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Technology Changing @ a Dizzying Pace: Reflections on Selected Jurisprudence of the UN Committee on the Rights of the Child and Technology

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Technology Changing @ a Dizzying Pace: Reflections on Selected Jurisprudence of the UN Committee on the Rights of the Child and Technology

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Abstract

The year 1989 gave birth to both the Convention on the Rights of the Child and the Internet. The Convention is not a static document, and this article explores how the Committee on the Rights of the Child (CRC Committee) has, through its jurisprudence, contributed to keeping the Convention relevant for the last 30 years. The challenge posed by the tension between participation and protection rights is very evident in respect of children's rights in the digital environment. This is reflected in respect of the right of access to information, the right to freedom of expression, as well as the discussions on children's participation rights within the digital environment. The article the challenges relating to online sexual exploitation and child sexual abuse images, and grapples with the way that inequalities are exacerbated as a result of the global digital divide, and the effect of this on civil, social and economic rights of children. The contemporary use of the Internet (and genetic technology advances) to discover identity is the link that connects in the third part of the article, which deals with assisted reproductive technologies (ART). A conservative estimate of seven million people have been born as a result of ART, most of them during the past 30 years. New challenges are being experienced in relation to children's rights in surrogacy. The article traces concerns raised and the recommendations made by the CRC Committee in concluding observations on a range of relevant issues under the CRC and the Optional Protocol on the sale of children, child prostitution and child pornography (OPSC). The concluding observations and general comments of the CRC Committee feature strongly in this article, which also draws on the OPSC Guidelines adopted in 2019 and the CRC Committee's Report on the Day of General Discussion on digital media and children's rights. The dizzying pace of the evolution of digital technology that affects children's rights is not slowing down. Children's rights advocates need to remain responsive and flexible to ensure that the field keeps up with developments.

keywords: *algorithm; assisted reproductive technologies; cyber; digital; sexual abuse material; surrogacy*

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Introduction

The drafters of the Convention on the Rights of the Child (CRC or Convention) had foresight. 30 years ago, in 1989, they recognized children as rights holders. They retained the well-established rights of protection and fused them with new concepts of evolving capacity and children's rights to participation. The Convention has provided a platform for children to be allowed to be children, but also to gain increasing autonomy as they grow older. But the drafters probably did not foresee the explosion of new technology that the last 30 years has witnessed, or the impact that this would have on children's rights.

Fortunately, the Convention is not static. The effort to understand the obligations under the Convention is informed by, among others, the UN Committee on the Rights of the Child (CRC Committee), which is the body of 18 independent experts that monitors compliance with the CRC.¹ The CRC Committee, considers States Parties' reports and issues concluding observations, holds days of general discussion, and publishes its evolving interpretation of the Convention's provisions, in the form of general comments on thematic issues.²

This article highlights some of the emerging issues, that the CRC Committee has had to contend with in respect of technology, which is changing around us at a dizzying pace. The first part focuses on online sexual exploitation and child sexual abuse material. Part two zooms in on selected civil and political rights of children in the context of the Internet. The third part reflects on Assistive Reproductive Technologies, including surrogacy and the implications for children's rights.

The authors are, at the time of writing, members of the CRC Committee. The article focuses on the last five years, during which at least one of us was on the CRC Committee, and to the extent that we can, we provide insights into the Committee's current thinking. Some of the jurisprudence predates our participation on the Committee, where we provide a history or context to an issue. The article draws mainly on the jurisprudence of the CRC Committee in the form of Concluding Observations and General Comments. The article also refers to the report on the Committee's day of general discussion on digital media and children's rights (CRC Committee, Report of DGD, 2015). The Optional Protocol on the sale of children, child prostitution and child pornography (OPSC) receives special attention, together with relevant

¹ For the mandate and composition of the CRC Committee, see arts 42–45 of the CRC.

² *Ibid.* See, too, http://tbinternet.ohchr.org/_layouts/treatybodyexternal/TBSearch.aspx?Lang=en&TreatyID=5&DocTypeID=11.

aspects of the OPSC Guidelines that were developed and adopted by the Committee in May 2019 (CRC/C/156 2019).

1. Online Sexual Exploitation and Child Sexual Abuse Images

The role of the digital environment for the realization of the rights of the child is immense. However, the digital environment can also be used as a tool for the violations of the rights of the child, which has received increasing attention in recent years. The growth of the Internet poses two challenges that are a serious concern regarding children.

Firstly, the criminal activities pertaining to child abuse images online - and secondly, the fact that children themselves are accessing such material at an early stage thereby distorting their views on sex and relationships.³ Therefore, there is a pressing need to ensure the full application of the provisions of the Convention and its Optional Protocols to the digital environment, especially in respect of child sexual abuse images online, and provide all stakeholders with important guidance for the realisation of children's rights online.

1.1 The Convention, the OPSC, and Online Child Sexual Abuse Images

Article 34 of the CRC gives children the right to protection from all forms of sexual exploitation and abuse and provides that all exploited children have these rights recognized by the CRC, including the right to recovery and reintegration in terms of Article 39. However, increasing globalization and mobility, coupled with the explosion of technologies, have impacted on children's rights. Thirty years ago, the exchange of files on the Internet was just beginning. 'As widespread and uncontrolled online access became commonplace, countless paedophile websites appeared, and child pornography made its way into the global and connected world on the screens of personal computers' (UNICEF 2008, vii).

In 2004, the Special Rapporteur on the sale of children, child prostitution and child pornography observed that many States were still 'at the stage of equipping themselves with the normative, institutional and policy instruments to tackle the issue' of child pornography (Akdeniz 2008). Unfortunately, fast forward fifteen years, the same observation can be

³ The above comment comes from a speech David Cameron, the UK Prime Minister, gave in 22 July 2013 "The internet and pornography" Prime Minister calls for action" available at <https://www.gov.uk/government/speeches/the-internet-and-pornography-prime-minister-calls-for-action>

made about the legislative, administrative and other measures that States have undertaken. This is exacerbated by the pace with which technological advancements are taking place, often leaving law enforcement and other stakeholders ill equipped to address the issues.

