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PARENTAL SELECTING AND AUTISM

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ABSTRACT
According to Savulescu and Kahane's principle of Procreative Beneficence, potential parents have a strong moral reason to select the child who will, on the basis of her genetic furniture, enjoy the most well-being. Embryos with a tendency towards autism are considered to have reduced well-being, and therefore, it is morally advised, when possible, not to select them. We claim that, in the case of mild autism, the principle of Procreative Beneficence should not be carried out, and more precisely, that there is no victorious public reason for potential parents to negatively select an embryo with mild autism. The focus of our argument is put on talents and abilities specific to persons with autism, and because of them, we can reasonably find this condition as that of a valuable human life. We extend the debate and discuss a question of enhancement. In this context, our proposal is future-oriented, under the assumption that needed biomedical resources will become available. Our thesis is that potential parents that have a child with mild autism have a moral obligation to use biomedical resources to remove or reduce their child's impairment, under the condition that the enhancement does not affect child's talents and abilities.

KEYWORDS
Autism Spectrum Disorders, biological enhancement, genetic selection, procreative beneficence, public reason

MAIN TOPICS AND THE JUSTIFICATORY FRAMEWORK

We develop our discussion starting from Julian Savulescu's and Guy Kahane's paper on the principle of procreative beneficence (PB) as a moral advice for all potential parents (2009). The authors say that when potential parents decide to have a child, they have a significant moral reason to select the child who can be expected

to enjoy most well-being when this is possible.[1] The same follows even in cases where a potential child could have a condition expected to reduce well-being, and the condition in question is not a disease or a disability. We focus on the recommendation related to the autism spectrum disorder, the condition of severe social impairment, as one of the cases where, in Savulescu's and Kahane's view, the principle of PB should be carried out.

We address some comments to the proposal related to this case. First, we find their view on autism problematic due to the fact that Autism Spectrum (AS) incorporates heterogeneous conditions that include not only impairments, but also exceptional talents. Given that autism's impairment severity varies from one individual to another, there are three diagnostic severity markers that describe the conditions of autistic persons.[2] As it will be shown, these markers do not include specific talents exhibited by autistic individuals, diagnostically placed within the first two levels of severity impairments. The talents and abilities specific to autistic people are what we put in the focus of the paper. We highlight the importance of these talents for the question of selection of an autistic embryo.

Our central claim is that, due to the abilities and talents present in autistic people that some may find central for the conception of valuable life, there is not, all things considered, a victorious public reason to negatively select potential autistic children who fall under the diagnostic criteria of mild autism. By relying on prominent authors like Rawls (1993/1996/2005) and Gaus (1996; 2011), in a first approximation, we define "public reasons" as valid justificatory reasons to justify public decisions or interventions on subjects. Their main characteristic is that they pertain to the subjects of intervention, or, to the whole society. The opposite concept is that of "personal reason". Personal reasons are related only to the values, norms, beliefs, preferences, etc. of an agent and they justify decisions for an agent that regard her personal life, but not public decisions, or interventions on other subjects.

We build on Gerald Gaus's work to distinguish among valid public reasons and victorious public reasons, although our conception of public reason is different from his (Gaus, 1996). The former are legitimate reasons to justify a public decision, but frequently they do not lead to decisions that all reasonable agents need to choose. A victorious reason leads to a justification that all reasonable agents must endorse. Our view is that, in order to recommend an action to an agent, or to justify interventions on a subject, we must have a victorious public reason.

We do not debate PB in all cases of autism. We do not discuss whether PB should be implemented in cases of additional neurological difficulties where impairments associated with autism are such that no one can reasonably find this condition as that

1 J. Savulescu and G. Kahane, „The Moral Obligation to Create Children With the Best Chance of the Best Life", *Bioethics*, 23(5) (2009), pp. 274-290.

2 K. Scaler Scott, „Dysfluency in Autism Spectrum Disorders", *Procedia – Social and Behavioral Sciences*, 193 (2015), pp. 239-245.

of a valuable human life. One possibility to rebut PB in such cases is that, even if the form of life is not valuable, human life is valuable as such. In any event, we think that the subject has value, as such. But we do not even begin to discuss such questions.

