The Ideo-Politics of Paedophilia

The Controversial Case of the Child-Like Sex Robot

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Abstract

Can the Child-Like Sex Robot (CSR) keep paedophilic individuals from harming a child? Ever since its deployment was first suggested in 2014, experts have been responding vividly and divergently to this controversial question. This indeterminacy seems to be the logical result of the current state-of-affairs: prior investigations into either virtual child pornography or adult sex robots seem unable to resolve the issue and the unknown causes of paedophilia are pushing an assessment of the CSR towards one of speculation.

Today, this divergence creates an unfortunate deadlock: the ethical stakes are high while the current marketplace emergence of the CSR demands ever more a philosophical and legal reply. In response to this impasse, the purpose of this dissertation is two-fold. Firstly, it aims to elucidate how contemporary arguments either in favour of or against the CSR appear to be conceptually inaccurate. Paedophilia, that is, constitutes a number of subgroups on which the CSR could have different effects; experts choose to ignore this by building their argument on one-sided conceptualisations of paedophilia. Nevertheless, the conceptualisations that they stick to are different from each other. In this regard, the second purpose of this dissertation is to explain this divergence in terms of ideology: formal approval of the CSR is not only a matter of morality, but it calls into question, too, metaphysical standpoints on civilisation and political authority – among others.

Normatively, this dissertation implicates a rigorous rethinking of the stigma surrounding paedophilia. Through a dialectic analysis of two leading arguments in favour of and against the CSR, we may find that ideological convictions are not necessarily beneficial to the accuracy with which the CSR's 'true' danger to children is being assessed. Currently, stigma and dominant ideology cannot be seen separate from each other.

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I would like to express my sincere gratitude towards the following people, without whom I would not have been able to complete this research. First of all, I must thank my supervisors, Dr Patrick Taylor Smith and Dr Andreas Weber. I have come to experience their pleasant guidance and valuable feedback as indispensable elements throughout this dissertation project.

Secondly, I wish to thank the many people around me that have continuously supported me in writing this dissertation. Here, I am referring to my family, my amazing roommates as

well as my beloved group of friends – a particular shout-out to Amber, Danique, Janneke, Laura, Rik and Zanne. Each one of them has given me a healthy dose of joy and laughter whilst engaged in this particularly charged topic.

Prologue

Qualification

In this dissertation, I shall make a number of claims concerning the *aetiology* of paedophilia, referring to the phenomena that are causing it. Most importantly, I will conclude that the aetiology of paedophilia is *uncertain*, by which I mean to say that it is unclear, contested and not conclusively established. Secondly, I will present a number of conceptual demarcations within paedophilia on the basis of empirical and psychophysiological evidence. As such, I shall claim the existence of *paedophilic plurality*. To substantiate both claims, I will make use of the work of a great number of authors within the field of psychology and psychiatry. And, by virtue of convenience, I shall assume that the authors cited all *agree* with these respective claims. I reckon, though, that they might not, which is why I wish to clarify in advance whence I derive the confidence in making them.

I make these claims on the basis of an exhaustive meta-analysis conducted by paedophilia scholar Michael C. Seto: *Pedophilia and Sexual Offending Against Children* (2018). Here, he concludes that "no unique neurodevelopmental risk factor [...] is surely indicative of paedophilia, and [...] many children who are sexually abused or have unusual childhood experiences do not go on to develop paedophilia either" (2018: 114). Equally, he proclaims that "one myth worth dispelling [...] is the idea that persons with paedophilia [...] are very similar to each other or that persons who have sexually offended against children are very similar to each other" (idem: 5). Throughout his analysis, Seto enlists to the idea of paedophilic plurality – or, as he calls it, paedophilic heterogeneity. In short, the central claims that I am making with respect to the aetiology of paedophilia are in line with his findings.

As an applied ethicist, I have decided to take his word for it: I must relegate any internal objections to his findings to the field of psychiatry itself, for I do not have the time nor the authority to assess the validity of these objections¹. For what it is worth, I do not expect much resistance either. Seto himself is a registered, clinical forensic psychologist and a forensic research director within the Royal Ottawa Health Care Group (idem: 329). On top of that, he has professorship appointments in psychology and psychiatry at four different universities. Ever since Seto received his doctorate in psychology in 1997, he has published substantially on - among others - paedophilia, child pornography and sexual offending. Over time, he has become a respected and authoritative figure within the scholarship of paedophilia.

¹ Note that, by this, I do not mean to say that his claims are absolute. In other words, it is not an *appeal to authority*. Seto, too, faces criticism and this is important to remember. For example, in '*More Puzzles: Response to Seto*'s (2017) 'The Puzzle of Male Chronophilias' (2018), forensic researcher Paul Fedoroff criticises Seto's inconsistent definition of sexual orientation. My somewhat 'blind' acceptance of Seto's analysis is not because I grant him epistemological superiority, but because of constraints in time and authority.

'Objective', 'Accurate' and 'Truthful'

Central to this dissertation will be the assessment of the child-like sex robot. In this regard, I shall come to speak of the 'true' danger to children as well as the need for an 'objective', 'accurate' and 'truthful' assessment of the robot. I shall continue to place these adjectives between apostrophes, for they are intended to induce some philosophical nuance. After all, does a purely objective assessment even exist; is risk not always *subjective*? As we will see, the child-like sex robot is a telling vehicle for this subjectivity: its danger is perceived differently along with different considerations on what psychiatric data to include.

My dissertation, however, is not one of epistemology. Rather, it is one of applied ethics for which it seems only futile to completely relativize risk. Some of the normative claims that I will make, namely, depend on having an 'objective' assessment in mind; without it, these claims would lose their standing ground. In this regard, the 'objective' assessment that I will refer to is one that departs from the epistemic position that does as much just as possible to the well-being of children. As such, I ask the reader to understand 'objective', 'accurate' and 'truthful' not in a realist sense, but rather in a pragmatic, realistic sense; one that makes a philosophical and legal response to the CSR possible and works with the knowledge available to us.

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Introduction

The Deadlock of the CSR

Can the child-like sex robot (CSR) keep paedophilic individuals from harming a child? As of 2020, this controversial question has already received substantial attention from both academia² and popular media³. Self-proclaimed paedophile and entrepreneur Shin Takagi is likely to respond to this question with a 'yes' (Morin 2016). Currently developing and shipping CSRs, he is convinced that his product can keep paedophilic individuals from offending. Fortunately for him, his controversial claim is supported by a number of experts. Most noteworthy, renowned paedophilia scholar Michael Seto has cautiously endorsed the robot, arguing that "access to [the CSR] would be a safer outlet for [paedophilic individuals'] sexual urges, reducing the likelihood that they would seek out child pornography or sex with real children" (Nguyen 2015: Section 7).

There are equally strong voices claiming that the CSR will not at all have the preventive effect that proponents ascribe to it. On the contrary, opponents of the CSR believe that it will only serve as a 'stepping stone' to the sexual abuse of a child - it will increase child sexual abuse, not reduce it. In this regard, psychologist Peter Fagan claims that, in many instances, "[CSRs] cause [paedophilia] to be acted upon with greater urgency" (Morin 2016: Section 6). A strong argument in favour of this opposition has been developed by philosopher Lauren Shapiro and criminologist Marie-Helen Maras (2017). They argue that the aggravating effect of the CSR can be easily explained by the concept of 'desensitisation': paedophilic individuals must find increasingly more excessive versions of child pornography to reach the same level of sexual gratification. After the CSR, they claim, the logical next step would be a real child.

Understandably, the divergence among experts is creating an unfortunate deadlock. Certainly not helpful is the current marketplace emergence of the robot, which increasingly warrants both a philosophical and legal response. The ethical stakes are high and intertwined. On the one hand, it is paramount that children are protected from sexual abuse. On the other hand, society must also take into account the psychological pain endured by paedophilic individuals themselves. Although it is often ignored, a common comorbidity among paedophilic individuals is the presence of self-loathing and suicidal tendencies. As sexual abuse psychiatrist Elizabeth Letourneau proclaims, this is caused by their undesirable and according to them - unsolicited sexual preference (2014). Judgements concerning the CSR's desirability may carry grave consequences for both groups.

² E.g. (Danahar 2014), (Frank & Nyholm 2017) and (Sparrow 2017)

³ E.g. (Cox 2018), (Waugh 2018) and (Valenzuela 2018)

Aetiological Uncertainty

In this dissertation, I shall not endeavour to answer the controversial question posed at the start of this introduction. I reckon that this would be impossible; the aforementioned indeterminacy is a logical result of the current state-of-affairs. After all, judging the CSR means to judge its probable effects on paedophilic behaviour - whether it will reduce or aggravate it and this, in turn, requires that we possess the right knowledge on paedophilia to make such predictions. It is exactly this knowledge, though, that we are lacking. More specifically, aetiological research as the discipline investigating its underlying causes cannot yet substantiate what paedophilia truly *is*. It might be a sexual orientation akin to heterosexuality, but it could equally be the case that is caused by a psychopathology – temporary and treatable. The CSR is not likely to bring about the same effects for both cases. In terms of philosophy, the phenomenon of paedophilia is haunted by an ontological ambiguity that is not expected to get dissolved in the near future.

Naturally, this is not to say that aetiological research has remained useless altogether. With respect to the CSR, a promising research area is that of *paedophilic plurality*. Recent advancements within the field, namely, have led researchers to assert that paedophilia is, in fact, not as homogeneous as was long believed. Firstly, some presumed paedophilic individuals may not be so 'paedophilic' after all; they engage in child sexual behaviour for reasons that have little to do with a persistent, sexual interest in minors. Secondly, some individuals do experience such an interest, but they nonetheless refrain from offending. Slowly but surely, these advancements are producing a *conceptual taxonomy* of paedophilia that may not yet provide us with the absolute truth behind it, but at least with an *approximate* one. It would represent a plurality that is, too, of clinical relevance with regard to the CSR: it might indicate demarcations that are not merely semantic in nature, but psychological and/or physiological as well. This is important, for it would suggest the existence of a number of paedophilic subgroups on which the CSR could have divergent effects - reducing the urges for one and aggravating it for another.

Dissertation Objectives

In light of these observations, the purpose of this dissertation is two-fold. Firstly, I wish to elucidate that the just mentioned conceptual taxonomy is still significantly neglected in spite of it having an ethical value. As I will demonstrate, experts are building their argument either in favour of or against the CSR on carefully selected, yet divergent conceptualisations of paedophilia that demonstrate little respect to taxonomical demarcations. Here, they assume too much an aetiological consensus that does not exist, causing them to ignore contradictory evidence.

Secondly, I wish to clarify that the reason why their conceptualisations of paedophilia move in such divergent directions is likely because of the ideological visions undergirding them. As I will demonstrate, the CSR constitutes the extreme example of a more fundamental *ideopolitical discourse* of which the stakes embedded in it go beyond the mere protection of children. As it appears, formal approval of the robot would either be in line with or very much against the experts' metaphysical standpoints on, for example, civilisation and political authority. Here, the conceptualisation of paedophilia seems to be of argumentative value in solidifying these positions in society. As such, the CSR constitutes the material embodiment of a political game of power and rhetoric in which participants deliberate about a range of ideals in its name – hence the term ideo-political.

Ultimately, the main motivation behind this dissertation is *moral*. I have come to recognise, namely, that the influence of such ideological visions is not necessarily beneficial to the accuracy with which the CSR's 'true' danger to children is being determined. An accurate assessment, namely, would need experts to respect the conceptual taxonomy as laid out above and ideological convictions are mostly drawing them away from doing so. Ultimately, this might cause them to either obfuscate the CSR's potential virtue or severely underestimate its 'objective' risk. By exposing these dynamics, I hope that this dissertation will ultimately lead to a more 'truthful' answer to the polemic question posed at the start of this dissertation as well as a morally and politically adequate response to the CSR in the meantime.

Structure

I will start this dissertation with an introductory chapter (**Chapter 1**) that discusses both the philosophical challenges associated with the CSR and the moral landscape in which the latter is supposed to operate. Here, I will emphasise that prior and similar investigations into virtual pornography and anthropomorphic sex robots cannot provide a way out of the deadlock; 'simply' deploying the CSR into society seems no option either. Once I have set these foundations, **Chapter 2** enunciates how experts are being pushed towards a speculative assessment of the robot on the basis of its anticipated impact and how they must resort to the aetiology of paedophilia for its justification. This is not any less challenging, because the aetiology of paedophilia remains *uncertain*: unclear, contested and not conclusively established. As a result, paedophilia's aetiology cannot by itself indicate whether or not the CSR has any plausibility at all of reducing child sexual abuse.

Fortunately, aetiological research does nonetheless allow for the derivation of a novel conceptual taxonomy that might constitute the first step towards an accurate assessment. It may be that paedophilia is an umbrella term for a number of significantly different subgroups, and, as a result, the CSR might generate different responses - for better or worse. I will lay out this taxonomy in **Chapter 3**, where I will equally indicate how the risk posed by the CSR might

now be over- or underestimated once this novel taxonomy is neglected. An important conclusion, though, is that the clinical establishment of this taxonomy remains hindered by the aetiological uncertainty from which it departs. This observation will be important in explaining why the controversial debate surrounding the CSR is allowed to be as ideo-political as it has become.

Before arriving at this point, though, I must first provide evidence that this taxonomy is indeed being neglected. I will do this in **Chapter 4**. Here, I will observe that the aetiological uncertainty haunting the ontology of paedophilia does not seem to withhold experts from making predictive claims about the CSR's impact. I will underscore that the arguments that they bring to the fore are built on- and depend significantly on specific conceptualisations of paedophilia. In addition, I will make explicit that each of these conceptualisations is the result of a careful selection of psychiatric data with little respect to the taxonomical demarcations as presented in the previous chapter. I shall clarify that this is not only an *epistemic irresponsibility*, but equally a *moral* one. As I remarked earlier, namely, this might cause them to either obfuscate the CSR's potential virtue or severely underestimate its risk.

At this point, the moment has come to understand the CSR as the extreme example of a more fundamental, ideo-political discourse; to understand how these divergent conceptualisations of paedophilia are likely the result of motivated reasoning and how the aforementioned aetiological uncertainty constitutes not only an obstacle, but equally an argumentative convenience. For this, I will use insights from Science and Technology Studies. I shall present these insights in **Chapter 5**, after which I will apply them to the controversial case of the CSR in **Chapter 6**.

Finally, **Chapter 7** will address a question of more practical value: where to go from here? In other words, in the epistemically meagre position that society finds itself, what can be considered the most adequate response to the CSR from a legal perspective? By placing arguments in favour of and against legalisation side by side, I hope to provoke contemplation on what legal avenues to explore. As such, this chapter provides the first step towards a legal decision on the CSR that is justified in both moral and political terms.

Chapter 1. The Controversial Case of the Child-Like Sex Robot

My hope for this dissertation is, indeed, that the CSR becomes recognised as the focal point of a more fundamental, ideo-political discourse. I consider this recognition to be important, for the influence of such ideological convictions is not necessarily beneficial to the accuracy with which the CSR's 'true' risk is being assessed. To arrive at this conclusion, however, I must start from the very beginning. After all, the CSR might have been less the subject of an ideo-political discourse if it were easy to answer the question of whether or not it would reduce child sexual abuse. Therefore, the main purpose of this introductory chapter is to underscore that, indeed, this answer cannot be easily obtained. Prior and similar investigations into virtual pornography and anthropomorphic sex robots seem unhelpful in determining the CSR's desirability and engaging in empirical studies to determine it nonetheless seems morally impermissible. Before diving into this philosophical complexity, however, I will first sketch the moral landscape in which the CSR is supposed to operate.

This chapter shall proceed as follows. Firstly, **Section 1.1.** will draw our attention to child sexual abuse, a phenomenon of which I can already give away that it knows an unfortunate global prevalence of 12.7 to 18% for girls and 7.6% for boys (Stoltenborgh, Van IJzendoorn, Euser & Bakersmans-Kranenburg 2011). Given the severity of it, I have decided that the well-being of children is my primary concern; the observation that the CSR has the potential to increase abuse provides both the motivation behind- and the main incentive for engaging in this dissertation. In **Section 1.2.**, I wish to underscore that prioritising the well-being of children, however, need not be mutually exclusive to taking into account the well-being of paedophilic individuals as well. That is, the latter group might also be affected by the CSR and there is no *prima facie* incentive for them not to be considered. Although I find this an important point to make, the remainder of this dissertation will – for reasons provided – nevertheless see the CSR discussed primarily in light of its potential effects on the well-being of children.

Once this moral landscape has been sketched, **Section 1.3.** will discuss more meticulously how the CSR is believed to either combat or aggravate child sexual abuse, and, in **Section 1.4.**, I will demonstrate how the CSR as a 'novel ontological category' cannot avoid a line of inquiry that is speculative in nature. Finally, I wish to close this chapter with a more trivial point in **Section 1.5.** Here, I will justify that my interest in the CSR is primarily focusing on it as a means of prevention to the *onset* of paedophilic behaviour, not to its *recidivism*.

1.1. The Severity of Child Sexual Behaviour

As noted, the main incentive to engage in this dissertation is the severity of child sexual abuse and the observation that the CSR could increase its occurrence. Although it seems obvious, it is nonetheless worthy to show why such behaviour is as morally impermissible as most people

perceive it to be⁴. In his *Ethics of Paedophilia* (2015), ethicist Ole Martin Moen provides two convincing reasons for this position. I endorse both.

Firstly, it is immoral to *harm* children as adult-child sexual intercourse is proven to have a negative effect on both the physical and psychological well-being of children (2015: 113). Regarding the first, Moen undisputedly explains that "[if] small children are penetrated, or otherwise raped, they have a significant chance of being physically harmed" (ibid.). Regarding the latter, Moen resorts to empirical studies to evidence the existence of strong correlations between childhood sexual abuse and a variety of psychological disorders. In an exhaustive meta-analysis conducted in 2010, paediatric practitioner Gail Hornor identified that between 51 and 79% of sexually abused children experience symptoms of psychological disorders, such as post-traumatic stress disorder, borderline personality disorder and a number of eating disorders. Moen concludes that "psychological disorders [...] constitute harm, and arguably, the threshold for being harmed is even lower than the threshold for having identifiable psychological disorders" (ibid.). As such, he claims that "the evidence for the harmful psychological effects of adult-child sex seems solid" (ibid.).

Secondly, even if adult-child sexual intercourse could not be proven to be harmful, it remains to be impermissible due to its lack of *consent* (idem: 116). Moen argues that it is unacceptable to engage in sexual intercourse without consent and, subsequently, he determines that children are per definition not in the position to provide such. What follows is that all sexual intercourse involving children is non-consensual, and, with that, unacceptable.

1.2. Paedophilic Individuals as Ethical Stakeholders

Taking into account the well-being of children does not mean that the well-being of paedophilic individuals *cannot* be taken into account as well. Again, Moen provides us with the reason why. He explains that, "[for] something to be subject to moral assessment, we usually assume that it must be something that, more or less, we control or choose. If something is entirely outside of our control, such as our genetic makeup, it seems that though it might be more or less fortunate [...], it is not properly subject to moral assessment" (2015: 112). Subsequently, he takes from aetiological research into paedophilia that "it seems most plausible that [paedophilic

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⁴ I do so, for this perception is nonetheless not universally accepted. In his controversial paper *Adult-Child Sex* (1984), philosopher Robert Ehman provides three reasons for the belief that adult-child sexual does not need to be harmful per se. Firstly, on methodological grounds, he argues that children having mere positive experiences from adult-child sexual intercourse "remain invisible to clinical observation", rendering "[the individuals] who come to legal and clinical attention not [...] necessarily a typical cross section of the entire population (idem: 433). Secondly, he believes that adult-child sexual intercourse is only harmful because of society's view on it - supposedly 'making' it traumatizing by labelling it as 'abuse' and 'molestation' (Moen 2015: 114). In a sense, then, he proclaims that the harm resulting from adult-child sexual intercourse is contingent to the culture in which it is practised. Lastly, Ehman suggests that society ought to be open to the idea that sexual contact between an adult and a prepubescent minor can be mutually desirable, as he believes that children, too, are sexual beings (ibid.). Although it is beyond the scope of this dissertation to do so myself, I wish to point towards Moen's aforementioned *Ethics of Paedophilia* (2015) for a convincing refutation of each of these three claims.

individuals] do not choose their preference," and that though their preferences might be unfortunate, "the mere fact of having such preferences is neither moral nor immoral" (ibid.)⁵ ⁶. Paedophilia, then, is not *prima facie* immoral and there is not a *prima facie* incentive to not include them. Note that, here, Moen's conclusion applies only to those individuals who have not yet engaged in child sexual behaviour – which is why I use the term *prima facie*. Child sexual behaviour remains impermissible at all times and it is unclear whether the inclusion of paedophilic individuals can still be justified once they have acted upon their urges – in other words, whether their inclusion is *conditional* to their behaviour. In **Section 1.6.**, I shall explain that, given the scope of this dissertation, we need not bother with this difficult question.