In fact, with additional advancement of technology and the expanded use of the Internet including by hand held small devices, the problems regarding child sexual abuse material are on the rise. An example of an emerging challenge is a relatively new crime, known as webcam sex tourism. It is one of the darkest corners of the where paedophiles, often situated in the developed world, pay or offer rewards to facilitators in other countries to sexually abuse children 'giving direction to the facilitators on actions to perform through online live-streaming services' (NY Post 2017). Some Internet dens, for example in the Philippines, that have been identified as sites where webcam sex tourism was happening, have been closed down (Terre des Hommes 2013).

New developments in information and communications technology facilitate greater circulation of child sexual abuse material increasingly through peer-to-peer (P2P) file-sharing platforms and increased use of mobile devices by child predators. Use of cloud-based services allow sex offenders preying on children to avoid the risk of carrying incriminating evidence through customs or border checkpoints. The increase in live video streaming of child sexual abuse and the growth in the production of self-generated sex images ('sexting' and 'sextortion') are all adding to the wide circulation of such material. Another technology-fueled development that is gaining traction is the use of virtual currencies such as Bitcoin to purchase commercial sexual-exploitation material (ECPAT 2016).

There are a number of questions that the CRC Committee considers in applying the CRC and the OPSC at the domestic level with a view to prevent and address online child sexual abuse images. To start with, the definition of a child can pose challenges, as the question of what constitutes child pornography is dependent on who is considered a child. The Convention defines a child as a person below the age of 18 unless majority is attained earlier. The disparity in definitions of 'a child' in various jurisdictions means that some children below the age of 18 do not benefit from the full protection of the CRC and the OPSC. In addition, the differences in definitions can also make cross-border law enforcement difficult (Akdeniz 2008).

It has long been understood that the Internet rendered the traditional definition of child pornography – namely 'the visual depiction or use of a child for pornographic purposes' outdated (Akdeniz 2008). Calls were made back in the early 1990s that the CRC Committee should develop its jurisprudence on Article 34 (3), which provides that State Parties undertake

to protect children from all forms of sexual exploitation and sexual abuse including ‘the exploitative use of children in pornographic performances and materials’. The OPSC Guidelines, issued in 2019, state clearly that States parties should ‘criminalise the acts of recruiting, causing or coercing a child into participating in pornographic performances, profiting from or otherwise exploiting a child for such purposes, and knowingly attending pornographic performances involving children’ (CRC/C/156 2019, para 64). The terminology ‘child pornography’ is itself evolving – the Guidelines on the OPSC consider the term ‘child sexual abuse material’ to be more appropriate (CRC/C/156 2019, para 5).

The CRC Committee provides tailor-made recommendations to deal with specific challenges pertaining to children’s rights in the digital environment of each State party that it reviews. For example, Bhutan has been asked to ‘put in place online safety measures, in particular regarding grooming and sexual exploitation and abuse’ in the context of increasing and widespread use of social media in the State party (CRC/C/OPSC/BTN/CO/1 2017, paras 19 and 24).

The CRC Committee often lauds domestic efforts regarding law and policy aimed at improving the protection of children online. For example, Japan was commended for ‘the amendment of the Act on Regulation and Punishment of Acts Relating to Child Prostitution and Child Pornography, and the Protection of Children, in 2014, which now criminalizes the possession of child pornography’ (CRC/C/JPN/CO/4-5, 2019, para 3). In respect of Malawi, concern was raised that its Censorship Act does not cover electronic media and the Internet, which are the most common modes of distributing pornographic material (CRC/C/OPSC/MWI/CO/1 2017, para 29).

Children find themselves in an unusual legal position when they take intimate photos of themselves which might amount to pornography. A photo of this nature, which might have been taken to share consensually with boyfriends or girlfriends, will often be viewed by the law as child pornography, because the image is of a child. The fact that the image was created by a child, and the contradictions this pose for autonomy versus protection debates in child law, is often overlooked. Laws which carry tough penalties for this type of offence almost always do not provide differentiation for the fact that the person making the image is a child. The dilemma of how the law can deal with such situations is exacerbated by the question of whether the child had the legal capacity to consent to the creation of material, and compounded further because, once sent through electronic means, the image can so easily be shared non-consensually with a third party or parties, which would clearly amount to an offence. This issue has been raised in dialogue with state parties, and recommendations to decriminalize

the creation of self-generated images, to ensure that such measures be accompanied by awareness-raising efforts for children to appreciate the risks associated with the use of self-generated content through social media, have made their way into the concluding observations to South Africa (CRC/C/OPSC/ZAF/CO/1) and Guinea (CRC/C/OPSC/GIN/CO/1 2017, para 31). The OPSC Guidelines pay specific attention to this issue, observing that while self-generated sexual content created by children to others is increasingly considered by teenagers as 'normal', it does involve certain risks. The images can be easily spread beyond the child's will and can be used in the context of bullying and sexual extortion. The OPSC Guidelines encourage States parties to establish clear legal frameworks protecting children and call for efforts to raise awareness among children of 'the gravity of spreading images of others and of oneself' (CRC/C/156 2019, para 42).

The Committee urged the Democratic Republic of Congo to explicitly define and criminalize the 'grooming' of children facilitated by the Internet and other information and communication technologies for the purpose of sexual abuse (CRC/C/OPSC/COD/CO/1 2017 para 2(e)). This issue is captured in the OPSC Guidelines, which point out that the rapid development and spread of ICTs has created new ways for sexual offenders to groom children (CRC/C/156 2019, paras 67-68).

While the great majority of the recent concluding observations emphasize the 'obligation of State Parties to undertake law reform measures to regulate access to and use of the internet and digital media', in some instances State Parties such as Spain (CRC/C/ESP/CO/5-6 2018 para 20) have been asked to develop action plans, policies, and 'initiatives' - which is a broader concept. Moldova was commended for its 2017 Action Plan on the Promotion of Internet Safety for Children and Teenagers (CRC/C/MDA/CO/4-5 2017, para 45). The absence of a policy preventing online sexual exploitation and abuse on the Internet has also been raised as a concern by the CRC Committee in its concluding observations to Guinea (CRC/C/OPSC/GIN/CO/1 2017, para 26). Some State Parties have undertaken measures to participate in the 'We Protect' Global Alliance to End Child Sexual Exploitation Online. The initiative has more than 70 countries as members 'along with major international organisations, 20 of the biggest names in the global technology industry, and 17 leading civil society organisations' (We Protect 2016). Saudi Arabia, for example, reported that it has the intention to join 'We Protect' initiative (CRC/C/OPSC/SAU/CO/1 2018, para 24).