While we initially discuss the main Savulescus's and Kahane's issue, i.e. the selection among different embryos, we extend the debate. Thus, we discuss biomedical interventions on existing embryos or children as well. We raise the question whether parents should use medical technology to improve the lives of embryos or already born autistic children in a manner of reducing or removing their impairments. In our view, parents could have moral obligations to bio-medically remove or reduce impairments in their autistic child, and provide her greater abilities and opportunities. However, as will be shown, we call upon this obligation only in cases where the enhancement of disabilities does not affect the talents an autistic child already has. We arrive at our conclusions through a framework of justification of public decisions built on John Rawls's theory of public reason (Rawls, 1993/1996/2005).

The object of Rawls's justificatory model was the specific domain of constitutional essentials. We endorse Jonathan Quong's extended view of public reason (Quong, 2011) and we apply it to various normative decisions in society. Among them, and relevant for this paper, we apply it to the identification of values relevant for decisions to select or enhance impaired children. We apply and extend the discussion in Baccarini (2015), as well.

Basically, the public reason thesis is that, in order to have a valid public reason, one must have a reason for which we can reasonably expect that it will be accepted by each agent as free and equal. An epistemic threshold is needed as well. Rawls includes in the public reason theory "presently accepted general beliefs and forms of reasoning found in common sense, and the methods and conclusions of science when these are not controversial" (Rawls, 1993/1996/2005, 224). We interpret the epistemic condition as weakly idealised. Agents must be epistemically responsible and thus, we interpret the expression "presently accepted general beliefs and forms of reasoning found in common sense" in relation to agents who are responsibly open and responsive to justified beliefs and forms of reasoning accessible to a wide audience, and who avoid easily discoverable mistakes in reasoning and conclusively refused beliefs. This is needed in order to eliminate epistemic deviances like prejudices, stubbornness, fake news, etc. The public reason model of public justification rules out controversial reasons, i.e. reasons reasonable agents can disagree on.

A consequence of the endorsement of the public reason model of public justification is renouncing the Savulescu's and Kahane's criterion of well-being. Instead, we speak about valuable life. The reason is that we think that it is implausible from the standpoint of public justification to assume the criterion of well-being as dominant in the matter of public decisions about selecting embryos or characteristics in people. This is because even the normative strength of the criterion

of well-being is a matter of reasonable disagreement. Reasonable agents can have valid public reasons for rejecting its supremacy. Think about Mill's thesis that "it is [...] better to be Socrates dissatisfied than a fool satisfied" (Mill, 1861/1969, 212). This is why we prefer the more general and inclusive criterion of valuable life.

The criterion of valuable life is more inclusive, in the sense that it is acceptable by more people in virtue of its generality. For example, it can be accepted both by J.S. Mill, as well as by people who embrace well-being as the supreme criterion. But a consequence of its acceptance is a rather wide reasonable pluralism in virtue of plural reasonable conceptions of valuable lives. Value pluralism is admitted even by some perfectionists (Wall, 1998). In comparison to these authors, we include even the pluralist perfectionist view among those which are not epistemically compulsory for reasonable agents.

Consequently, the endorsement of the criterion of valuable life does not delete reasonable pluralism in the question relevant for Savulescu and Kahane, i.e. embryo selection. We agree with Michael Parker (2007) who says that the lack of clear and determinate answers as to which lives are better or the best possible is highly problematic due to the interpretative possibilities of parents to rank possible lives as „better" or „worse".

Our claim in this paper is, consequently, two-fold: (1) there is no victorious public reason that we can suggest to potential parents to negatively select an embryo with mild autism, because of talents and abilities in such conditions that justify the all things considered reasonable judgment that the life of a person with mild autism is a valuable life; and (2) in the case of an embryo or a child with mild autism, parents have a moral obligation to remove or reduce the impairments their child has, when this is possible, but only under the condition that the enhancement does not affect the talents and abilities the child already has in her actual condition.

