

## “You are inferior!” Revisiting the expressivist argument

### ABSTRACT

According to the expressivist argument the choice to use biotechnologies to prevent the birth of individuals with specific disabilities is an expression of disvalue for existing people with this disability. The argument has stirred a lively debate and has recently received renewed attention. This article starts with presenting the expressivist argument and its core elements. It then goes on to present and examine its counter-arguments before it addresses some aspects that have gained surprisingly little attention. The analysis demonstrates that the expressivist argument has a wide range of underpinnings and that counter-arguments tend to focus on only a few of these. It also reveals an important aspect that appears to have been ignored, i.e., that people do not select fetuses based on chromosomes or other biological traits, but based on characteristics of living persons with specific disabilities. This makes it more difficult to undermine the claim that negative selection of fetuses expresses a disvaluing of persons with such disabilities. It leaves the expressivist argument with a strong bite still.

**Key words:** Expressivist argument, objection, disability, foetus, selection, reproduction, embryo

## INTRODUCTION

A wide range of new technologies have significantly increased the reproductive autonomy of prospective parents. Prenatal testing and screening (with subsequent selective termination of pregnancies) are well established technologies while non-invasive pre-natal testing (NIPT) is becoming widespread. Emerging technologies, such as gene editing, may further increase the reproductive choices in the future.

Due to unprecedented possibilities, such technologies have been appreciated and promoted by many. However, due to the ethical challenges posed by the new choices, such technologies have also been opposed from a wide range of positions. One of the objections has often been advanced by disability rights supporters and others and has been called the *expressivist objection* (1-3), i.e., that the choice to use biotechnologies to search for and prevent the birth of individuals with specific disabilities is an expression of disvalue for existing people with this disability. Accordingly, testing for certain conditions does not only express a negative valuation of the fetus being tested, but also of the lives of persons living with these conditions specifically and people living with disabilities more generally (Parens and Asch, 2000; Saxton, 2000).

However, the “expressivist objection” has been met with a series of counter-arguments, also from within the disability movement. This has made the argument somewhat unfashionable in the ethics literature. Nonetheless, it has received some renewed attention recently (4) and deserves closer scrutiny.

In this article I will shortly recap the *expressivist argument* (EA) and the counterarguments before investigating some of the aspects that have not been addressed in the literature. The analysis reveals that the expressivist argument expresses many moral concerns, that the counter-arguments only address some elements of the argument, and that opponents of the expressivist argument still have some work to do in order to undermine its relevance in debates on selection-instigating reproductive biotechnologies.

I will use the term “expressivist argument” (EA) instead of “expressivist objection,” “expressivist view” (5), or “expressive force”(6) in order to avoid contributing to the unfruitful polarization between promoting and objecting to new technologies, or between “bioconservatives” and “bioproggressives” or “transhumanists.” When striving for good assessments of biotechnology and finding the best ways to develop and implement such technology, we need to assess and analyze arguments on their own rights – independent of whether they are promoting or opposing implementation of a given technology.

## EA AND ITS ELEMENTS

EA is frequently presented as follows: the choice to use biotechnologies to prevent the birth of individuals with specific disabilities is an expression of disvalue for existing people with this disability (3, 7, 8). A much quoted version of the argument goes like this: “tests to select against disabling traits express a hurtful attitude about and send a hurtful message to people who have those same traits” (3).

There are many underpinnings of EA, which are summarized in table 1. The table is meant to give an overview over the many and various elements<sup>1</sup> of the argument. All the elements are rarely present

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<sup>1</sup> Some may argue that what here is denoted as “core elements” qualify as premises or that they express certain perspectives. To avoid sidetracking the analysis, they are denoted “elements” here. See the *Discussion*.

at the same time, but more frequently one or more elements are at the basis of various discussions on new reproductive technologies.

[Table 1]

Let us briefly look closer some of these elements before we look at some of their counter-arguments.

One core element of EA is a critique of an implicit *reduction* of individuals' worth to a specific disease trait. To use a biotechnology to remove an embryo or fetus with a particular genetic trait implies that the value of that future child can be judged on a single characteristic or a (disease) trait (2, 9, 10). As elaborated by Asch: "As with discrimination more generally, with prenatal diagnosis a single trait stands in for the whole, the trait obliterates the whole. With both discrimination and prenatal diagnosis, nobody finds out about the rest. The tests send the message that there's no need to find out about the rest." (10) This reduction of a person to a trait, also called *the synecdoche argument*, has been identified in everyday language about persons (or fetuses) being "diabetic," "hemophiliac," "Downs" etc. (11). Accordingly, expressing a devaluation is not wrong (primarily) because the harm it causes (to third persons), but because it "manifests a willingness to quickly infer a global evaluation of a person on the basis of a single fact" (4) as the disabling trait comes to 'trump' all other traits (9, 10).