Progress can and should also be achieved through institutional measures. The extent to which institutions charged with regulating as well as monitoring Internet related activities comes within the purview of the CRC Committee. For example, Saudi Arabia established the Division on Combating the Sexual

Exploitation of Children on the Internet in the Ministry of the Interior's Department for the Repression of Cybercrime, on 12 January 2015 (CRC/C/OPSC/SAU/CO/1 2018, para 4(d)). Moldova has been commended the establishment of the Centre for Fighting Information Crimes (CRC/C/MDA/CO/4-5 2017, para 45). In respect of Benin, the Committee raised concerns about 'the limited capacity of the Central Office for the Suppression of Cybercrime to supervise that access' (CRC/C/OPSC/BEN/CO/1 2018, para 26).

A question might be raised whether these types of recommendations, that could require significant human and financial resources, take into account the developmental stage of a country- and its available financial and human resources. In addition, the extent to which children in a particular country are using the Internet is a pertinent consideration. Efforts to ensure a contextual understanding and to provide appropriate recommendations are often discussed within the Committee, and State Parties that need support are frequently encouraged to benefit from international cooperation, including from UN entities. However, in respect of online protection of children, while the data shows that there are around 4.3 billion people that use the Internet, it only covers 57% of the world population (We Are Social, 2019). Despite the more than 3 billion people that are without the Internet, the great majority of whom are in the developing world (We Are Social, 2019), it could be argued that gaps in law and ill-equipped institutions would be an attraction to perpetrators, making the need for legislative and other measures to prevent and address violation against children relevant in all corners of the world.

Article 3 of the OPSC establishes legal liability of Internet Service Providers (ISPs) 'where appropriate'. This provision is not prescriptive on whether such legal liability should be civil, criminal, or a combination of both. It appears it is an issue left for national law to determine what is appropriate. There is ongoing debate about whether self-regulation of ISPs is adequate, or whether it should be accompanied by co-regulation. The long standing approach in the United States in respect of the legal responsibility of ISPs has been that they are immune from prosecution even when they are aware of child pornography material on their servers and do not report, but simply have the obligation to report (Akdeniz 2008). The situation in Europe is different in that there is notice-based prosecution liability (Akdeniz 2008). The OPSC Guidelines rightly indicate that 'responses to online offences should be developed in close collaboration with the relevant industries and organizations' (CRC/C/156 2019, para 38).

The CRC Committee has acknowledged the need to closely cooperate with the information technology industry, but has also not shied away from emphasizing the responsibility of the State. The Russian Federation

was asked to impose obligations on service providers to 'block and remove inappropriate online content, report incidents to law enforcement authorities, and develop innovative solutions', and Angola was presented with a similar recommendation (See CRC/C/OPSC/RUS/CO/1 2018, para 26(b)(iii); CRC/C/OPSC/AGO/CO/1 2018, para 24(b)). Norway was called upon to adopt 'specific legislation on the obligations of Internet service providers in relation to child pornography on the Internet' (CRC/C/NOR/CO/5-6 2018, para 36(c)).

However, there is room for improvement in the direction being provided by the CRC Committee. There are a number of questions and detailed issues that would benefit from an explicit reflection and more precise guidance from the Committee through its jurisprudence. For example, since the definition of the offence of child pornography is the 'production, distribution, and possession', is the offence of 'making' which exists in some jurisdictions the same as 'production'? If a person prints child sexual abuse material that has been obtained from the Internet, does it qualify for the purpose of the offence of production or only for the purpose of the offence of possession? These differentiations are critical, as they usually do not attract the same level of penalty if a person is convicted.

The gender aspect of online sexual exploitation also needs a closer scrutiny. The default position is to assume, which is supported by the data, that the majority of victims of child online exploitation are girls. However, the efforts to prevent and address child sexual abuse image should also target boys, especially since, as indicated in the OPSC Guidelines, 'recent research has shown that a significant proportion of children depicted in online child sexual abuse material are boys' (CRC/C/156 2019, para 4). Boys also need to benefit from support services, (CRC/C/156 2019, para 4), including referral services.

Two decades ago, the Special Rapporteur on sale of children, child prostitution and child pornography called for the scope of Article 34 of the Convention to be interpreted to include an absolute prohibition on 'pseudo-child pornography', including the 'morphing' of child and adult bodies to create virtual child pornographic images' (OHCHR, Special Rapporteur, A/52/482, 1997, para 34). Clear guidance has now been provided by the OPSC Guidelines, which encourage States parties to include, in their legal provisions regarding child sexual abuse material, 'representations of non-existing children or of persons appearing to be children, in particular when such representations are used as part of a process to sexually exploit children' (CRC/C/156 2019, para 62).

2. Children's Rights, the Internet, and a Selected Number of Civil and Political Rights of Children

The Convention does not refer to the Internet – let alone explicitly address social media. However, it is currently reported that children make up a third of the global number of Internet users and are important stakeholders (Livingstone *et al.* 2016). Despite this, most Internet governance bodies pay little attention to children's rights, and when they do, it is often on child protection issues (Livingstone *et al.* 2016). Children's rights to participation and provision are often ignored (Livingstone *et al.* 2016).

There are a number of civil and political rights of children that could be facilitated as well as undermined as a result of the use of the Internet. These rights include the right to privacy; the right to freedom of expression; the right to freedom of association; the right to access to information. The Internet also facilitates cyberbullying, which is a form of violence, and is often a result of a discrimination against a child or group of children.

Some of the violations of children's civil and political rights can be demonstrated by citing recent emblematic incidents such as the Ring Pop Campaign accused of violating children's privacy;⁴ the increased concerns around children's screen time and its negative consequences (Klass 2016); recent cases of children suing their parents for posting videos online about them (Rudgard 2018); reported plans to prosecute persons including children 'who repeatedly view extremist material online' (Rudgard 2018); and Facebook's policy for the removal of false and discriminatory information including in the context of real world attacks on ethnic minorities [including children] in Sri Lanka, Myanmar, and India (Frenkel 2018).

