

Towards a Legal Qualification of Online Sexual Acts in which Children are Involved: Constructing a Typology

Argyro Chatzinikolaou & Eva Lievens^[1]

1. Introduction

1.1 Background

In today's society, the widespread use of digital technologies among children^[2] is indisputable. They learn to navigate the digital environment from a young age by using a plethora of online communication platforms and mobile applications. The use of and interaction with digital media and services covers a broad variety of aspects of one's (private) life, including the development of (online) sexual behaviour.

On the one hand, as they grow up, children are engaging with technology to establish and maintain intimate relationships and develop their identity, including sexual aspects thereof (Lenhart A, 2015; Livingstone S, Mascheroni G & Staksrud E, 2017). They use mainstream social media sites and applications to look for or maintain romantic or sexual encounters or relationships (Livingstone S et al., 2012). Many applications provide chat or messaging functionalities (Drake N, 2017), which allow for private communications, enabling both the exchange of texts, images or videos and live (webcam) sessions. Acts or expressions can be part of children's legitimate exploration of their sexual identity and a way to express their sexual individuality. In this sense, online sexual behaviour involving children may be conceived as falling within the scope of a child's freedom of expression and right to privacy, laid down in the United Nations Convention on the Rights of the Child (UNCRC) (Livingstone S, Lansdown G & Third A, 2017).

On the other hand, phenomena such as non-consensual types of sexting, forced webcam sex or sexual extortion of children are not only associated with a potentially negative impact on children's lives, but may also fall within the scope of application of criminal legislation. The production, possession and/or dissemination of sexual images which depicts young people under the age of 18, for instance, is in many jurisdictions qualified as a criminal act according to child sexual abuse material (CSAM) legislation that aims to protect them from abuse and exploitation (European Data Protection Supervisor (EDPS), 2017).^[3] At the same time, consensual types of sexting between children could in certain instances be judged to fall within the scope of such criminal provisions, but in practice may constitute 'legitimate' behaviour.

1.2 Problem Statement

The conflicting perceptions of online sexual behaviours and acts in which children are involved, voluntarily or as a result of coercion, reflect the need for a regulatory framework that offers both protection from abuse and ‘space’ for self-determination and autonomy (Crofts T & Lievens E, 2018).

However, a legal qualification of online sexual acts, or, in other words, assessing whether behaviours that regularly occur in practice fall within the scope of applicability of existing legislative provisions, is often challenging. Whether mediated sexual practices in which children are somehow involved, such as sexting or the creation of fake pornographic material, are regulated or ought to be regulated is not always clear-cut. Not only do such phenomena carry contemporary elements that had not been considered by the legislator at the time of drafting of the most relevant provisions, but the specific circumstances under which they occur and how these match with the wording of existing legislative provisions, play a significant role in their legal qualification.

Four examples of such acts illustrate the difficulty in legally qualifying online sexual acts when children are involved. A first example is the phenomenon of sexting which consensually occurs among children; would such behaviour fall under national Criminal Code provisions on the production, possession or dissemination of CSAM – usually under the title ‘child pornography’? A second example is the forwarding of sexual or sexually explicit material without the consent of the depicted child; does forwarding such a picture to one further person constitute ‘dissemination’ or is it only the case when posting the material online? A third example is the unwilling reception of sexual or sexually explicit material depicting a child; would such an act be interpreted as criminalised possession of CSAM and be punished pursuant to the respective national Criminal Code provision? A fourth example is the creation, dissemination and possession of fake pornographic material; do such acts qualify as production, dissemination and possession of CSAM and does the relevant Criminal Code provision also cover the virtual aspect of the act?

Before reaching the point of, first, assessing the actual applicability of current regulatory provisions, and second, considering whether acts should be regulated, and if so, which regulatory options are fit for purpose, a conceptualisation of the online sexual behaviour and acts in which children are involved is a key factor in establishing a common understanding with regard to the terms and notions. It is evident that a wide range of activities may fall under the notion of ‘online sexual acts’, ranging from sexual activities which are widespread and more commonly encountered or adopted in the online sphere, such as sexting or webcam sex, to emerging phenomena, such as live streaming through public and private app(lication)s or virtual reality sex apps. In order to enable the legal qualification of acts that can be denominated as online sexual acts, it is essential to capture the nature and boundaries of those acts in which children are involved. Assessing whether the wording of existing legislative provisions covers mediated acts which carry a sexual element and occur in children’s lives would strongly benefit from a clear understanding of those acts’ characteristics and variables.

1.3 Methodology

In order to reply to both the evaluative question (*does* this act fall within the scope of the regulatory framework?) as well as the normative question (*should* this act fall within the scope of the regulatory framework?) regarding the legal qualification of such acts, we considered a typological construction to be an apt tool. According to a traditional perception widely established

in scholarship, typologies are viewed as classification systems (Koops B J et al., 2016). According to Bailey, a classification serves as a pivotal descriptive tool, through which an (exhaustive) array of types may be presented (Bailey K D, 1994, p.12). A systematic assessment of the relevant types which occur essentially facilitates the reduction of complexity and the creation of a simpler visualisation of a given core notion. Classification further enables the identification of similarities and differences among cases, while in a second stage allows for their analysis and grouping. Such an exercise enables a differentiated handling of distinct cases, as – with respect to the subject of our research – will be necessary with regard to the (legal) qualification of different types of online sexual activities.

Although in the past efforts have been undertaken to classify online sexual acts in which children engage or are involved in, a more refined, granular and systematic typology, that transcends a ‘risk’ approach, is needed for further in-depth legal research. The ultimate goal of this article is to explore the creation of a typology that encompasses a comprehensive range of acts in order to facilitate their legal qualification.