The structure of the paper is the following. The first upcoming part PB as offered by Savulescu and Kahane, and specifically focuses on their suggestion to avoid natural reproduction in cases where there is a possibility of a child having a disposition towards autism. The second part problematizes the latter suggestion and provides present studies of autism as a group of heterogeneous conditions that are not all being fairly treated. Such conditions deserve a complex analysis. It is important not to endorse the idea of autism as largely disorder-oriented, with impairments being put into the spotlight, while the talents and skills are being completely neglected. We claim that cases of mild autism can represent examples of overall human lives that we can reasonably judge as valuable all things considered. The third part uses these studies, as well as the public reason model of justification, to discuss Savulescu's and Kahane's PB. The fourth part opens a new discussion and is primarily concerned with the question of enhancement of already existing embryos or children with mild autism.

THE PRINCIPLE OF PROCREATIVE BENEFICENCE

It is a thought of common sense that couples who are planning to have a child should build sufficient financial, material and emotional resources so their future child can have conditions for a good life. Through PB, Savulescu and Kahane go a step further and claim that it is in the same line of thought that potential parents have moral reasons to select the most advantaged child through the process of genetic selection and, in doing so, ensure child's well-being[3]:

„If couples (or single reproducers) have decided to have a child, and selection is possible, then they have a significant moral reason to select the child, of the possible children they could have, whose life can be expected, in light of the relevant available information, to go best or at least not worse than any of the others" (2009: 274).

PB is not an absolute moral obligation, but a claim that potential parents have *significant moral reasons* to select the child who is *expected* to have the most advantaged life. PB does not offer a specific definition of what stands for good or the most advantaged life, but asks us to apply to procreative decisions the same concepts of a good life we employ in our everyday lives. Thus, PB implies that when the choice of, for instance, a non-disabled child is possible, we have a significant moral reason to choose a child who does not have the condition that is recognized as a disability.[4] Note that it does not only claim that potential parents have a moral reason to choose the child who is non-disabled, but gives reasons to select the most advantaged child out of the possible children a couple can select.

Savulescu and Kahane specifically argue that potential parents should prevent the reproduction of a child with autism. Reproducers, in their opinion, have a strong moral reason to prevent even an innate tendency towards conditions that include impairments, and specifically call upon the in vitro fertilization (IVF) in cases where natural reproduction could result in a child having Asperger's syndrome.[5] Savulescu and Kahane classify autism and Asperger's syndrome in particular as a severe impairment in social skills.[6] Embryos with these severe impairments can never have the best chance for the best life, and that is the reason for potential parents not to choose embryos with autism. But on what grounds are all conditions of the autistic spectrum evaluated in this way? Survival and health are not the only criteria, as Savulescu (2007) stresses. He refers to the notion of "all-purpose goods" offered by

3 The idea was first presented by Savulescu's 2001 paper, "Procreative Beneficence: Why We Should Select the Best Children" where the principle is defined as following: „Couples (or single reproducers) should select the child, of the possible children they could have, who is expected to have the best life, or at least as good a life as the others, based on the relevant, available information." (2001: 415)

4 Savulescu and Kahane (2009: 275-276).

5 The assumption is that there are genetic markers for disposition towards autism that can be found in embryos in the process of in vitro fertilization.

6 Savulescu and Kahane (2009: 281).

Buchanan et al. (2000): "These are traits which are valuable regardless of which kind of life a person chooses to live. They give us greater all-around capacities to live a vast array of lives. Examples include intelligence, memory, self-discipline, patience, empathy, a sense of humor, optimism and having sunny temperament" (2007: 7).

Some of the putative goods such as intelligence, memory, self-discipline, and patience are capacities that persons with autism can have. However, autistic persons lack some of the mentioned goods such as a sense of humor, empathy, sympathy and the capacity to live socially with others. Is it the case, therefore, that autism is all things considered a condition that allows a person to lead a good life, or is it, as Savulescu and Kahane advocate, a condition of severe impairments that does not allow a potential child to lead a valuable life?