On 12 September 2014, the Committee devoted its 21st Day of General Discussion to 'digital media and children's rights'. In 2018 the Committee decided to develop a General Comment on children's rights in relation to the digital environment, with a view to 'elaborate the various measures required by States and other stakeholders in order to meet their obligations to promote and protect children's rights in and through the digital environment'.⁵ The General Comment is expected to cover the whole gamut of issues such as right to education and digital literacy; freedom of assembly; right to culture, leisure and play; protection of privacy, identity and data processing; health and wellbeing; family environment, parenting and alternative care. This

⁴ <https://bits.blogs.nytimes.com/2014/12/09/complaint-says-ring-pop-campaign-violated-childrens-privacy/?searchResultPosition=11>

⁵ Concept Note (2018) available at <https://www.ohchr.org/EN/HRBodies/CRC/Pages/GCChildrensRightsRelationDigitalEnvironment.aspx>

part emphasizes three issues, also earmarked for attention in the General Comment; non-discrimination, cyberbullying; and the right to access to information and freedom of expression.

2.1 Discrimination and the Internet

The Internet was initially hailed as the great equalizer. However, there is evidence that, depending on access and use, it could also prove to be the great unequalizer (JODS, 2019). Children face challenges of ‘digital exclusion’, ‘fake news’, as well as ‘information overload’, and the need to provide digital literacy/education has been identified as critical to support the exercise of their civil and political rights (Wagner *et al.*, 2019, 387).

The Committee pays attention to the negative consequences that discriminatory access to the Internet can have on children. Discrimination in accessibility, for example, for children in rural areas in Guatemala and Argentina has been identified as a concern (CRC/C/ARG/CO/5-6 2018, para 19(e); CRC/C/GTM/CO/5-6 2018, para 19 (d)). The Committee also views the involvement of children in the development and implementation of policies and laws aimed at preventing and addressing the violations of the children’s rights in the context of digital media as crucial. An approach that develops policy in this area without involving children could be tantamount to discrimination (see for instance Russia, CRC/C/OPSC/RUS/CO/1 2018, para 26(b) (ii)).

Over-sexualization and objectification of girls in the media, has also been raised as a concern by the Committee in its concluding observations to Norway, under the right of non-discrimination (CRC/C/NOR/CO/5-6 2018, para 11(a) and 12(a)). Continued negative portrayal of adolescents and discrimination in the media, including in social media, was raised by the Committee as a concern to Guatemala in its 2018 review (CRC/C/GTM/CO/5-6 2018, para 19 (b)). The need to stay the course and provide recommendations in these issues is critical. However, the need to expand the engagement of the CRC Committee and develop jurisprudence in other more recent and sophisticated issues is also an emerging need.

For example, in a call for papers in 2019 by the Journal of Design and Science under the topic ‘Algorithmic rights and protections for children’ a critical question – ‘How can we build a more equitable algorithmic world for all children?’ is posed (JODS 2019). Algorithms simply put are ‘sequences of commands that allow a computer to take inputs and produce outputs’ (FRA 2018). There is a growing trend to use algorithms to speed up processes and also bring about some level of consistency, but it is notable that computers too can ‘learn to discriminate’ (FRA 2018).

While the concept of algorithmic justice for children is relatively new, there is evidence that because children mostly depend on adults for guidance in respect of their experiences on the Internet, the complex algorithms that shape their online experiences are often not aligned with their interests and needs. In particular it is believed that poor people, people of color, and 'vulnerable and lower income children experience more algorithmically based injustices' (JODS 2019; Cynthia *et al.* 2019). This is the case even when they are advertised as being 'neutral' (Cynthia *et al.* 2019).

In this state of affairs, for example, it is no surprise that there is a new Bill being developed in the United States to build on the Children's Online Privacy Protection Act (COPPA), among others, to 'extend protection to children from age 12 to 15 and ban online marketing videos targeted at them' (Markey 2019). The hope is that this will compel platforms like YouTube and Facebook to manage their algorithms so that they do not serve up endless streams of content promoting commercial products to children (Ito 2018). In September 2019, in a case where a platform instead of a content creator was held accountable for the first time, the US Federal Trade Commission imposed a penalty of 170 Million USD against Google for the manner in which YouTube 'illegally collected personal information from children without parents' consent'.⁶ It is not by default but by design that the General Data Protection Regulation 2016/679, a regulation in EU law on data protection and privacy, which came into force on 25 May 2018, underscores the need to prevent discrimination as a result of automated decision making.

The Committee has already developed some jurisprudence, including in the form of General Comment No. 16 'on State obligations regarding the impact of the business sector on children's rights' (CRC/GC/16 2013). The Committee already appreciates the fact that there are particular difficulties in holding multi-national corporations accountable and also obtaining remedy 'for abuses that occur in the context of businesses' global operations' (CRC/GC/16 2013, para 67). There are also concerns about identifying and attributing legal responsibility because of the manner some transnational companies are structured (CRC/GC/16 2013, para 67). This is usually the case for transnational technology companies. The time for the jurisprudence of the CRC Committee, including in the context of the State Party reporting process, to guide States on specific accountability and remedy practices is ripe.

⁶ <https://www.cnet.com/news/youtube-170m-fine-kids-video-policy-changes-google-settle-ftc-investigation/>

2.2 Cyberbullying

Cyberbullying ‘extends the traditional forms of bullying to cyberspace’ where participants can, among others, spread rumours, threats, insults, or post embarrassing or demeaning videos or pictures (Shariff 2011). There have also been instances where breach of trust is perpetrated by circulating further intimate videos or photos of friends or significant others. Cyberbullying allows individuals to ‘hide’ their identities by using screen names. Public policy and law is often either absent or ill-prepared. The challenges posed by cyberbullying are further compounded because the Internet facilitates participation by a large number of ‘audience of bystanders and cyber-voyeurs’, (Shariff 2011) and it often involves individuals in different national jurisdictions.