The CSR can seriously affect the well-being of paedophilic individuals. By reducing the urges to engage in child sexual behaviour, the robot could seriously decrease the psychological pain from which they suffer - by now, that pain must be understood initially as unwarranted⁷. This pain is not to be underestimated either. Already in 1983(a), psychiatrists Glenn D. Wilson and David N. Cox reported elevated shyness, sensitivity and depression in a sample of paedophilic individuals8. More recently, clinical psychologists Sara Jahnke and Juergen Hoyer discovered that 46% of paedophilic individuals had seriously considered suicide; 32% of the sample had planned to carry it out and 13% had already made an attempt (2013). According to psychiatrist Elizabeth Letourneau, psychological issues as such are caused by their undesirable and - according to them - unsolicited sexual preference (2014). Although the origins of these psychopathologies are disputed, it would not be surprising if they had anything to do with the severe stigmatisation with which paedophilic individuals must live. After all, paedophilia is associated with child abuse and - in spite of aetiological advances - it is still widely believed that being paedophilic is a personal choice (Jahnke et al. 2015). As a result, individuals planning to express it openly should not expect to receive much empathy; they can only await social ostracism, anxiety and fear⁹ (Seto 2018: 3, 4).

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⁵ Naturally, Moen's viewpoint is built on the belief that being paedophilic is not something that one can choose. I shall not contest this belief, for it is indeed true that aetiological research is increasingly providing more reasons to presume that paedophilia is not a personal choice (Embury-Dennis 2017).

⁶ Virtue ethicists might disagree with this claim. Whereas child sexual abuse is evidently wrong, they would claim that having such preferences is bad even without acting on them. Similarly, an addiction to smoking is bad even in rehab and even when it is out of one's control. Note that this difference is irrelevant concerning a moral assessment of the CSR. Just as much as Moen, I imagine virtue ethicists coming to the conclusion that paedophilic individuals cannot be blamed for their preferences *despite them being bad*. As such, the well-being of paedophilic individuals is to be taken into consideration in either case.

⁷ It becomes problematic to speak of unwarranted psychological pain if it is the direct result of one's one engaging in child sexual behaviour. Yet, as shall be touched upon in **Section 1.6.**, it is unclear to what extent a paedophilic individual is blameworthy for their offenses.

⁸ In the following decade, clinical psychologist William Marshall would confirm this observation, demonstrating that paedophilia generally co-occurs with numerous psychopathologies such as depression, anxiety, personality problems and low self-esteem (1997).

⁹ More specifically, a recent Dutch study into this stigmatisation reported that nearly all reactions to paedophilic individuals were more negative than they were to alcohol abusers, antisocial people and even sexual sadists (Jahnke, Imhoff & Hoyer 2015). Most radically, 28% of participants subscribed to the statement that paedophilic

In short, the CSR may affect both the well-being of both children and paedophilic individuals for better or worse. Yet, as remarked, the remainder of this dissertation will focus primarily on the well-being of children. This is because their mutual inclusion would have to deal with preexisting, controversial and challenging questions with respect to the ethics of paedophilia for which this dissertation offers no room. More specifically, I would continuously have to deal with the polemical intertwinement¹⁰ between the well-being of both parties, engendering ethical ramifications that are not directly relevant to an understanding of the CSR as part of an ideopolitical discourse¹¹.

By virtue of both brevity and relevance, then, I will make clear at once that I will discuss the CSR in the light of a right-based approach in which I place the well-being of children as lexically prior to that paedophilic individuals. By this, I mean to say that I will be primarily concerned with the risk that the CSR might pose to children while I relegate its potential, independent virtue for paedophilic individuals to the background. Vice versa, I shall equally be primarily concerned with the potential, independent virtue that the CSR might be for children, while I adopt the premise - which, frankly, cannot be guaranteed - that the CSR poses no risk to the well-being of paedophilic individuals themselves. Concerning the latter, I shall assume that paedophilic individuals would want to acquire a CSR if they were in the position to do so.

1.3. The Child-Like Sex Robot: A Novel Approach

In order to reduce child sexual abuse, a number of experts have now advocated the use of CSRs: "realistic reproductions of young (prepubescent) children in size and appearance with anatomically correct genitals and anus" (Maras & Shapiro 2017: 4). This idea pioneered in 2014, when ethicist Ronald Arkin proclaimed that, akin to satisfying heroin addicts with the much less harmful opioid methadone, paedophilic individuals could be provided with a robot in order to prevent them from resorting to an actual child (Hill 2014). It seemed particularly appealing in the face of contemporary 'treatments' 12 being only partially successful (Camilleri

individuals should better be dead, even if they had never engaged in criminal behaviour. Nevertheless, as mentioned earlier, aetiological and epidemiological research is increasingly providing more reasons to believe that paedophilia is not a choice, nor that every paedophilic individual engages in child sexual behaviour.

¹⁰ After all, in the case of paedophilia, a reduction of a child's well-being might be inversely proportional to that of a paedophilic individual, with it being unclear to what extent a reduction in the first accounts for an increase in the latter. Here, I expect ethical theories to respond divergently. Consequentialism, for example, would want to know if the aggregate improvement in well-being of the total population of paedophilic individuals outweighs the aggregate reduction in well-being of the total population of abused children. It could wonder what would be the moral incentive to forbid adult-child sexual behaviour, and, with respect to this dissertation, what would be the moral incentive to analyse the CSR as a potential measure of prevention. Naturally, such an inquiry would be denounced by rightsbased approaches (e.g. Hayenhjelm & Wolff 2011).

¹¹ In **Chapter 7**, for example, I will defend the legality of the CSR on the basis of public reason. Here, I will assume that paedophilic individuals themselves would want to acquire a CSR. As they are part of public reason's constituency, the defence is built on- and assumes their agreement.

¹² Here, the most prominent 'treatments' are cognitive behavioural therapy and biomedical interventions. The former aims at targeting "attitudes, beliefs, and behaviours that are believed to increase the likelihood of sexual offenses against children", and the latter provide paedophilic individuals with medications to "reduce [their] sexual urges toward children" (Seto 2018: 215, 216). Of course, these treatments equally branch into several more specific

& Quinsey 2008). According to philosopher Caitlin Roper, the proposal is now gaining "traction in academic circles", where the accordant belief is that it would be better for a robot to be 'raped' than for an actual child (Roper 2020: Section 3). As psychologist James Cantor asks himself: "[if] we surveyed victims of childhood sexual abuse, I wonder how many would say they [wished] their abusers had a sex doll who might have taken their place" (Nicol 2019). Using a CSR, he concludes, is a harmless way of masturbation.

Yet, many are deeply sceptical of this idea. They claim that CSRs "harm children through legitimising and normalising their sexual use. Instead of satisfying users' sexual appetites for children", as the argument goes, "they could encourage and even strengthen these urges" (Roper: Section 3). Moreover, a recent series of events have enhanced the belief that there may be a link between CSR-ownership and child sexual abuse (Rawlinson 2017; Hamblin & Simonis 2018; Dearden 2019). In a number of occurrences, that is, paedophilic individuals caught with a CSR were equally in the possession of child pornography, suggesting a correlation between the robot and offending against children. Maras and Shapiro's aforementioned 'desensitisation'-argument (2017) is most exhaustive. They argue that paedophilic individuals must find increasingly more excessive versions of child pornography to reach the same level of sexual gratification; after a robot, the only logical next step would be a real child.

In reactions to each other, the discourse already shimmers through that what might be at stake goes beyond the mere protection of children. Here, proponents of the CSR dismiss objections as being "rooted in a societal discomfort or disgust over adult-child sex" (Roper 2020: Section 4). Psychologist Craig Harper claims that opponents are "literally creating an offence without a victim for reasons of moral disgust" (ibid.). Opponents, on the other hand, seem to disagree with the naivety with which advocates address the phenomenon of paedophilia, criticising their presumption of it as a 'mere' sexual orientation stripped away from any irrational tendencies that paedophilic individuals might possess.

Legally, most countries are still assuming the worst. Individuals in possession of the robot are mostly arrested, for the robot is considered an obscenity and a form of child pornography (Van Den Berg & San Giorgi 2019). Recently, the U.S. House of Representatives adopted a law that would make its possession explicitly illegal, naming it the 'Curbing Realistic Exploitative Electronic Pedophilic Robots Act'. Not coincidentally, this long name abbreviates to the 'CREEPER ACT'. A noteworthy deviation from this prohibiting trend is The Netherlands. As long as the CSR is not known to aggravate child sexual abuse, its government has no intention of making it illegal (ibid.).

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ones. On top of that, this list is not exhaustive. For an exhaustive overview, please have a look at Chapter 8 from Michael Seto's *Paedophilia and Sexual Offending Against Children* (2018).

Unfortunately, which side is right in the end seems answerable only by empirical observation. In this particular case, though, empirical studies 13 would seem unethical. As Roper articulates: "[while] it is true that empirical data on the outcomes of [CSR] use does not exist, it is difficult to imagine how research of this nature could ever be conducted in an ethical way" (2020: Section 4). Indeed, 'simply' providing paedophilic individuals with a CSR and asking them afterwards if it had encouraged them to sexually abuse a child seems no option. Additionally, ethicist Marc Behrendt implies that, as long as empirical studies as such are not conducted, it is difficult to determine in which *shape* the CSR should come. Whether it should be "freely available in retailing" or available only in hospitals and prisons with "very stringent medical control", he argues, depends on "pilot projects [...] coupled with statistical studies on [paedophilic individuals'] recidivism rates treated with such a machine" (2018: 104, 105).

1.4. A Novel Ontological Category

In settling the case, experts equally cannot resort to preceding debates that have been categorically very similar. Firstly, it could be argued that the findings from empirical studies related to *virtual child pornography* could be extrapolated to the moral assessment of the CSR. This comparison is premised on the belief that "exposure to texts and graphics that sexualize children makes [paedophilic individuals] more prone to engage in adult-child sex in the real world" (Moen 2015: 119). Since this premise equally applies to the CSR, it is assumed that virtual child pornography and the CSR would have a similar effect on child sexual abuse; if the former is known to increase it, the latter could equally do so.

Yet, this hypothesis stumbles upon two issues. Empirically, the crucial link between exposure and abuse cannot be supported. In a study of child pornography possession among paedophilic individuals, applied psychologist Dennis Howitt could find "no clear-cut causal link [...] between [...] exposure to pornography and sex crime" (1995: 17). On the contrary, the 1989 Czech legalisation of child pornography¹⁴ was met with a significant drop in child sexual abuse, suggesting nonetheless that "for many [paedophilic individuals], pornography is a tool that helps them redirect their urges and drives and gives them an outlet for their sexual desires in a way that does not involve having [sexual intercourse] with children" (Moen 2015: 119; e.g. Diamond, Jozifkova & Weiss 2011; Riegel 2004). Philosophically, it is also not clear to what extent virtual pornography is ontologically comparable to the CSR. The first accounts for an

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¹³ In the context of psychiatry, these empirical studies may be referred to as *clinical trials*. I will come back to this in **Section 2.1.**

¹⁴ Until 2007, the possession of child pornography remained legal in the Czech Republic. Until then, only the distribution of child pornography was faced with legal punishment (Asiedu 2007).

immersive, but, indeed, virtual experience, whereas the second stays tangible and is situated in the 'real world' 15. It is unclear if their effects on paedophilic behaviour are the same.

With respect to the latter problem, it could be argued that the CSR is at least ontologically comparable to 'regular' *adult sex robots*, as they demonstrate the same level of advanced anthropomorphism. Importantly, this would open the door to a comparison between the CSR and a category of robots that has already been under much closer scrutiny. A prominent feminist criticism of sex robots has been that they "recreate women as passive, ever-consenting sexual tools, which will contribute to their silencing and subordination, and will normalise a *rape culture*" (Danahar 2019: 8, italics added). Recently, philosopher Oliver Bendel echoed the same concern, claiming that "it is possible that repeated exposure to a fictional-real test robot (i.e.: ability to 'rape' robots) might actually increase the prevalence of abuse extrapolated into society" (2017: 22). Over the years, this concern has prompted investigations into the possible aggravating effect of sex robots on rape prevalence. By drawing an explicit comparison between robots as such and the CSR itself, findings from investigations into the first could be extrapolated directly to the latter.

Nevertheless, this hypothesis equally stumbles upon two issues. One is again empirical, as Bendel ultimately had to conclude that "[the] lack of empirical studies means that the longer-term impact is not yet fully realized" (ibid.). On top of that, we cannot easily compare paedophilic and non-paedophilic individuals. One must not forget that paedophilia can co-occur with significant physiological and/or psychological perturbations, possibly causing paedophilic individuals to respond differently to a robot than a non-paedophilic individual.

1.5. Preventing the Onset of Paedophilic Behaviour

Lastly, I wish to make a more trivial point. Throughout this dissertation, I shall focus primarily on the robot as a means of prevention to the *onset* of paedophilic behaviour, not to its *recidivism*. By this, I mean to say that I will touch upon the robot's virtues and vices to the extent that it can prevent paedophilic individuals from *beginning* to engage in child sexual behaviour; not to the extent that it prevents them from offending *again* once they have already done so. I reckon, namely, that paedophilic individuals that either have or have not refrained child sexual behaviour might have a different psychological and/or physiological make-up. As such, the robot is likely to evoke different responses with both. Again, by virtue of both brevity and relevance, I will discuss only what the CSR's impact may be on the former group.

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¹⁵ Specifically, according to law scholar Litska Strikwerda, this difference gives rise to two assumptions. Firstly, in support of Arkin, the CSR may be more efficacious than virtual pornography, because "engaging in sexually explicit conduct with a [CSR] is a better *substitute* for child sexual abuse than watching entirely computer-generated child pornography" (2017: 146). On the other hand, "the step from engaging in sexually explicit conduct with a [CSR] to child sexual abuse seems *smaller* than the step from watching entirely computer-generated child pornography" (ibid., italics added). Greater immersion, that is, equals greater concern. In her paper, Strikwerda does not resolve the issue; she is no position to claim which assumption is true.

Naturally, this is not to say that assessing the robot's potential efficacy in preventing the recidivism of child sexual behaviour would not be laudable. Yet, provided that recidivism rates among child offenders remain low¹⁶, it seems morally superior to prevent the damage before it has materialised. On top of that, although I have chosen to grant moral primacy to children, my implicit hope for this dissertation is that paedophilic individuals might equally benefit from it in some way or another. I reckon that being paedophilic is highly undesirable and yet, probably no more a choice than being heterosexual¹⁷. I would not know, however, to what extent our moral duty to *care about* them would be conditional to their child sexual behaviour. To what extent, that is, are they *blameworthy*¹⁸ for their offences? By focusing on the CSR as a means of prevention to the *onset* of paedophilic behaviour, I can dodge this difficult question. It allows me to engage in this dissertation in good conscience, knowing that those who are to benefit from it are children and individuals that are per definition not yet to be blamed for anything.

1.6. Chapter Summary

With this first chapter, I hope to have laid the foundations for the remainder of this dissertation. Firstly, I have indicated its moral boundaries: I shall be primarily concerned with the well-being of children, for I have identified child sexual abuse as a "universal problem with gravelife-long outcomes" (Singh, Parsekar & Nair 2014: 430). I have underscored, too, that paedophilic individuals are themselves nonnegligible stakeholders; they might be equally affected by the CSR and there is no *prima facie* incentive for them not to be included. Throughout this dissertation, I shall address the well-being of both groups in lexicographical order.

Secondly, I have demonstrated that an easy response to the question of whether or not the CSR will reduce child sexual abuse seems unobtainable. The CSR, that is, signifies a "fantasy [existing] between the living and the inanimate" - it constitutes a 'new ontological category' that makes preceding investigations unapproachable (Sharkey, Van Wynsberghe, Robbins & Hancock 2017: 1). Moreover, empirical studies into it seem morally impermissible. As a result, experts are being pushed towards a speculative assessment of the robot on the basis of its anticipated impact. Here, they must resort the aetiology of paedophilia to justify it. As I will demonstrate in the following chapter, this is not any less challenging.

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¹⁶ Approximately 13% after 4-5 years (Hanson & Bussière 1998)

¹⁷ Supra nr. 5.

¹⁸ In the aforementioned *Ethics of Paedophilia* (2015), Moen endeavours to systematically analyse blameworthiness with respect to paedophilic behaviour. More specifically, he touches upon arguments of an 'appeal to ignorance' and 'moral luck' (see pages 117-119). It must be noted, though, that he does conclude by stating that "what counts against blameworthiness in these cases is exclusively limitations on the part of paedophilic individuals qua agents, so if a given individual is sufficiently enlightened and autonomous, neither the appeal to ignorance nor the appeal to moral luck will detract from his (or her) blameworthiness" (idem: 118).

Chapter 2. Paedophilia and Aetiological Uncertainty

Indeed, in the face of the epistemically and morally meagre position in which society finds itself, experts are being pushed towards a speculative assessment of the CSR on the basis of its anticipated impact. Formulated differently, society must *estimate* the CSR's true effect in order to decide whether or not it will consider the robot a desirable addition to society. Here, experts will depend on paedophilia's underlying aetiology in order to justify their estimation, referring to the phenomena that are causing it. Illustratively, experts might put more confidence in the CSR knowing it is a temporary disorder instead of a neurologic inability to inhibit paraphilic behaviour.

This chapter shall proceed as follows. Firstly, **Section 2.1.** shall contextualise the value of aetiology in speculative assessment, addressing directly the question of why it is so important to have a strong, aetiological foundation. Thereafter, I wish to present a brief overview of the aetiological past of paedophilia. Here, **Section 2.2.** demonstrates how efforts have been made to explain paedophilia *neurodevelopmentally* and **Section 2.3.** demonstrates how efforts have been made to explain it *behaviourally*. The purpose of this overview is two-fold. Firstly, as I will do in **Section 2.4.**, I will underscore that none of these approaches have produced the adequate aetiology with which the controversial case of the CSR can be resolved upfront. Provided that the aetiology is unclear and contested, any speculation on the robot's impact remains controversial and prone to objection. Secondly, as I will do in **Section 2.5.**, I will use this overview to conclude that paedophilia is most likely to represent a state of *psychophysiology* - a result of both neurodevelopmental *and* behavioural contingencies. This insight will bear practical value throughout the remainder of this dissertation.

The importance of this chapter needs to be seen in its connection to the following chapter. Amidst the aetiological uncertainty, namely, it could be that there does not exist a single phenotype¹⁹ of paedophilia. Rather, paedophilia could be an umbrella term for a number of significantly different subgroups with which the CSR could evoke different responses. This hypothesis seems to be increasingly supported by both empirical and psychophysiological evidence.

2.1. The Importance of Aetiology

An assessment of the CSR benefits from a robust foundation with respect to paedophilia. This requires some clarification, for I reckon that it is not uncommon for psychiatric treatments²⁰ to

¹⁹ A sophisticated, psychiatric definition of 'phenotype' is "the observable characteristics or traits of an organism that are produced by the interaction of the genotype and the environment: the physical expression of one or more genes" (*Merriam-Webster*: n.d., phenotype entry).

²⁰ 'Treatment' is value-laden terminology, indicating the existence of something to be 'rectified'. Although I wish to avoid terminology as such, I use it here nonetheless in the absence of a better alternative. Secondly, the term 'treatment' is conventional when speaking about psychiatric interventions, which is why I believe that it does not

be assessed whilst largely *bypassing* the respective aetiology²¹. This is done through *clinical trials*: to "evaluate the effectiveness and safety of a [medical intervention] by monitoring their effects on large groups of people" (Shiel 2018: Section 1). Here, targeted individuals undergo the treatment under investigation, and, on the basis of empirical outcomes, it is *a posteriori* determined whether it has been successful²². It is the pragmatic, non-theoretical nature of these trials that make it possible to assess treatment in the absence of aetiological knowledge – ultimately, of relevance for clinical trials is *that* it works, not *why* it works. Metaphorically, once discovered that ibuprofen will relieve migraine pain, it becomes irrelevant to know whether the migraine was caused by either exhaustion or irregular mealtimes.

This prompts the question of why, in the case of the CSR, the aetiology of paedophilia cannot be bypassed. This is because clinical trials with the CSR are no option: in resonance with **Section 1.3.**, it is the empirical nature of these trials that make them morally impermissible²³. In this regard, experts inescapably come to depend on the aetiology of paedophilia to justify their expectations of the CSR. Here, the importance of aetiology is premised on two observations. Firstly, if it can no longer be determined on the basis of *empirical observation* whether a particular treatment is effective, its effect must be predicted on the basis of *logical considerations*. Secondly, these logical considerations will be aetiological considerations: as for any medical condition, identifying its underlying causes constitutes an important step in anticipating effective treatment. Metaphorically, it seems relevant to know whether one's migraine pain is caused by either a lack of sleep or an irregular diet in order to prevent it from happening in the future. An assessment of the CSR is no exception to this rule.

Given the importance of aetiology, speculative assessment benefits from a strong, aetiological foundation. In fact, the *strength* of the speculative assessment – at least, concerning medical conditions – seems to be contingent on the *strength* of the aetiological foundation. In this regard, it is unfortunate to observe that a speculative assessment of the CSR must work with an aetiology of paedophilia that is uncertain: unclear, contested and not conclusively established. That is, it is not known if paedophilia is either caused by a 'lack of sleep' or an 'irregular diet'. This causes any speculation on the CSR's future impact to be

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necessarily undermine the philosophical complexity of psychiatric conditions such as paedophilia. In this particular context, I believe the CSR can equally be described as a psychiatric treatment.