We find Savulescu's and Kahane's claims about autism problematic, especially their generalization of autism as a homogenous condition and its reduction to social impairments, neglecting remarkable capacities and talents that persons with this diagnosis exhibit. Autism is a group of heterogeneous conditions that drastically vary among people diagnosed with Autism Spectrum Disorders.[7] The term alone encompasses children and adults with a wide range of clinical presentation, while the diagnosis is not always strict and static, meaning that some persons can move into or out of the diagnosis of autism.[8] Furthermore, autism is not all about impairments; it also includes specific cognitive abilities and talents. In the following chapter we will, first, present the heterogeneity of autism and second, the abilities people with mild autism share. A reasonable judgment can evaluate that these compensating abilities overcome their difficulties, which impede, we argue, a victorious public reason for always choosing an embryo without autism and reject a life with autism.

DEFINING AUTISM

Diagnostic and Statistical Manual V defines autism as a: "...lifelong developmental disability that affects how a person communicates with, and relates to, other people."[9] (APA 2013: 299.00; F84.0). As it is described in the manual, it is primarily a neurodevelopmental disorder with the wide range of symptoms, strengths, and levels of impairment severity, described as the "spectrum". It encompasses a large amount of heterogeneity and describes conditions from non-verbal people with severe developmental delays to high-functioning savants with above average IQ. However,

7 R. K. Lemroot and P.K. Yeung, „Heterogenity within Autism Spectrum Disorders: What Have We Learned From Neuroimaging Studies*?", Frontiers in Human Neuroscience*, 7 (2013), pp. 1-16.

8 M.W. Yu, M. Coulter, M. Chahrour and C.A. Walsh, „Autism Spectrum Disorders" in: G.S. Ginsburg and H.F. Wallard (eds.), *Genomic and Personalized Medicine 2nd Edition*, Academic Press, 2012, pp. 1067-1074.

9 American Psychiatric Association, *Diagnostic and Statistical Manual of Metal Disorders 5th Edition*, American Psychiatric Publishing, 2013, 299.00; F84.0.

all people with autism spectrum disorder share, at some level, the triad of impairments: (1) lasting problems with language and communication, (2) impairments in social interaction in different settings and (3) repetitive or restricted interests and behaviors with a difficulty to change.[10] All these impairments are behavioral features, and within each of these domains, there are a number of specific features relative to the proper diagnosis. The social domain is usually treated as the most severely impaired feature in autism, as it includes poor eye contact, lack of joint attention, difficulty in initiating and maintaining peer relationships, lack of empathy[11], difficulties in understanding and using facial features and body language, and lack of interest in other people's goals and interests.[12]

Besides these common features, people with autism often differ greatly from each other, and each individual's autistic condition is specific. The degree of autism varies from severe to mild, and the level of abilities can vary from severe learning disabilities to exceptional above average intelligence. Before the DSM-V the heterogeneity of the autistic spectrum was presented through different diagnostic labels which included *Asperger syndrome* and *Pervasive Developmental Disorders – Not Otherwise Specified* as forms of mild autism, *Rett syndrome* and *Childhood disintegrative disorders* as forms of severe autism.[13] After DSM-V, these diagnostic labels have been rejected, while a broad category of *Autism Spectrum Disorders* (ASD) has been introduced. The DSM-V diagnostic definition of ADS is, thus, not making difference between diagnostic subtypes, but specifies three levels of symptom severity.[14] From DSM-V onwards, the clinical image of ASD includes *severity markers* based on the degree of impairments – mild, moderate and severe impairment. These markers are intended to allow clinicians to rate the presence and severity of psychiatric and related symptoms. The severity classification has three levels – *Level 1* ("Requiring support"), *Level 2* ("Requiring substantial support"), and *Level 3* ("Requiring very substantial support") – in which the notion of "level of support" is to be read as the environmental modifications necessary for daily functioning. The classification levels are split across two areas – *Social Communication* and *Restricted and Repetitive Behaviors. Level 1*, the highest level, describes cases where autistic individuals function without support in place, but still exhibit deficits in social communication (e.g. difficulty initiating social interaction).