Another crucial element of EA is that the disability is considered to be an essential part of the *identity* of persons with the disability (12, 13). Disabling traits are (at least partly) identity constitutive. Negative actions or attitudes against this disability thereby are considered to be devaluations of the identity of persons with this disability. Edwards gives a clarifying outline of the identity aspect:

- (a) Reduction in the incidence of condition C is viewed as morally desirable.
- (b) C is (at least partly) identity constituting for persons of type P.
- (c) Reduction of C necessarily entails the reduction of persons of type P.
- (d) Reduction in the numbers of persons of type P is considered morally desirable.
- (e) This is harmful to existing (and future) P-type people.
- (f) This is therefore morally wrong." (12)

EA also has empirical elements in terms of references to empirical studies that reveal negative or biased attitudes and behaviors of those who provide fetal screening and termination services (14). In particular it has been shown that genetic counsellors have a more negative perspective on disabilities than individuals whose lives are directly affected by them and that these attitudes may affect the counsellors' description of disabling conditions in a prenatal setting (15). In another study half of the respondents agreed with the statement, "Parents ought to do everything technologically possible to prevent their child from suffering including using reproductive genetic technologies." (16) Studies also show various forms of devaluation are felt amongst relatives of persons with disabilities (12, 17). E.g., one recent study found that EA featured prominently in the reproductive decisions of families living with Spinal Muscular Atrophy (SMA) and represented a significant emotional burden (7). Empirical studies also illustrate how discrimination and devaluation may be covert and difficult to discover (18). While there are few empirical studies on how people with disabilities feel, there is ample anecdotal or case-based evidence on people feeling disvalued or discriminated upon. Even in a small country like Norway several newspaper articles witness of people feeling disvalued or endangered (19, 20).

This touches on the point that there is a discrepancy between persons with experiential knowledge of the conditions that the technologies are testing for and those without (including genetic counsellors) (21, 22). Ignoring the experiences and perspectives of those affected sends a negative signal, and can be conceived of as a kind of *epistemic injustice*. Hence, some of the empirical elements have a double

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3 touch: first they argue that people with disabilities experience negative attitudes or discrimination,  
4 and second, they reveal that these experiences are ignored.<sup>2</sup>  
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6 Yet another element of EA (which has been heavily criticized) is that negative selection of embryos or  
7 fetuses due to specific traits is *inconsistent* with the support of persons with such traits. This is  
8 related to the tension between prevention and protection in the general disability debate (23) and to  
9 the concern that viewing (genetic) disability as a reproductive choice “may reduce our communal  
10 commitment to people with genetic disabilities.” (24). The point that is being made is that it is  
11 inconsistent to support the rights of people with specific disabilities and at the same time to prevent  
12 people to be born with that disability. Although this appears to be the element of EA that is most  
13 frequently rejected, it is rarely explicitly encountered in the literature.  
14

15 Additionally, EA also has some consequentialist elements. Selection-promoting reproductive  
16 technologies draw attention to prejudicial language (Shakespeare 2013: 118) and can potentially be  
17 harmful to persons who identify with (the) disability (Edwards 2004; 2005; Shakespeare 2013)  
18 through their emotional and existential impact. Screening tests directed at avoiding conditions which  
19 persons have (and identify with) stirs existential reflections on whether one would have existed, had  
20 the technology been available to one’s parents: “if they had this technology, I would not have  
21 existed.” The consequentialist version of the argument reasons from the harm that various types of  
22 (negative embryo or fetus) selection cause, either as mental distress or as being “objectively harmful,  
23 regardless of whether one takes it to heart, or is even aware of it, for example because being  
24 outwardly valued by others is a component of the good life” (4).  
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26 Various versions of EA also refer to *human rights and principles*, such as equity, and basic values,  
27 such as “openness to the unbidden” (25). To search for and abort fetuses with specific conditions or  
28 traits breaches with the basic conception that all human beings have “equal worth independent of  
29 health, condition, disease or abilities” in the same manner that to abort fetuses on basis of a specific  
30 sex breaches with the basic principle of equality (26).  
31

32 In addition to the mentioned elements, Søren Holm makes some useful distinctions when he points  
33 out that there are at least three versions of EA (13) depending on *who* is expressing something and  
34 *what* is expressed. With regard to *who* is expressing, there is a difference between whether a given  
35 politically backed social practice expresses something (e.g., an attitude undermining equity) and  
36 whether choices made by individual agents within the context of that practice express something.  
37 Correspondingly, there is a difference with regard to *what* is expressed. There is a difference  
38 between whether the practice is claimed to express a discriminatory or just a negative attitude  
39 towards (a particular) disability. Holm argues that it is more plausible that negative selection  
40 expresses a negative attitude than a discriminatory attitude. Underscoring the importance of  
41 personal identity, he describes this *negative attitude version* of EA as follows: “If having a particular  
42 disability is an essential part of my personal identity, part of what I am, the mere fact that I know or  
43 have reasonable reasons to believe ... that others evaluate that disability negatively may affect my  
44 sense of identity and social standing negatively. And I may justifiably feel that way even if the  
45 negative evaluation does not lead to any actual discrimination.” (13)  
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54 <sup>2</sup> Please note that this is not a review of the empirical literature on how people with disabilities experience  
55 (reproductive) biotechnology that aims at avoiding persons with this disability to be born. I am not investigating  
56 the soundness of the argument, only presenting it. Moreover, there may be ethical and practical reasons why  
57 there are so few studies on how people with disabilities experience new technologies that can restrict the  
58 existence of future persons with such disabilities. However, it may also be due to devaluation.  
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Table 2 illustrates various types of expressivist arguments. According to Holm, it is important to be clear about which version one is dealing with when discussing EA, and that it is not clear that valid arguments against one holds against the others (13).<sup>3</sup>

[Table 2]

There are also other phrasings of EA than those presented so far. For example, in underscoring how prenatal diagnosis breaches with *basic human rights*, such as all persons being of equal value, Kass describes how future persons may experience life: “A child with Down's syndrome or with hemophilia or with muscular dystrophy born at a time when most of his (potential) fellow sufferers were destroyed prenatally is liable to be looked upon by the community as one unfit to be alive, as a second-class (or even lower) human type. He may be seen as a person who need not have been, and who would not have been, if only someone had gotten to him in time.” (11)

However interesting, all phrasings of EA and various types of implicit or second order arguments will not be discussed in this article. Table 1 provides a summary of EA and its most prominent elements.