²¹ Akin to paedophilia, psychiatric conditions often suffer from weak, aetiological foundations. As such, beliefs about the effectiveness of a proposed treatment are often divergent and, therefore, the success of psychiatric interventions is mostly determined through clinical trials as a way out.

²² That is, whether the treatment mitigated any of the psychopathological symptoms targeted.

²³ Some might disagree, claiming that, under strict conditions, *some* kinds of clinical trials should be possible. Here, one might think of clinical trials with paedophilic individuals that are already under stringent supervision if not incarcerated. Yet, clinical trials as such would *by necessity* be done in an experimental setting of which it is questionable whether its results can be extrapolated to the real world. On top of that, it is unclear what is the long-term effect of the CSR, making it questionable if participants can ever go without supervision again once they are no longer legally obliged to adhere to such supervision.

controversial. Before arriving at this conclusion, I shall first present a brief overview of the aetiological past of paedophilia.

2.2. Neurodevelopmental Perturbations

Clinically, the authoritative World Health Organization has defined paedophilia as "a sustained, focused, and intense pattern of sexual arousal - as manifested by persistent sexual thoughts, fantasies, urges, or behaviours - involving prepubertal children" (ICD-11: 7D72²⁴). Formally coined by psychiatrist Richard von Krafft-Ebing in 1906, it is now estimated that paedophilia can be found in 1% of the male population and 0.8% of the female population²⁵ (Seto 2017; Joyal, Cossette & Lapiere 2015).

Currently, two main approaches have been competing in identifying its underlying causes. Firstly, some experts believe that it can be explained *neurodevelopmentally*, pointing towards evidence of "prenatal and perinatal risk factors and evidence of differences in brain structure and/or function" (Seto 2018: 113). This hypothesis gained support in 2003 when neurologists Jeffrey Burns and Russell Swerdlow presented an intriguing case for its endorsement. They demonstrated how a man who showed no prior evidence of paedophilic interests suddenly starts to have such interests whilst suffering from an orbitofrontal tumour (2003)²⁶. Interestingly, his sudden sexual attraction towards children disappeared again once his tumour was removed, suggesting that the brain must be involved in one way or another²⁷.

Since the recording of this curious case, a stream of brain-related studies has been conducted to expose the neurodevelopmental underpinnings of paedophilia. Above all, they

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²⁴ This refers to the eleventh version of the International Statistical Classification of Disease and Related Health Problem, Section 7D72. Available at: https://icd.who.int/dev11/f/en#/http%3a%2f%2fid.who.int%2ficd%2fentity%2f517058174 (Accessed 10-06-2020). In order for it to be established, the ICD-11 underlines that the preference must have been present for at least six months and the person under scrutiny must be at least sixteen years of age and five years older than the age group that they are interested in.

²⁵ Both for the male and female population, the definitive prevalence of paedophilia remains unclear. Understandably so, for contemporary research aiming to find out asks for paedophilic participants to admit to a highly stigmatised sexual attraction - if not to illegal behaviour such as possession of child pornography or sexual offending - and, as such, it is not likely that participants will easily engage (Seto 2018: 22). Over the past years, though, epidemiological advances have been made due to the rise of online surveys that offer anonymity in one's confessions. Notably, the prevalence of paedophilia among women is most obscure. Most recently, Joyal, Cossette and Lapierre observed 0.8% of a sample group of 799 women responding 'yes' to the question of whether they had ever fantasised about having sex with a child below the age of twelve (2015). It is unclear, though, how many women out of this group could truly be diagnosed as paedophilic. That is, they must be diagnosed as paedophilic according to the criteria of the ICD-11. They would have to have a persistent sexual interest in prepubescent children, rather than just having thought about having sexual intercourse with a child once or twice.

²⁶ I should mention that his curious case has not gone without criticism. As Seto explains, the orbitofrontal region of the brain is associated with "inhibition of behaviour", so it is possible that the man was, in fact, paedophilic, but he was just able to conceal it very successfully (Seto: 118). Due to the appearance of the tumour in exactly the right orbitofrontal region, he might no longer have been able to do so.

²⁷ Independent from the curious case of the man with the orbitofrontal tumour, Seto himself believes that the brain must be involved in paedophilia, for "all psychological traits and behaviour involve the brain" (2018: 118). For him, the question is not so much whether or not the brain is involved, but rather "[what] structural or functional features are associated with paedophilia" and whether or not they are "specific to paedophilia or involved more generally in atypical sexuality or all sexuality" (ibid.).

have resulted in a number of interesting correlations. Related to prenatal and perinatal risk factors, Dyshniku, Murray, Fazio, Lykins & Cantor demonstrated that paedophilic sex offenders differ in their rates of - among others - non-righthandedness and minor physical anomalies (2015). Moreover, in a meta-analysis of 236 samples, Cantor, Blanchard, Robichaud and Chistensen discovered that child sex offenders scored significantly lower than other offenders in their intelligence score (2005). Regarding postnatal risk factors, Blanchard et al. identified that, in comparison to non-paedophilic offenders, paedophilic sex offenders were significantly more likely to have suffered from head injuries before the age of thirteen (2002). This latter observation suggests that "head injury during a critical, sensitive period of brain development, before the onset or completion of puberty, is important" (Seto 2018: 120)²⁸.

2.3. Behavioural Perturbations

The second approach to explaining paedophilia is by understanding it as a *behavioural disorder*. Here, it is speculated that, through atypical sexual experiences during a critical period of adolescence, paedophilic individuals have learned that sexual behaviour with children is the norm. Regarding this hypothesis, a substantial amount of attention has been given the influence of *childhood sexual abuse* on the development of paedophilic tendencies (e.g. Garland & Dougher 1990; Hanson & Slater 1988). As Seto explains: "[early] exposure to sex or childhood sexual abuse is presumed to be associated with greater sexual response to children because of conditioning, where child-related cues are associated with sexual arousal and reward through physical stimulation and later fantasy and masturbation" (2018: 113, 114). If abused individuals go on to abuse others themselves, this phenomenon is sometimes referred to as the *cycle of abuse* (e.g. Johnson & Knight 2000; Kobayashi, Sales, Becker, Figueredo & Kaplan 1995).

The influence on childhood sexual abuse on the onset of paedophilia is not without substantiation. Jespersen, Lalumière and Seto discovered that sex offenders against children were significantly more likely to have been abused than offenders against adults (2009). Moreover, myriad investigations into offending adolescents have shown that a history of sexual abuse is positively correlated with factors of which prior research has shown that they are related to paedophilia. These factors include the particular interest in male victims (Becker,

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²⁸ Recently, brain-related research has also been pursued more directly by resorting to neuro-imaging (ibid.). In their research, Cantor et al. examine - among others - the frontal brain regions (2008). Here, brain scans revealed that paedophilic offenders had significantly less white matter than non-paedophilic non-offenders. According to Seto, these white matter differences may be relevant to "how facial, body, and other cues of potential attractiveness are perceived and integrated" (2018: 121). Lastly, Posenti et al. found that the brain areas involved in the processing of sexual stimuli - such as the thalamus and cingulate cortex - functioned differently for paedophilic individuals than for non-paedophilic individuals (2012).

Kaplan & Tenke 1992; Worling 1995), multiple child victims (Renshaw 1994; Becker & Stein 1991) and - quite obviously - younger victims (Kaufman, Hilliker, Daleiden 1996).

Another hypothetical behavioural explanation of paedophilia is that of *masturbatory conditioning*. As Seto explains, "[many] people have their first sexual experiences with similar aged peers when they are children or young adolescents. Some individuals may pair the physical cues of a young person - such as small body size, androgynous body shape, absence of pubic hair, and the absence of secondary sexual characteristics - with the sexual pleasure elicited by these initial experiences, and eventually learn to associate these cues with the powerful reinforcement of masturbation to orgasm" (2018: 127). As they grow older, non-paedophilic individuals learn to adjust the association with sexual interest to similar-aged peers. Paedophilic individuals, on the contrary, seem unable to do so.

2.4. Aetiological Uncertainty

The investigations into paedophilia presented just now constitute only a small portion of all aetiological research and one can expect that many more will come in the next decade. The take-home message, though, is that none of these investigations have led to the identification of clear-cut physiological and/or psychological motives behind one's engaging in child sexual behaviour. Formulated banally, aetiological research cannot confirm whether paedophilia is – among others – a sexual orientation akin to heterosexuality, a neurological inability to inhibit one's sexual desires to non-adults, or, in the worst case, a very repellent yet freely chosen lifestyle²⁹. It cannot be confirmed whether paedophilic tendencies are innate, alterable or completely fixed, caused by an unchangeable genetic make-up or by a grave, yet temporary psychopathology³⁰.

The aetiology of paedophilia is uncertain, causing a speculative assessment of the CSR to become a challenge. After all – and without presuming too much – I reckon that experts will put different levels on trust in the CSR on the basis of different conceptions of paedophilia. Among others, experts might see no benefit in the CSR if paedophilia is a proven free choice. They might perceive it more positively if paedophilia is proven sexual orientation. As long as

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²⁹ Naturally, evidence is increasingly suggesting certain motives over others. Specifically, I expect almost no psychiatrist to endorse the claim that paedophilia is a free choice. As I will explain in **Section 3.6.**, this is not the point. Here, the take-home message will be that, as long as aetiological uncertainty exists in the field of *psychiatry*, conceptual transgression remains possible in the field of *applied ethics*. In this regard, I will eventually claim that aetiological uncertainty manifests itself as an *argumentative convenience* amidst a more fundamental, ideo-political discourse (**Section 6.4.**).

³⁰ This 'ontological uncertainty' is clearly reflected in two methodological issues that aetiological investigations into the phenomenon continuously stumble upon – including the ones described above. Firstly, research so far might have identified a number of interesting physiological and psychological states correlated with paedophilia, but which one of these is *causing* it remains undetermined³⁰. As Seto concludes, "no unique neurodevelopmental risk factor [...] is surely indicative of paedophilia, and [...] many children who are sexually abused or have unusual childhood experiences do not go on to develop paedophilia either" (2018: 114). Secondly, aetiological hypotheses can often not be proven and/or are contested by contradictory evidence³⁰. If anything, these methodological issues reaffirm that paedophilia's ontological ambiguity is not expected to get dissolved in the near future.

the aetiology of paedophilia remains uncertain, any speculation on the CSR's impact remains controversial and prone to objection³¹.

Ultimately, the question concerning the CSR's 'true' impact is and will always be one of empirical observation. Even if paedophilia were a proven sexual orientation, namely, we would not be able to know in advance whether the CSR will reduce or aggravate abuse just as much as we do not know this about the 'regular' sex robot³². In other words, knowing the aetiology of paedophilia is *not* tantamount to knowing whether the CSR will be effective. This does not disvalue aetiological knowledge: in an assessment that is *inherently* speculative, knowing the aetiology of paedophilia is the epistemically most ideal position to be in.

2.5. A Matter of Psychophysiology

Throughout the remainder of this dissertation, I shall refer to the aetiological underpinnings of paedophilia as a state of *psychophysiology*. We cannot assume, namely, that paedophilia gets caused exclusively by either neurodevelopmental or behavioural perturbations. If there is one agreement between the many divergent aetiological investigations, it is that paedophilia is most likely to develop during the period of childhood and/or adolescence (e.g. McClintock & Herdt 1996)³³. Or, as Seto articulates it, "[whatever] the mechanisms involved, adrenarche and puberty are likely to be the critical events in the emergence of sexual preferences, paedophilic or not" (2008: 166). Not coincidentally, this is a period in which the human brain is in full development. As such, certain childhood experiences might manifest themselves physically - and irreversibly - in the human brain, and, vice versa, the way that these childhood experiences manifest themselves is partially determined by that person's physiology. *Nature* and *nurture*, it seems, are continuously and dynamically interacting and the development of paedophilic thoughts appears to arise from a specific interaction between the two³⁴.

As stressed in the introduction, the adoption of this terminology serves a practical value – one of truth and one of convenience. On the one hand, it acknowledges that paedophilia

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³¹ I will not speculate on whether this indeterminacy is *definitional* or *contingent*. In other words, I will not speculate on whether we are per definition not able to know what paedophilia is caused by, or whether we simply have not yet found out. I will leave this question open for psychiatrists and neuroscientists to answer. On top of that, relevant for this dissertation is the observation that paedophilia's aetiology is uncertain in 'the here and now'; it is not relevant to know whether this uncertainty is going to be resolved in the far future.

³² See Section 1.4.

³³ This also coincides with the experience of onset by paedophilic individuals themselves (Fiorillo 2014). Self-reported paedophilic individuals, that is, first started to notice their atypical sexual preference during adolescence (e.g. Marshall, Payne, Barbaree & Eccles 1991; Freund & Kuban 1993).

³⁴ Although not directly relevant, Seto adds to this that this interaction need not be the same for each paedophilic individual. Rather, he believes that "[different] causal pathways may lead to paedophilia (equifinality)" (2018: 136; italics added). He explains that "this may explain some of the apparent heterogeneity in findings, including group differences, predictive associations, and estimates of heritability" (bid.). "A good aetiological theory", he concludes, "will need to incorporate this complexity" (ibid.). As such, he supports neuroscientist Gilian Tenbergen and her colleagues who believe that paedophilia is a complex and 'multifactorial' phenomenon in which "the influences of genetics, stressful life events, specific learning processes, as well as structural brain changes may generate [...] child sexual preference" (Jordan 2019: 2).

emerges from the mutual interaction between the psychological 'mind' and the physical 'body', while, at the same time, it allows the specifics of this interaction to remain 'blackboxed'. As I will demonstrate in the following chapter, of relevance here is merely the clinical observation that psychophysiological differences between subgroups of paedophilia *exist*, not necessarily how they *come into being* biologically-wise.

2.6. Chapter Summary

As concluded in the previous chapter, experts are being pushed towards a speculative assessment of the robot on the basis of its anticipated impact. Here, the strength of their assessment is dependent on a firm aetiological account of paedophilia. As remarked, experts will put different levels of trust in the CSR on the basis of different conceptions of paedophilia. The aetiology of paedophilia, however, is *uncertain*. By this, I mean to say that we are not in the epistemic position to determine whether paedophilia is – among others - a curable disorder, a fixed condition or simply a repellent lifestyle. At most, we have established that paedophilia is likely the result of a complex interaction between both neurodevelopmental and behavioural perturbations. Until this indeterminacy disappears, any speculation on the CSR's impact remains controversial and prone to objection.

As rightfully remarked at the start of this dissertation, this is not to say that aetiological research has remained useless altogether. Recent advancements have increasingly led researchers to believe that paedophilia is not as homogeneous as was long believed. In fact, evidence is accumulating that suggests the existence of a number of psychophysiologically different subgroups on which – importantly – the CSR could have divergent effects. This taxonomy, as I will lay it out in the following chapter, constitutes the first step towards an accurate assessment of the robot's endeavour in reducing child sexual abuse.

Chapter 3. Towards a Novel Conceptual Taxonomy

In the past decade, there has been a growing set of voices proclaiming that there is no single phenotype³⁵ of paedophilia: psychophysiological differences engender different versions of it. Clinical psychologist Jan Hendriks, for example, observes that a paedophilic individual is not necessarily someone who abuses a child. "Paedophilia", he claims, "takes multiple forms"³⁶ (Soethout & Becker 2017: Section 5). He is supported by criminal lawyer Job Knoester, whose agency is dealing with 15% of all Dutch child offence cases. Knoester believes that the image of sex crimes is 'skewed': "[a] person who commits a sex offence can do so for many different reasons [and this] can have many different causes" (idem: Section 2). "All these variants", Knoester argues, "deserve a completely different treatment" (ibid.).

In light of this, the purpose of this chapter is to demonstrate that – even in the face of aetiological uncertainty – the call for a novel³⁷ conceptual taxonomy is indeed gaining traction. In order to do so, the chapter shall proceed as follows. Firstly, **Section 3.1.**, **3.2.**, **3.3.** and **3.4.** will discuss the main conceptual demarcations that have been suggested so far, evidencing where possible how these demarcations go beyond mere semantics: they represent true psychophysiological differences. In agreement with these observations, **Section 3.5.** anticipates how the risk posed by the CSR might now be over- or underestimated once this novel taxonomy is neglected. Lastly, **Section 3.6.** offers a 'midway' conclusion. Here, it is emphasised that this conceptual taxonomy cannot break free from the aetiological uncertainty from which it is departing. This is an important observation with normative implications: in **Chapter 6**, I shall demonstrate that this uncertainty eventually enables the debate surrounding the CSR to be as ideo-political as it has become.

3.1. Paedophilic versus Non-Paedophilic Offenders

The first demarcation to touch upon is that of *paedophilic* versus *non-paedophilic* offenders. I reckon that this demarcation seems out of place, as members of the latter group can per definition not constitute a subgroup of paedophilia. Their inclusion is justified nonetheless, for, too often, they are incorrectly classified as such. As a consequence, an assessment of the CSR's impact on paedophilic behaviour might equally take into account the psychophysiology

³⁵ *Supra* nr. 19.

³⁶ This one and the following quote are translated from Dutch.

³⁷ Here, the purpose of the term 'novel' is two-fold. Firstly, the specific, conceptual taxonomy as I will present it in the following sections is my own design. Naturally, the *content* of this taxonomy is not mine; over the years, this is generated by a great number of – among others – psychiatrists and neuroscientists. As such, the novelty of this conceptual taxonomy manifests itself in the specific way that I have decided to bring empirical and psychophysiological insights together to create conceptual demarcations that carry clinical value with respect to the CSR. As discussed in the prologue, the conceptual taxonomy corresponds largely with Seto's idea of paedophilic heterogeneity. Secondly, the novelty also refers to the increasing endorsement of paedophilic plurality that the field of psychiatry is currently experiencing.

of non-paedophilic offenders. This seems inaccurate. As I will argue in **Section 3.5.**, the two subgroups are likely to have different responses to the CSR.

Clinically, the existence of non-paedophilic offenders has already been exhaustively conceptualised in Seto's motivation-facilitation model³⁸ (2017). Here, he distinguishes between three main motives to engage in child sexual behaviour: paraphilia, hypersexuality and intense mating effort. Regarding the first, it could be that someone wishes to gratify their persistent atypical sexual urges - such as biastophilia or voyeurism - and their victim's age is of no importance to the degree to which this is done (e.g. Pullman, Stephens & Seto 2016; Kingston & Bradford 2013). Regarding the second, Seto explains that "hypersexual [individuals turn] to criminal behaviour involving persons [...] who cannot legally consent" in order to satisfy their "intense sexual preoccupation that is not satisfied by legal behaviour" (2018: 94; e.g. Kuhle et al. 2017). The third category describes intense mating effort, explaining how an excessive "interest in partner [...] variety" eventually causes individuals to transgress the boundaries of the law (idem: 103). They will resort to children and adolescents in their search for novelty (e.g. Cortoni & Marshall 2001). Lastly - although not included in Seto's model - a large proportion of child sexual abuse can be attributed to incest. Seto explains that "some non-paedophilic men might still have sexual contacts with their daughters [...] because they do not have access to adult partners" (idem: 154). Abuse as such is mostly driven by opportunism³⁹.

For all four motives mentioned just now, an important observation to make is that children *could* become a victim, but not *by virtue* of them being a child. Not all child offenders, then, are necessarily paedophilic. Rather, by denoting it a paraphilia, Seto believes that paedophilia accounts - and partially so - for only one of the four motives in explaining sexual offending against children. According to psychiatrists Neil Malamuth and Mark Huppin, this encompasses 40 to 50% of the total number of abuse cases (2006).

Slowly but surely, the demarcation is manifesting itself both empirically and psychophysiologically. Empirically, offenders officially diagnosed as paedophilic appear to be more likely to have multiple boy victims that are prepubescent and unrelated. Vice versa, non-paedophilic child offenders appear to offend only once and their victim is often a girl that is

³⁸ As Seto admits himself, his model is not exhaustive. Firstly, it does not specifically address non-sexual motives behind child sexual abuse, such as anger against children expressed in a sexual way (2018: 93). Moreover, some child sexual abuse can be attributed to a lack of social skills, where some individuals "are unable to develop appropriate relationships with peers and thus turn instead to children for their sexual and emotional needs" (idem: 88/89) Lastly, some offenders are merely paedophilic by law. This happens when an adult engages in a sexual behaviour with a post-pubescent, yet sexually mature adolescent. The intriguing case of Mary Kay Letourneau demonstrates how such a classification can occur (History.com editors 2019). After a prison sentence of seven years, she married the 22 year old father of her children, who she had 'raped' seven years earlier. By that time, he was still a minor and Letourneau became classified as a convicted paedophile, even though her sexual engagement with the victim was not motivated by paedophilic desires.