10 Ibid.

11 Baron-Cohen (2011), discussing the relationship between the lack of empathy and cruelty, states that not all absence of empathy is negative. He claims that there is at least one condition in psychiatry, i.e. autism spectrum condition, where individuals have positive zero degrees of empathy, meaning that their lack of empathy is not dangerous neither to themselves or the people around them.

12 C. Schreiber, „Social Skills Intervention for Children with High-functioning Autism Spectrum Disorders", *Journal of Positive Behavior Interventions*, 13 (2011), pp. 49-62.

13 F.R. Volkmar and B. Reichow, „Autism in DSM-5: Progress and Challenges", *Molecular Autism*, 4 (2013), pp. 1-6.

14 American Psychiatric Association (2013: 299.00; F84.0).

People who receive a diagnosis of *Level 1* of autism, according to DSM-V, still require support (in the form of behavioral therapy), but often maintain a high quality of life. Some of the symptoms that describe *Level 1* are decreased interest in social interaction, difficulties in maintaining a conversation and troubles adapting to change. The individuals diagnosed with *Level 2* autism have social impairments, reduced verbal and non-verbal communication skills and mild inflexibility of behavior. The symptoms of this level include difficulty in coping with change, significant lack of verbal and non-verbal communication skills, narrow interests and reduced response to social cues. However, people diagnosed with *Level 2* autism can still have a good quality of life, but with support and therapy in place. *Level 3* is used when an autistic person has severe deficits in verbal and non-verbal social communication, severe impairments in daily functioning, minimal response to social interactions and limited or completed lack of language. According to DSM-V, this level of autism requires substantial support, due to symptoms like severe lack of verbal and non-verbal skills, extreme difficulty in changing routines or environment, limited ability to engage in social interaction, and learning disabilities which follow.

The DSM-V classification, as it can be seen from the impairment severity classification, is largely disorder-oriented, highlighting the impairments and inabilities of autistic persons.[15] Kapp and Ne'eman (2012) express their concerns regarding the introduction of a severity scale for the ASD diagnosis, as its outcome "would likely result in clinicians inappropriately discouraging autistic traits as an emphasis of intervention (...) rather than focusing on functional skills with more direct impacts on quality of life" (2012: 3). Less attention is given to the special talents, abilities and savant skills such as calendar calculation, perfect-perspective drawing, extraordinary memory for facts, instant multiplication and precise attention to details.[16] These talents and skills are far more common in the autism spectrum than in any other group, and should be put into the spotlight.

Several authors insist that the connection between autism and talent lies in the detail-focused *cognitive style* that is specific for people with autism conditions. Frith (1989) suggested that what makes an autistic brain different is the weak "central coherence", i.e. the lack of ability to integrate information into a coherent context. Autistic people show *detail-focused processing* in which features are perceived and retained at the expense of global configuration and contextualized meaning. Children and adults with autism often show a preoccupation with details and parts, while failing to grasp the overall picture. However, the inability to grasp a coherent

15 Weitlauf et al. (2013) state that it is not clear how individuals with mixed levels of impairments should be classified in terms of DSM-V „Level of Support" using existing measures of autism impairment severity.

16 S. Baron-Cohen, E. Ashwin, C. Ashwin, T. Tavassoli and B. Chakrabarti, „Talent in Autism: Hyper-systemizing, Hyper-attention to Detail and Sensory Hypersensitivity", *Philosophical Transcription of the Royal Society London B,* 364 (2009), pp. 1377-1383.

whole can be seen in a positive manner, not as an inability, but rather as a superior ability to process local information. In this manner, Frith's original account of weak CC has been altered in two important ways. First, the original failure of autistic people to extract global meaning has transformed from a primary perceptual problem to a possible superiority in detail-focused processing. Second, the idea of core cognitive deficit was changed with the idea of processing bias or cognitive style. Happe´ & Vital (2009), in their investigation on the correlation between talent and neurodevelopmental deficit, suggest that detail-focused attention and memory predispose the development of talent, both in the general population and in autism. Additionally, Baron-Cohen et al. (2009) suggest that sensory hypersensitivity, another trait most autistic individuals share, underlies the detail-focused cognitive style, which in turn boosts the tendency towards closed systems (e.g. calendars, train schedule) and improves the ability towards creating law-based pattern recognition.