In terms of methodology, two steps were taken for the systematic classification of the acts; firstly, the *listing* of phenomena that qualify as ‘online sexual acts’ and secondly their *systematisation*. First, we drafted a list of activities or phenomena which relate to sexual expression or sexuality, and occur in practice, along with widely accepted definitions thereof. The listing of the acts is based on a literature and criminal legislation review; more precisely, academic literature, (policy) documents and reports, among which the Luxembourg Guidelines and the Internet Organised Crime Threat Assessment (IOCTA) 2018, served as a resource for identifying phenomena that carry a sexual element, occur in the digital environment, and in which children may be involved.

After the wide range of online sexual acts was documented, the systematisation thereof was based on a literature review with interdisciplinary input. Firstly, social science literature provided us with a broad understanding of children’s sexual development and the ways in which they explore or express their sexuality and sexual identity. Additionally, legal doctrine supported the systematisation process. The literature review thereof provided more insight into specific legal elements and notions that are incorporated in different types of potentially applicable regulatory frameworks, such as children’s rights, criminal law, media law and data protection law.

The systematisation of online sexual acts is essential to identify characteristics, similarities and dissimilarities between the acts, and hence to cover the myriad of ways in which children may be involved in online sexual acts. At the same time, it is important that this systematisation meets the standards of a living structure, which remains open to accommodating emerging technologies, future forms of online sexual behaviour brought along by the further digitisation of childhood and contemporary forms of social interaction. An advanced typology presents a set of *dimensions* on which *types or type concepts* are based, which is as exhaustive as possible, and facilitates the study of relationships which occur between different types (Bailey K D, 1994). The extent to which the types of a typology may be mutually exclusive depends on the nature of the notion or concept that finds itself in the centre of the typological structure. Typologies that aim to capture broad and more abstract concepts inevitably accommodate (partly) overlapping types.

The typology that is the subject of this article is developed on the basis of labelled types, and aims to be primarily conceptual and multidimensional, and not necessarily strictly mutually exclusive.

Lastly, with the intention to validate the indicated dimensions against the aim of this classification exercise, we applied them to a number of phenomena that appear in practice and discussed relevant (interpretative) issues that may arise.

1.4 Relevant existing classifications

Existing classifications most commonly capture the online behaviour of adults or children in a broader and more generic sense; sexual or sexually suggestive activities are usually listed among the documented online activities, yet do not serve as the main focus of the created typologies. The 2009 *EU Kids Online* Report, for instance, speaks of *online risks* and *opportunities* (Hasebrink U et al., 2009) and creates two distinct classification figures. On the one hand, according to the constructed classification of risks (which includes commercial, aggressive, sexual and value-related risks), sexuality-related activities may be perceived as *content* (e.g. accessing pornographic or harmful sexual content), *contact* (e.g. meeting strangers, being groomed) or *conduct* (e.g. creating or uploading pornographic material) risks. On the other hand, according to the equivalent table for opportunities connected to education and learning, participation and civic engagement, creativity and identity and social connection, important positive experiences in relation to sexuality (e.g. obtaining information, exchange of experiences with interest groups) can also be distinguished.

Other classifications focus on a particular act or activity that children are involved in. Examples are a 2011 typology of youth-produced image or sexting cases known to law enforcement by Wolak and Finkelhor (2011), and the 'Typology of Child Cyberexploitation and Online Grooming Practices' (O'Connell R, 2003), which sheds light on '*the behaviour patterns of adults and adolescents with a sexual interest in children and the varying cycles of abuse that can occur*'. The latter solely focuses on risks and does not take into account legitimate online sexual acts.

The abovementioned studies and attempts to classify (online or offline) sexual behaviour do not directly correspond to the focus of this article. They either focus on one type of act or classify the acts relevant to this article only according to one dimension. Along with additional literature, they do provide essential insights and material for reflection on different dimensions of a typology. Not only do they serve as a resource of acts which facilitate the first step towards constructing this typology (*listing* of acts), but they accent characteristics of online sexual acts and are therefore also helpful for the second step, the *systematisation* of the acts.

2. Towards the construction of a typology

2.1 Listing of Online Sexual Activities

The phenomena which underpin the typology, in one way or another, all fall under the notion of 'online sexual act'. The term refers both to activities facilitated by ICTs and to activities committed elsewhere which are then shared or disseminated online through, for instance, images or videos. The concept of online sexual acts is perceived in the broadest possible manner in order to include any kind of activity that relates to one's sexuality or sexual identity, and to capture both voluntary and involuntary acts. In this sense, both a coerced (and, hence illegal) act which involves or targets children, such as 'grooming' for sexual purposes (Luxembourg Guidelines, 2016, p.51), and an act which may be perceived as being an expression of the legitimate exploration of sexual identity, such as 'sexting' (Livingstone S, Mascheroni G & Staksrud E, 2017) qualify as online sexual acts.

The identification and description of the acts listed (alphabetically) in the following section built on

existing literature, research reports and policy documents. Moreover, the Terminology Guidelines for the Protection of Children from Sexual Exploitation and Sexual Abuse, drafted by the Terminology and Semantics Interagency Working Group on Sexual Exploitation of Children, also known as the 'Luxembourg Guidelines' (Luxemburg Guidelines, 2016), have provided greater conceptual clarity regarding the use of relevant terms and notions.