A 2016 study had found that none of the 28 EU Member States had provisions in their criminal law addressing cyberbullying. (European Parliament 2016) This in practice meant that other areas of law, mostly broad - such as on computer crimes, violence, or anti-discrimination are interpreted or used to constitute an offence (European Parliament 2016). The impact, both positive and negative, of this approach is probably an issue that requires further research.

Beyond legislative measures, efforts aimed at addressing cyberbullying through policy and practice are important. State Parties, such as Denmark, that already have national action plans in respect of anti-bullying, including cyber-bullying, have been encouraged to continue implementing these measures (CRC/C/DNK/CO/5 2017, para 23). The need to prevent, but also prepare children against cyberbullying including through the introduction of ‘mandatory elements into school curricula at all education levels’ is also well entrenched in the jurisprudence of the CRC Committee, with examples from Norway (CRC/C/NOR/CO/5-6 2018, para 29(b)) Angola (CRC/C/OPSC/AGO/CO/1 2018, para 24(b)), Denmark (CRC/C/DNK/CO/5 2017, para 23), Ecuador (CRC/C/ECU/CO/5-6 2017, para 22(d)) and Slovakia (CRC/C/SVK/CO/3-5 2016, para 31(b)),

In the context of Slovakia, the Committee expressed concern ‘about the growing instances since 2010 of cyberbullying’ (CRC/C/SVK/CO/3-5 2016, para 30). Such an increase can only be detected through disaggregated data collection, which State Parties should undertake. Many State Parties are confronted with the challenge of addressing cyberbullying among children, in part because of gaps in research on the prevalence of cyberbullying especially in developing countries. (UNICEF Innocenti Center 2012, 35)

In some situations, there is a lack of awareness among children of the harmfulness of cyberbullying. Some children accused of cyberbullying have

reportedly testified in court saying that they were ‘just joking’ (Shariff 2011). The Committee therefore asked Slovakia to organize trainings and awareness raising campaigns for children and parents (CRC/C/SVK/CO/3-5 2016, para 31(c)). In respect of El Salvador, it recommended to the State Party to ‘strengthen awareness-raising programmes for children, parents and teachers on Internet safety, particularly regarding cyberbullying....’ (CRC/C/SLV/CO/5-6 2018, para 21). The UK was asked to ‘raise awareness among children on the severe effects that online bullying can have on their peers’ (CRC/C/GBR/CO/5 2016, para 49 (b)). In respect of policy developments, the Committee commended Japan for ‘the Fourth Basic Plan on Measures for Providing Safe and Secure Internet Use for Young People, in 2018’ (CRC/C/JPN/CO/4-5 2019, para 3).

The responsibility and role of service providers such as Facebook and Twitter to tackle cyberbullying is critical. The Committee has recommended, for example, that the Government of the UK ‘increase the involvement of social media outlets in the efforts to combat cyberbullying’ (CRC/C/GBR/CO/5 2016, para 49 (b)). It is encouraging that, when the Committee put out the concept note on its upcoming General Comment on children in the digital age for comment, Google was among the organisations that made submissions.⁷

2.3 Access to Information and Freedom of Expression

There are a number of scenarios in which the rights of access to information and freedom of expression are positively as well as negatively affected as a result of technological advancements. The CRC Committee has addressed some of the negative impacts and related issues in its jurisprudence.

The Committee recommended to Syria to ensure not only access to information, but that such access should be ‘from a diversity of national and international sources of all forms, including the Internet, with a view to guaranteeing the child’s exposure to a plurality of opinions’ (CRC/C/SYR/CO/5 2019, para 21). The Committee also recommended to El Salvador that the ‘State party promote children’s access to appropriate information from a diversity of sources, and strengthen awareness-raising programmes for children, parents and teachers on Internet safety, particularly regarding cyberbullying and stalking by adults for sexual purposes’ (CRC/C/SLV/CO/5-6 2018, para 21). It may come across as quite extraordinary to some that given the many challenges children in Syria face, in particular as a result of the armed conflict, that a recommendation in respect of access to

⁷ Concept Note (2018) available at <https://www.ohchr.org/EN/HRBodies/CRC/Pages/GCChildrensRightsRelationDigitalEnvironment.aspx>

information, including through the Internet was provided. However, this approach is in line with the Committee's efforts to view the provisions of the Convention in a holistic manner, and also address the relatively limited attention that Articles 13-18 have received in the jurisprudence of the CRC Committee. Similar recommendations have been given to Algeria, Tajikistan, Vanuatu, and the United States (CRC/C/OPAC/DZA/CO/1 2018, para 42; CRC/C/OPSC/TJK/CO/1 2017, para 37; CRC/C/OPSC/VUT/CO/1 2017, para 39; CRC/C/OPAC/USA/CO/3-4 2017, para 41). Concern has been raised in the context of Bahrain on 'censorship of information though laws regulating the press and the internet' (CRC/C/BHR/CO/4-6 2019, para 25) which reportedly undermined children's right to access information. Some State Parties, such as Syria and Argentina, have reported on the efforts they have undertaken to protect children from 'harmful information' (CRC/C/SYR/CO/5 2019, para 21; CRC/C/ARG/CO/5-6 2016, para 19 (c)).

Despite the fact that Article 17 does not prescribe a limitation on children's freedom of access to information according to their age or maturity, it is possible, even necessary to do so. For example, YouTube's policy does not allow children under the age of 13 to create or own accounts. There has also been progress with the establishment of YouTube Kids in 2015 (which requires parental consent) which in principle does not allow paid promotional content, and the materials used are made as child friendly as possible. However, there have been cases of violations of all these criteria – underage children who conceal their true age and create content and own accounts; complaints that YouTube Kids App had inappropriate content of a sexual nature including jokes about pedophilia; and the Campaign for a Commercial-Free Childhood has complained about sponsored videos on YouTube Kids (Bloomberg 2019).