The majority of autism researches share the view that the ability to detect and process detailed and local information in a hyper-systemizing manner plays an important part in predisposing savant skills.[17] Howlin et al. (2009) argue that over a third of individuals with autism show unusual skills that are both above population norms and above their own overall cognitive functioning. The autistic abilities and talents are to be found across the spectrum, primarily within the category of *Level 1* and *Level 2* of the impairment severity classification. This is why we advocate that the autistic persons who do not suffer from severe autism and following disorders can achieve a good life by practicing their skills and talents. We can say that in general, as well as specifically, when we consider the number of famous scientists who have been diagnosed with autism. As Temple Grandin, autism advocate, stressed, half of the Silicon Valley have the diagnosis of mild autism, they are just avoiding the labels.[18]

The point is further developed in Baron-Cohen (2008, 2011). While savantism is seen only in a subset of autistic individuals, a universal feature seen across the autism spectrum is *excellent attention to details*. This talent is a result, as Baron-Cohen (2011) states, of evolutionary forces positively selecting brains for strong systematizing, which allow persons with autism to achieve high levels in domains such as mathematics, physics and computer science.[19] The hyper-systemizing ability autistic people share is to be understood as a *pattern-seeking* ability, which can

17 F. Happé and P. Vital, „What Aspects of Autism Predispose to Talent?", *Philosophical Transactions of the Royal Society London B,* 364 (2009), pp. 1369–1375.

18 T. Grandin, *The Autistic Brain: Thinking Across Spectrum*, Houghton Mifflin Harcourt: Boston, 2013.

19 A recent survey showed that among Cambridge undergraduate students of mathematics, physics, engineering and Computer Science, mild autism (specifically Asperger's sydrome) is most likely to be found. See S. Baron-Cohen, S. Wheelwright, R. Skinner, J. Martin and L. Clubley, „The Autism-Spectrum Quotient (AQ): Evidence for Asperger Syndrome/High-functioning Autism, Males and Females, Scientists and Mathematicians", *Journal of Autism Developmental Disorders*, 31 (2011), pp. 5 – 17.

"reveal scientific truths about the nature of reality, since their systemizing can help the individual understand how things work. These may be mechanical systems (like computers or car engines), abstract systems (like mathematics or syntax), natural systems (like a biological organ, or the weather), collectible systems (like a library or a lexicon), or even social systems (like a legal code or a historical chronology). What was previously dismissed as an "obsession" can be viewed more positively as a "strong, narrow interest" in a topic that, when harnessed, can lead the person with autism or AS to excel in a highly specific field" (2008: 69). He continues, "in this sense, it is likely that the genes for increased systemizing have made remarkable contributions to human history" (2008: 72).

PUBLIC REASON AND SAVULESCU'S AND KAHANE'S PB

In virtue of the complexity of impairments and talents in mild autism, we claim that there is no victorious public reason for negatively selecting a child with this condition. To confirm this, we apply the public reason model of justification shown above. We advocate that if the potential child has a disposition to mild autism (*Level 1* and *Level 2*) without accompanying disorders (such as learning disability, mental retardation, and epilepsy), then there is no victorious public reason to suggest to the potential parent to negatively select that child. Although the potential child in question will have social impairments to some degree, the talents that the child will exhibit can be reasonably judged as constituents of a valuable life, all things considered. We advocate that even though embryos with mild autism will, when born, not have the goods such as empathy, sympathy, and the capacity to live with others, there is not a victorious public reason to offer to the potential parents to negatively select the embryo with mild autism. The talents and skills that the embryo with mild autism will have once born can be reasonably judged as founding an all things considered judgment about a valuable life, especially because there are ways for reducing the impairments.

The reason is that such a child has capacities and talents that can be reasonably judged as having high value. Reasonable agents can judge that there is no victorious reason to say that a life with specific talents, as well as with impairments characteristic of mild autism, is less valuable than a life deprived of both the talents and the impairments. This is why we cannot apply Savulescu's and Kahane's PB here and it cannot be publicly justified like a recommendation for parents. By this, we have argued against the proposal of negative selection of all embryos with dispositions to autism.