(SEXUAL) CYBERBULLYING 'Cyberbullying' is defined as 'aggressive behaviour that is intentionally and repeatedly directed at an individual who holds less power than the aggressor, when the means through which to embarrass, threaten, sexually harass or socially exclude are ICTs' (Hinduja S and Patchin J W, 2015; Vaillancourt T, Faris R & Mishna F, 2016, p.62). Sexual cyberbullying is a term used to describe cyberbullying when a link to sexual elements exists (UK Department for Children, Schools and Families, 2009), and may be considered a form of sexual harassment.^[4] Sexual cyberbullying may be, for instance, focused on a minor's sexual orientation (e.g. homophobic motives) and may be further linked to (non-consensual types of) sexting, grooming or sexual extortion or may be used to refer to '*the coercion, intimidation, or enticement to sexual activity from peers, or unwanted pressure from peers to have sex*' (Luxembourg Guidelines, 2016, p.22).

CYBERSEX 'Cybersex' is a term that encompasses '*a constellation of online activities with a partner that occur in real-time and involve sexual communications about sexual activities, fantasies, and/or desires*' (Shaughnessy K, Byers S & Thornton S J, 2011, p.23). Cybersex is usually facilitated by the use of a webcam.

FAKE PORN (THROUGH ARTIFICIAL INTELLIGENCE) Through a combination of software, machine learning algorithms and existing photos or video footage of a person it is possible to paste an individual's face onto existing sexually explicit material. Such '*algorithms are able to take the face of a person from a publicly available video and seamlessly paste it onto the body of a porn performer*' (Cole S, 2018).^[5] Alternatively, pseudo images that depict child figures yet do not represent real persons (such as animation videos or pictures/comics) may also fall under the category of fake or 'virtual' pornography. In fact, in some jurisdictions, the term 'child pornography' also includes pornographic material that visually depicts either a person appearing to be a minor engaged in sexually explicit conduct or realistic images representing a minor engaged in sexually explicit conduct.^[6]

GROOMING^[7] Online 'grooming' for sexual purposes refers to the solicitation of children for sexual purposes.^[8] More precisely, it describes the process of establishing a relationship with a child through the use of the Internet or other digital technologies to facilitate either online or offline sexual contact with that person (Luxembourg Guidelines, 2016, p.52).

ONLINE (production/possession/dissemination of) CHILD SEXUAL ABUSE MATERIAL [CSAM] – CHILD SEXUAL EXPLOITATION MATERIAL [CSEM] The term 'child sexual abuse material' (INTERPOL) is used instead of the term 'child pornography' and refers to material that depicts acts of sexual abuse and/or focuses on the genitalia of a child. Although 'child pornography' is frequently used in both legally binding and non-binding instruments and its definition varies depending on the different legal instrument it is referred in, the Luxembourg Guidelines advise against the use of the notion. 'Child sexual exploitation material' (Frangež D et al., 2015, pp.291-299) is used in a broader sense to include all other sexualised material depicting children.

ONLINE CONSUMPTION OF SEXUALLY EXPLICIT MATERIAL [SEM] The ubiquitous online availability and use of sexually explicit as well as sexually suggestive material (widely referred to as 'pornography' or 'erotica') in practice, according to research, leads to the exposure and

consumption by children under the age of 18 (Quadara A, El-Murr A & Latham J, 2017). Sexually explicit material may be consumed either through live streaming (e.g. live video, live sex shows) or through downloading (e.g. video, images).

ONLINE PURCHASES FROM SEX SHOPS OR OTHER WEBSITES Regardless of the age at which it is possible to engage in commercial transactions in a given country, children can also buy objects of a sexual nature online (e.g. sex toys). Online purchases could be carried out by children via any of the numerous sex shops available online in so far as there is no (adequate) age verification mechanism in place.

(LIVE) ONLINE CHILD SEXUAL ABUSE Online child sexual abuse is a widely accepted and broad term which appears in a number of legally binding instruments (Luxembourg Guidelines, 2016, p.46) and refers to the exploitative use of children in activities, performances and materials. Online sexual abuse refers to any kind of sexual abuse of children when a link to the online environment has been established. Sexual harassment may take place on social media or other online channels; alternatively, the act of harassment may take on an online dimension as soon as it is photographed or recorded (audio or video) and made available online (Luxembourg Guidelines, 2016, p.22). When the online sexual abuse is live (i.e. the live performance by the child is recorded and streamed in real time), this represents a dual abuse of the child. In a first stage, the underage person is coerced to participate in sexual activities and, in a second stage, the sexual activity is transmitted live through ICT and is watched by others remotely (Luxembourg Guidelines, 2016, p.46).

ONLINE CHILD SEXUAL EXPLOITATION The term 'online sexual exploitation' refers to any act of a sexually exploitative nature which is carried out against a child and, at some stage, has a connection to the online environment. It could be considered as an umbrella term which encompasses forms of sexual exploitation that have an online component or any relation to the internet (e.g. soliciting/manipulating/threatening a child into performing sexual acts in front of a webcam, or the distribution, dissemination, offering, selling possession of or knowingly obtaining access to child sexual exploitation material) (Luxembourg Guidelines, 2016, p.28).

SEARCHING INFORMATION ON SEXUAL HEALTH/SEXUALITY-RELATED CONTENT Online search engines provide access to websites which may, for instance, host information on sexual health, sexual orientation, sexual techniques or other sexuality-related issues (Shaughnessy K & Byers S, 2014, p.32).

SEEKING FOR A ROMANTIC PARTNER/SEXUAL ENCOUNTER The digital environment accommodates communications that either directly serve as a means for engaging with a romantic partner or sexual encounter or by chance result in the establishment of romantic or sexual contact. Social networks, private chat messengers, chat-rooms, fora, dating websites, or mobile dating apps offer such opportunities for people that do not already know each other.