## COUNTERARGUMENTS

After this brief overview of EA, let me turn to the most frequently presented counter-arguments. I will shortly present each counter-argument, illustrate how it addresses the various elements of EA (in Table 1), and indicate some shortcomings of the counter-arguments. The goal is to highlight overlooked aspects and potential fields of improvement in the argumentation on reproductive technologies.

### Confusing identity

One counter-argument is directed at the identity element of EA. Several scholars have pointed out that there is a logical contradiction in the emotional response that new technology expresses a statement that “I should not have been born” because the “I” in the statement does not exist prior to birth. The more correct response, it is argued, is that “this may result in fewer people with the condition that I have to be born in the future.” (Shakespeare 2013: 119). Moreover, it is argued that there are millions of events (other than the application of a specific technology) that could have resulted in me not have come into being (Harris 1992). One specific sperm cell fertilizing a given egg cell at a certain time, is but one example. Accordingly, the existential concern of EA is unwarranted. This counterargument presupposes that there are no morally relevant differences between the norms, values, and responsibilities related to accidental events (sperm randomly fertilizing an egg) and the norms, values and responsibilities related to organized search for and (negative) selection of specific traits.

Steven Edwards gives three grounds for resisting EA, even if one takes the “identity claim” seriously (12). First, the obligation not to offend does not trump reproductive autonomy. Second, Edwards reiterates the well-known inconsistency argument (see below). Third, (with Buchanan and Nelson) he argues that EA leads to an *argumentum ad absurdum* (6, 27) as the removal of any disability, such as deafness, blindness, and paraplegia could be said to express a devaluation of persons with such disabilities (12).

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<sup>3</sup> One example of a scholar who does not differentiate is Leon Kass who wrote: “the moral health of the community and of each of its members is as likely to be affected by the aggregate of purely private and voluntary decisions on genetic abortion as by a uniform policy imposed by statute.” 11.Kass LR. Implications of prenatal diagnosis for the human right to life. *Biomedical ethics and the law*: Springer; 1976. p. 313-27..

Edward's first two counterarguments do not address the identity issue. The third does. According to Edwards the removal of any disability, such as deafness, blindness, and paraplegia expresses a devaluation of persons with such disabilities, which according to Edwards and others is absurd (12). This counter-argument appears to ignore the fact that deafness is strongly related to (linguistic) identity, and at least to the deaf community the non-removal of the non-ability to hear (with cochlea implants) is not absurd (28).<sup>4</sup> Edwards seems to be right with respect to quadriplegia and blindness. The removal of blindness does not offend anybody, as there is arguably no blind culture (29). Edwards may of course think that the conceptions of the deaf community are absurd, but the example illustrates that it is not absurd to all.

The (counter)arguments related to identity appear to presuppose that there is no morally relevant difference between avoidance of and removal of disability, that is, between removing the potential of a person with disability and removing a disability in a (consenting) living person. They also appear to ignore an important premise to one version of EA, i.e., what persons of a certain group perceive.

### Against "inconsistency"

The most common counter-argument against the inconsistency element of EA goes like this: A negative preference for a disability in future persons is not a negative preference for existing persons with that disability (8, 27, 30, 31). Accordingly, it is not a contradiction to both terminate a pregnancy (due to expected disability) and simultaneously uphold respectful and supportive views of disabled people within society, as procreative decisions are highly complex and emotionally charged (Shakespeare 2006). John Harris elegantly presents this counterargument in the following way: "I have a rational preference to remain nondisabled, and I have that preference for any children I may have. To have a rational preference not to be disabled is not the same as having a rational preference for the nondisabled as persons." (32).

As indicated earlier, the inconsistency element of EA is not frequently encountered in the literature. When counter-arguments are more prominent than the arguments they counter, it becomes relevant to ask whether the arguments they counter are strawmen. Moreover, the counter-argument focuses on consistency of preferences, but EA says little about people's preferences. It has not been possible to identify anybody in the literature on EA arguing that the preferences for freedom from disability harboured by those persons who choose to terminate embryos or foetuses are morally unacceptable. The argument only claims that the actions (selective termination) express devaluation. Hence, it is not clear that this counter-argument hits the target.

Yet another argument from consistency goes like this: EA implies that one had to ban abortion for one specific reason (embryo or fetus that could or would develop into a person with disabilities), and that would be inconsistent with a general right to abortion. Tom Shakespeare has formulated the argument in the following manner: "the expressivist objection has the implication that abortion in general is wrong. It appears to me inconsistent and illogical to support abortion rights in all circumstances except where the foetus is likely to grow into a disabled person." (31). However, this counterargument presupposes that there is no morally relevant difference between a general right to abortion and a right to search for and termination of foetuses with specific traits.