In what follows, we discuss the possibility, at the moment hypothetical, of biomedical interventions intended to improve the lives of an autistic person. By this,

we mean interventions through biotechnological resources, such as genetic interventions, medicines, and technological resources in general.

BIOMEDICAL ENHANCEMENT OF AUTISTIC CHILDREN

We assume that, in future, biomedical interventions could improve the lives of autistic people by targeting and improving their impairments. This is a speculative assumption, but we endorse Baron-Cohen's et al. thesis to confirm that the assumption is, at least, not a non-starter.

They describe the empathizing deficit in children with autism, i.e. deficits in imagining other people's mental states and developing empathy towards them, as a deficit that "has little if anything to contribute" to the islet of ability autistic children exhibit – the ability to systemize. They suggest that "alongside empathizing deficits, a different process [the process of systemizing] is intact or even superior." (2002: 499). The process of empathizing can be understood as an ability to respond affectively to other people's mental states, and the process of systemizing as the drive to analyse and build systems in order to predict the future events. The first is in the majority of cases impaired in autistic persons, while the latter is recognized as one of their talents. If empathizing and systemizing are independent dimensions, as Baron-Cohen et al. claims, then there is a possibility to remove or reduce the social impairments (lack of empathy being one of them) while at the same time not to deprive the person of a systemizing talent.

In the previous sections of the paper, we argued that there are no victorious public reasons to offer to potential parents in order to recommend to them to negatively select an embryo with dispositions towards mild autism. In this section, we argue that once parents give life to an embryo or child with mild autism, they have a moral obligation to remove or reduce impairments in their potential child through biomedical intervention, if resources to do so are available. However, we stress that interventions on persons with mild autism would be legitimate if, and only if, they are used in order to improve impairments without eliminating talents that a person already has. Imagine a child with mild autism with an above average intelligence and substantial mathematical skills, who exhibits a severe lack of empathy. In this case, through genetic engineering, we intervene legitimately by improving the empathy impairments she has, without eliminating her mathematical talent.

Our present argument, in this part, is analogous to Savulescu's argument (2016). There, he speaks of *Neglectful Parents* who give birth to a child with a stunning intellect who needs a cheap dietary supplement to sustain that level of intelligence. The *Neglectful Parents* are the parents who neglect the diet of a child and are responsible for diminishing the child's well-being. Savulescu claims that in

substitution of "biological enhancement" with "diet", we can see that in order to do no harm to the child, we should enhance her. The *Neglectful Parents* in our scenario are those who have the opportunity for an intervention on an autistic child that could remove or reduce her impairments without eliminating capacities and talents, but do not wish to select this kind of enhancement. If reducing or removing impairments is possible without eliminating capacities and talents, then parents have a moral obligation to do this.

We have, however, an additional thesis: if with removing or reducing impairments, the child loses her capacities and talents, then the intervention is not justified. This is because there can be reasonable pluralism about the question which of the following is more valuable; a life without impairments of the mild autistic condition and without specific talents, or the contrary. But for justifying an intervention on a person, we need a victorious public reason, one that will be accepted by each reasonable agent as a conclusive reason.

CONCLUSION

We have applied the method of public reason that, in our application, requires that public decisions and decisions of interference with other subjects are justified by reasons that each agent can reasonably accept. We have shown that the application of PB for the negative selection of embryos with dispositions for mild autism cannot pass the test of this justificatory model. The reason is represented by value pluralism, as well as by the presence of talents and capacities in people with mild autism. Thus, the life of a person with mild autism can be reasonably judged as valuable. It can also be reasonably judged as comparatively valuable. This impedes the application of PB in the present case.

Impairments present in people with mild autism, however, can be judged as undesirable by each person in a reasonable judgment. This grounds the duty to remove them, if or when biomedical resources of enhancement become available. However, intervention is justified only if it does not imply the removal of talents. The thesis is, again, justified in virtue of value pluralism and of the public reason requirement.

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