³⁹ Psychiatrists James W. Maddock & Noel R. Larson, for example, described how father-daughter incest is more likely to occur in the face of family disfunction, where the parental relationship has deteriorated and the mother is 'sexually unavailable' (1995). As a consequence, the father sees the opportunity to resort to his daughter in order to find sexual gratification.

related to them (Seto 2018: 71). Psychophysiologically, recent studies have shown that paedophilic offenders are more social, less neurologically impaired and demonstrate lower levels of psychopathology - such as anxiety, personality problems and depression (Strassberg, Eastvold, Wilson Kenney & Suchya 2012; Joyal, Beaulieu-Plante & de Chantérac 2013). These differences clearly manifest themselves in the degree of success in preventing recidivism. Non-paedophilic offenders, that is, respond more successfully to cognitive behaviour therapy; paedophilic offenders, on the contrary, are more likely to reoffend (Hanson & Morton-Bourgon 2005). According to Seto, this can be easily explained by the different motives behind their offending. Whereas non-paedophilic offenders resort to abuse because of a - frequently - temporary and treatable psychopathology, paedophilic offenders do so in the face of a persistent, sexual interest.

3.2. Paedophilic versus Paedosexual Individuals

Another demarcation that is gaining traction among psychiatrists is that of paedophilic versus *paedosexual* individuals. Here, a paedophilic individual refers to someone who refrains from offending altogether and a paedosexual individual refers to someone who does not. Seto explains that "[paedosexual individuals] have, per definition, engaged in criminal and antisocial behaviour" (2018: 58). As such, he believes that "they are likely to differ in meaningful ways from persons with paedophilia who have not committed such offences" (ibid.). Here, he is supported by philosopher Laurence J. Cohen and his peers. They discovered that paedosexual individuals demonstrated elevated levels of psychopathy, signifying an impaired self-concept and damaged interpersonal functioning (2002).

Remarkably, Cohen and his colleagues argued that these elevated levels of psychopathology could be the reason behind paedophilic behaviour. Interestingly, though, it could also be the case that most of such psychopathology did not occur until *after* the abuse. One must not forget Letourneau's argument that paedophilic individuals suffer from self-loathing and suicidal tendencies exactly because of their undesirable and unsolicited sexual preference. These traits could be aggravated once the paedophilic individual has engaged in child sexual behaviour, engendering "a difficulty in untangling cause and effect" (Wilson & Cox 1983b: 324). As a consequence, however, it could be the case that the clinical data on paedosexual individuals - which constitutes the majority of clinical research - can say little about the true reason of why a non-offending paedophilic individual eventually makes the jump to offending a child. If it is not psychopathology, it seems, the true reason is inescapably obfuscated by it.

Naturally, by virtue of preventing the *onset* of paedophilic behaviour, the clinical value of the demarcation discussed just now becomes questionable. As long as it is not proven that psychopathy is *not* the true reason behind child sexual abuse, the question is warranted of

why the CSR cannot be assessed on the basis of the clinical data related to paedosexual individuals. Until that time, namely, the demarcation between paedophilic and paedosexual individuals could be meaningless inasmuch there truly is no psychophysiological difference between the two subgroups. As such, a paedophilic individual might simply decide to refrain from child sexual abuse for ethical or faciliatory reasons, rendering the putative difference merely semantic or moral in nature.

3.3. 'At Risk'-Paedophilia

Fortunately, amidst this complexity, there is an increasingly strong voice claiming that psychopathology is *not* the reason why a non-offending paedophilic individual eventually starts to act upon their urges. The evidence increasingly suggests that, *prior* to any psychophysiological differences caused exactly by the abuse, there must already be a significant difference between them that makes the latter group reach the point of abuse in the first place whereas the former group has the ability to abstain. As such, an emerging body of research has endeavoured - and some successfully - to identify both physiological and behavioural differences between the two subgroups (Cantor et al. 2016; Lett et al. 2018; Kruger et al. 2019; Banse, Schmidt & Clarbour 2010; Ristow et al. 2018; Fromberger, Meyer, Jordan & Müller 2018).

Amidst these investigations, the one conducted by psychologist Christian Kaergel and his peers deserves a specific mention. In their study, namely, they discovered that "[paedophilic individuals] who did not commit hands-on offences against children might deploy a neural compensatory mechanism [...] facilitating efficient response inhibition or cognitive control in general" (2017: 11). In other words, non-offending paedophilic individuals might possess a brain mechanism that provides them with greater self-control; paedosexual individuals, on the contrary, do not.

According to Kaergel, their study "underlines the importance to distinguish between paedophilic hands-on offenders and those who have not sexually offended against children in terms of separate clinical entities" (Johnson 2016: Section 7). Paedophilic individuals, that is, truly are not the same as paedosexual individuals, even though the terms are often used interchangeably. Here, an important observation to make is that Kaergel and his peers were able to distinguish between paedophilic and paedosexual individuals even *before* the onset of

paedophilic behaviour⁴⁰. And, although a paedosexual individual might not relevantly⁴¹ be different before and after this onset, the group of paedosexuals that have not yet engaged in child sexual behaviour shall be named 'at risk'-paedophilic individuals⁴². As shall be demonstrated in **Section 3.5.**, this is conceptually convenient in describing more meticulously the subgroup of paedophilia that the CSR is supposed to target. Here, the main question is whether this particular subgroup *contingently* or *definitionally* never engages in child sexual behaviour; if 'at risk'-paedophilic individuals might still offend regardless of having the appropriate brain regulatory mechanism and whether the CSR has any plausibility in preventing them from doing so if this is indeed the case.

I must mention that the prevalence of non-offending paedophilic individuals - 'at risk' or not - in proportion to paedosexual ones is unclear. According to sexologist John Bancroft, they are likely to constitute the majority (2009). As **Section 6.5.** will clarify, the cause of this lack of knowledge is mostly attributable to the "stigma associated with paedophilia" (Seto 2018: 32). It prevents non-offending paedophilic individuals, namely, to participate in - among others - epidemiological research.

3.4. Categorical or Spectral?

The two demarcations discussed just now are by far the most substantiated ones. Others have been proposed as well, though. Firstly, some psychiatrists believe that offences committed by female offenders - accounting for no more than 5% of all cases - deserve to be explained through a distinctive feminist lens. It is proclaimed that 'male-based conditions' leading to abuse do not necessarily apply to women as well (Cortoni, Babchishin & Rat 2017; Rousseau & Cortoni 2010). Here, it has been asserted that women deserve their own psychopathological category, referring to "their own histories of trauma, personality disorder or family turmoil" (Seto 2018: 109). Secondly, it has been proposed that child sexual behaviour by adolescents would equally need its own aetiological theory for which psychopathological and paraphilic reasons seem to intriguingly intertwine (Caldwell 2016; Leroux, Pullman, Montayne & Seto 2016).

Perhaps still a bit far-fetched is the proposed demarcation between cultures. As of now, namely, child sexual behaviour is mostly understood within the context of 'WEIRD' countries, referring to countries that are "[western], educated, industrialized, rich and democratic" (Seto

⁴⁰ In other words, paedosexual individuals differ from non-offending paedophilic individuals even *before* the former start to act upon their urges. In terms of psychophysiology, a non-offending paedophilic individual does not *become* paedosexual. Rather, paedosexual individuals exist too, and they are different from non-offending paedophilic individuals. To avoid confusion, I must mention that this terminology is used differently in the field of law. Here, paedosexuality is not used to denote a psychophysiological difference, but to signify a criminal status.

⁴¹ Given that the psychophysiology of a paedosexual individual might not be significantly different before and after the onset of paedophilic behaviour, this information would not be clinically relevant concerning an assessment of the CSR.

⁴² In his *Pedophilia and Sexual Offending Against Children* (2018), Seto uses the term 'at-risk' individuals to signify "persons who are likely to develop paedophilia, paedophilic individuals who have not yet had sexual contact with children" (2018: 242).

2018: 110). As Seto argues, it must be understood that one's culture of origin "may play a role in the relative importance of factors to explain in sexual offending" (Seto 2018: 111). It could be, for example, that hostile masculinity and impersonal sex - of which the presence of these phenomena differs per culture - can significantly affect children's psychophysiology, and, in the context of explaining child sexual abuse, their motives behind engaging in child sexual behaviour (e.g. Malamuth 2003; Leguízamo, Lee, Jeglic & Calkins 2017).

Unfortunately, it is unclear where this list of demarcations would stop, prompting Seto to argue that "[it] is not necessarily that paedophilic individuals are different in kind rather than in degree" (Seto 2018: 132). Formulated crudely, then, each paedophilic individual might have their own, unique motivation for engaging in child sexual abuse that can be explained on the basis of their own, unique psychophysiological profile. In accordance, it would be nonsensical to assess the CSR on the basis of subgroups, let alone on paedophilia in its entirety. The CSR, namely, could evoke different responses to each paedophilic individual, not only to each subgroup.

For now, though, these demarcations seem either ungrounded or contested. Firstly, they are yet to be made significant through more diverse research into specifically female and adolescent offenders and through cross-cultural investigations. On top of that, researchers did actually discover that similar factors often are at play in explaining offending against children - that is, across gender, age and culture (Andrews & Bonta 2010; Keelan & Fremouw 2013; Smallbone & Rallings 2013; Zeng, Chu, Koh & Teoh 2015). As Seto concludes, "the extent to which assigning offenders to offending pathways can lead to more individualised treatments has not been fully explored" (Seto 2018: 206). For now, then, the objectives of this dissertation are expressed mostly through the two demarcations touched upon in the previous sections for which there already are substantial reasons to be endorsed.

3.5. Implications for CSR-related Policy: Over- or Underestimating the Risk

Fortunately, as heralded, these two demarcations are helpful in describing in more detail the specific subgroup of paedophilic individuals that the CSR is truly supposed to target: 'at risk'-paedophilic individuals. In other words, in assessing the CSR as a preventive measure to specifically the *onset* of paedophilia, a judgement must be based on the clinical data with respect to non-offending individuals that (1) experience paedophilic interests and (2) whose psychophysiological make-up poses a significant risk for offending but (3) *have not yet done so.* As such, 'at risk'-paedophilic individuals differ from non-paedophilic individuals that will resort to child sexual behaviour because of another paraphilia or because of more psychopathological reasons related to hypersexuality, intense mating effort or incest. Moreover, they differ from paedosexual individuals in the degree of psychopathological

morbidities. With respect to the CSR, the question to ask is whether the robot can prevent members of this particular subgroup from making the eventual jump to offending.

Inescapably, the recognition of this novel conceptual taxonomy would entail major implications for CSR-related policy. As Seto underscores, "policies [...] can be misguided to the extent that groups are confused with each other or combined" (2018: 81). Indeed, if the CSR is based on the clinical data of any other subgroup, the assessment will be inaccurate insofar it can cause experts to over- or underestimate the risk involved. Naturally, as discussed in **Section 1.3.**, the risk here is that the CSR will function as stepping stone to child sexual abuse, rather than as a device that can help paedophilic individuals to redirect their emerging urges.

Firstly, clinical assessments that perceive all offenders as paedophilic would underestimate the risk posed by the CSR. This is because most offenders engage in child sexual behaviour because of a curable psychopathological reason, and, as such, they tend to respond positively to treatment. In accordance, assessing the CSR on the basis of their clinical data as well would engender overly optimistic expectations of it: it would give the impression that the robot as a 'treatment' could have a significant chance of success. However, offenders that are truly paedophilic engage in such behaviour in the face of a persistent sexual interest in children that cannot be easily satisfied. Recidivism rates are relatively higher and treatment seems only partially successful. As such, the outlook for the CSR as a 'treatment' ought not to be considered as promising with respect to paedophilic offenders as to non-paedophilic ones.

Yet, clinically assessments that would conflate paedophilic and specifically other-paraphilic offenders might *overestimate* the risk posed by the CSR. This is because members of the latter category – such as sexual sadists and biastophilic individuals – demonstrate clinical features in which oblivion to their victim's pain might not only be an intrinsic quality, but it is the damage inflicted upon another that constitutes the core element of their sexual gratification. Providing these offenders with a CSR would be both nonsensical and dangerous. Provided that individuals as such are not aware of the moral wrongdoing that they engage in, it cannot be guaranteed that they understand why the CSR would be an ethically better alternative; the jump towards victimising a living being might be more easily made. Yet, the mere reason that these individuals sometimes target children does not imply that all paedophilic individuals are sadistic and biastophilic as well. As touched upon earlier, paedophilic individuals are mostly aware of the wrongdoing of their actions; they demonstrate a natural aversion towards child sexual abuse even though they sometimes succumb to opportunities presenting themselves. Provided that their 'rational and moral compass' is

pointing in the right direction, though, the CSR could have more positive effects on them than on other-paraphilic individuals⁴³.

Lastly, policies that make no distinction between non-offending paedophilic and paedosexual individuals are likely to overestimate the risk as well. Formulated crudely, an assessment of the CSR as such would acknowledge only the clinical existence of the latter group, for which it is believed that child sexual abuse is difficult to prevent. This is premised on three observations. Firstly, it must be understood that most knowledge on paedophilia follows mainly from criminal justice samples concerning individuals that have, per definition, engaged in child sexual abuse. Secondly, as such, these individuals are likely to demonstrate the psychopathological morbidities that are understood by some as the very reason behind their child sexual behaviour. Thirdly, provided that the distinction between these and non-offending individuals is not made, morbidities as such are now attributed to the entirety of paedophilia. As a result, each and every paedophilic individual per definition possesses an underlying psychophysiology of which it is believed that child sexual abuse is a predictable result. As demonstrated, though, this is not necessarily true. Most paedophilic individuals are not likely to ever abuse a child and, if they do so nevertheless, it is not obvious that these morbidities are the reason behind it. After all, it could be the case that they did not materialise until after the abuse. Ultimately, then, an assessment of the CSR conflating the two would not only undermine paedophilic individuals' general ability to abstain from offending, but it would equally ignore a large group of 'at risk'-individuals for which the CSR's prospects could turn out to be more positive⁴⁴.

3.6. Chapter Summary: 'Mid-Way' Conclusion

In this chapter, I have presented a novel⁴⁵ conceptual taxonomy of paedophilia. I have done so not by virtue of semantic convenience with respect to law or literature, but for the reason of indicating psychophysiological differences that might be of clinical value with respect to the CSR. By this, I mean to say that the taxonomical demarcations presented in this chapter have distinguished between a number of paedophilic subgroups on which the CRS could have divergent effects. Mainly, I have differentiated paedophilic from non-paedophilic offenders and non-offending, paedophilic individuals from paedosexual ones. On top of that, I have equally

⁴³ We shall see this in **Section 4.1.**, where a detrimentally negative conceptualisation of paedophilia in disfavour of the CSR is based on the clinical data of individuals that are more likely to be sadistic and/or biastophilic than they are paedophilic.

⁴⁴ Importantly, it *could* be the that CSR's prospects could turn out to be more positive. This is no guarantee, for it could still be that the CSR undermines the very neurologic, regulatory mechanism that is preventing them from abusing a child. I still believe that assessing the CSR only on the basis of clinical data with respect to paedosexual individuals will lead to an *overestimation* of the risk. In this regard, namely, a precautionary attitude becomes *immediately* justified; it faces no opposition that could bring forward intelligible reasons for the why the CSR might be successful in preventing particularly non-offending individuals from jumping to abuse.

⁴⁵ Supra nr. 37.

touched upon potentially relevant psychophysiological differences across gender, age and culture, but I have judged the substantiation of their existence not strong enough to warrant inclusion. Lastly, I have used the taxonomy to articulate more meticulously the subgroup that the CSR is supposed to target – at least, in this dissertation: 'at risk'-paedophilic individuals.

In accordance, I have indicated how, in the speculative assessment to which experts are being pushed, the risk posed by the CSR might now be over- or underestimated once this conceptual taxonomy is neglected. Here, estimating the CSR's impact equally on the clinical basis of non-paedophilic offenders might cause them to support it, even though, in reality, the robot will lead to an increase in child sexual abuse. Vice versa, estimating the CSR's impact equally on the clinical bases of other-paraphilic and paedosexual individuals might cause them to reject it, even though, in reality, the robot could have led to a reduction in child sexual abuse.

Before continuing with this dissertation, however, I wish to clarify on the basis of which I judge non-compliance with the conceptual taxonomy an epistemic and moral irresponsibility. I take from **Section 2.4.**, namely, that aetiological research into paedophilia cannot even confirm whether paedophilia is a variable disorder or a freely chosen lifestyle, let alone signify internal demarcations. Of course, evidence is increasingly suggesting the existence of this taxonomy, but this is not the point. The point is that, as long as academic consensus is not reached in the field of psychiatry, transgressing its demarcations is nonetheless *methodologically allowed* in the field of applied ethics; by experts engaging in a speculative assessment of the CSR. This has normative implications, for, in terms of scientific argumentation, the conceptual taxonomy loses both its epistemological and ethical standing ground.

This is, by the way, visible as well in the equally controversial debate surrounding climate change. Here, the theoretical ineptitude to confirm that climate change is truly caused by anthropocentric interference makes it hard to take to the mat those that design undesirable policy plans because of its refusal. For example, we cannot ask for President Trump to reconsider his environmentally unfriendly policy, for he will appeal to the few academic studies that – going against all trends - claim that contemporary climate change is caused by natural phenomena (Leber 2020). In the words of philosopher Stephen M. Gardiner, theoretical uncertainty leads to *moral corruption*; it makes it easier to "engage in *manipulative or self-deceptive* behaviour by applying one's attention selectively, to only some of the considerations that make the situation difficult" (2006: 408).

Before demonstrating that such corruption applies to the CSR, I wish to justify how non-compliance with the conceptual taxonomy can nonetheless be considered both epistemically and morally irresponsible. For this, I appeal to a moral principle as old as Aristotelean ethics, one that goes beyond the methodological courtesies of academia: *the moral badness of*

voluntary negligence⁴⁶. This principle proclaims that an agent is at fault when, in their decision-making, they deliberately ignore information that they ought to have known in the face of what is at stake. I recognise that the ethically most informed decision with regard to the CSR cannot discard the conceptual taxonomy as laid out above. It is relevant, important and established enough not to be easily overlooked. As such, I conclude that it represents information that experts *ought to know* – or ought to have known - if they wish to respect most fully the well-being of children contingent to it. Throughout the remainder of this dissertation, then, I shall adopt the premise that neglecting the conceptual taxonomy is both an epistemic and moral irresponsibility.

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⁴⁶ In his *Nicomachean Ethics*, Aristotle states the following: "[also] men are punished for offences committed through ignorance of some provision of the law which they ought to have known, and might have known without difficulty; and so in other cases where ignorance is held to be due to negligence, on the ground that the offender need not have been ignorant, as he could have taken the trouble to ascertain the facts" (1934: 113b-114a §8-10). In his *Summa Theologica*, 13th-century theologist Thomas Aquinas re-articulated culpable negligence: "[if] [...] reason or conscience err with an error that is voluntary, either directly or through negligence, so that one errs about what one ought to know, then such an error of reason or conscience does not excuse the will, which abides by that erring reason or conscience, from being evil" (1997: 342).

Chapter 4. The Occurrence of Conceptual Negligence

What I have established so far is the following. Firstly, I have demonstrated that the question of whether the CSR can reduce child sexual abuse is not easily answerable. Preceding investigations into categorically similar phenomena cannot confirm whether it has any *independent* plausibility of succeeding, and speculative, paedophilia-specific assessments cannot resolve the controversy all at once either. Nevertheless, I have laid out a conceptual taxonomy of paedophilia that would constitute the first step towards an 'accurate' assessment. The taxonomy expresses a heterogeneity that is increasingly endorsed as much as the clinical value of it: it recognises a number of subgroups on which the CSR may have divergent effects. Given the ethical stakes therewith, I have deemed it both epistemically and morally irresponsible if this conceptual taxonomy is being neglected.

In this chapter, I will demonstrate that conceptual negligence is nevertheless occurring. I shall do so while making use of the two leading arguments: one in favour of and one against the use of the CSR. The first one, discerned in **Section 4.1.**, shall elaborate on the particularly negative conceptualisation of paedophilia as presented by philosopher Lauren Shapiro and criminologist Helen-Marie Maras. The second one, presented in **Section 4.2.**, shall elaborate on the remarkably less menacing conceptualisation of paedophilia as offered by ethicist Marc Behrendt. For both arguments, I shall elucidate how they cross conceptual boundaries. Subsequently, in **Section 4.3.**, I will make explicit that the experts' respective trust in the CSR is necessarily linked to their conceptualisation of paedophilia. Now that I have equally exposed the conceptually weak origins of these conceptualisations, I shall sketch, too, the moral consequences of this linkage. Finally, **Section 4.4.** will anticipate some objections.

I must mention that the value of this chapter is primarily *substantive* with respect to a more profound point that I wish to make – one that is increasingly coming closer. Eventually, I wish to substantiate that the ideological visions undergirding one's conceptualisation of paedophilia are not necessarily beneficial to the accuracy with which the CSR's 'true' danger is being assessed. As established, namely, an accurate assessment would need experts to respect the conceptual taxonomy as laid out above, but ideological convictions are drawing them away from doing so. I shall describe this tension in **Chapter 6**, where I will equally demonstrate that Shapiro, Maras and Behrendt's conceptualisation of paedophilia is, too, influenced by certain ideological visions. What is left for this chapter, then, is to evidence that conceptual negligence truly is occurring and to underscore that the well-being of a large group of vulnerable children is in jeopardy therewith.