SEXTING 'Sexting' refers to 'the creating, sharing and forwarding of sexually suggestive, nude or nearly nude images through mobile phones and/or on the internet' (Ringrose J et al., 2012, p.6). [\[9\]](#) Consensual sexting facilitates the proliferation of flirtatious or even sexual relationships in the online space (Walrave M et al., 2018).

SEXUAL EXTORTION OF CHILDREN Sexual extortion of children or 'sextortion' indicates the '*blackmailing of a person with the help of self-generated images of that person in order to extort sexual favours [...] or other benefits from her/him under the threat of sharing the material beyond the consent of the depicted person*' (e.g. through posting images on social media) (Luxembourg Guidelines, 2016, p.52). Sexual extortion of children sometimes is a feature of online solicitation of

children.

VIRTUAL REALITY SEX The porn industry is said to be heavily investing in virtual reality. Two years ago, Pornhub.com was the first website to launch a free virtual reality channel which is compatible with both iOS and Android mobile devices (Gaudiosi J, 2016). Virtual reality sex videos are pre-recorded through a 180 or 360-degree camera and the viewer is then immersed in the scene (often with a central point of view) through the use of a virtual reality headset (Bailey D E, 2016).

VISITING ONLINE INFORMATION PLATFORMS/FORA Online platforms, fora or chat-rooms offer the opportunity to exchange information or experiences or reach out or provide support, for instance, with regard to romantic relationships, the shaping of sexual identity or sexuality-related issues. Such platforms, which are sometimes addressed toward underage people, may provide for distinct sections on LGBT, Sexuality and Gender Identity.[\[10\]](#)

2.2 Exploration of dimensions

The theoretical background as well as the brief description of online sexual act(ivity)s in which children are involved or online sexual behaviours which children perform set the scene for the development of the typology and the identification of types and dimensions.

2.2.1 (Public or private) Nature of the space which accommodates the act

A first dimension refers to the qualification of the online 'space' in which a given act is carried out as (semi-)public or (semi-)private. Reflecting on whether the online environment (as a whole or with reference to a specific channel of communication or action) ought to be considered as being a public space, not only carries a theoretical value, but is also essential from a legal perspective as certain types of legislation require acts to be 'public' in order to fall within their scope (think about offences of public indecency). Moreover, classifying a space, medium, communication (channel) or act as 'public' or 'private', plays a pivotal role in determining whether the person had a legitimate or reasonable expectation of privacy (Timan T, Newell B N & Koops B J, 2017). This however does not lead to the uncontested deduction that individuals performing online acts that are classified as 'public' waive their right to privacy (Madden M et al., 2013; Nissenbaum H, 2011, p.32-48; Solove D, 2008). In a sense, though, such acts tend to be linked to a lower level of privacy expectation.

2.2.2 Effect or Outcome of the Act

The distinction between solitary-arousal, partner-arousal or non-arousal activities could serve as a fitting selection on the basis of the aim of the actor or the effect of the activity on that actor. In this regard, the consumption of sexually explicit material could fall under the first category, sexting could fall under the second category and seeking information about sexuality online could arguably fall under the third category.[\[11\]](#) A distinction made on the basis of the effect caused by the activity itself at first sight seems appropriate, given the nature of activities which carry a sexual element.

2.2.3 Role or level of participation of the child

Approaching the typological exploration exercise from the perspective of the child also leads to a dimension on the basis of the *role* which the child takes up, willingly or not. More precisely, a child may be the *target* of the activity, a *participant* or an *actor* (Hasebrink U et al., 2009).

For instance, the child is perceived as a target or, in other words, an unwilling participant, with

regard to online sexual abuse or exploitation of children, online grooming of children for sexual purposes, sexual extortion of children, the production/possession/consumption of child sexual abuse material or sexual cyberbullying. With regard to the consumption of sexually explicit or suggestive material, the child may be perceived as a recipient or a participant who does not take up an active role. Lastly, the child is an actor her/himself when she or he is willingly and actively engaging in a certain behaviour; this could be the case with consensual sexting or cybersex.

2.2.4 Nature of the Representation of the Child(ren) Depicted in the Material

Technology enables the fictional representation of a child in material of sexual or pornographic nature. Animation clips or pictures may depict children or underage figures. Comics, cartoons or games, for instance, may involve animated figures who are presented as equivalent to human children, without, however, having used actual children for the production of this material. Along the same lines, new technological phenomena, such as 'deep fakes' or 'fake porn', may use parts of a depiction of a real child and integrate it with other images leading to a doctored image that is not a truthful depiction of the child. Alternatively, a virtual child could be depicted in pursuance of a goal of public interest. The most prominent example would be SWEETIE 2.0, a research project on online child sex tourism and criminal law through which a virtual child is used to lure perpetrators of sexual abuse and exploitation (Schermer B W et al., 2016). On the basis of the nature of the representation of a child figure in such material a distinction could be made between a *virtual* and *non-virtual* or *real* representation of a child.

3. Discussion

Following the preliminary identification of possible dimensions, this section discusses these against the background of social and legal literature in a first step, classifies the listed acts along the dimensions and reflects on them with the ultimate aim of this typological exercise in mind, namely the facilitation of the legal qualification of online sexual acts in which children are involved.