### Against expression

Another range of counterarguments target *what is expressed* in EA. Some argue that it is unclear how prenatal testing practices are capable of 'expressing' any message (30, 31). Accordingly, EA diverts attention away from the social and political context in which reproductive genetic technologies are

<sup>4</sup> No doubt, such attitudes and decisions may of course seem absurd to Edwards and others.

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3 developed, implemented, and advanced (Shakespeare, 2006). Neither individual actions nor general  
4 practices involving (negative) trait-based selection necessarily express disrespectful messages (6).  
5 Moreover, prenatal testing and termination decisions are incapable of communicating negative  
6 messages to disabled people as they are usually made in the private sphere (Murphy, 2011).  
7 Considerations, deliberations, and decisions are made within the family, and are thus not open to or  
8 communicated in the public.  
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10 Steven Edwards gives an elucidating formulation of this kind of counterargument: "disabilities are  
11 analogous to illnesses. And just as it would be implausible to suppose reduction of the incidence of  
12 illnesses such as flu sends a negative message to ill people, so it is not plausible to suppose  
13 prevention of disability sends a negative message to disabled people" (12). This echoes John Harris'  
14 claim that attempts to preempt disabilities constitutes discrimination against disabled as a group as  
15 little as does medical treatment against diseases (33). Hence, there is no relevant difference between  
16 reduction of the incidence of disability and reduction of the incidence of any disease, goes the  
17 counterargument. It is hard to see how autonomous choices can express anything of moral relevance.  
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20 John Harris also argues forcefully that if the (negative) selection expresses anything, it is not a  
21 disvaluing of living persons. Harris argues that "to say that it would, other things being equal, be  
22 better not to create an individual who will suffer an unnecessary harm is not to say that it would be  
23 better for that individual had he or she never been born, nor is it to say that the world would have  
24 been a better place had they never been born, nor is it to say that individuals with disabilities are  
25 somehow less valuable or lesser persons than others." (32)  
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28 Many of these counterarguments go back to Buchanan's seminal article where he argues that  
29 negative selection only conveys meaning if the agent *believes* that "life with the disabilities in  
30 question would not be worth living" and that such beliefs play a *role* in people's decision making (27).  
31 Only then would the negative selection express anything. Nelson, however, acknowledges that the  
32 meaning of one's actions may have meanings beyond one's intention and that social practices can  
33 express meanings. Nonetheless, he maintains that the social practices of reproductive technologies  
34 are too vague and ambiguous to be worth considering (6). These practices do not convey any  
35 important message to persons with disabilities.  
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38 As interesting and well-articulated as these counterarguments may be, they do not take into account  
39 that actions (facilitated by social institutions, such as legislations, health care provision, and  
40 technological armamentarium) may frame and form certain values which may be detrimental to  
41 societal attitudes and individual members of these societies (34). Legalizing, institutionalizing, and  
42 routinizing certain practices (14), such as selective termination of pregnancies, may consolidate and  
43 spread certain norms and values.<sup>5</sup> In particular the counterarguments seem to fail to recognize the  
44 importance we attach to the attitudes towards us of other human beings and the great extent that  
45 our personal feelings and reactions depend on and involve our beliefs about such attitudes. Strawson  
46 points out that moral relevance depends on attitudes (and intentions) and reminds us of "...how  
47 much we actually mind, how much it matters to us, whether the actions of other people—and  
48 particularly *some* other people—reflect attitudes towards us of good will, affection, or esteem on the  
49 one hand or contempt, indifference, or malevolence on the other." (34). One could also add Charles  
50 Taylor's third sense of morality: self-respect in the eyes of others (35)(p.14-15) and what Rawls called  
51 "the social bases of self-respect" to indicate that the counterargument on expression still needs  
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57 <sup>5</sup> Given that many countries have abortion statistics that communicate the overall frequency of abortion  
58 decisions for various conditions, aggregates of private decisions seem able to communicate collective norms  
59 and values. I am thankful to one of the reviewers for this argument.  
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3 more elaboration to be convincing.<sup>6</sup> Everybody seems to understand that a letter of reference  
4 consisting of the following sentence (only) sends a message beyond its words: “NN always comes to  
5 work on time and has a lovely handwriting.” Actions, routines, and institutionalized actions also send  
6 messages which forceful counterarguments need to address.  
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### 8 **Offence maybe, but no discrimination**

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10 Another relevant counterargument is that the new technologies may offend persons with disabilities,  
11 but they do not discriminate against them. Offence is different from harm (36), and persons with  
12 disabilities, like all others, must accept offences. Moreover, offence has to be balanced against other  
13 issues: “one may choose to have an abortion in the knowledge that this will offend prolife groups,  
14 but it does not follow that the offence caused to these groups outweighs one’s right to make such a  
15 choice.” (12)  
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17 Although the empirical literature on the effect of technologies for (negative) selection is growing,  
18 there is still no evidence that such selection is (only) offensive. Moreover, the counterargument does  
19 not address the fact that the labelling itself may reduce the opportunities and the quality of life for  
20 persons who are labelled (37). This is not the place to enter the discussion on discrimination. The  
21 point here is that this counterargument does not seem to undermine EA in terms of devaluation of  
22 persons with disabilities.  
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### 25 **Choice is the issue, not expression**