Therefore, while the word 'appropriate' does not feature in Article 17 of the Convention, States have the obligation to develop 'appropriate guidelines for the protection of the child from information and material injurious to his or her well-being, bearing in mind the provisions of articles 13 and 18' (See Article 17(e) of CRC). Given the potential risks that children could be exposed to online, the Committee often emphasizes a more protectionist view - as access to 'appropriate information' including online information is underscored in a number of concluding observations. Even the heading in the Committee's concluding observations in respect to this issue reads 'Access to appropriate information' and States are also often requested to 'strengthen awareness-raising programmes for children, parents and teachers on Internet safety, particularly regarding cyberbullying and stalking by adults for sexual purposes' (CRC/C/SLV/CO/5-6 2018, para 21). Since the Draft Concept Note for the General Comment on children's rights and

digital environment indicates that the Committee is fully aware of the need to balance protection and autonomy, it is anticipated that this important balance will be fleshed out in the General Comment.

While the rights to freedom of expression and access to appropriate information are not absolute, restrictive laws in respect of the rights, including on the Internet could be a violation of the provisions of the CRC. In its concluding observations to Democratic People's Republic of Korea, the CRC Committee recommended that the State party should 'review its legislation, in particular article 185 of the Criminal Code, to decriminalize children's access to what is considered 'hostile broadcasting and collection, keeping and distribution of enemy propaganda' (CRC/C/PRK/CO/5 2017, para 24).

Some countries have passed legislation that criminalizes the dissemination and circulation of false information, including by using social media platforms. For instance, restricting message forwarding by WhatsApp throughout the world to a maximum of just only twenty messages at a time (from a, earlier cap of 250 messages at a time) after the mob lynching in India, can be mentioned in this respect,⁸ underscoring an aspect that State Parties, and non-state actors are grappling with. However, such legislation could raise the spectre that if arbitrary, they could potentially undermine children's rights to freedom of expression. As a result, in its recommendations to Lao People's Democratic Republic, the Committee expressed concern that 'Decree 327 adopted on 16 September 2014, which criminalizes the dissemination and circulation of untrue information, may hinder the enjoyment of the right to freedom of expression of children if applied outside of the context of article 13 of the Convention' (CRC/C/LAO/CO/3-6 2018, para 21). In this respect, the Committee also emphasized the obligation of the State to raise the awareness of children about the various limitations of the right to freedom of expression – namely for the respect of the rights or reputations of others or for the protection of national security or public order, or of public health or morals- including on social media (CRC/C/LAO/CO/3-6 2018, para 21).

The link between advertising of tobacco or other addictive substances and the extent to which such information reaches children including online is a concern. It seems it is because of this reason that the CRC Committee has recommended, under a heading '[d]rug and substance abuse' that State Parties such as Seychelles and Angola, 'prohibit tobacco and alcohol advertising by privately owned media and companies' (CRC/C/SYC/CO/5-6 2018, para 33(c); CRC/C/OPSC/AGO/CO/1 2018, para 32(b)). The need

⁸ <https://www.theguardian.com/technology/2018/jul/20/whatsapp-to-limit-message-forwarding-after-india-mob-lynchings>

to provide children with adequate information in social media and other platforms with a view to educate children in prevention of substance abuse is also underscored, for instance, in the context of Sri Lanka (CRC/C/LKA/CO/5-6 2018, para 33(b)). In this respect, occasionally, the use of social media to inform children about ‘the dangers of joining a gang’ has also been recommended (CRC/C/GTM/CO/5-6 2018, para 25(c)).

The extent to which the concluding observations, the State Party Reports, as well as written replies to the list of issues are made available to various stakeholders is part of the success or otherwise of the constructive dialogue. Making these documents widely available to various stakeholders ‘including through the internet’ is a standard recommendation that is given to all State Parties (see, for example, concluding observations to Czech Republic, Saudi Arabia and Russia) that report to the CRC Committee (CRC/C/OPSC/CZE/CO/1 2019, para 34; CRC/C/OPSC/SAU/CO/1 2018, para 43; CRC/C/OPAC/SAU/CO/1 2018, para 47; CRC/C/OPSC/RUS/CO/1 2018, para 38).

The draft General Comment on digital environment does indeed plan to address most of the issues covered above. For example, the extent to which States should ensure how non-state actors respect and promote the rights associated with the digital environment, including the right to freedom of expression as well as access to information, will need more fleshing out. However, for now, issues pertaining to assistive reproductive technologies, which will form the discussion of the next sections, is an issue that is mostly confined to development through concluding observations for now.

3. Children’s Rights and Assistive Reproductive Technologies

Around the time that the Convention was adopted, a child, let us call him Joe, was conceived by his mother using a donor egg. Fast forward to 2004, when he was 15 years old, Joe took a DNA sample using a swab on the inside of his cheek, and sent it off in the post to an online genealogy DNA-testing service. He was trying to find his father. Although his father was not in the database, another man related to him was – and as a result of the man’s (unusual) surname being revealed, and with further surfing of the Internet, Joe found his father (Motluk 2005). By 2015 PBS Independent Lens reported that a number of organisations promoting strategies and databases to identify sperm donors are now available on line. More recently, a young person who had been conceived using donor sperm was contacted within two weeks of using Ancestry.com by a person who claimed to be her third cousin. After contacting her cousin and using Facebook, the sperm donor

was revealed (Harper *et al.* 2016). Experts are pointing out that children and young adults are not waiting for lawmakers to lift anonymity rules and help them uncover their full identity. They do not need to, because with a small swab and a few clicks, all can be revealed (Harper *et al.* 2016; McGovern and Schlaff 2017).

3.1 Children Born as a Result of Assistive Reproductive Technologies, Including Surrogacy

The first baby conceived as result of Assistive Reproductive Technologies (ART) was born in 1978, just over a decade before the adoption of the Convention on the Rights of the Child by the United Nations General Assembly. It is estimated by the European Society of Human Reproduction and Embryology (ESHRE) that globally, more than 7 million children have been born, since 1978, as a result of ART. More than half of all reported treatment cycles have occurred in Europe, with Spain, France, and Germany being the most active in the use of ART, while the Nordic countries and Belgium have the highest availability of ART treatment per millions of people (ESHRE 2018). However, the actual numbers may be far higher as states with high populations such as China, have not been providing information.

