UDK 343.549-053.2:341.9]:004
347.63:341.9]:004
Original scientific paper

INTERNATIONAL FAMILY LAW IN THE AGE OF DIGITALISATION: THE CASE OF CROSS-BORDER SURROGACY AND INTERNATIONAL PARENTAL CHILD ABDUCTION*

Katarina Trimmings, PhD, Professor
University of Aberdeen, School of Law
High Street, Aberdeen, AB24 3UB, United Kingdom
k.trimmings@abdn.ac.uk

ABSTRACT

This article illustrates in an anecdotal way the impact of digitalisation on international family law. Specifically, it explores the part that digital technologies have played in the expansion of cross-border assisted reproduction, with a particular focus on cross-border surrogacy arrangements. It then examines the interface between international parental child abduction and facial recognition technologies. The EU approach to the use of AI-powered facial recognition technologies is explained, before considering the potential utility of facial recognition technologies in the specific context of international parental child abduction.

Keywords*: International Family Law, digitalisation, cross-border surrogacy, facial recognition, digital technologies, international parental child abduction*

1. INTRODUCTION

In one way or another, developments in the area of digital technologies over the past few decades have affected every area of law, including international family law. This article maps the impact that digital technologies have had on international family law in two distinct respects. First, it explains the role that the internet and other digital channels of communication such as smartphones (text and video messaging), social media, and applications such as WhatsApp have played in the

* This paper is co-funded by the Erasmus+ Programme of the European Union. The paper reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

growth of cross-border assisted reproduction. The legal consequences of this trend are then demonstrated using the example of cross-border surrogacy arrangements. Second, the article explores the interface between international parental child abduction and facial recognition technologies. The EU approach to the use of facial recognition technologies in the context of legal proceedings is discussed before considering the potential utility of these AI technologies in the specific context of international parental child abduction.

Cross-border surrogacy and international parental child abduction have been at the centre of the author's research over the past decade. In the course of her involvement in the DIGinLaw project from which this special issue stems, the author developed strong interest in digitalisation and the impact that digitalisation has had on different areas of law. This intellectual curiosity naturally led to a desire to explore the role of digitalisation within in her key areas of expertise – cross-border surrogacy and international parental child abduction. It should be noted that the underlying objective of the article is to exemplify the impact of digitalisation on international family law, without aiming to cover the topic in an exhaustive way or seeking to offer detailed solutions to the issues identified throughout the analysis.

2. DIGITAL TECHNOLOGIES AND CROSS-BORDER ASSISTED REPRODUCTION

It is more and more common for the delivery of healthcare to be facilitated by digital channels such as the Internet, smartphones (text and video messaging), social media, multi-platform instant messaging and voice-over-IP service apps (such as WhatsApp and Telegram) and telemedicine. This trend has been enabled by dispersion of mobile technology and rapid advances in artificial intelligence. Digital communication channels provide wide coverage, enable communication, including (often untrustworthy) advertising and information sharing to be directed at specific groups or individuals. The area of reproduction is no exception to this trend. Quite the contrary - the employment of assisted reproduction technologies combined with the use of the Internet[1] and other digital communication channels has led to the proliferation of modern family building methods. Traditionally, conception occurred through sexual intercourse between a male and female, with the male supplying the sperm and the female providing the ova. Assisted reproductive technologies ('ART') is the overarching term for various medical technolo-

[1] For an overview of concerns surrounding the use of the Internet in the context of cross-border assisted reproduction see Hird Chung, L., *Free Trade in Human Reproductive Cells: A Solution to Procreative Tourism and the Unregulated Internet*, Minnesota Journal of International Law, Vol. 15, 2006, pp. 263-296, 283-284.

gies that are employed to achieve conception through means other than sexual reproduction.[2] There are various ART techniques. The oldest and most common is Artificial Insemination ('AI'), followed by In Vitro Fertilization ('IVF').[3] These procedures aim at a successful fertilization of a human ova, with the view of creating an embryo. That embryo may then be stored for future use or implanted into a woman's uterus for gestation.[4] Gestation may be facilitated by a surrogate mother.[5] Over the past few decades, there has been a significant growth in ART practices using gamete or embryo donation and/or employing the services of surrogate mothers. The Internet and other technological developments have walked hand in hand with the growth of ART as potential 'suppliers' and 'consumers' are now able to connect in ways that were inconceivable in the past when the only avenue to advertise for gamete donors was through local newspapers.[6] In the context of surrogacy in particular, the Internet has played a significant role in this process as it has facilitated the making of surrogacy arrangements between adults – either directly[7] or via intermediaries.[8] In this regard, justified concerns have been expressed about the lack of legal regulation of such activities on the Internet and the potential for legal disputes further down the line.[9]

---

2 For a detailed overview of ART methods and recent trends in the field see e.g., Sheriff, D.S. (ed.), *Infertility, Assisted Reproductive Technologies and Hormone Essays*, IntechOpen, London, 2019.