4.1. Lauren Shapiro and Helen-Marie Maras

As mentioned, the leading argument against the CSR is presented by U.S. philosopher Lauren Shapiro and U.S. criminologist Helen-Marie Maras. In their paper *Child Sex Dolls and Robots:*

More Than Just an Uncanny Valley (2017), their disapproval of the CSR could hardly be any more explicit: the idea of using it as a means of prevention is "naïve", "fundamentally flawed" and both "nonsensical and irrational" (2017: 11). Rather, they are convinced that it will serve as "a gateway to child sexual abuse", and, as such, it will constitute a source of indirect harm (idem: 7).

According to Shapiro and Maras, this gateway-effect is caused by *desensitisation*. This phenomenon - on which they build their argument - describes how paedophilic individuals must find increasingly more excessive versions of child pornography in order to reach the same level of sexual gratification. They write:

"Specifically passive viewing of child pornography often becomes insufficient for the perpetrator as he or she becomes desensitized to it. The perpetrator escalates to the next level by masturbating to the image [...], seeking out more extreme versions of child pornography, and/or acting out impulses [...] in order to receive the same (original) level of stimulation and gratification" (ibid.).

As a result, the CSR - of which they argue is "clearly a form of virtual child pornography" - is predicted to entail a similar sexual aggravation: it will "incite lust in paedophiles and [propels] them towards future offences" (idem: 6). This time, though, the offence will be with a real child.

In the face of the clinical taxonomy presented in the previous chapter, however, Shapiro and Maras' conclusion is unjustified. Conceptually, the main fallacy that Maras and Shapiro engage in is the continuous extrapolation of empirical data regarding paedosexual individuals - those that have already engaged in child sexual behaviour - to paedophilia *in its entirety*. More concretely, they substantiate the overall occurrence of desensitisation by referring to empirical studies that have observed this phenomenon among individuals that already committed a prior offence (e.g. Malamuth & Huppin 2006; Ost 2004; Adwent 2017). As I concluded in **Section 3.2.**, the clinical data on paedosexual individuals can say little about the true reason of why a non-offending paedophilic individual eventually makes the jump to offending a child. This is because that jump - and presumably the phenomenon of desensitisation as well - might be explained by the offender's psychopathology of which it is *not* clear whether it was present before or after the offence. At most, then, Shapiro and Maras are in the epistemic position to argue against the usage of the CSR as a means of prevention to *recidivism*. Yet, these arguments do not necessarily apply to the *onset* of paedophilia.

Throughout the remainder of their paper, Maras and Shapiro attempt to strengthen their conclusion by engaging in some more dubious conceptual transgressions. Most explicitly, they ascribe to paedophilia some cognitive distortions that do not necessarily belong to it: "[even]

when the victim is crying and bleeding from the sexual assault, the paedophile is oblivious to the child's pain and does not experience the normally associated *negative feelings* of shame, guilt, and anxiety. [...]. These cognitive distortions provide rationalizations, reduce the paedophile's guilt associated with the desire and assault, and minimize the fear of being caught" (idem: 8, 9). Here, Shapiro and Maras are likely to conflate paedophilia with other paraphilias such as the ones we have seen **Section 3.2**⁴⁷. None of these features, namely, seem to be an intrinsic quality of paedophilia. Lastly, Shapiro and Maras wish to underscore the gravity of debate by referring to the high prevalence of child sexual abuse. Mistakenly, though, they describe all sexual abuse as paedophilic, even though **Section 3.1.** tells us that the most of it is caused by non-paedophilic reasons.

4.2. Marc Behrendt

In his paper Reflections on the Moral Challenges Posed By A Therapeutic Childlike Sexbot (2018), Belgian philosopher Marc Behrendt foresees a brighter future for the CSR. His argument is both blunt and brief: there is no reason to assume that the CSR will aggravate child sexual abuse, and, as such, there is no reason to assume it would not function as an alternative means of 'treatment'. Pace Maras and Shapiro, the concern of desensitisation makes no appearance. Notably, in order to not end up in the detrimental prospects as sketched by his fellow debaters, his argument, too, depends on a specific conceptualisation of paedophilia - or, in this particular case, the absence of it.

Indeed, whereas Maras and Shapiro create an exhaustive and convincing psychiatric profile of paedophilia to support their, albeit problematic, distrust of the CSR, Behrendt's conceptualisation of it is far from substantiated. Most meticulously, he describes paedophilia as an "incurable structural deviation" (2018: 98). A crucial disclosure, though, appears to be his decision to emphasise the academic speculation that "paedophilia could be a 'sexual orientation'", by which he seems to put paedophilia on a par with common sexual orientations such as hetero-, homo- and bisexuality (ibid.). Even though it remains unclear what Behrendt takes from sexual orientations to categorise paedophilia as such, one could argue that the comparison assigns to the phenomena a psychophysiological kinship. As such, the CSR is expected to have a similar effect on child sexual behaviour as the 'regular' sex robot has on non-paedophilic sexual behaviour. Provided that the latter is not known to aggravate sexual abuse nor is prohibited, the CSR should not be prohibited either.

As I shall touch upon in **Chapter 7**, Behrendt's endorsement of the CSR must be seen in the light of his political stance: rather than merely not being able to demonstrate its efficacy, it is the robot's aggravating effect that needs to be validated in order to warrant a prohibition.

⁴⁷ Or, at least, they conflate it with a sadistic of biastophilic *subgroup* of paedophilia that would only constitute a (small) minority of the total population of paedophilia.

As such, he does not clinically substantiate his endorsement, for, quite simply, he does not need to: 'innocent until proven guilty'.

However, Behrendt's reduction of paedophilia to a 'sexual orientation' does cause him to overlook some subgroup-specific evidence that could, in fact, counter his *prima facie* approval of the robot. Not all paedophilic individuals, that is, are reducible to "responsible adults, diverting spontaneously their sexual interest from real children to [CSRs]" (idem: 105). As I demonstrated in **Section 3.1.** And **3.2.**, recidivism rates for paedophilic offenders are significantly higher than that of non-paedophilic ones, even though Behrendt does not seem to distinguish between these two subgroups. On top of that, he argues that "[paedophilic individuals] who never acted upon their impulses [...] would [not] be very inclined to use therapeutic [CSRs]" (ibid.). As such, he does not seem to detect the subgroup of 'at risk'-paedophilic individuals that, as shown in **Section 3.3.**, do possess the psychophysiological make-up to potentially benefit from the robot. In his paper, Behrendt does not specify which of these subgroups the CSR is supposed to target; if it is supposed to prevent the onset or recidivism of child sexual behaviour.

4.3. Assuming Aetiological Consensus

The experts' position on the CSR is strongly connected to their ontological interpretation of paedophilia; the former is built and depends on a specific conceptualisation of the latter. In the case of Shapiro and Maras, 'the paedophile' is constituted of a careful selection of clinical data from paedosexual and other-paraphilic subgroups with which they can support an argument that, perhaps, they had been willing to make from the start: the CSR is to be opposed. Conceptually, though, their argument is weak: any nuance or critical reflection remains absent. In the case of Behrendt, the 'paedophile' has been reduced to a rational human being that, akin to non-paedophilic individuals, is not proven to commit any abuse after the acquisition of a sex robot. Here, a great source of existing investigations is ignored that could warrant a precautionary attitude. Perhaps, his conceptualisation of paedophilia equally supports an argument that he had been willing to make from the start: the CSR is not to be opposed.

In light of the previous chapter, we can conclude that this conceptual negligence has moral implications. Firstly, Shapiro and Maras might *overestimate* the risk posed by the CSR, ignoring a more honest analysis in which the conclusion could be that the CSR could actually reduce child sexual abuse. Behrendt, on the other hand, might *underestimate* the risk, ignoring a more stringent analysis in which the conclusion could be that the CSR could actually increase child sexual abuse.

There seems to be an asymmetry here. Shapiro and Maras might oppose the CSR on a conceptually weak basis, but it is not clear if the CSR would have worked for their account if they had respected the 'conceptual rules'. On top of that, Behrendt might endorse the robot,

but not necessarily because he believes it will be efficacious. Rather, he disagrees with the unfounded reason behind its suggested prohibition. Here, I envisage one looking at both arguments and coming to a precautionary conclusion: it will not hurt to ban the CSR while making it legal could hurt very well. One must bear in mind, though, that while the second part of this conclusion is no understatement, the first part is not obvious. While it is true that the robot's efficacy is not yet proven, it has not been disproven either; the CSR could still 'work', redirecting paedophilic urges away from a group of vulnerable children that is now safeguarded from abuse. As such, adopting a precautionary approach is not necessarily the morally superior option: prohibiting the CSR on an incorrect conceptualisation of paedophilia could hurt very well. It could have *prevented* damage from *materializing*. In fact, it seems plausible that the *moral gain* lost in such an occurrence would equal the *moral cost* of the evenly bad case in which the CSR is allowed even though it increases child sexual abuse.

4.4. Dialectic: Anticipating Objections

Before closing this chapter, I wish to discuss two possible objections to my account of the arguments as presented above. Firstly, it might be argued that Shapiro and Maras' argument is not entirely contingent on their conceptual accuracy. They substantiate their theory of desensitisation, namely, on a phenomenon that is not exclusively applicable to paedophilia alone but to a group as broad as mammals. "[The] Coolidge effect", to which they refer, is "a phenomenon in mammals [...] such that arousal and desire for intimacy with the same partner declines over time. However, interest is renewed when a new partner is introduced" (2017: 17). Given that each paedophilic individual is per definition a mammal, the strength of this argument in disfavour of the CSR would not weaken if all paedophilic subgroups are being lumped together. Having said this, Maras and Shapiro do not explain why this Coolidge effect necessarily leads to rape, nor why the renewed partner needs to be more anthropomorphic than the former. On the contrary, as observed in Section 1.4., the 1990s wide-spread emergence of pornography has led to a *decrease* in the prevalence of rape. In other words, the Coolidge effect and desensitisation do not necessarily describe the same phenomenon; the generalizability of the former does not justify conceptual aggregation with respect to the latter.

Secondly, Shapiro, Maras and Behrendt could simply disagree with the report I gave on their 'blemished perception' of paedophilia; that I could have been more charitable with respect to their ontological interpretation of it. After all, they would only commit conceptual negligence if they themselves had acknowledged paedophilic plurality. It might be that they do not; that they are aware of paedophilia's proposed demarcations, but that they find their existence unlikely. Rather, from what is known about paedophilia, they aim to infer its most likely ontology yet come to different conclusions and equally disagree with mine. In other

words, the divergence in conceptualisation is not the result of *motivated* reasoning – as I will argue shortly from now - but that of *abductive* reasoning. To this, I can only say that I find it implausible. The conceptual taxonomy as presented in **Chapter 3** represents well-substantiated distinctions that are increasingly endorsed in the field of psychiatry; they can be abstracted convincingly from Seto's exhaustive and easily accessible meta-analysis *Pedophilia and Sexual Offending Against Children* (2018)^{48 49}.

4.5. Chapter Summary

In this chapter, I have shown the occurrence of conceptual negligence. Here, I demonstrated that prominent arguments either against or in favour of the CSR are built on a divergent set of carefully selected conceptualisations of paedophilia: the one from Shapiro and Maras emphasises tragedy; the one from Behrendt emphasises negative freedom. In neither case, though, are the limits of these conceptualisations made clear. Maras, Shapiro and Behrendt argue beyond mere rhetoric: their conceptualisations represent paedophilia's 'true ontology': what paedophilia really is. For this, they assume too much an aetiological consensus that does not exist. Most tellingly, by attributing traits to 'the paedophile', the authors already rhetorically rule out any significant heterogeneity amongst paedophilia from inception; they eliminate the possibility that paedophilia could, in fact, be something entirely different than what they are proclaiming it is. As established in the previous chapter, this conceptual negligence is both epistemically and morally irresponsible, for it might cause the risk associated with the CSR to be over- or underestimated.

In the following two chapters, I will clarify why the conceptualisation of the paedophilia moves in such divergent directions and why this ultimately comes at the expense of a large group of vulnerable children. For this, it is important to understand the CSR as the extreme example of a more fundamental, ideo-political discourse of which the stakes embedded in it go beyond the mere protection of children. Instead, I shall observe that the formal approval of the robot would either be in line with or very much against the experts' metaphysical standpoints on, for example, civilisation and political authority. Here, the conceptualisation of paedophilia seems to be of *argumentative* value in solidifying these positions in society.

⁴⁸ Please have a look at the *preface* to understand more elaborately the strength of this conceptual taxonomy.

⁴⁹ As a side-note, I do wish to make a remark with respect to Behrendt's conceptualisation of paedophilia. Although I might have given the impression, Behrendt's reductive conceptualisation of paedophilia is certainly not careless. Even though the potential kinship between paedophilia and regular sexual orientations constitutes the centre of his argument, he does acknowledge that "[a] high percentage of sexual perpetrators suffer from mental diseases and don't always realise the serious nature of their crimes" (2018: 105). In line with this observation, he also opposes a *laissez-faire* policy regarding the CSR. Rather, he invites some precaution, arguing that the CSR can be authorised only "under strict medical supervision and in accordance with guidelines issued by an ethics committee" (idem: 96).

Chapter 5. The Moral Agency of an Ontology

In order to understand the CSR as the extreme example of a more fundamental ideo-political discourse, we are first in need of some insights from Science and Technology Studies. Here, I will make use of examples from the past to abstract them. After that, I will apply them to the CSR in the chapter to come. For now, though, I ask the reader to remain patient.

This chapter shall proceed as follows. Firstly, in **Section 5.1.**, I will start by underscoring the causal relationship between Ontology and Ethics. I will show that the manner in which a phenomenon is ontologically interpreted indeed carries mundane, moral consequences. In other words, the way in which something is defined engenders ethical implications. Subsequently, **Section 5.2.** clarifies how ontologies are not transcendentally-given; they become established in a human process that one could describe as *political* in nature. From these two sections, **Section 5.3.** will present the first *four* insights that will be important to understand how the question related to the CSR's impact is not merely one of 'objective' science, but equally one of 'normative' ideology. Finally, **Section 5.4.** will underscore that the latter observation does not necessarily need to entail 'ontological relativism'. Rather, ontological interpretation is delimited by reasonable margins set by either science or philosophical reflection, allowing nonetheless some degree of 'objective', ontological validation. I find this observation equally important, for it will allow us to shed light on the 'honest way' out of the deadlock as well as to articulate what is undesirable about the ideo-political culture that is currently surrounding the CSR.

5.1. The Ontology Dictates the Ethics

The causal connection between ontology and ethics is certainly not unique to the polemic case of the CSR. The past stores myriad examples to emphasise this; ambiguous phenomena can be defined in one way or another and ethical consequences become visible in society. In the pre-1848 German Confederation of Prussian King Friedrich Wilhelm IV, for example, the ontology of 'God' would have a major impact on the reach of the monarch's power. Political philosopher Friedrich J. Stahl believed that "the creation of the universe was [...] an act governed by reason", rendering God an entity bounded by his own creation (Stedman Jones 2016: 109). Given that the King was its human representative on Earth, this reasoning was quickly applied to the monarch as well: he ought to be bounded by the state's constitution just as much as God was bounded by the laws of nature. Expectedly, the King opposed such reasoning. God, according to him, was a transcendental power that obeyed no law; the Prussian King ditto. Absolutism followed and the state became an "aggregation of transcendent authorities, while those beneath, the people, were merely a 'rabble of individuals'" (ibid.). They enjoyed few rights.

Closer to the present day, STS-scholars Lee Vinsel and Andrew Russell make clear the ethical implications embedded in the ontology of 'technology' (2016). In the 1940s, they claim, technology came to signify the material manifestation of 'progress'. Eventually, though, this association induced a certain technological imprudence that culminated in "a shocking series of twentieth-century disasters", such as the Chernobyl disaster and the Atomic Bomb (Marx 1994: 240). In order to survive, technology soon became re-associated with the morally neutral term 'innovation'. As of 2005, though, the societal obsession with innovation is becoming increasingly held responsible for "economic and social turmoil" (Russell & Vinsel 2016: 4). Possibly, the survival of technological optimism might depend on yet another reassociation.

Perhaps, though, the clearest example of the causal connection between ontology and ethics is provided by historian Gabrielle Hecht. Focusing on the historical development of 'nuclearity', she recognises that "an apparently immutable ontology has long distinguished nuclear things from non-nuclear ones" - an ontology that, according to her, has had "significant consequences for the lives and health of mineworkers" (2009: 896, 897). More concretely, the Western post-World War II ontology of nuclearity as the zenith of modernity caused the obfuscation of its downside in African colonies. In the eyes of the West, namely, these insignificant countries could not possibly partake in nuclear exceptionalism, even though they did provide the majority of radioactive uranium. African uranium-related activities, then, would not be considered 'nuclear', and, as such, African miners would equally not be entitled to the protective measurements associated with nuclearity. Interestingly, a number of Gabonese mines are currently endeavouring to obtain the label of nuclearity and its initiators are already foreseeing the much welcomed moral consequences of this: the set-up of a "health [...] monitoring program and a fund to disburse medical compensation claims" (idem: 916).

5.2. Politics Dictate the Ontology

Noticeably, the stakes associated with a given ontology - be it political, economic, ethical or of any other kind - are often high, intertwined and, importantly, are known to clash with each other. Clearly, these collisions play out on very mundane levels, putting tension on, for example, disputed changes in the Prussian constitution or the provision of protective gear in African uranium mines. The various stakeholders involved in these collisions are well-aware of these dynamics: they benefit from the adoption of a certain ontology over another. And, as shall be demonstrated, they do not shy away from 'fighting' over it. In other words, they foresee a desirable future and negotiate over the right ontology to bring it into fruition. As a result, the philosophical realm of ontology turns into an arena of politics.

In accordance, Stahl's conceptualisation of 'God' was certainly no coincidence. Rather, in a nation where political philosophy suffered greatly from state censorship, dissatisfaction with the state-of-affairs could only be voiced whilst being carefully camouflaged in debates not

interruptible by even a monarch: metaphysics and, indeed, religion. As such, Stahl's conceptualisation of the rational God was expressly selected with in mind a clear objective of political reform. Flying under the radar of censorship, then, Stahl initiated a game of politics between critical philosophers and the authorities in which the meaning of God was continuously renegotiated in the face of visions for the future. Similarly, it would be naive to think that any buzzword associated with 'technology' was altogether arbitrary. Rather, both government and corporate life benefited from the avoidance of technological pessimism. Here, in the face of political, moral and environmental criticism, changing the meaning of technology would bring them a long way.

In Hecht's remarkable case of nuclearity, the political character of an ontology becomes equally visible. Here, she demonstrates that the ontology of nuclearity has not emerged 'teleologically', but rather is the "technopolitical product of historical circumstances" (2009: 898). Her most explicit example is the post-World War II dispute between India and South Africa on becoming nuclear nations. When, in 1953, nuclear exceptionalism equally started to become manifested in atomic power plants, both nations saw in this the opportunity to use 'nuclearity' as a vehicle to become identified with advancement: they were technologically able to participate, were willing to demonstrate it and wished to raise their geopolitical status along the way. India, however, incorporated in this opportunity the anti-imperialist mission to transform the meaning of nuclearity into one that would no longer portray the West as the pinnacle of advancement. The renewed ontology of nuclearity, that is, ought to deal once and for all with "post-colonial fantasies of nuclear nationalism" (2006: 324).

South Africa's equal acknowledgement as a nuclear nation, however, would impede this anti-imperialist mission. South Africa was still an apartheid state, and, as such, it constituted "the very antithesis of the postcolonial settlement pursued by India" (ibid.). Being fully aware of this, India responded by trying to hinder the South African association with nuclearity. It attempted to do so by 'tweaking' with the ontology of nuclearity in such a way that the provision of 'source materials' - on the basis of which South Africa had claimed its nuclear status - would no longer be considered a nuclear activity. Eventually, India succeeded: the provision of source materials had been relegated to mere production and South Africa was no longer able to call itself a nation of nuclearity nor that of advancement.

5.3. Ontology and Values

From these two sections, we can already derive *four* important insights. As stressed, these insights will be relevant to an understanding of how the question related to the CSR's impact is not merely one of 'objective' science, but equally one of 'normative' ideology. Firstly,

ontologies do not possess a Platonic identity⁵⁰. Rather, the meaning attributed to a phenomenon changes over time and place in accordance with the socio-political hegemony in which it becomes established. In this regard, the phenomenon of nuclearity has not only experienced "ontological shifts" on its way from Western countries to their colonial states, but it has equally adopted different meanings across the annals of nuclear history (2006: 324). Ontologies are, as Hecht summarises it, *spatio-temporal juxtapositions*: at no moment in time or space, a phenomenon's ontology becomes "settled and forever mandated" (2009: 925).

Secondly, the major force causing an ontology to change is that of *human intervention*. As the example of nuclearity has demonstrated, ontological shifts do not occur in a detached and transcendental realm of some sort, but they are constructed in the midst of worldly and human interactions, buffeted by "contexts of economic, social, cultural and political power" (Roberts 2016: 347). Thirdly, ontologies possess a certain *agency*. This means that the particular ontology attributed to a phenomenon - in turn - produces an effect that becomes noticeable in the real world. In accordance, the pending victory over nuclearity in Gabonese mines would eventually materialise into profound effects on the working conditions of its employees.