3.1 Dimensions

3.1.1 (Public or private) Nature of the Space which Accommodates the Act

The assumption that everything digital is (automatically) public should be rejected (Madden M et al., 2013; Nissenbaum H, 2011, p.32-48; Solove D, 2008), as there is no doubt that individuals maintain the right to protect their personal information from being accessed or disseminated without their consent in case they decide to share intimate imagery or other sexual material online. Article 8 of the European Convention on Human Rights as well as article 7 of the Charter of Fundamental Rights of the European Union provide for a broad protection of the right to private life, in the offline as well as in the online environment. When thinking about the conceptualisation of public and private spaces *within* the online environment, however, the distinction is inherently more difficult to grasp in comparison to offline spaces. For instance, whether social networks are considered *loci of public display* or private spaces has been debated (Burkell J et al., 2014, p.17). According to boyd (2007), social network sites, such as Facebook serve as 'networked publics', which offer opportunities of socialising. Online social spaces may be perceived as public venues or as spaces for private revelation depending on the (explicitly) intended audience. As boyd (2014) argues, in these environments information and interactions are often 'public by default, private

through effort'. Audiences may vary from one correspondent to a selected list or group of 'friends' or the online community or public at large. What happens in someone's private sphere or in the context of an intimate relationship, and is intended to be private (e.g. a sexual image), may, be made public with unprecedented ease, regardless of whether this information was obtained in a legitimate (e.g. with consent) or illegitimate (e.g. through hacking or without consent) manner. Characteristics of 'networked publics' such as persistence, visibility, spreadability and searchability (boyd d, 2014) enable fast, widely accessible and persistent sharing of what may be considered private information. Hence, the characterisation of an activity as 'public' or 'private' could cumulatively depend on the intention and expectation of the actor at the given time, and the features of the online space or application.

Freely accessible websites^[12] could, in this sense, be considered as public spaces, even though the activities that are performed on them (e.g. searching for information related to sexuality via a search engine) might still be considered of a private nature by the individual. Private chat or messenger applications, on the offer, promise to offer a private virtual space for communication and resemble confined offline spaces, with the difference that there is a platform or app provider who might have access to those conversations.

In between these two opposites, one could place social network profiles, fora and online platforms which host multiple participants as well as websites that operate on the basis of controlled access. In such cases, the user acknowledges or allows for access to the shared content to a number of persons; this number is usually either pre-defined in advance or at least roughly estimated by the user. The level of visibility may in fact serve as a defining factor for the characterisation of an act as 'public' or 'private'.

Alternatively, a number of online sexual activities may occur in both private and public contexts. For instance, the distribution of sexually explicit content may occur in a private messenger app as well as in a forum with more participants. Similarly, acts of sexual abuse occur both in private and more public contexts, on the basis of visibility to third parties; a child may be approached and sexually abused through private conversations on social network sites/apps or even in a more visible manner, through online platforms, fora, and social media. It should thus be noted, that, beyond acts which can inherently be linked to the public or private sphere, the classification of a specific act will depend on the circumstances of its occurrence.

non – public

public

communication in private chat-rooms or messenger apps, through personal devices; transactions on private online platforms	communication on fora/ platforms with multiple participants	search engines; freely accessible websites
sexting, Child Sexual Abuse (CSA), Child Sexual Exploitation (CSE), grooming, VR sex, production/dissemination/ possession of CSAM/CSEM, sexual cyberbullying, cybersex, production/ dissemination or consumption of (fake) SEM, online purchases	seeking for information/ support, sexting, grooming, dissemination of CSAM/ CSEM, sexual cyberbullying, dissemination of (fake) SEM	seeking for information

3.1.2 Effect or Outcome of the Act

The online search for information on issues such as sexual health, romantic relationships, gender, sexual identity, sexual orientation or sexuality is not (or at least not primarily) carried out with the purpose of arousal but carries a clearly informative value. Similarly, a child may reach out for support or additional information with regard to such matters through online platforms and fora. Relevant websites often provide for chat-rooms and online spaces which are meant for children and which afford space for public conversations on sexuality, sexual identity or romantic relationships and dating (e.g. Teenhelp). Searching for information on online search engines as well as contacting other young persons or experts while seeking for advice or willing to share previous experiences are perhaps not always qualified as *stricto sensu* ‘sexual acts’, but they certainly fall under the broad notion of acts related to sexual exploration.

On the other hand, as already made clear, information and communication technologies (ICTs) play a prominent role in interpersonal interactions, and thus the expression of sexuality also includes the communication of sexually explicit or suggestive content via text or photo messages (sexting) (Livingstone S, Lansdown G & Third A, 2017; Ringrose J et al., 2012; Van Ouytsel J, Walrave M & Ponnet K, 2018; Walrave M et al., 2018b) or remote sexual conduct facilitated by the use of a webcam (cybersex). Both sexting and cybersex usually occur in private spaces and (may) involve both solitary and (real-time) partner arousal communications.

Yet, an important observation in reference to this dimension is related to acts of online child sexual exploitation and other acts that are carried out as a result of coercion. For this dimension our initial choice was to assess the effect from the perspective of the child who is the target of such acts. We found that this leads to the uncontested classification of all activities that constitute child sexual abuse or exploitation, or in general harm the child, as non-arousal. When the activity would be considered from the perspective of the actor who initiated it and actively carried it out, a child sexual abuse or exploitation act would have probably been classified as a (single-)arousal

behaviour, although other motives – such as financial or commercial gain – could also be present. In other words, despite the non-arousal character of the (targeted) child’s involvement, it is possible that the objective aim of the intentionally performed activity may have been arousing for the actor – who may be a child or an adult. This observation renders this particular dimension – and/or the chosen perspective – inherently problematic notwithstanding its value for certain types of acts.