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27 Yet another counter-argument is based on showing that the motives of persons selecting (away)  
28 embryos or fetuses are not to express negative attitudes or devaluation, but choosing what they  
29 consider to be best for them. Or as clearly expressed by Julian Savluescu: “Reproduction should be  
30 about having children who have the best prospects” (38). As Harris points out: “It might be suggested  
31 that the mere existence of disabled people is good for society and that we will benefit from they  
32 being around us. Of course we do! This is not an issue. What is fundamental is that, once we have the  
33 choice as to create people with disability or not (...), we have to decide whether we are entitled to  
34 impose disability on some in order to reap the benefit of their presence among us” (39).  
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36 The gist of this counterargument is that (reproductive) choice trumps potential harm created by  
37 expressing attitudes. There are two important premises to this counterargument. First, that we have  
38 a reproductive choice, and second, that the choice trumps other considerations. The first premise  
39 presupposes what is up for debate (*petitio principii*). It assumes that not introducing (selection-based)  
40 technologies represents a “suppression of one’s free choice” or does “justify coercive state inference”  
41 (4). This counterargument only has traction if everything that is possible is thereby a real option or an  
42 imperative (imperative of possibility). Otherwise, it begs the question. The second premise, that  
43 choice trumps other considerations has force if you have a specific conception of individual choice.  
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46 Some versions of this counter-argument (e.g., Harris’) presuppose that the moral obligation to avoid  
47 harm with respect to potential future persons trumps the harm actually being experienced by living  
48 people today. One may of course argue, as Harris does, that he fully respects the rights and worth of  
49 persons with disabilities and that his arguments do not imply any type of discrimination. However, if  
50 a given practice actually harms living persons today, one would expect proponents of this counter-  
51 argument to eliminate or modify the negative experience in persons with disabilities by convincing  
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58 <sup>6</sup> Some would also argue that other important aspects have been ignored as well, e.g., Axel Honneth’s  
59 conception of recognition.  
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arguments. The alternative, to claim that their experiences are irrational or not warranted, can undermine the equity assertion by revealing negative attitudes towards persons with disabilities.<sup>7</sup>

### Against harm: not enough harm

As implicitly stated, another counterargument points out that while social practices for (negative) selection may be harmful, they are not harmful enough or are less harmful than alternatives. Says, Shakespeare: "While there is evidence that some disabled people feel offended and discriminated against by prenatal diagnosis, there is no strong empirical evidence that material harms to disabled people result from selective abortion." (31)

With a different take Gyngell and Douglas analyse whether the harm to third parties is of any relevance to restrict embryo-selecting technologies within a liberal eugenics framework and conclude that although negative selection may cause reasonable distress (as opposed to unreasonable distress, such as resulting from people being distressed by homosexuality) and be highly objectionable, they do not find coercive state interference with them to be justified in a liberal state (4). The harm is not severe enough to justify "coercive state inference" (4).

This argument presupposes that the regulation of negative selection is coercion. Gyngell and Douglas do acknowledge, however, that anti-hate speech legislation outlaws speech acts that promote hatred based on race, religion or ethnicity, but find that "it seems at the very least doubtful whether the harm-based variant of EA will meet the liberal eugenic challenge" (4). They think that negative selection with various reproductive technologies may cause harm to future generations by making future generations more susceptible to future catastrophes (4). However, in this they refer to the diversity argument, and not EA.

In any case, for these counter-arguments to have any traction we need better evidence on the harm of selective social practices. To argue that the harm from devaluing weighs less than breaching with values of liberal eugenics framework you need to have evidence of the harm from devaluation. However, so far no such evidence is available.<sup>8</sup>

### No empirical evidence

Accordingly, one counterargument to EA is that there is little evidence that selection is harmful or promotes attitudes that are harmful to persons with disabilities (5). Hence, harm cannot be taken into account. However, absence of evidence is not evidence of absence (of harm). As already pointed out, there are some studies demonstrating a negative effect of (negative) selection on persons with the disabilities that are selected for (40) and it has been demonstrated that people want testing even though they think it may be discriminatory (41).<sup>9</sup> One may of course argue that the empirical evidence is of poor quality and that more knowledge is needed before the harm-argument has any

<sup>7</sup> One can of course believe that someone's negative experiences are irrational or unwarranted without necessarily having negative attitudes towards this person. However, many people will consider claims about their thoughts and experiences to be about them, e.g., the claim that "your thoughts and experiences are stupid" is formally not the same as "you are stupid." However, we would hardly blame anybody not serenely situated in the philosopher's arm chair for inferring the latter from the former.

<sup>8</sup> You may of course argue that no such evidence would ever outweigh the harm from breaching with a liberal eugenics framework. This, however, would demand even more to work as a valid counterargument to EA.

<sup>9</sup> It may also be argued that we have no knowledge of what is expressed beyond some clues that persons with disability may feel that they are "a second-class specimen," "second-class human beings," and "defectives." 11.

Kass LR. Implications of prenatal diagnosis for the human right to life. *Biomedical ethics and the law*: Springer; 1976. p. 313-27.