Importantly, these three characteristics together make way for a fourth one: the incorporation of *value-laden intentionality*. As Stahl's 'God', Vinsel and Russell's 'technology' and Hecht's 'nuclearity' have underscored, stakeholders proactively use the unstable and ambiguous nature of phenomena in order to attribute to them an ontology that is beneficial to their interests. In other words, ontologies become carefully constructed - and, indeed, negotiated - in order to bring about a premeditated effect that is in line with their ideological visions - be it political, economic or ethical.

5.4. Positivism: Objective, Ontological Validation

By now, the ontological interpretation of a phenomenon must be understood as inescapably 'subjective'. In the words of Hecht, they are the technopolitical products of historical circumstances and this seems to be true for every concept. However, I do reckon that this observation touches upon "[one] of the most lively and persistent debates in twentieth-century philosophy of science" (Curd & Cover 1998: 1049)⁵¹. Undergirding it is a normative concern: if

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⁵⁰ Here, I am referring to Plato's theory of 'ideas' or 'forms'. In this theory, Plato asserts that, for all visible objects in the material world that are accessible through the senses, there exists an ideal version of it in the invisible world that is accessible only through reason. Philosopher Richard Kraut provides the following description: "[the] world that appears to our senses is in some way defective and filled with error, but there is a more real and perfect realm, populated by entities (called "forms" or "ideas") that are *eternal*, *changeless*, and in some sense *paradigmatic* for the structure and character of the world presented to our senses" (2017: Section 1., italics added).

⁵¹ Here, I am referring to the debate between empiricism and scientific realism concerning the status of scientific theories as described by philosophers Martin Curd and Jan Cover. What I take from it is the difficulty in establishing a particular scientific account of the world as truthful, and, "if we accept scientific theories as true", whether we should "believe that the entities they appear to postulate really exist" (1998: 1049). In this regard, empiricists argue that all scientific claims "ultimately [rest] on experience, on what can be observed, tested and measured" (1998:

any objective basis of a phenomenon is altogether rejected, how are we to judge which ontologies are *better* than others? Indeed, if an ontology is dictated *solely* by its political desirability, the aforementioned Gabonese miners would be in a rather meagre position amidst their ongoing battle for nuclearity: its aristocratic government could simply reject the claim and no substantiation would be necessary. In the face of this dilemma, I wish to demonstrate that ontologies are not infinitely malleable: interpretation is delimited by reasonable margins set by either *science* or *philosophical reflection*, allowing nonetheless for some degree of 'objective', ontological validation. I do so on the basis of a positivist criticism of interpretive research.

As articulated by philosopher Robert J. Weber, the positivist criticism of interpretive research starts by stating that "[they] fully understand that their culture, experience, history and so on impact the research work they undertake and thus the results of their work" (2004: 6). However, they disagree with the constructivist claim that the ontological and epistemological status of phenomena is altogether unstable; that knowledge of the world is constituted solely through "a person's lived experience" and that intersubjectively evaluative criteria "have no meaning" (idem: 4, 5). Rather, there exists, too, an objective, independent reality beyond the human mind that is increasingly being mapped. Accordingly, research is a "continuous journey to find improved ways to understand this reality", while equally accepting the claim that there is no "foolproof way of knowing this reality exists" (idem: 6).

In agreement with this criticism, Hecht demonstrates that although the ontology of 'nuclearity' is steered by *political* discourse, its interpretive flexibility has been limited by *scientific* discourse: "material realities" and "purely technical parameters" (2016: 899, 897). For the Gabonese miners, this means that they can strengthen their claim be appealing to independent, dosimetric readings. Indeed, their government might disagree with the dosimetric threshold indicating nuclearity, but it ultimately cannot ignore that some readings are evidently associated with health issues whereas others are not. Formulated differently, the Gabonese government can alter the ontology of nuclearity on political grounds, but only within a reasonable extent set by an objective Geiger counter. In this regard, India's mission to relegate South Africa to a mere producer seems to have succeeded only because the latter's industry had "successfully kept [such dosimetric] measures at bay for over thirty years" (idem: 921).

Hecht's example supports the idea that ontologies can indeed be 'tweaked with', but only within *reasonable margins*. Naturally, these margins are not at all clear-cut: where 'positivism' stops and 'constructivism' begins shall continue to be subject of discussion. Here,

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^{1049).} According to Curd and Cover, this suspicion is reinforced by "arguments from underdetermination: given the same body of observational evidence, there are in principle an indefinitely large numbers of alternative theories that are compatible with the evidence and which entail it" (ibid.). Scientific realists, on the other hand, "insist that there is a clear sense in which science progresses and improves over time" (ibid.). Clearly, the debate has extended itself to the concept of paedophilia, for the evidence still seems to support a number of different aetiologies. Here, experts seem divided over the degree to which they are willing to accept conceptual demarcations as truthful. This is because the aetiology is uncertain; conceptual transgression is possible in terms of methodology.

science appears to be in a privileged position⁵². Provided that scientific phenomena are analysed systematically on the basis of evidence and critical analysis, their ontological margins are more easily agreed upon. For instance, an atom undisputedly consists of an equal number of protons and electrons – if not, it loses its status as an atom. 'God' and 'technology', on the other hand, are more enigmatic concepts that depend mostly on *philosophical reflection* for their ontological validation. Regarding 'God', we accept that some descriptions of it are more acceptable than others, but there is no scientific account to confirm which one is correct. Similarly, we can intuitively classify an artefact as technological on the basis of its material properties, yet "the essence of technology" – as once famously articulated by philosopher Martin Heidegger – "is by no means anything technological" ([1954] 2014: 305). For both 'God' and 'technology', the establishment of intersubjectively evaluative criteria for their ontological validation seems controversial: contrary to the ontology of an atom, they are more easily the subject of negotiation.

Naturally, it is far beyond the scope of this dissertation to settle the epistemic position from which ontologies can be 'objectively' validated. Rather, what I take from the debate are the following two observations. Firstly, even though ontological interpretation is inescapably subjective, this does not mean we need to succumb entirely to 'ontological relativism'. Instead, science and philosophical reflection provide reasonable margins within which an ontology can be negotiated. Secondly, the more ontological validation depends on philosophical reflection instead of science, the easier it is for the aforementioned value-laden intentionality to be *inappropriate*⁵³. That is, margins are not yet set and this makes it difficult to validate which ontologies are better than others - even when these ontologies appear to be morally irresponsible⁵⁴. In **Section 6.5.**, these two observations will be important to shed light on the 'honest way' out of the CSR's deadlock, as well as to articulate what is undesirable about the ideo-political culture that is currently surrounding it.

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⁵² Supra nr. 51.

⁵³ Here, I explicitly use the term 'inappropriate', for the ideal of an altogether 'value-free' science is refuted. In the words of philosophers Julian Reiss and Jan Sprenger, "[epistemic] or cognitive values such as predictive accuracy, scope, unification, explanatory power, simplicity and coherence with other accepted theories are taken to be indicative of a good scientific theory and figure in standard arguments for preferring one theory over another" (2017: Section 3.1.). I imagine the same values to be of importance in establishing a 'good' ontology. By inappropriate values, then, I mean the non-epistemic values that can only derail experts from arriving at such an ontology. As I will show in **Section 6.3.**, the non-epistemic values guiding the ontology of paedophilia might be – among others – civilisation and political authority. By virtue of completeness, I must mention that the epistemic/non-epistemic distinction is increasingly being criticised. In her seminal *Cognitive and Non-cognitive Values in Science: Rethinking the Dichotomy* (1996), philosopher Helen Longino argues that even epistemic values are never politically neutral; their use "imports political and social values into context of scientific judgements" (Reiss & Sprenger 2017: Section 3.2.). I consider Longino's criticism intelligible, but discussing its implications for this dissertation is beyond the scope of it.

⁵⁴ For instance, the ontology of 'God' seems endlessly negotiable, making it extremely prone for value-laden intentionality. In the words of theologist Karen Armstrong: "[because] God is infinite, nobody can have the last word" (2010: 8). Similarly, in the words of historian Leo Marx, the concept of 'technology' seems to invite "endless reification" (1994: 249). As demonstrated in **Section 5.1.**, the ontologies of these concepts may lead to outcomes that are morally impermissible. I do not expect scientific concepts such as that of the atom to engender similar, controversial negotiations.

5.4. Chapter Summary

In this chapter, I have presented several insights of which I believe constitute the key ingredients to an understanding of the CSR as the extreme example of an ideo-political discourse. Consecutively, I have demonstrated that ontologies are (1) spatio-temporal juxtapositions, (2) established through politics, (3) possess agency and (4) enable the incorporation of value-laden intentionality. In addition, I have equally demonstrated that ontological flexibility is nonetheless limited by (5) reasonable margins set by either science or philosophical reflection: *not anything goes*.

Chapter 6: Paedophilia and Ideo-Politics

The purpose of this chapter is to demonstrate how the CSR constitutes the extreme example of a more fundamental, ideo-political discourse; how the CSR constitutes the material embodiment of a political game of power and rhetoric in which participants debate a range of ideals. For this, I will apply the insights as abstracted in the previous chapter. Naturally, the ontology that is being negotiated here is not that of 'God' or 'nuclearity', but that of paedophilia. Here, a key term is 'paraphilia', referring to the psychiatric denotation of abnormal sexual desires. I shall clarify that the 'ideological battle' embedded in the CSR manifests itself in the degree to which paedophilia either or not becomes denoted as paraphilic.

This chapter shall proceed as follows. Firstly, **Section 6.1.** will demonstrate that the ontology of paraphilia, too, is one to be negotiated. Here, the psychiatric past of homosexuality provides a startling example. This observation is relevant to Section 6.2., where I shall demonstrate that the malleable ontology of paraphilia makes it possible for ideological visions to become of influence in how the question related to the CSR's impact is being answered. As I mentioned before, these ideological visions appear to go beyond the mere protection of children. In Section 6.3., I shall elaborate on what they might be. Subsequently, Section 6.4. will return to the aetiological uncertainty undergirding the concept of paedophilia. Within the larger, ideo-political discourse, this uncertainty must no longer be seen merely as an obstacle to an accurate assessment of the CSR. Rather, it has become an argumentative convenience in solidifying these ideological convictions in society. In Section 6.5., I will underscore that the malleability of paraphilia, too, is limited by reasonable margins. This insight is useful in elucidating the 'honest' way out of the deadlock as well as articulating what is undesirable about the ideo-political culture currently surrounding the CSR. Finally, Section 6.6. shall dedicate some attention to the CSR itself: how are we to describe it amidst this grand web of conceptual transgressions, negotiable ontologies and ideological visions?

6.1. The Politics of Paraphilia: Perversion in Disguise

Indeed, the ontology of paraphilia is equally a 'spatio-temporal juxtaposition': what is considered 'normal' and 'abnormal' sexual behaviour is liable to change across time and space. One must not forget that, until 1973, the authoritative DSM⁵⁵ not only denoted paedophilia as a paraphilia, but homosexuality too (Pappas 2013). Today, most Western countries would strongly oppose such an inclusion. An important observation to make, though, is that 1973's classificatory shift towards the 'normalisation' of homosexuality was not altogether grounded psychophysiologically. Rather, society had 'simply' decided that same-sex activity between consenting adults should no longer be considered a sexual abnormality.

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⁵⁵ The Diagnostic and Statistical Manual of Mental Disorders

Here, one must recognise that this turning point, too, was the result of a highly political process between human rights organisations on the one hand and orthodox psychiatrists on the other hand - a process that historian Ronald Bayer has come to define as 'the politics of diagnosis' (1987; e.g. Wafelbakker 1986). Clearly, these stakeholders must have been aware of the agency carried by the ontology of paraphilia: given that homosexuality was no longer considered to be abnormal, the declassification of it as such resulted in, among others, "the repeal of sodomy laws that criminalized homosexuality [and] the ability of LGBT personnel to serve openly in the military (Drescher 2015: 572).

The example of homosexuality suggests that 'paraphilia' can be a psychiatric disguise for the semantically not so different phenomenon of 'perversion'. Here, the mere difference is that perversion is a matter of opinion that grounds no societal interference, whereas paraphilia is a psychiatric classification that does ground such interference. Medically, though, the fine line between the two appears arbitrary insofar as crossing it would not be the complete result of novel psychophysiological insights, but rather of normative politics. As exemplified by homosexuality, then, it is society that has the final say in whether sexually deviant behaviour is believed to be abnormal to the degree where it becomes *socially unacceptable*; when it must be understood as a *disease* that requires treatment. Paraphilia, it seems, could function as a vehicle through which societal disgust becomes reified into concrete therapy⁵⁶.

6.2. Paedophilia and Subjectivity

I say so, for I have observed a *correlation* between the degree to which experts associate paedophilia with paraphilia and their conceptualisation of it. Provided that experts build their speculative assessments of the CSR on these conceptualisations, this association now indirectly comes to determine the robot's desirability. In the light of the just observed negotiable nature of 'paraphilia', though, this association becomes inescapably subjective. By exposing the hidden normativities undergirding Shapiro, Maras and Behrendt's arguments, we can observe such subjectivity becoming manifested in the debate.

Firstly, Maras and Shapiro's discomfort with the CSR does not seem to be based entirely on its anticipated real-world effects on child sexual *behaviour*, but equally on its normalisation of having 'obscene' *thoughts*. Importantly, as demonstrated by **Section 3.2.**, these thoughts need not necessarily evolve into sexual abuse. As such, Maras and Shapiro appear to depict the robot as *intrinsically* undesirable: not for the danger that it poses to

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⁵⁶ In **Section, 6.5.**, I shall provide nuance to this claim. I do not wish to assert, namely, that all paraphilias are mere perversions. There is, too, a scientific, psychiatric side to paraphilias that determines their classification in a way that is much less steered by inappropriate values (*supra* nr. 53). Here, I shall clarify as well that the declassification of homosexuality as a paraphilia is likely to be the result of novel psychiatric insights as well. At this moment in the dissertation, however, it must be stated explicitly that the phenomenon of paraphilia is subjected to societal opinion. I hope that this – for now, at least – justifies my unsophisticated account of homosexuality's paraphilic past.

children, but for its transgression of "the state's right to maintain a decent society" (idem: 7/8). The CSR, they argue, "erodes moral standards" and "is anathema to [...] therapy which seeks to remove undesirable thoughts" (idem: 7, 11). Not surprisingly, one of the conclusions with which they underscore their disapproval of the robot is that it ends up normalizing thoughts that society considers "perverted" (idem: 17). Notably, U.S. Congressman Dan Donovan of the aforementioned CREEPER ACT⁵⁷ adopts a similar point of view, claiming that his bill takes "[the] necessary steps to stop these *sickening* dolls from reaching [his] communities" (Blake 2018: Section 4, italics added).

By describing it as a 'normal' sexual orientation, Behrendt seems to suggest that paedophilia is not at all as paraphilic as his fellow debaters seem to proclaim. In fact, he appears to argue that the only reason why paedophilia is not being acknowledged as a regular sexual orientation is its "[incompatibility] with social and moral norms" (2018: 98). As such, Behrendt seems to endorse psychologist Craig Harper in his belief that objections against the CSR are, ultimately, rooted in societal and moral discomfort rather than in theoretical and empirical evidence. In accordance, Behrendt equally berates the statement made by ethicist Kathleen Richardson that "paedophiles, rapists, people who cannot make human connections [...] need therapy, not dolls" (Wiseman 2015: Section 4). According to Behrendt, such a reductive comparison - which supports the "traditional image of paedophiles laden with violence and vulgarity" - is hardly objective (2018: 108). Rather, it embodies a normative concern: "the degradation of the family as a cohesive unit" (idem: 101).

By now, we must observe that Shapiro and Maras' explicit depiction of paedophilia as a paraphilia correlates strongly with their negative conceptualisation of it; a classical *petitio principii* in which its content already assume a conclusion that they had been working towards from inception: paedophilia is 'abnormal'. Such a self-affirming correlation equally applies to Behrendt, for his defiance of paedophilia as a paraphilia becomes manifested in a reductive if not naive conceptualisation of it. Formulated differently, both conceptualisations of paedophilia use its aetiological underdetermination in order to bring about an account of it that will not obstruct either their support or defiance of it as a paraphilia. Given that the assessment of the CSR's desirability is built on conceptualisations as such, it is ultimately the (dis)association with 'paraphilia' that - albeit indirectly - comes to determine this desirability. This association is largely subjective, for what is considered 'abnormal', 'indecent', 'immoral', 'sickening' and 'perverted' - or, in short, 'paraphilic' - is not merely a tale of psychophysiology. Rather, the meaning attributed to each of these predicates is constructed along with human intervention and, importantly, human *disagreement*. 'Paraphilia', it appears, is not something that *is*, but it is something that *becomes* in what can be described as a political process.

⁵⁷ Please have a look at **Section 1.3.**

Section 6.3. Beyond Morality: What Is At Stake?

In sum, the CSR's desirability indirectly depends on the degree to which paedophilia is believed to be a paraphilia. Given that the latter's ontology is negotiable, this desirability is largely an outcome of politics. So far, though, one major question has been omitted: what is at stake? In other words, what is so utterly important about the ontology of paraphilia that paedophilia ought to be - or not - classified as such? So far, then, the polemic debate surrounding the CSR has come to affirm two characteristics of an ontology as abstracted in **Section 5.3.** Firstly, the ontology of paraphilia is a spatio-temporal juxtaposition, and, secondly, it is constructed through human intervention. At this point, though, it is worth paying attention to the following two characteristics. What agency, that is, do debaters imagine the classification of paraphilia to have? And, in response, what value-laden intentionality are they incorporating into it? Akin to 'God' as a stepping stone towards constitutional changes and 'nuclearity' as a stepping stone towards health reimbursements, what premeditated effect do experts such as Shapiro, Maras and Behrendt envisage that the classification of paedophilia as either or not a paraphilia will bring about?

To this question, the following three answers seem most obvious. Firstly, the ontology of paraphilia could 'simply' be a matter of *morality*. By this, I mean to say that experts might be convinced upfront that the CSR will either or not aggravate child sexual abuse and they 'tweak' with their conceptualisation of paedophilia as either or not paraphilic to engender a conclusion that resonates with it. After all, it is the classification of paraphilia that is grounding the legal interference to either allow or prohibit the CSR. Especially under the impression that the latter will aggravate child sexual abuse, it becomes instrumentally imperative for opponents to keep the association between paedophilia and paraphilia intact. If they fail to do so, the protection of children will come to fall outside of their legal reach⁵⁸.

Secondly, the ontology of paraphilia could be a matter of *civilisation*, referring to "the stage of human social and cultural development that is considered most advanced" (*Lexico Encyclopaedia*: n.d., civilization entry). As underscored in **Section 6.1.**, namely, there appears to exist a semantic kinship between the phenomena of 'paraphilia' and 'perversion'; the fine line between the two is medically dubious. As such, the declassification of paedophilia as a paraphilia would equally acknowledge the societal normalisation of something that has conventionally been perceived as 'perverted'. Here, proponents of the declassification might welcome the shift as a pragmatic decision rooted in rationality rather than in emotional disgust; it would recharacterize paedophilic individuals not as sexual predators *per se*, but rather as

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⁵⁸ In light of this, Seto has rightfully remarked that "[anti-discrimination] laws and policies refer to sexual orientation, but with the implicit understanding that one is referring to sexual *gender* orientation. But what might happen", he wonders, "if the definition of sexual orientation were to extend to include sexual *age* preferences such as paedophilia?" (2012: 231, italics added).

prima facie victims of unchangeable and unsolicited sexual desires. Opponents of the declassification, however, might understand the shift as surrendering to social and cultural degeneration. Aside from the real-world consequences that this classificatory shift might entail, then, it is also civil reputation that appears to be at stake. Transforming paedophilia into a regular sexual orientation would symbolise either the zenith of rational empathy or the nadir of moral depravity.

Thirdly, the ontology of paraphilia could be a matter of political authority. Amidst the aforementioned kinship, namely, the CSR seems to ignite the question to what extent society is allowed to interfere with sexually deviant behaviour as premised solely on the belief that such behaviour is 'perverted'. This question is one of meta-politics, for it is an instantiation of the more fundamental question related to negative freedom: "[what] is the area within which the subject [...] is or should be left to do or be what he is able to do or be, without interference by other persons (Berlin 1969: 121)? 59" For reasons of consistency, though, the answer given to the former question is, albeit implicitly, equally an answer to the second question. As such, the degree to which paedophilia is associated with 'paraphilia' - which would approve of societal interference - is equally determining the value that society ought to attribute to negative freedom. Naturally, this a determination of which the consequences will reach beyond the realm of paedophilia and it would be naïve to believe that debaters are not aware of this while providing their answer. The (in)famous U.S. Ashcroft versus Free Speech Coalition case might be a strident example of this political implication. Here, the court rejected the "government's contention that virtual child pornography whets the appetite of paedophiles and encourages them to engage in illegal conduct" (Maras & Shapiro 2017: 6). Its reason: "the government cannot constitutionally premise legislation on the desirability of controlling a person's private thoughts", a claim that returns as well in arguments about drug usage and offensive speech (Stanley versus Georgia 1969: 557, 566).