Instead, placing the focus on the outcome of the act in itself rather than on the aim of the parties involved or, in other words, the effect of the act on them, may lead to a slightly different yet more objective classification. Such a dimension could, for instance, distinguish between *seeking information or support*, acts related to the *exploration of sexual identity*, and acts where a type of ‘*exploitation*’ is aimed at – be it commercial or sexual. Behaviours of a purely informative nature then fall under the first type and are clearly distinguished from the other two, which entail acts beyond the quest for support or information. Acts related to the exploration of sexual identity or sexuality form a broad category of behaviours and actions that vary depending on the actor and her or his background. In general, they are linked to an individual’s right to development of personality, and as such deemed legitimate, whereas, the third type of acts is associated with an exploitative, and thus in most instances illegitimate, nature. The latter types of acts are heavily regulated, for instance on the basis of the Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse (Lanzarote Convention) and the EU Directive 2011/93/EU on combating the sexual abuse and sexual exploitation of children and child pornography. In the end, we concluded that this interpretation might be more fruitful from a legal perspective as it sets more clear boundaries between acceptable or non-acceptable behaviours within society.

non – arousal

solitary – arousal

partner – arousal

production/dissemination of CSAM/CSEM, seeking for information/support, sexual cyberbullying, grooming, CSA, CSE, seeking for a partner/sexual encounter[13]	consumption of SEM, production or possession of SEM, sexting	sexting, cybersex, consumption of (fake) SEM, virtual reality sex
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information

exploration of sexual identity

exploitation

seeking for information/support	sexting, cybersex, consumption of SEM, virtual reality sex, production or consumption of SEM, seeking for a partner/sexual encounter	production/dissemination of CSAM/CSEM, sexual cyberbullying, grooming, CSA, CSE
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3.1.3 Role or level of participation

Regarding the level of participation, the distinction between a *passive* and an *active* role may vary depending on the intentions and awareness of the child. From this perspective, a child may be: a target or unwilling participant by either remaining unaware of her/his involvement in a sexual act (e.g. grooming or non-consensual distribution of sexually explicit material that depicts her/him); a recipient of content (e.g. consumption of sexually explicit material); or an actor (e.g. consensual sexting).

Moreover, with regard to those activities in which children can be classified as actors, it should not be overseen that they may also be *offenders* of certain acts that may be considered illegal under criminal legislation (Lievens E, 2014, p.254; IOCTA, 2017). This entails that actors can both engage in legitimate and illegitimate behaviour. In the latter cases, the set age of criminal liability will be crucial with regard to how children are treated when performing an act for which an adult would be held criminally liable (Balajanov E, 2017, p.32).

Additionally, we found that the ‘role or level of participation’ dimension is closely linked to the dipole of *consensual* and *non-consensual* behaviour. In this context, the notion of consent plays a pivotal role in defining what could qualify as legitimate or legal behaviour versus illegitimate or illegal acts, and, hence, be highly relevant from a legal perspective. Consent could be associated with taking up an active role, yet undoubtedly, the two dimensions do not fully overlap. Not only could a person, for instance, be the recipient of content both consensually and non-consensually, but a person could take part in an act after being tricked or forced to, entailing that consent is not given freely. Along the same lines, in certain circumstances, a passive role might indicate a lack of consent (for instance because a child is not aware that an image that depicts him or her has been forwarded).

passive participation

active participation

target or unwilling participant	recipient	(willing) actor	offender
CSE, CSA, non-consensual dissemination of SEM, fake SEM, sexting, sexual cyberbullying, production/ possession/dissemination of CSAM/CSEM	consumption of SEM or CSAM	sexting, cybersex, seeking for online information, virtual reality sex, seeking for a partner/ sexual encounter, online purchases	CSE, CSA, non-consensual dissemination of SEM, fake SEM, sexting, sexual cyberbullying, production/ possession/dissemination of CSAM/CSEM

non-consensual

consensual

CSE, CSA, non-consensual dissemination of SEM, fake SEM, sexting, sexual cyberbullying, production/possession/dissemination of CSAM/CSEM		sexting, cybersex, seeking for online information, virtual reality sex, seeking for a partner/sexual encounter, online purchases
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3.1.4 Nature of the Representation of the Child(ren) Depicted in the Material

The nature of the representation of a child in pornographic material constitutes a crucial element for determining whether a physical child has been abused for the creation of the sexualised imagery or video. One may argue that the creation of a sexualised comic involving characters that appear to be children or figures equivalent to children (e.g. human-like cartoons or non-human being animations who nonetheless resemble human beings and their habitual behaviours) constitutes a legitimate and acceptable artistic expression. Even though a physical child has neither been used nor harmed, the impact of such material on perceptions regarding the sexual representation of children must not be overlooked. The need for further consideration is made even more apparent the bigger the resemblance of the virtual child to a non-virtual one is. Whether the eroticisation of childhood could be harmful through the sexualised depiction of fictional 3D children is open to discussion; whether freedom of (artistic) expressions overrules children’s rights *in abstracto* varies depending on the culture of a given country (Beard J J, 2003; Levy N, 2002; Watanabe M, 2017). In fact, according to the Council of Europe Discussion Paper on protecting children against sexual violence, ‘*child pornography is harmful whether or not its production involves real children; what is important is the message*’ (2012). Child sexual abuse material is alternatively used to *validate certain beliefs and behaviours, establish trust among others interested in abusing children* as well as *encourage others to engage in illegal conduct, and make economic profit* (Council of Europe, 2012, p.6). The Lanzarote Convention, the Cybercrime Convention as well as Directive 2011/93/EU provide for the possibility to include ‘simulated representations or realistic images of a non-existent child’ in the scope of what is considered ‘child pornography’.

virtual

non-virtual

production of CSAM/CSEM (fake SEM, fake SAM), cybersex, virtual reality sex		CSE, CSA, production of CSAM/CSEM
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3.2 Assessing the (Value of the) Indicated Dimensions

As a next step, the dimensions discussed above are validated against the aim of this typological exercise, by applying them to a number of phenomena that transpire in practice and reflecting on the (interpretative) issues that may arise. The examples that are used are the ones illustrated in the introductory part of the article.