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3 traction. However, this lack of knowledge does not only undermine the empirical expressivist  
4 argument, but also its counterargument.  
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### 6 What the counterarguments show

7 What this short review of the counterarguments reveals is a) that they are not fully compelling (to all)  
8 and b) that they address only some of the aspects of EA. In particular they are directed at the  
9 inconsistency aspect, which does not seem to be a core element of EA.  
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11 Fierce opponents of EA may of course argue that I haven't paid enough attention to the  
12 counterarguments, or that my concerns about their range are irrelevant. Many may also counter my  
13 concerns with supplementary premises supporting the counterarguments or new arguments  
14 undermining EA. That is fine. My point has not been to claim that the counterarguments are totally  
15 wrong, but only to indicate that they are not overly convincing to guide regulation and practice. My  
16 very coarse analysis indicates that there is still work to be done in order to make the  
17 (counter)arguments convincing. Moreover, the counterarguments should address core elements of  
18 EA, and not mere remote aspects (and strawmen).  
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21 In addition to the counter-arguments' lack of marksmanship and persuasive power, there are also  
22 aspects of EA that have appear to have been ignored by those who eager to dismiss EA.  
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### 25 OVERLOOKED ASPECTS OF EA

26 One of the points that the debates on EA appear to have overlooked is a basic concern driving part of  
27 the argument, i.e., that social practices frame and form our social norms and values and that the sum  
28 of individual legitimate actions may lead to a society we do not want. Its proponents are not  
29 convinced by theoretical arguments that eliminating disability and valuing and supporting disabled  
30 persons are completely independent. EA proponents seem to fear that the first involves underlying  
31 negative norms and values that may have negative consequences independent of the latter.  
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34 Moreover, EA tries to address the tension between individual liberty and plurality. One of the  
35 reasons why these perspectives are not easy to reconcile may be because they are based on different  
36 conceptions of the good. Those who find EA irrelevant and flawed tend to equal the good with  
37 progress and enhancement/improvement while those who think the argument to be sound, have  
38 other, and usually much broader, conceptions of the good, e.g. as much more than mere satisfaction  
39 of preferences. Hence, there is a (irreconcilable) conflict of goals.  
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42 Another overlooked aspect is *what* is evaluated, i.e., what the expression is *about*. In the various  
43 forms of (negative) selection the assessment of fetuses apparently is made on basis of biomolecular  
44 characteristics, e.g., three chromosomes in chromosome pair 21. If tests of the foetus show that it  
45 has three such chromosomes, most women choose to terminate the pregnancy. What is important is  
46 that these decisions in particular, and (negative) selection in general, are not made on basis of  
47 biomolecular characteristics. People have no experiences of chromosomes. We do not have  
48 preferences for specific types of chromosomes *per se*. The biomolecular traits that we base our  
49 decisions on have meaning to us only in terms of their associations with characteristics or traits of  
50 living human beings. We base our decisions on experiences with or knowledge from living persons  
51 with the disability (42). The embryo or foetus does not have such traits. In fact, it does not have any  
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humanly valued traits (e.g., inherent potential for rationality, interaction, consciousness, sociability).<sup>10</sup>

Quite contrary, we base our decisions on associations with characteristics or traits of living human beings, such as persons with Down's syndrome. It is not the chromosomes that are at the core of our assessments, but the physiognomies and humanly perceivable features they are associated with. Therefore, it is neither farfetched, inconsistent, or "theoretically unsound" for persons who have these features to claim that when you make a decision to terminate a pregnancy (which may result in a person having certain characteristics) this decision is based on an assessment of characteristics of persons living with this disability. Correspondingly, it does not appear unreasonable to claim that the disvaluing is not of chromosomes, but is (based on) a disvaluing of characteristics of living persons. And, accordingly, a disvaluing of characteristics of living persons (who identify with these characteristics in some way) may reasonably be conceived of as a disvaluing of them as persons.

The point is that we determine to select for certain genetic characteristics in embryos and fetuses because these are associated with characteristics which are (dis)valued. The reason that many find sex selection abhorrent is not that they think that X chromosomes are as beautiful and valuable as Y chromosomes. It is because they think that females are as valuable as males, and that any discrimination is unjust. If it were the abilities of the chromosomes, we would be warranted in preferring X-chromosomes, as they contain 30 times as many (presumably functionally beneficial) genes as Y-chromosomes. Hence, on a chromosomal level it could make sense to select X and discard Y chromosomes. But we don't, because it is not the chromosomes that matter to us. What matters is the characteristics associated with these chromosomes.

The core of the what may be called *the disvaluing transfer* (aspect of the expressivist) *argument* goes like this:

- i. The condition C is viewed as undesirable.
- ii. C is (at least partly) identity constituting for persons of type P.
- iii. It is possible to reduce the incidence of C by assessing certain markers M of condition C.
- iv. The markers M are not experienced, but only (dis)valued as markers of C.
- v. The assessment of the value of M is based on characteristics of persons with C.
- vi. Disvaluing M based on characteristics of persons with C can be conceived of as a disvalue of persons of type P.
- vii. Reducing the incidence of condition C (being identity constituting for persons of type P) based on markers M being disvalued due to characteristics of P (or individuals with C) may be conceived of a disvalue of persons with P.