In the consideration of periodic reports, the Committee tends to deal with the question and recommendations about this under Article 7 (the child's right, as far as possible to know and be cared for by his or her parents) and Article 8 (the child's right to preserve his or her identity). As early as 1994, the Committee raised a concern in its concluding observations on the initial report of Norway that 'concerning the right of a child to know his or her origins, the Committee notes the possible contradiction between this provision of the Convention with the policy of the State party in relation to artificial insemination, namely in keeping the identity of sperm donors secret' (CRC/C/15/Add.23 1994, para 10). Sweden had already taken a position against anonymity of donors, based on the idea (taken from the context of adoption) that a child would have a right to know his or her biological parents (Lind 2019, 357).

In its concluding observations on the report of Switzerland in 2002, under the heading, 'the right to know identity' the committee noted a concern that according to the Law on Medically Assisted Procreation, a child could be informed of the identity of his/her father only if he/she has a 'legitimate interest'. The Committee recommended that, in light of article 7 of the Convention, the State party should ensure, as far as possible, respect for the child's right to know his or her parents' identities (CRC/C/15/Add. 182 2002, paras 28 and 29).

The United Kingdom of Great Britain and Northern Ireland received similar recommendations from the Committee in the same year, under the heading 'Name and nationality and preservation of identity'. The Committee expressed concern that children born in the context of medically assisted fertilization did not have the right to know the identity of their biological parents. Invoking articles 3 (best interests) and 7 (child's right to know parents), the Committee recommended that measures be taken to ensure that all children, irrespective of the circumstances of their birth, to obtain information on the identity of their parents (CRC/C/15Add. 188 2002, paras 31 and 32).

3.2 Children's Rights in the Context of Surrogacy

Surrogacy and the child's right to know his or her origins was the underlying theme the first communication in which views were issued by the Committee on the Rights of the Child under its Optional Protocol for a Communications Procedure (OPIC). The case was brought in 2015 by J.A.B.S., the father of twin boys born through a surrogacy arrangement concluding in the United States. The father returned with the children to the USA, and he wished to have the surrogate mother's surname included in the birth registration in his country, Costa Rica. The authorities refused to do so, finding it impermissible under Costa Rican law, and the father brought a communication under OPIC, claiming a violation of article 8 of the Convention. The Committee found the communication to be inadmissible, partly due to the non-exhaustion of remedies, but also because the author had not presented convincing argument to demonstrate that the assignment of his surnames would constitute a barrier to their children's ability to have full knowledge of their biological origins or failed to respect their right to preserve their identity. Given the fact that the right to know origins had featured strongly in the CRC's concluding observations on ART, and as we will show below, continued to be a trend in relation to surrogacy, this decision is somewhat surprising. Because it is a view on admissibility, the merits are not properly considered, but when considered against the broader jurisprudence of the Committee, it seems that it did not consider that the surrogate mother's name being on the birth certificate was dispositive of the right to preserve identity. In summary, the view takes the position that a state that does not permit surrogate mother's names to be on the birth certificate is not necessarily violating the right to a name, nor to preservation of identity. The views are brief and do not close the door to further cases that might be brought in this regard.

Surrogacy began to feature in the Committee on the Rights of the Child's concluding observations from 2013. It is important to distinguish between those instances where the Committee's observations arose from reports under the Convention on the Rights of the Child (CRC), and those that were on reports on the Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography (OPSC 2000). OPSC is ratified separately from the CRC, and the first report under the optional protocol is a stand-alone report. Thereafter, it may be incorporated under the general report of the CRC. We will deal with concluding observations under each of these instruments, in turn.

3.3 Surrogacy in Reporting under the CRC

In relation to reports under the CRC, the Committee first mentioned surrogacy in the concluding observations to Israel in 2013. The Committee referred to 'the regulation of assisted reproduction technologies, particularly with the involvement of surrogate mothers'. The Committee continued to display its concern about children's right to have access to information about their origins – requiring states to respect the right for child to have access to information, and to 'ensure respect for the rights of children to have their best interests taken as a primary consideration' The Committee also recommended that States consider requiring that surrogate mothers and prospective parents undergo appropriate counselling and support' (CRC/C/ISR/CO/2-4 2013, para 34). Very similar recommendations were included in subsequent concluding observations to Ireland in 2016 (CRC/C/IRL/CO/3-4 2016). The importance of providing access to information about origins was included in the concluding observations on the CRC reports of Georgia (CRC/C/GEO/CP/4 2017) and Spain (CRC/C/ESP/CO/5-6 2018).

Other issues flagged by the Committee regarding reports on the CRC have been concerns relating to international surrogacy. Recommendations regarding this were issued to Georgia, requiring the government to address obstacles in the law that might interfere with birth registration of children born in Georgia through surrogacy, and to 'establish an effective and efficient identification and referral mechanism for children who are undocumented and at risk of statelessness' (CRC/C/GEO/CO/4 2017, para 19). France had previously received a similar recommendation, requiring the registry offices to issue nationality certificates to all children born through surrogacy, with no local discrepancies in this regard (CRC/C/FRA/CO/5 2016). The Committee's concluding observations to India were positioned under the heading 'Adoption', and requested the government to ensure that a Bill on assisted reproductive technology and any subsequent legislations contain provisions

that define, regulate and monitor surrogacy arrangement and criminalize the sale of children for the purpose of illegal adoption, including the misuse of surrogacy (CRC/C/IND/CO/3-4 2014). In 2018, the Committee's concluding observations to Lao People's Democratic Republic also recommended that measures, including legislation, be adopted to prevent the sale of children in the context of commercial surrogacy (CRC/C/LAO/CO/3-6 2018). This last point, on the sale of children, is an issue that the Committee has usually taken up under the OPSC, but it is likely that it arose for consideration under these reports on the CRC due to concerns about commercial surrogacy and exploitation of surrogate mothers in those countries.