Naturally, it is above all these latter two examples that demonstrate how the stakes embedded in the CSR's legality move beyond the mere protection of children. As it appears, formal approval of the robot would either be in line with or very much against the experts' metaphysical standpoints on, for example, civilisation and political authority. I do not claim that this list is exhaustive. For example, insofar as an ideo-political hegemony is discernible into multiple facets, I reckon that the robot might, too, challenge firmly established religious doctrines. Here, I shall not elaborate on whether experts' are *aware* of their argument's ideological underpinnings and I shall equally refrain from speculating which ones are relevant for Shapiro, Maras and Behrendt. With regard to the latter, though, it would at least be interesting to scrutinise if their either U.S. or Belgian origins can explain in any way why their

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⁵⁹ Naturally, it is also a moral question. Here, though, I wish to emphasise the political consequences that paedophilia's paraphilic declassification might entail.

conceptualisation of paedophilia moves in such divergent directions. Surely, their argumentation departs from ideo-political hegemonies that are not particularly even. I wish to underscore, though, that whatever stakes are being challenged by the CSR, the ideo-political culture that is currently dominating both nations must have nothing of it. In **Section 6.5**., I shall explain why this is not necessarily desirable.

Section 6.4. The Two-Faced Value of Aetiological Uncertainty

Before doing so, however, I wish to draw some attention to the aetiological uncertainty undergirding the concept of paedophilia. Within the larger, ideo-political discourse touched upon just now, namely, it must no longer be seen merely as an obstacle to an accurate assessment of the CSR. Rather, it has become, too, an *argumentative convenience* in solidifying these ideological convictions in society.

This claim is premised on three observations. Firstly, it is worth recalling that Maras, Shapiro and Behrendt's divergent conceptualisations of paedophilia are the result of problematic transgressions with respect to the conceptual taxonomy presented in **Chapter 3**⁶⁰. Secondly, we now understand that such divergence is not arbitrary, but likely to reflect differences in one's ideological convictions. Thirdly, although I deemed conceptual transgression both *epistemically* and *morally* irresponsible, we must acknowledge that it is nonetheless *methodologically* allowed. After all, the aetiology of paedophilia cannot even affirm if it is a curable disorder or a repellent lifestyle, let alone its internal demarcations.

In light of these observations, aetiological uncertainty seems more welcome than regretted. To quote Gardiner again, it is a "complexity [that] may turn out to be *perfectly convenient* for us": it allows for the rationalisation of moral corruption⁶¹ (2006: 408). In this particular case, moral corruption manifests itself in conceptual negligence, is facilitated methodologically and is eventually justified by paedophilia's uncertain aetiology. As such, the latter ultimately constitutes a convenience with argumentative value: it enables paedophilia to be variably described as a paraphilia or not and it solidifies ideological convictions in society therewith.

6.5. The Ontological Boundaries of Paraphilia

Finally, it is time to make use of the last insight as abstracted in the previous chapter: reasonable margins. Here, I expressed that, even though ontological interpretation is inescapably subjective, this does not mean that we need to succumb to 'ontological relativism'.

⁶⁰ To recall: Shapiro and Maras' negative conceptualisation is constructed out of a careful selection of clinical data from paedosexual and other-paraphilic subgroups; Behrendt's conceptualisation puts paedophilia on a par with regular sexual orientations.

⁶¹ To recall, moral corruption means to "engage in *manipulative or self-deceptive* behaviour by applying one's attention selectively, to only some of the considerations that make the situation difficult" (2006: 408).

On top of that, I suggested that the more ontological validation depends on philosophical reflection instead of science, the easier it is for inappropriate values to steer its course. I applied these observations to the ontology of nuclearity, which appears to be an interesting boundary case: although it is subjected to scientific investigation - and, as such, partly dictated by dosimetric contexts - consensus is not yet firm enough to non-controversially claim what is nuclear and what is not.

Paraphilia must equally be understood as a boundary case: although it is true that its ontology is negotiable, we cannot dismiss altogether its scientific validation. In this regard, it is true that homosexuality's classification as a paraphilia was reconsidered in 1973 on the basis of 'factors outside of APA⁶²' – that is, gay activism – but it was simultaneously 'internally' decided that homosexuality was not associated strongly enough with the "subjective distress" and "impairment of social effectiveness of functioning" now deemed necessary for a phenomenon to be regarded as such (Spitzer 1981: 211, italics added). In other words, although it is true that paraphilia as a concept is "vulnerable to societal pressures", it is equally determined in terms of psychiatric health (Zonana 2011: 249). The latter, it appears, shapes its reasonable margins. As I remarked earlier, the recognition of this scientific basis of paraphilia allows us the elucidate the 'honest' way out of the deadlock as well as to articulate what is undesirable about the ideo-political culture that is currently surrounding the CSR. Here, the key term is *stigma*.

I will start with the former. This is premised on three observations. Firstly, with regard to preventing the onset of paedophilic behaviour, Section 3.5. tells us that experts must conduct a speculative assessment of the CSR on the basis of clinical data with respect only to 'at risk'-paedophilic individuals⁶³. If they assess it, too, on clinical data with respect to paedosexual and other-paraphilic subgroups, they might over- or underestimate the CSR's 'objective risk'. I have deemed this both epistemically and morally irresponsible. Secondly, Section 3.6. reminds us that conceptual negligence is nonetheless methodologically allowed⁶⁴: we have seen it occurring in **Chapter 4**. Thirdly, in light of these observations, we can now articulate what would be the 'honest way'65 out of the deadlock: the establishment of the conceptual taxonomy as laid out in Chapter 3 and the methodological necessity to perceive 'at risk'-paedophilic individuals as members of a clinically separate entity therewith. Note that this would be in line with the previously made observation that the more ontological validation

⁶² American Psychiatric Association

⁶³ To recall: non-offending individuals that (1) experience paedophilic interests and (2) whose psychophysiological make-up poses a significant risk for offending but (3) have not yet done so.

⁶⁴ To recall: as aetiological research cannot even confirm whether it is a curable disorder or a freely chosen lifestyle, transgressing its internal demarcations is methodologically possible. Formulated differently, the conceptualisations of paedophilia presented by Maras, Shapiro and Behrendt are divergent but nonetheless in line with aetiological evidence; this aetiological underdetermination enables conceptual transgression.

⁶⁵ I say so, for, independent from any ideological convictions embedded in the CSR, this line of inquiry would do most just to the well-being of children. I will come back to this in the conclusion.

depends on philosophical reflection instead of science, the easier it is for inappropriate values to steer its course. Here, the scientific establishment of the conceptual taxonomy would produce a counter-effect: it would make it methodologically more difficult for controversial ideologies to derail an 'objective' assessment of the CSR.

I do reckon, though, that for this specific subgroup of paedophilia to become established as a clinically separate subgroup, it would need to enrol in aetiological research. In other words, it would be required to investigate if 'at risk'-paedophilic individuals truly have a different psychophysiology in comparison to paedosexual and other-paraphilic subgroups. If this is the case, the following step would be to see if this would warrant different expectations from 'treatment' - including the CSR⁶⁶. Yet, we must observe that the enrolment of 'at risk'-paedophilic individuals seems to constitute a major challenge given that paedophilia is strongly associated with stigma. As already touched upon in **Section 1.2.**, this stigma entails fear, anxiety and social ostracism. Overall, it provides "little reason to come forth and identify as [paedophilic]", causing the knowledge on paedophilia to be extracted from exactly these other subgroups (Fiorillo 2014: Section 5).

The reasonable margins of paraphilia might be of help in making the stigma disappear; to nonetheless bring about the enrolment of 'at risk'-individuals in aetiological research. This is, again, premised on three observations. Firstly, it must be noticed that the stigma surrounding paedophilia is itself strongly associated with its classification as a paraphilia. In fact, psychiatrists Charles Moser and Peggy J. Kleinplatz advocated the "removal of the entire [paraphilia] category from the DSM" due to the stigma associated with being classified as a 'mental abnormality' (2006: 107). Secondly, by acknowledging the scientific basis of paraphilia, we can now call into question the 'paraphilic nature' of 'at risk'-paedophilia. In other words, Shapiro and Maras might opine that paedophilia is altogether 'paraphilic' for its abnormal and perverted nature, but this does not mean that the same conclusion can be drawn for each and every subgroup of it on the basis of paraphilia's psychiatric criteria. In fact, the reason that it is not known whether 'at risk'-paedophilia corresponds with aforementioned 'subjective distress' and 'impairment of social effectiveness of functioning' might be the vindication for its declassification as a paraphilia⁶⁷. Note that this lack of knowledge is not the *justification* behind this declassification. Rather, it is an epistemic convenience in a more *pragmatic* endeavour. Thirdly, namely, this declassification might be the start of paedophilia's de-stigmatisation. As such, it will slowly but surely allow us to know more about the reason behind paedophilic

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⁶⁶ That is, if the psychophysiological differences between the two subgroups is clinically relevant.

⁶⁷ We do not know this, because 'at risk'-paedophilic individuals do generally not enroll in aetiological research. Naturally, it could be the case that, if they did enroll in aetiological research, the conclusion could still be that 'at risk'-paedophilic individuals, too, suffer from subjective distress and impairment of social effectiveness of functioning. For now, though, we cannot draw this conclusion and this is pragmatically convenient.

individuals' jump towards offending and it will put us in a stronger position to safeguard the well-being of children therewith.

Finally, we are now in the position to articulate what is undesirable about the ideopolitical culture that is currently surrounding the CSR. Observably, it is a culture that, for ideological reasons, empowers the belief that all types of paedophilia are paraphilic. With that, it keeps its associated stigma intact. As remarked, this might not only be psychiatrically incorrect, but it is, too, pragmatically undesirable: it prevents 'at risk'-individuals from participating in much needed aetiological research. This proceeds in circles as well, for as long as conceptual negligence remains methodologically allowed, experts can describe 'at risk'-paedophilia just as paraphilic as any other subgroup. With respect to the CSR, this results in the wide acceptance of the CSR being merely "a way of maintaining a perversion" instead of "contributing to its obliteration" (Behrendt 2018: 97). Ultimately, it entails that we cannot 'accurately' assess if it has any plausibility of being efficacious in preventing the onset of paedophilic behaviour – it causes, above all, the obfuscation of its potential virtue⁶⁸.

Since this hostility towards the CSR is as much the result of ideological visions for civilisation and political authority as it is of mere morality, we can conclude that the influence of ideological convictions is not necessarily beneficial to the accuracy with which the CSR's 'objective' danger to children is being evaluated⁶⁹. An accurate assessment would need experts to respect the conceptual taxonomy as laid out in **Chapter 3** and ideological convictions are drawing them away from doing so.

6.6. The Socio-Materiality of the CSR

Amidst this grand web of conceptual transgressions, ambiguous ontologies and ideological visions, there is one phenomenon, though, that has persistently been its centrepiece: the CSR itself. Therefore, by virtue of closing this long and complex chapter, it is time to pay it some final attention. More specifically, given that the debate surrounding it has become occupied with values far beyond the mere well-being of children, it is worth wondering what has been the role of the robot itself in this controversial narrative. Here, the concept of *socio-materiality* seems to proffer the adequate language to describe so.

Evidently, the CSR has provoked vivid and even emotional discussions between opposing debaters. Understandably so, for it is the protection of a large group of vulnerable children that is at stake. Yet, as Behrendt provocatively ponders, the sudden ethical attention towards the CSR seems to be arbitrary inasmuch as paedophilic individuals have long been

⁶⁸ As I underscored at the end of **Section 4.3.**, taking a precautionary approach is not necessarily the morally superior option. In this regard, the obfuscation of the CSR's potential virtue is regrettable.

⁶⁹ Of course, the exceptions here would be the ideological conviction that speculative assessments concerning psychiatry must *always* be well-grounded conceptually, or when, by mere *accident*, the expert's ideological convictions lead to a conclusion that resonates with the CSR's 'true' effect - the effect it would have in reality.

able to buy "a doll sold in a toy store"; to transform it into a masturbation device that would practically be indistinguishable from a sex robot (2018: 98). With this statement, Behrendt seems to suggest that - even before the CSR made its arrival – the concern for child sexual abuse should already have been there.

He does not mean this literally, though. After all, greater immersion equals greater concern⁷⁰ and this is especially true if Shapiro and Maras' aforementioned theory of desensitisation has any validity to it. Rather, he uses the comparison to illuminate how the CSR is igniting attention of a particularly unprecedented kind. As Behrendt asks himself: "[would] it be the explicit sexual nature of the [CSR], as well as the use that a paedophile makes of it, which would transform this object in something immoral and illegal?" (idem: 98). Ultimately, the comparison between the toy store doll and the CSR is part of a larger point that Behrendt wishes to make: that the robot probably reflects "deep ideological and philosophical beliefs about what kind of choices we should make as a society" (idem: 102). The CSR, that is, appears to be the material embodiment of a great number of fundamental, divergent and colliding ideologies that are being deliberated about in its name.

In this regard, the CSR can be described as a socio-materiality. Just as much as the negotiable identity of an ontology, namely, it is increasingly believed that the meaning adopted by a material substance cannot be understood disentangled from its 'social life'. In the words of historian Lissa Roberts, a substance's identity is not recognised "in terms of narrowly epistemic or ontologically static definitions, but as evolving over time and across time and space in keeping with specific contexts of practical engagement" (2016: 343). It is contingent on "highly social and political, as well as culturally and geographic [variability]" (idem: 346). Needless to say, the CSR is – and explicitly so - a telling vehicle for this observation.

Section 6.7. Chapter Summary

In **Chapter 4**, I have evidenced the occurrence of conceptual negligence: experts are building their argument either in favour of or against the CSR on carefully selected, yet divergent conceptualisations of paedophilia that demonstrate little respect to taxonomical demarcations. Rather, they assume too much a non-existing aetiological consensus that causes their ontological interpretation of paedophilia to ignore contradictory evidence to it. Building upon insights from Science and Technology Studies, I have endeavoured to explain this divergence by understanding the CSR as the extreme example of a more fundamental, ideo-political discourse. Here, the key term has been that of *paraphilia*, for the 'ideological battle' triggered by the CSR manifests itself in the degree to which paedophilia either or not becomes described as such.

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⁷⁰ *Supra* nr. 15.

More specifically, what appears to be at stake with the CSR seems to go beyond the mere protection of children. Rather, as I have mentioned before, formal approval of the robot would either be in line with or very much against the experts' metaphysical standpoints on, for example, civilisation and political authority. In this chapter, I have demonstrated how the conceptualisation of paedophilia can be of argumentative value in solidifying these standpoints in society. They can either be upheld by invigorating paedophilia's description as a paraphilia, or they can be questioned by challenging its description as a paraphilia. Notably, this divergence is made methodologically possible by paedophilia's aetiological uncertainty, now manifesting itself as an argumentative convenience.

Amidst this discourse, I have equally recognised a concern: the influence of ideological convictions is not necessarily beneficial to the accuracy with which the CSR's 'objective' danger to children is being evaluated. An accurate assessment, namely, would need experts to respect the conceptual taxonomy as laid out in **Chapter 3** and ideological convictions are drawing them away from doing so. In the face of this concern, I have appealed to paraphilia's reasonable margins as set by psychiatric health. The latter, that is, would provide the standing ground to challenge the 'paraphilic' nature of a particularly important subgroup of paedophilia: 'at risk'-paedophilic individuals. This is important, for this pragmatic defiance might bring about the latter's enrolment in aetiological uncertainty, constituting the first step towards their acknowledgement as a separate, clinical entity. Hopefully, it would produce the data needed for the most 'objective' speculative assessment of the CSR: one that is not over- or underestimated by resorting to the data derived from non-paedophilic, paedosexual or other-paraphilic subgroups. In other words, it is a defiance likely to provide the most 'honest' answer to the controversial question undergirding this dissertation: can the CSR keep paedophilic individuals from harming children?

Chapter 7. In the Absence of Truth: Where to Go From Here?

The current ideo-political culture, then, is preventing 'at risk'-paedophilic individuals from enrolling in aetiological research. And, until they do enlist to such research, society remains distant from a valuable *truth*: the robot's 'true' effect on paedophilic behaviour. In other words, society is not in the epistemic position to know whether the CSR will push towards the onset of such behaviour or if it is preventing it.

Although this observation is philosophically interesting, I wish to end this dissertation with a chapter of more *practical* value. After all, the robot is increasingly appearing in the marketplace; Behrendt himself strongly believes that the emergence of the CSR is "inevitable" (2018: 98). Given what is morally at stake therewith, the absence of truth seems no incentive to refrain from legal scrutiny altogether. In other words, policymakers must decide on the robot's legality, but they will have to do so without knowing if they are making the morally right decision. Departing from such an epistemically meagre position, the purpose of this chapter is one of *contemplation:* be it in favour of or against the CSR, how can policymakers nonetheless justify their legal standpoint? Here, the tension between both sides can be well-articulated using John Rawls' concept of *public reason*. As he once famously suggested, namely, this account of moral and political justification "does without the concept of truth" (1996: 94).

This chapter shall proceed as follows. Firstly, **Section 7.1.** will provide a brief introduction to public reason and **Section 7.2.** shall hypothesise that the CSR is a matter of exceptional prudence. This latter premise is useful in elucidating that a *legal* assessment of the CSR might be steered by ideological visions just as much as a *moral* assessment of it. What follows is a first attempt to 'brush away' these visions. In this regard, I will proffer a 'no ontologies considered'-approach in **Section 7.3.**: 'freed' from any normative underpinnings, the aetiology of paedophilia offers no basis to ratify a prohibition of the CSR⁷¹. Although I do not necessarily support this approach, this position allows me to assess more rigorously any objections to it – I shall discuss two of them in **Section 7.4** and **7.5.** In a somewhat Socratic manner, then, I hope that this final chapter provides a first step towards a legal decision on the CSR that is justified in both moral and political terms.

7.1. 'Doing Without the Concept of Truth'

According to Rawls, the reason why moral and political justification must be possible in the absence of truth follows from his recognition of the 'burdens of judgement'. Here, he refers to the "hazards involved in the correct [...] exercise of our powers of reason and judgement in the

⁷¹ As stressed in **Section 4.2.**, this standpoint seems to be shared by Behrendt. For this, he refers to the harm principle as presented by philosopher John S. Mill: "[that] the only purpose for which power can be exercised over any member of a civilised community, against his will, is to prevent harm to others" ([1859] 2010: 17,18). As long as the CSR is not proven to increase child sexual abuse, it's prohibition cannot be justified.

ordinary course of political life" (idem: 55/56). The burdens that he recognises are clearly relevant to the CSR as well: the complex and conflicting nature of scientific evidence, the vagueness of concepts and the divergence of normative considerations underneath. As evidenced in the previous chapters, the CSR's legislation on the basis of truth is indeed problematised by the instability of paedophilia as a concept; it is assembled in varying ways steered by normative underpinnings. According to philosopher Jonathan Quong, it is the burdens of judgment that explain why "reasonable and rational people will be permanently [and irreconcilably] divided over matters of philosophy, religion and other aspects of life" (2018: 8).

In order for a free and equal society to nonetheless justify moral and political rules, Rawls develops his concept of public reason. This concept requires that "our moral or political principles be justifiable to, or reasonably acceptable to, all those persons to whom the principles are meant to apply" (idem: 2). In order to reach such principles, debaters must avoid appeals to "controversial moral, religious or metaphysical claims" over which "reasonable persons are assumed to disagree, and instead appeal only to those public or political ideas that are part of a liberal democratic political culture and can be assumed acceptable to all persons as reasonable and rational" (idem: 17, 8). Only then, Rawls claims, intersubjectively valid principles can be obtained that are endorsed by all reasonable people. Here, Islam provides a contemporary example. Islamic individuals may wish to advocate their right to build mosques, but they cannot expect fellow citizens to endorse this right for the reason of Islam being 'the supreme religion'. Rather, in a pluralistic society where multiple religions co-exist, Islamic individuals will promote their right by appealing to 'freedom of religion': instead of resorting to a religious doctrine embraced only by themselves, the right to build mosques is now being justified by a principle that most members of society - including themselves - find reasonable, rational and acceptable. Note that this is not merely a tactical move in order to gain approval. Rather, it is a commitment to which they are devoted within their own faith as part of treating all religious people equally.

7.2. A Matter of Exceptional Prudence

If policymakers wish to challenge a prohibition of the CSR, it is public reason on which they can ground it. In order to understand why, one must first realise that the CSR might be a matter of *exceptional prudence*. There appears to be, that is, an *unusually strong* presumption against the acceptability of the CSR. This is premised on three observations. Firstly, sex robots in general are granted *prima facie* innocence. As the 'regular' sex robot evidences, the mere suspicion of aggravating sexual abuse is not warranting any proscription just yet - not even that of 'Roxxxy' whose 'rape setting' is programmed specifically to ignite resistance (Millard 2017). From this, I derive the moral and political rule that a sex robot should be banned as

soon as it causes a proven increase in sexual abuse⁷². Adult sex robots, that is, are perceived 'innocent until proven guilty'⁷³. Secondly, the CSR seems to be a strident exception to this rule: it falls under great suspicion and only its proven efficacy is likely to reduce the abhorrence with which it is perceived.