Whether this then is a knock down argument against introducing technologies for reducing the incidence of C is not the core issue here. I am not claiming that persons have been terminating pregnancies based on the characteristics of genes or chromosomes either. The point is that there are important aspects of EA that have been ignored and that may undermine some of the counterarguments.

One may of course argue that this aspect is not overlooked. As John Harris wrote more than 30 years ago: "...anyone who thinks that the detection of handicap in the fetus is a good reason for abortion, must accept that such an individual is, or will become, less valuable than one without such a handicap, less valuable because less worth saving or less entitled to life." (43). However, Harris here

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<sup>10</sup> For some people this point is at the core of the justification for their decision. They do not kill a person, they terminate a pregnancy.

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3 expresses the belief that the foetus has a handicap. But what handicap does the fetus have?  
4 Ascribing disabilities to a foetus presupposes that foetuses have abilities. It is quite unclear what  
5 those abilities are (and whether they are related to personhood). The “handicap” appears to be  
6 projected on to the foetus by Harris. My claim is that what is projected is based on characteristics of  
7 living persons, and, therefore, relevant for those persons.<sup>11</sup>  
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10 It may also be argued that Leon Kass has alluded to this aspect of EA 40 years ago when he pointed  
11 out some problems with what he called the “natural standard” used to assess embryos and fetuses  
12 as a measure being “objective and in the fetus itself” (11). His point was that it is difficult to  
13 differentiate the “human” from the “non-human,” the “severe” from the “non-severe” based on any  
14 reasonable interpretation of a “natural standard.” According to Kass, “it is the natural standard which  
15 may be the most dangerous one in that it leads most directly to the idea that there are second-class  
16 human beings and subhuman beings” (11). While Kass may be right that it is difficult to draw the line,  
17 this is a general problem. We don’t avoid setting speed limits because there is no natural line (in  
18 accident statistics). Where Kass and others may have gone wrong is that they have pursued the  
19 “natural standard” in nature in terms of biology, and not in in our minds and in society.  
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22 If the *disvaluing transfer* argument holds, negative selection expresses devaluation of persons with  
23 conditions that are discarded (on basis of association with certain biomolecular characteristics). Such  
24 devaluations may counter or undermine cherished social norms and values, such as an open society  
25 with space for everyone independent of physical or mental capacity.  
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28 It may of course be argued that the evaluation is not made of any particular person, and hence is no  
29 devaluation of any particular person. However, the (dis)valuation must be made on basis of a  
30 conception of some characteristics of persons with this condition as a group. Otherwise they would  
31 not be defined as a group with a condition that is worth to predict and prevent. Moreover, the  
32 practically active support of the rights of existing people with disabilities does not exclude negative  
33 attitudes, biases, offences, disvaluing, or discrimination of persons in this group.  
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36 If the disvaluing transfer aspect of EA discussed here has any hold, we should add another issue to  
37 Holm’s useful differentiation between *who* and *what* is expressed, i.e., *what* the expression *is about*.  
38 Is it about the biological characteristics (e.g., genotype), is it the characteristics that correspond to  
39 the biological characteristics in persons living with the latter (e.g., phenotype), or is it about the  
40 characteristics of the persons who have the biological characteristics?  
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43 It is important to underscore that in pointing to this apparently ignored aspect of EA, I do not claim  
44 that it bolsters the argument or that it is a knock down argument against the counterarguments. I  
45 only claim that it is an argument that needs to be taken into account and that it indicates that EA  
46 warrants some more attention.  
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## 48 DISCUSSION

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50 In this article I have presented EA and some of its core elements/aspects. Thereafter I have  
51 presented frequent counterarguments and indicated some potential shortcomings. I have tried to  
52 show how the counterarguments address only some of the core elements of EA. This can explain why  
53 the debate has been so complex and interminable. Moreover, I have tried to show that important  
54 aspects of EA have been ignored. Both these findings indicate that important aspects of EA are still  
55 relevant for the biotechnology debate.  
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58 <sup>11</sup> John Harris may have changed his opinion on this matter viewing the fetus to be in a harmed state according  
59 to his “harmed condition model of disability.” (2001)  
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3 There are of course a wide range of aspects of the debate that have not been discussed in this article.  
4 One of them is the conceptual status of disability, e.g., whether disability is a social or a natural  
5 phenomenon or whether people with disabilities are worse off (44). No doubt, such debates are  
6 relevant for the expressivist argument, but addressing them would be beyond the scope of this  
7 article.  
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9 Also in discussing harms from (negative) selection, there are other harms than discussed here, e.g.,  
10 future harms to future people (4). Although this is highly relevant when discussing various types of  
11 embryo selection technologies, it is not specific for the expressivist argument.  
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13 As pointed out in Table 1, the *elements* of the arguments could be interpreted as premises for the  
14 expressivist argument. They could also be seen as arguments in their own right, related or affiliated  
15 to the expressivist argument. Accordingly, one may very well argue that there is not one expressivist  
16 argument with many elements, but many (expressivist) arguments loosely related. I am open to such  
17 suggestions. This is the reason why I have called them “elements” and “aspects” and not “premises,”  
18 and readers may prefer to call them “related elements.” The point in this article is that what I have  
19 denoted “elements” is related to what is generally called “the expressivist objection” in some way.  
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22 Both some elements of EA and several counter-arguments have empirical premises that can be  
23 assessed. However, investigating the empirical premises is beyond the scope of this article. I have  
24 only briefly referred to the literature reporting attitudes and experiences of professionals and  
25 relatives to persons with disabilities. A systematic review of this literature will be needed to make  
26 proper assessments. Allow me only to point to a study of French adults and professional caregivers to  
27 indicate that such a study may be worthwhile. The study revealed implicit stigmatization of  
28 individuals with Down syndrome based on the degree of conformity of their facial features to  
29 stereotyped features of the disorder (45). Or as expressed by David McFarland: “I have lived my life  
30 with Down syndrome all my life. The living part is great, but changing attitudes is tough going.” (46)  
31 here cited from (47).<sup>12</sup>  
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34 The expressivist argument also has implications for the enhancement debate as selecting for certain  
35 valued character traits may represent a disvalue of the lack of such traits – and consequently express  
36 a disvalue of persons with the lack of these traits. Selecting for intelligence may make people less  
37 intelligent feel disvalued. Again, the problem may not be limited to the harm caused to unintelligent  
38 persons (as we will die out), but the norms and values we formed by the selection. Hence, the harm  
39 of importance in the expressivist argument may not be the harm to individuals or groups with a  
40 certain characteristics or trait, but the harm to us as a society. Accordingly, the expression of  
41 importance in the expressivist argument may not only be what (vulnerable) groups perceive, but as  
42 much the social norms and values expressed by our social institutions and practices. A good society is  
43 not necessarily a society where there are no dangers, where everybody is born according to given  
44 norms of beauty or intelligence.  
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## 49 CONCLUSION