3.2.1 Consensual sexting among children

A first example is sexting which occurs through a chat or messaging application among children who willingly create and exchange sexually suggestive or explicit material of themselves. Looking at the dimensions of the typology, the described phenomenon is consensual and is carried out in a private space, namely through messenger applications or private chat-rooms downloaded on personal devices. In this instance, the child actively engages in such communication in order to explore and express his/her (sexual) identity and interacts with another peer by communicating real/non-virtual material depicting him/her. Under these circumstances, sexting appears to be a legitimate form of exploring one's sexuality according to social science literature (Lenhart A, 2015; Livingstone S, Mascheroni G & Staksrud E, 2017). However, to what extent this constitutes legal or illegal behaviour pursuant to criminal legislation is highly debated at both national and supranational level within Europe. Whether this behaviour falls under legislation on CSAM (more often referred to as 'child pornography' in legislative texts) under the existing wording of legislative provisions is relatively opaque, as the practice of sexting was not considered during the drafting thereof. The monitoring exercise regarding the protection of children against sexual exploitation and sexual abuse facilitated by ICTs which was launched by the Lanzarote Committee (the Committee assigned with the task to monitor the implementation of the Council of Europe Lanzarote Convention) affirms the importance of reconsidering the applicability of the existing legislation to such cases. More precisely, the relevant survey, which was addressed to all Member States of the CoE, revealed a fragmented approach toward the criminalisation of consensual sexting between children among the Member States.

On the basis of an overview of existing (national) legal texts (Lanzarote Committee, 2017), the acknowledgement that a consensual online sexual act carried out by children in a private space does not (necessarily) lead to harm and may constitute a contemporary way of exploring one's sexual identity is not reflected in the relevant criminal provisions. In fact, both the *outcome of the act*, being the exploration of sexual identity, and the *role* of the involved child as a *willing actor* (active or passive) rather than a perpetrator or offender are overlooked by the legislator. This observation accents the need for adaptation of the wording of legal provisions that criminalise the production, dissemination and possession of sexually suggestive or explicit material that depicts children. However, a careful reconsideration of the wording is key to avoiding the unwanted decriminalisation of possibly harmful behaviours.

3.2.2 Non-consensual forwarding of sexual or sexually explicit material

A second example is the forwarding of sexual or sexually explicit material without the consent of the depicted child. In this case, the act takes place without the permission or, in certain cases, even the awareness of the depicted child. The dissemination of the material to third persons may take place in a public or private context, depending on the channel of dissemination (e.g. through a messaging app or posted on a social network site or a website). The depicted child cannot be said to actively participate in the online sexual act despite the impact it could have on him/her. An interesting question is raised when assessing the 'outcome' dimension. It is clear that the act in

question does not fall within searching for information or exploration of sexual identity. It rather leans towards exploitation, yet when discussing the dimensions our focus was predominantly on exploitation with a commercial or sexual aim, whereas when it comes to children there might also be other motivations ('a joke', bragging, revenge) (Walrave M et al., 2018a, pp.39ff). There are already jurisdictions, such as Belgium, in which criminal legislation applies to the non-consensual dissemination of sexual images. In the respective criminal provision the focus is predominantly on the lack of consent and the disclosure and dissemination of the picture, and not on the outcome of the offender, because of the potential impact on the victim and the intrusion on his or her private life (Beyens J & Lievens E, 2016).

3.2.3 Unwilling reception of sexually suggestive or explicit material

A third example is the unwilling reception of sexual or sexually explicit material depicting a child. In such a case, the recipient of the sext is passive, does not want to receive the imagery or video or might not even be aware of the intention (and the identity) of the sender. Nonetheless, the former factually possesses pornographic material that depicts a child and thus the question arises whether such an act shall be interpreted as criminalised possession of CSAM and be punished pursuant to the respectful national Criminal Code provision. It remains contestable whether the individual is exempted from the criminal legislation as he/she has not taken up an active role in the act and had no intention to be involved as a recipient of such material. At the same time, questions may be raised as to whether the sender child might commit an illegal act when he or she sends a sexually explicit image to someone who does not want to receive such an image. As such, he or she takes up an active role, might do this either with an intention to explore his or her sexual identity (e.g. as a way of flirting) or with a more exploitative aim (e.g. with the intent to harass), but there is no consent from the receiver. This begs the question whether consent always needs to be present both at the side of the receiver and at the side of the sender.

3.2.4 Creation, Dissemination and Possession of Fake Pornographic Material that Depicts a Child

A fourth example is the creation, dissemination and possession of fake pornographic material that depicts a child. In this case the dimension playing the most important role in the legal qualification of the act refers to the nature of the representation of the child, be it virtual or non-virtual. The relevant question is whether the production, dissemination and possession of fictional erotic or sexual material involving children may qualify as production, dissemination and possession of CSAM. Attention is subsequently steered toward the scope of application of the relevant criminal provisions; it is not always self-evident that the legislator intended to cover the sexual representation of virtual children in material created by digital means. National legislators do not necessarily make an explicit distinction between the real or virtual representation of a child when regulating the production, dissemination and possession of CSAM (Lanzarote Committee, 2017), despite such a possibility to criminalise acts even when the pornographic material visually depicts a person appearing to be a minor engaged in sexually explicit conduct or realistic images representing a minor engaged in sexually explicit conduct being provided for in the CoE Convention on Cybercrime.