Lastly, the reason behind this skewed burden of proof is not immediately clear. Naturally, the rights of children are legible in terms of public reason, but their elevation over that of adults may not be so necessarily. For example, concerning the prevalence of postabuse traumatic stress syndrome, women tend to experience more harm (39%) in comparison to teenage children (26%) (Möller, Bäckström, Söndergaard & Helström 2016; Hébert, Lavoie & Blaise 2015). On a quantitative level, adults are also much more likely to become a victim of rape (85%) in comparison to children (15%) (Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Sex Offenses and Offenders 1997). Albeit controversial, we may call into question whether children truly are especially vulnerable - if not less⁷⁴. In line with this, we may wonder on what basis, then, society could ban the CSR while still allowing a robot that could do even more harm to its potential victims. Henceforth – and by virtue of contemplation - let us adopt the hypothesis that a prohibition of the CSR depends on the justification of such exceptional prudence.

7.3. Political Liberalism: No Ontologies Considered

On the basis of both this hypothesis and public reason, a defence in favour of the CSR can be argued for. This proceeds in three steps. Firstly, if exceptional prudence is not justified in terms of harm, it could be suggested that this skewness is, indeed, justified only in terms of dominant ideology. As Section 6.3. has demonstrated, experts maintain abhorrent conceptualisations of paedophilia by virtue of ideological visions for - among others - civilisation and political authority. Visions that are, by the way, empowered in an effectively demagogic manner by politicians such as Dan Donovan⁷⁵: it ignites the (in)famous *yuck-factor* that the CSR has already been evoking amongst its spectators. This factor asserts that the deep-seated negative response towards the robot must be evidence for its intrinsic badness - to the degree of prohibition, it appears (Gould 1997).

⁷² I do not mean to be presumptuous, though. I reckon that a political liberal might still object to presumption of innocence on the basis of his political visions. This would concern any sex robot. Yet, I do expect this person to preliminarily agree with me that such presumption of innocence must apply to either both the CSR and the 'regular' sex robot or to neither. Formulated differently, I except this person to agree with me on meta-political grounds, not necessarily on political grounds.

⁷³ Supra nr. 71.

⁷⁴ The remainder of this chapter is entirely dependent on the truth of this premise. I find it *very* important, therefore, to remark that this premise is not universally agreed upon. I will come back to this at the end of this chapter. For now, I assume it to be true by virtue of provoking contemplation on how to respond to the CSR from a legal perspective, even in the absence of relevant knowledge on paedophilia.

⁷⁵ Please have a look at **Section 6.2**.

Secondly, we must observe that ideological and metaphysical beliefs as such are *controversial*. Respectively, Behrendt demonstrates that predominant conceptualisations of paedophilia can be reasonably disagreed with and philosopher Martha Nussbaum regrets the manner in which they are currently invigorated: the yuck-factor is no more than a 'fallacious appeal to emotion' (2004).

Lastly, given that ideological and metaphysical beliefs are controversial, they are exactly the kind of factors that we can exclude in terms of public reason. As such, the exceptional prudence prohibiting the CSR can no longer be legitimised: it is justified in terms of controversial ideology that is not intersubjectively shared. Alternatively, policymakers might come to the conclusion that no ideology-driven conceptualisation of paedophilia can currently ratify a prohibition of the CSR; a ban must be postponed until aetiological – or empirical -advances have been made. In the meantime, political liberals might insist that the burden of proof concerning the CSR is to be *aligned* along with the *status quo*, with that of regular sex robots: presumption of innocence⁷⁶. By virtue of consistency, that is, society cannot ground a prohibition of the CSR while its adult counterpart remains available⁷⁷.

7.4. Political Conservatism: All Ontologies Considered

I foresee two ways in which this alignment can be objected in favour of a more precautionary attitude – both in line with criticisms of public reason. Firstly, in the words of Quong, "if a system of moral or political justification ignores the whole truth, the resulting moral or political principles may be *false*" (Quong 2018: 15, italics added). By this, he means to say that simply because a decision needs to be made in the absence of truth, this does not mean that the truth can be altogether set aside. Translating this concern to the CSR, the truth could still be that paedophilic plurality is a myth; that the psychophysiological difference between non-offending paedophilic and paedosexual individuals is and will always remain uncertain. Given that Shapiro & Maras make no conceptual difference between these two subgroups, such a truth would not only validate their particularly negative conceptualisation of paedophilia, but equally their ominous prospect with regard to the CSR thereafter. In this case, the aetiological uncertainty with respect to paedophilia is not pushing towards political liberalism – presumption of innocence, in this case - but rather towards political conservatism, and, indeed, exceptional prudence therewith.

⁷⁶ Let it be clear that they *might* advocate this alignment. Demonstrating that a prohibition of the CSR cannot be justified ideologically, namely, need not immediately entail that the CSR must be as easily available as the regular, adult sex robot. In terms of public reason, the two need to be argued for *separately*. For example, I imagine that policymakers could adopt a *broader* notion of precaution with respect to post-abuse harm: given that it costs society more effort to bring children back to their normal functioning, public reason might be content with exceptional prudence even *devoid* of any controversial, ideological influences (*supra* nr. 81). Rather, what I have demonstrated here is merely a strategy through which policymakers could defend the CSR; a strategy that *could* be argued for in terms of public reason.

⁷⁷ *Supra* nr. 72.

Following such an 'all ontologies considered'-approach, I reckon that a precautionary attitude might even become legible in terms of public reason. Once the insanity of paedophilia is no longer questioned, namely, paedophilic individuals are pushed out of public reason's constituency – that is, to whom "the relevant rules or principles need to be justified" (idem: 7). In other words, given that paedophilic individuals can no longer be conceived as reasonable and rational themselves, their input no longer needs to be taken into consideration. Yet, this would require political liberals to *assume* a truth – the non-existence of paedophilic plurality, in this case – which is exactly what they try to avoid.

7.5. The Metaphysics of 'Children'

The second objection to the legal alignment between the CSR and its adult counterpart is more complex. It could be suggested, namely, that exceptional prudence is not a *moral* conviction, but it is a *metaphysical* one. According to ethicist Pascal-Emmanuel Gobry, the concept of a 'child' was itself a once-controversial product of Christianity: "[Christianity's] invention of the cultural idea of children as treasured human beings", he claims, "was really an outgrowth of its most stupendous and revolutionary idea: the radical equality, and the infinite value, of every single human being as a beloved child of God" (2015: Section 16). In more pagan times, Gobry underscores, children were considered 'nonpersons' for which there was no shame in using them as a sex slave. Nowadays, no reasonable human being would ever endorse such a treatment. It is worth observing, though, that the exceptional precaution of children is the outgrowth of the latter's once 'holy' status. Today, the neo-Christian concept of 'child' has become a metaphysical basis for our moral thinking; it is deeply ingrained in Western morality and it has become unimaginable to *not* treat children with exceptional prudence.

Again, at first sight, this argument seems acceptable, too, in terms of public reason. Most members of society find the exceptional prudence with respect to children *perfectly reasonable* and I do not expect them to change their mind upon realizing its religious origin. It underscores that public reason operates in both directions: the Christian foundation of exceptional prudence has turned irrelevant now that it is widely endorsed by the public. Yet, paedophilic individuals might be dissatisfied with this reasoning. They might find it unfair that non-paedophilic individuals have access to a robot that could bring even more harm, while their access to such a robot is prohibited on the basis of a lesser risk of harm⁷⁸. The question is if public reason is on their side here, given that society cannot deny exceptional prudence originating from a somewhat arbitrary, metaphysical commitment.

Policymakers might ponder on this objection and discard it nevertheless: exceptional prudence is not the logical outcome of a rational discussion, for it *need* not be. Rather, being

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⁷⁸ Supra nr. 74.

a metaphysical commitment, it is a choice that demands no rational explanation. It underscores that, in the words of Quong, "getting the right moral or political answer" might ultimately still depend upon "religious or metaphysical claims about personhood" (Quong 2018: 17). Understandably, this criticism is problematic and its implications are severe. In fact, it might 'fatally' undermine public reason's mission to overcome 'arbitrary' authority⁷⁹. As such, I shall refrain from positioning myself within the debate. Rather, what I take from it is that the complete elimination of ideological and metaphysical beliefs is impossible and perhaps even inadvisable⁸⁰. In the case of the CSR, I reckon that opponents might turn this to their moral advantage: the neo-Christian concept of 'child' provides a 'healthy' dose of precaution as is equally the case for the aforementioned yuck-factor. The latter, namely, is not only a fallacious appeal to emotion, but it equally pushes debaters "to make a better case for why a given technology should be pursued at all" (Schmidt 2008: 525). Given what is morally at stake with the CSR, this would only deserve praise.

7.6. Chapter Summary

As remarked, society must deliberate about the CSR's desirability in the absence of a valuable truth: the robot's actual effect on paedophilic behaviour. In response, I have suggested a 'no ontologies considered'-approach: as long as the aetiology of paedophilia remains uncertain, the legal status of the CSR may not be different from that of the regular sex robot. Here, the principle to which regular sex robots seem to be subjected is that of *prima facie* innocence and there is no non-controversial principle through which this innocence cannot be extended to the CSR. Instead, efforts to justify a skewed burden of proof are the result of ideological convictions that one can reasonably disagree with, resulting in political authority that is both arbitrary and unjust with respect to the *status quo*. I have referred to this approach as a 'no ontologies considered' one, for it considers the unstable ontology of paedophilia to be incapable *in principle* to offer a point of departure for moral and political rule.

I have presented, too, an 'all ontologies considered'-approach. Instead of invalidating the aetiology of paedophilia, this approach interprets its uncertainty as a warning that justifies an 'assume the worst'-policy. As such, it departs from the belief that paedophilia could still be anything, however ominous suggested, and it justifies exceptional precaution therewith. In

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⁷⁹ In this regard, public reason must accept the unavoidability of "getting the right moral or political answers" depending on "religious or metaphysical claims about personhood, or else on controversial claims about human flourishing or the good life" (Quong 2018: 17). As such, arriving at intersubjectively valid principles would be impossible *in principle*.

⁸⁰ In fact, in his famous *A History of Western Philosophy* (1946), philosopher Bertrand Russell claims that our systematic ethics is altogether borne out of European, mathematical theology: "in Plato, St Augustine, Thomas Aquinas, Descartes, Spinoza, and Leibniz there is an intimate blending of religion and reasoning, of moral aspiration with logical admiration of what is timeless, which comes from Pythagoras, and distinguishes the intellectualized theology of Europe from the more straightforward mysticism of Asia" (1946: 56). It underscores the difficulty in determining if a metaphysical commitment is 'controversial' when it seems impossible to adopt an alternative position.

addition, albeit controversial, some opponents of the CSR might argue that exceptional prudence is 'simply' a metaphysical unavoidability.

By placing arguments in favour of and against the CSR side by side, I hope to have provoked contemplation on how to legally respond to the robot on a morally and politically firm basis. Let it be clear, though, that the purpose of this chapter reaches no further than that: *contemplation*. I say so, for there is a major premise at the root of this chapter that would have been insufficiently addressed if I had aimed to offer a definitive, legal response the CSR. The premise that I am referring to is that of children not being *especially* vulnerable; that the CSR is a matter of exceptional prudence. This is a crucial premise, for, if the opposite were true, the debate described in this chapter could have been undisputedly closed in favour of a precautionary attitude. In this regard, I should re-emphasise that it is merely an hypothesis; some evidence suggests that children, in fact, suffer more from abuse than adults⁸¹.

We must understand, then, that a legal response to the CSR ultimately demands knowledge on *both* paedophilia and post-abuse harm. Given that this chapter has focused on a legal response to the CSR in the absence of knowledge on paedophilia, I have decided to overjump the questionable premise of children not being especially vulnerable. Rather, I have assumed it to be true, for I envisage the philosophical challenge to be how to respond to the CSR if policymakers indeed believe that children are not especially vulnerable or if they discard evidence against this premise as being insufficient.

⁸¹ The Crime Survey for England and Wales, for example, discovered that 51% of adults who were abused as a child - including sexual abuse - experienced abuse in later, adult life (Office for National Statistics 2016). Having said this, an answer to the question of whether children are truly more vulnerable than adults when it comes to sexual abuse is difficult to obtain. Inasmuch as measuring harm is even objectively possible, the types of harm caused by sexual abuse for children and adults are different on a physical, physiological and sociological level: a comparison is not easily made. With regard to post-traumatic stress syndrome, the severity of it seems to differ even among different age groups under the age of eighteen: the older the child, the higher the risk of post-abuse PSTS (Dunn, Nishimi, Abigail & Bradley 2018). On top of that, children "may exhibit no symptoms during assessment, but have latent sequalae that might manifest later" (Gouvernement du Quebec 2020: Section 1). Related to this, I reckon it would be difficult to compare the effectiveness of post-abuse therapy between abused children and adults, for some children have not yet obtained the ability of speech and they might, at first, not even be aware of the injustice that they have had to endure. This might even warrant a broader notion of precaution, for public reason is not only interested in the difference in relative harm between children and adults, but, too, how much it will cost society to lift victims back to their normal functioning - something that may take much more time for children as it does for adults. In light of this, a precautionary attitude might, too, be justified more easily in terms of public reason. This is important to keep in mind.

Conclusion

The CSR: A Socio-Materiality

This dissertation started with the controversial question of whether the Child-Like Sex Robot can keep paedophilic individuals from harming children; whether it can prevent them from beginning to engage in child sexual behaviour. I underscored that this question is one of speculation: preceding investigations into either virtual pornography or anthropomorphic sex robots are unapproachable and empirical studies into its impact seem morally impermissible. I have set out that, in their speculative assessments, experts need to take into account a number of conceptual demarcations within the concept of paedophilia. Often conflated, non-paedophilic individuals are not the same as paedosexual ones. These demarcations add up to a novel conceptual taxonomy of paedophilia that represents psychophysiological differences. As such, they are of clinical value with respect to the CSR. The latter, that is, might evoke different responses with each subgroup. On the basis of this observation, I have deemed it both epistemically and morally irresponsible if the conceptual taxonomy is being neglected.

The purpose of this dissertation has been two-fold. Firstly, I have demonstrated that conceptual demarcations are nevertheless ignored. To show this, I have made use of two leading arguments: one in favour of and one against the use of the CSR. Both arguments are built on carefully selected, yet divergent conceptualisations of paedophilia that demonstrate little respect to taxonomical demarcations. Here, ethicist Marc Behrendt's *prima facie* endorsement of the CSR is rationalised mostly on the perception of paedophilic individuals as rational human beings. The rejection of it by philosopher Lauren Shapiro and criminologist Helen-Marie Maras, on the contrary, is rationalised mostly on the perception of paedophilic individuals as necessarily abusive. In both conceptualisations, experts assume too much an aetiological consensus that does not exist, causing them to ignore contradictory evidence.

Secondly, I have argued that the reason behind such conceptual divergence is attributable to ideological visions undergirding them. The CSR, it appears, constitutes the extreme example of a more fundamental, *ideo-political discourse* of which the stakes embedded in it go beyond the mere protection of children. Rather, formal approval of the robot would either be in line with or very much against the experts' metaphysical standpoints on, for example, civilisation and political authority. Here, the conceptualisation of paedophilia in one way or the other is of argumentative value in solidifying these positions in society. In other words, the CSR will challenge contemporary ideo-political hegemonies and the manner in which paedophilia is conceptualised helps in either supporting certain changes or preventing

them. The CSR is a *socio-materiality*: the material embodiment of a great number of fundamental, divergent and colliding ideologies that are being deliberated about in its name.

A key term has been *paraphilia*. I have recognised, namely, that the degree to which experts conceptualise paedophilia as such is helpful in realizing their ideological visions. Concerning civilisation, for example, the classification of paraphilia might prevent the societal normalisation of something it deems 'perverted'. Opponents might regret such labelling, albeit for pragmatic reasons. In short, 'paraphilia' is the vehicle through which the 'ideological battle' embedded in the CSR plays out. Here, insights from Science and Technology have been useful to explain how a psychiatric phenomenon as such can become subject of negotiation.

The 'Objective' Assessment: Reflecting on Stigma

Ultimately, the main motivation behind this dissertation was moral. I have come to recognise, namely, that the influence of ideological visions is not necessarily beneficial to the 'accuracy' with which the CSR's 'true' danger to children is being determined. To recall from the prologue, I have meant 'accurate' not in a *realist* sense, but in a *realistic* sense: the most 'objective' response to the CSR is one that departs from the epistemic position that does *as much just as possible* to the well-being of children. Concerning the *onset* of paedophilic behaviour, the acknowledgement of 'at risk'-paedophilia as a separate, clinical entity seems to be an important step in reaching this position. Here, I am referring to non-offending individuals that experience paedophilic interests and whose psychophysiological make-up poses a significant risk for offending but *have not yet done so*. Ultimately, the question to ask is if the CSR can prevent members from this particular subgroup from making the eventual jump to offending. An assessment based on the clinical data with respect to any other subgroup – such as non-offending or other-paraphilic individuals – might over- or underestimate the risk.

In this regard, it is unfortunate to observe that the dominant ideo-political culture is preventing exactly this subgroup from becoming acknowledged. By this, I mean to say that the observable political culture still tends to empower the belief that all of paedophilia is a continuous threat, a moral perversity of the worst kind or an abnormality that grounds obvious interference. It does so in the face of ideological visions for - among others - morality, civilisation and political authority. Simultaneously, it produces severe *stigma*: paedophilic individuals wishing to express it openly - offending or not - can only await social ostracism, anxiety and fear. Overall, they have little reason to come forth, causing their clinical acknowledgement to be prevented. This is at the expense of children, for we will *per definition* not be able to know if the CSR possesses any virtue; if it could, in fact, reduce child sexual abuse. In line with this, the main implication of this dissertation ought to be a normative statement already articulated by psychiatrist Michael C. Seto in 2018: "[if] we can agree that

children could be protected from sexual exploitation and abuse, then we have a strong reason to deal with our anger, fear and prejudices regarding [...] paedophilia" (2018: 248).

In the Meantime

Naturally, changing an ideo-political hegemony will not go overnight⁸². This is unfortunate, for the current marketplace emergence of the CSR demands both a philosophical and legal response. In the meantime, society must decide upon the robot's desirability whilst distanced from a valuable truth: the CSR's actual effect on paedophilic behaviour. In this epistemically meagre position, policymakers can go in two directions. Firstly, they might welcome it on the basis of there not being any intersubjectively valid principle that would ground its prohibition. Instead, its prohibition would be justified only in terms of dominant ideology, which is controversial and arbitrary with respect to the *status quo*. Here, policymakers might advocate the legal alignment between the CSR and the 'regular' sex robot: the latter is not prohibited and there is no non-controversial reason for why this presumed innocence cannot be extended to the CSR as well. In objecting to this alignment, policymakers might point towards the porous nature of paedophilic plurality: we know too little about paedophilia to assume the CSR will *not* lead to an increase in child sexual behaviour. In this regard, a precautionary attitude is preferred.

As I find myself amidst the same epistemically meagre position as policymakers do, I shall refrain from claiming which direction is best. In terms of harm, not one seems superior over the other; I shall leave it to policymakers to decide on the issue. As an applied ethicist, and by virtue of the well-being of a large group of vulnerable children, I can only express my desire that this decision is a morally and politically responsible one. Along with its criticisms, I reckon that John Rawls' concept of *public reason* provides the philosophical language to account for this decision.

In the Future

Overall, the controversial case of the CSR is a – renewed - testament to the importance of philosophy in the complex field of psychiatry. Although I imagine philosophical considerations to remain prominent throughout the future development of the CSR – such as design and availability considerations – there is one particular phenomenon that seems to be the designated follow-up topic to this dissertation: *techno-moral change*, referring to the "mutual interaction between technology and morality" (Boenink, Swierstra & Stemerding 2010: 2). In the words of philosopher Tsjalling Swierstra, we must acknowledge that emerging technologies destabilise "the normative and moral routines that we rely on to assess the (un)desirability [...]

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⁸² According to Seto, there are already some "glimmers of hope that stigma can change" (2018: 249). Please have a look at Chapter 9 of his *Pedophilia and Sexual Offending Against Children* (2018) to have a full overview.

of those technologies" (2015: 11). As such, techno-moral change is the opposite of 'moral presentism', which is the belief that future technologies can be assessed along with contemporary moral norms and values. Swierstra berates such presentism, for it precludes "the possibility that our future selves [...] might have learned something worth knowing" (2015: 17).

I imagine the CSR can, too, bring about techno-moral change. As Behrendt articulates, the CSR "could [...] become *moralized* by the medical establishment" (2018: 110). Without presuming too much, we can add substance to this claim. Imagine, namely, that the CSR invites 'at risk'-paedophilic individuals to finally enrol in aetiological research, with their psychophysiological and clinical distinction acknowledged thereafter. Perhaps, society might come to see paedophilic individuals as *prima facie* innocent beings that 'simply' suffer from an undesirable orientation. Subsequently, they might put more trust in the CSR, recognising that it serves, too, as sexual consolidation in an otherwise insufferable situation. Naturally, this is all pure speculation. Nevertheless, the phenomenon of techno-moral is both plausible and relevant with respect to the CSR, especially since – as argued for by this dissertation - the desirability of the CSR is expressed crucially in terms of the dominant, ideo-political culture in which it emerges.

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