50 The expressivist argument is discussed in many ways due to its diverse core elements. Despite many  
51 well-articulated counterarguments several shortcomings have been revealed, e.g., unwarranted  
52 premises. Moreover, the counterarguments do not address all core elements of the expressivist  
53 argument. This can explain why the debate has been so complex and interminable. Another reason  
54 may be that important aspects of the expressivist argument have been ignored, e.g. that people do  
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58 <sup>12</sup> We may also learn something from the many similar studies on obesity.  
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not select fetuses based on chromosomes or other biological traits, but based on characteristics of living persons with specific disabilities. This makes it more difficult to undermine the claim that negative selection of fetuses expresses a devaluing of persons with such disabilities. Although these findings do not make the expressivist argument a knock down argument, they indicate that important aspects of the expressivist argument are still relevant for the biotechnology debate. More work is needed.

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For Peer Review



Table 1 Main elements of the expressivist argument.

<b>Main argument</b>		The choice to use biotechnologies to prevent the birth of individuals with specific disabilities is an expression of disvalue for existing people with this disability
<b>Core element</b>	<b>Reductionism</b> (Synecdoche argument)	The value of individuals is reduced to one specific characteristic or (disease) trait, i.e., the disabling trait comes to 'trump' all other traits
<b>Core element</b>	<b>Identity</b>	The disability is considered to be an essential part of the identity of persons with the disability (which is why they can feel affected)
<b>Empirical aspect</b>	<b>Empirical fact</b>	People with disabilities and their relatives feel devaluated by the implementation and use of technologies that facilitate the termination of pregnancies with fetuses that have biological characteristics that are associated with this specific disability.
<b>Empirical aspect</b>	<b>Epistemic injustice</b>	Those affected by or having experience with the disability have less voice in assessing the negative value of a condition or disability.
<b>Logical aspect</b>	<b>Inconsistency</b>	It is inconsistent to support the rights of people with specific disabilities and at the same time to prevent people to be born with that disability
<b>Value conflict</b>	<b>Core social values</b>	Implementing technologies that (negatively) select for certain characteristics contradicts basic <i>social values</i> such as openness, equality, and basic <i>human rights</i> , such as the right to life and to liberty.
<b>Implication (Harm)</b>	<b>Emotional</b>	Technologies directed at avoiding persons with a certain disability to be born stirs emotions (sadness, anxiety, distress, despair) in persons who have these disabilities.
<b>Implication (Harm)</b>	<b>Existential</b>	Technologies directed at avoiding that persons with a certain disability are born stirs existential reflection in persons who have these disabilities: "If my parents had this technology available, I may not have existed."
<b>Implication (Harm)</b>	<b>Evaluative (objective)</b>	Technologies directed at avoiding that persons with a certain disability are born expresses a devaluation that reduces outward evaluation by others being an important part of the good life.
<b>Semantic aspect</b>	<b>Value-laden language</b>	Terms such as "normal embryo" indicates that embryos that are not normal are inferior.
<b>Conceptual aspect</b>	<b>Disability as a social concept</b>	Disability is defined by social prejudice or discrimination.

**Table 2** Types of expressivist arguments with respect to *who* is expressing and *what* is expressed when society or individuals search for and terminate pregnancies of fetuses with certain biological characteristics, such as genotype. The table adds one type of expressivist argument to Holms typology.

What \ Who	Society, social practice	Individual
<b>Discriminatory attitude</b>	1: Society discriminates	2: Individuals discriminate
<b>Negative attitude</b>	3: Society expresses negative attitudes	4: Individuals express negative attitudes

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