3.4 Surrogacy in Reporting under the Optional Protocol on Sale of Children

Reports under the OPSC have a narrower remit – States are to report on their progress in relation to the sale of children, child prostitution and child pornography. In particular, sale of children is defined as 'any act or transaction whereby a child is transferred by any person or group of persons to another for remuneration or any other consideration', and States are required to prohibit sale of children. The Committee's concluding observations on such reports are narrowly circumscribed, and therefore must focus on the question of sale in the context of surrogacy. Although the United States of America has not ratified the CRC, it has in fact ratified OPSC. Thus, the Committee's only opportunity to raise the question of surrogacy with the United States is through concluding observations on this instrument. In 2013, the Committee raised concerns that despite a regulatory framework under an accreditation law, payments to surrogate mothers were still occurring, due to legal loopholes, which was 'impeding the effective elimination of the sale of children for adoption', and called for federal legislation to regulate surrogacy (CRC/C/OPSC/USA/CO/2 2013, para 29). A similar concern was expressed in the Committee's concluding observations on OPSC to Mexico, where it is said that the State of Tabasco does not provide sufficient safeguards to prevent surrogacy from being used as a means to sell children' (CRC/C/MEX/CO/4-5 2015, para 69(b)).

The 2018 Report to the Human Rights Council of the UN Special Rapporteur on the sale and sexual exploitation of children stated 'commercial surrogacy as currently practised usually constitutes sale of children as defined under international human rights law.' (A/HRC/37/60 2018). However, this view is not reflected in the CRC Committee's more recent concluding observations. Although the Committee does recognise the potential for sale of children in context of unregulated surrogacy, it does not equate surrogacy with sale.

When the United States returned to the CRC for its second report on OPSC in 2017, the Committee expressed concern that widespread commercial use of surrogacy in the State party may lead, under certain circumstances, to the sale of children, in particular situations when parentage issues are decided exclusively on a contractual basis (CRC/C/OPSC/USA/CO3-4 2017). In 2018, the Committee recommended that Russia should strengthen its legislation in order to prevent surrogacy arrangements that may lead the sale of children (CRC/C/OPSC/RUS/CO/01 2018). An analysis in a report by the Child Rights International Network, the Committee has 'said several times that surrogacy may amount to the sale of children where it is not clearly regulated, but however has not called genuinely altruistic surrogacy into question' (CRIN 2018, 14). Concluding observations handed down since that time have not indicated any departure from that approach. However, it is important to note that the Committee has not, as at 2019, taken an official position on surrogacy or any other form of ART, in the sense that there has been no day of general discussion or a General Comment on these issues. Perhaps the closest it has come to this is in adopting guidelines on OPSC (CRC/C/OPSC/3). The document includes surrogacy in a list of situations which 'may' constitute sale, and the Committee urges States parties to take all necessary measures, including regulation, to avoid the sale of children under surrogacy arrangements.

The Committee's jurisprudence indicates its concern about the child rights implications of forms of ART that use donor gametes, in particular surrogacy. While the Committee has been careful not to equate surrogacy with sale of children as a general approach, it does remind states that this is a risk that must be carefully guarded against. The right to know one's identity has been a consistent theme in the Committee's thinking about children's rights in the context of ART. Indeed, many States have already abolished anonymity – Sweden abolished in 1984, following by the United Kingdom, Germany, Switzerland, Netherlands, Austria, Finland, Iceland, Italy, Portugal and Australia (Lind 2019). In February 2019 the Council of Europe's Parliamentary Assembly made recommendations to member states that anonymity should be waived for future gamete donors, and that it should not be lifted retrospectively if anonymity was promised at the time of donation, except for medical reasons or if the donor consents (De Sutter 2019). The donation does not result in inheritance, parenting or maintenance claims. The recommendations deal with the practical arrangements for contact being made (once the child is 16 or 18 years old) and allows for siblings to be contacted, too, subject to certain conditions (De Sutter 2019). However, the clock has been ticking for some time already on donor anonymity, as the stories in the introduction of this article indicated. Adolescents and young

adults are using technology to uncover the secrets about their identity that emanate from the technological inputs to their own conception.

Conclusion

Technology has reconfigured children's rights. It continues to do so every day. By coincidence, the adoption of the Convention and the public availability of the Internet happened at the same time - in 1989. At that time, it was difficult to imagine, let alone understand the synergy that would need to be forged in the future between children's rights and the Internet.

The role that the CRC Committee plays in interpreting the provisions of the Convention has contributed to keeping the Convention relevant for the last 30 years. The dizzying pace of the evolution of digital technology that affects children's rights is not likely to abate, and the effects will no doubt spread to many other areas of children's rights, bringing with it further challenges and opportunities. Children's rights advocates need to remain responsive and flexible to ensure that the field keeps pace with developments.

The challenge posed by the tension between participation and protection rights is very evident in respect of children's rights in the digital environment. This is reflected in respect of the right of access to information, the right to freedom of expression, as well as the discussions on children's participation rights and sexual abuse image within the digital environment.

Discrimination against children is a central part of the conversation on the digital environment. Inequalities are exacerbated as a result of the global digital divide as well as algorithms, and this affects their civil rights such as the right to information and to freedom of expression. It will also impact children's social and economic rights. There are likely to be many future benefits through technology in the spheres of education, health, sanitation, inclusion for children with disabilities and climate change amelioration, to name but a few. However, there are serious concerns that the advantages flowing from these innovations may be more accessible to children in the developed world.

There is no doubt that the General Comment that the CRC Committee is working on in 2019 and 2020, focusing on children's rights and digital environment, will address a number of gaps in States' and other stakeholders' understanding of the issues. However, given the pace with which technology and its interaction with children and their rights is changing, some of the contents of the upcoming General Comment might become less relevant within a relatively short period of time. As a result, the CRC Committee will need to continuously develop its jurisprudence on the issues, through

its concluding observations – which in turn often depend on the quality and up-to-date content of State Party and complementary reports.

As computers spread into everyday objects - also known as ‘Internet of Things’ – and become part of children’s everyday lives, the extent to which children will interact with technology and the effects of these developments on their rights in the Convention will be revealed. We see already that children use the Internet to find information that they want to access, such as identity of their biological parents, regardless of what the law says, as demonstrated in the third part of this article that highlighted the effects of assisted reproductive technologies and surrogacy on children’s rights. We have witnessed how children are using it to mobilize for social change – on issues such as education and climate change. This reminds us that technology brings as many opportunities as challenges. All stakeholders such as States, non-state actors especially the business sector, academia, non-governmental organizations, and the media will have to work together to harness the advantages and deal with any risks that simultaneously arise. As children are demonstrating on a daily basis through their on-line engagement, their participation in these ongoing efforts will be crucially important.

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