As already pointed out above, the creation, dissemination and possession of pornographic material that is either fake or depicts a non-virtual child may cause harm to children *in abstracto*. Consequently, the *outcome* of the act and the *intent/underlying motive* of the actor ought to be reconsidered by the legislator so as to ensure the criminalisation of acts that have a detrimental impact on children (even if not strictly physical).

4. Conclusion

In the context of our research, the value of developing a typology is twofold. First, it allows for a much more fine-grained understanding of online sexual acts in which children are involved. The comprehension of the notion 'online sexual acts' is multidimensional and, therefore, multiple denominators ought to be considered when reflecting on the online sexual acts in which children are involved. A consistent mapping offers an insight into the range of sexual activities, their characteristics and actors that are involved or play a role. The typology also confirms that the use of digital means of communications as a vehicle for sexual interactions adds to the already high intricacies of offline social interactions and sexual exploration. Second, the typology facilitates the legal qualification of online sexual acts in which children are involved. It does so at two levels. First, it helps to answer the evaluative question 'does a specific act (currently) fall within the scope of the regulatory framework? It has become clear that some of the dimensions might be crucial in determining this (e.g. public versus private). Second, and perhaps even more important, the dimensions, and moreover, the combination of dimensions, are valuable to answer the normative question, *should* a specific act fall within the scope of the regulatory framework? The outcome of a certain act, the role of the various actors and whether there is a lack of consent on behalf of one of the actors, for instance, are elements that should be thought about more carefully in constructing a balanced regulatory approach that reflects the ever-evolving reality. As such, building on the validation exercise, the typological construction shall be used as a tool for further determining the appropriate legal classification of and regulatory approach to all sexual acts that potentially occur in children's everyday lives. In the end, in addition to leading to a better understanding or assessment of the applicability of existing legislative provisions, it especially intends to contribute to a more fine-tuned framing of 'legitimate' and 'illegitimate' sexual acts against the background of a wide array of children's rights and to novel regulatory approaches that acknowledge children's autonomy and evolving sexuality, on the hand, and protect them against abuse, on the other hand.

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[1] Argyro Chatzinikolaou (Law & Technology, Ghent University) & Eva Lievens (Law & Technology, Ghent University)

[2] The term 'child' is widely understood as including any person who is under the age of 18 years (article 1 United Nations Convention on the Rights of the Child (UNCRC)), whereas 'juvenile', 'adolescent', 'teenager', 'young person/people' and 'youth' are all terms, the use of which – according to the Luxembourg Guidelines – ought to be carefully considered, for instance because these notions could also refer to individuals above the age of 18. As regards the notion 'minor', the Guidelines state that 'its meaning can vary greatly depending on national legislation, and sometimes has a negative connotation'. See: Terminology and Semantics – Interagency Working Group on Sexual Exploitation of Children. *Terminology guidelines for the Protection of Children from Sexual Exploitation and Sexual Abuse* (2016). Available at: <http://luxembourgguidelines.org/#>, pp.5-11. Therefore, throughout this text 'child' or 'children' is used. The authors are aware that this notion covers a wide age range (0-18), and that the equally wide range of acts that are discussed in this paper involve children of very different ages.

[3] See for instance: United Nations Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography, Council of Europe Convention on Cybercrime, Council of Europe Convention on Protection of Children against Sexual Exploitation and Sexual Abuse, and EU Directive on combating the sexual abuse and sexual exploitation of children and child pornography.

[4] Sexual harassment is an umbrella term which also encompasses situations in which the person perceives sexual conduct as being offensive or intimidating (e.g. the expression of sexual comments). See Istanbul Convention, Explanatory Report, paragraph 208, which specifies that the acts must have the 'purpose or effect of violating the dignity of the victim'.

[5] This was first reported with regard to a REDDIT user by the name of 'deepfakes'. See: Statt, N (2018), 'Fake Celebrity Porn Is Blowing Up On Reddit, Thanks To Artificial Intelligence' (*The Verge*) <<https://www.theverge.com/2018/1/24/16929148/fake-celebrity-porn-ai-deepfake-face-swapping-artificial-intelligence-reddit>> accessed 18 March 2018.

[6] See Council of Europe Convention on Cybercrime, Article 9 par. 2(b) and (c).

[7] 'Grooming' falls under the notion of 'solicitation of children for sexual purposes', along with the 'online sexual enticement of children' and the 'sexual extortion of children'. Despite the undisputed importance of the definitional

differences between all types of online sexual harassment of children, only a limited number of activities are presented in this paper. For the purposes of the paper, 'online grooming' and 'online sexual extortion of children' are selected on the basis of their prevalence and the attention they have drawn in the media and in literature.

[8] 'Grooming' has been alternatively defined as 'online enticement of children for sexual acts'. See J.M. Petit, 'Report by the Special Rapporteur on the Sale of Children, Child Prostitution and Child Pornography', UN Commission on Human Rights, 23 December 2004, par. 13.

[9] The term was originally used to describe the sending or receiving of sexually explicit text messages. See: Rosenberg E (2011), 'In Weiner's wake, a brief history of the word 'sexting' (*The Wire*).

[10] See, for instance, 'Teenhelp' (*Teenhelp.org*) <<http://www.teenhelp.org/forums/>> accessed 18 March 2018. See distinct sector on 'Sex and Relationships' and subsections on 'Sex and Puberty', 'Pregnancy and Childcare', 'LGBT, Sexuality and Gender Identity' and 'Relationships and Dating'.

[11] Acts may be, for instance, also divided in *material sharing* and *live offering/consumption acts*.

[12] Freely accessible websites are distinguished from websites the access of which requires sign up and potentially a registration/access or membership fee.

[13] This could also be considered a solitary-arousal activity.