3 See e.g., Dale, B.; Elder, K., *In Vitro Fertilisation*, Cambridge University Press, Cambridge, 1997; and Meniru, G.; Brinsden P.; Craft I., *A Handbook of Intrauterine Insemination*, Cambridge University Press, Cambridge, 1997.

4 For an overview of global embryo disposal practices and trends see Simopoulou, M. *et.al.*, *Discarding IVF Embryos: Reporting on Global Practices*, Journal of Assisted Reproduction and Genetics, Vol. 36, 2019, pp. 2447–2457.

5 Generally, see Trimmings, K.; Shakargy, S.; Achmad C., *Research Handbook on Surrogacy and the Law,* Edward Elgar Publishing, Cheltenham, 2024 (forthcoming).

6 See e.g., Storrow, R., *Quests for Conception: Fertility Tourists, Globalization and Feminist Legal Theory*, Hastings Law Journal, Vol. 57, 2006, pp. 295-330, who explores the dynamics of reproductive tourism in the globalization era.

7 See e.g., *Re A* [2014] EWFC 55 [1]: 'The adults met via an internet website upon which Wendy had posted her details effectively offering herself as a surrogate. AC [the intended mother] saw those details and contacted Wendy and the matter swiftly proceeded from there. […] An arrangement was reached between Wendy, AC and JD [the intended father] in 2012 that Wendy would carry a child for them using her own egg and JD's sperm.' Relevant groups can be hosted also on social media platforms such as Facebook. See e.g., *Re Z (A Child)* [2016] EWFC 34 [2]: 'The applicants, who are a same sex couple, were introduced to X through a Facebook surrogacy site, which was run or administered by W and others, to provide a forum for the introduction of potential surrogates and commissioning parents.'

8 In the UK, for example, negotiating a surrogacy arrangement on a commercial basis is a criminal offence, nevertheless, a number of agencies have been set up to facilitate surrogacy arrangements by making introductions, and providing advice and counselling to the parties: e.g, COTS Surrogacy UK, [https://www.surrogacy.org.uk/]; and Brilliantbeginnings, [https://brilliantbeginnings.co.uk/].

9 See e.g., an informal surrogacy arrangement case of *Re T (a child) (surrogacy: residence order)* [2011] EWHC 33 (Fam) [38], which involved a dispute between the intended parents and the surrogate

While many couples and individuals might need reproductive assistance in the form of gametes, embryos or surrogacy services, such assistance may be restricted or banned by the laws of their home countries. This leads to such persons bypassing the laws of their home countries by seeking reproductive assistance abroad. Other reasons for travelling abroad for reproductive treatment include possible unavailability or unaffordability of such treatment in one's home jurisdiction, lengthy waiting lists or simply convenience.[10] The practice of travelling for fertility treatment abroad is referred to as 'reproductive tourism' (also known as 'fertility tourism', 'procreative tourism' or 'cross-border reproductive care').[11] Technological advances have facilitated the development of reproductive tourism and cross-border family building using assisted reproduction.[12] As a result, the cross-border surrogacy market as well as the market in human gametes and, to a lesser extent, embryos, have grown exponentially over the past few decades.[13] Among the multitude of such cases worldwide, this reality is well illustrated by a UK cross-border surrogacy case of *Z and another v C and another.*[14] This case concerned a set of twins who had been conceived as a result of a surrogacy agreement between the intended parents (a same-sex male couple) and a clinic in India, arranged through a surrogacy agency based in Israel. The surrogate mother was Indian, one of the intended fathers was the genetic father and the egg donor originated from South Africa.[15] Being con-

---

mother over the custody of the surrogate-born child. In this case, the judge rightly expressed concerns 'about the dangerous and murky waters into which they [the parties] have strayed via the internet.' The parties had come across each other on an internet surrogacy site and connected in an internet chatroom. Prior to the intended parents entering into the arrangement with the surrogate mother, they had met another woman on an internet surrogacy site. That woman was already pregnant, and the intended parents most likely intended to buy the baby that she was carrying. This plan was aborted by the social services that later discovered that the woman was 'a prostitute, with seven children in care in Scotland', who was 'known on the internet as a surrogate parent […].' Ibid [40].

10 For a taxonomy of types of medical tourism see Cohen, G., *Patients with Passports*, Oxford University Press, Oxford, 2015, pp. 1-16.

11 See e.g., Ikemoto, L.C., *Reproductive Tourism Equality Concerns in the Global Market for Fertility Services*, in: Obasogie, O.K.; Darnovsky, M. (eds.), *Beyond Bioethics: Toward a New Biopolitics*, 2018, pp. 339 – 349; Pennings, G., *Legal Harmonization and Reproductive Tourism in Europe*, Reproductive Health Matters, Vol. 13, No. 25, 2005, pp. 120–128; and Deech, R., *Reproductive Tourism in Europe: Infertility and Human Rights*, Global Governance, Vol. 9, No. 4, 2003, pp. 425–432. On the moral aspects of reproductive tourism see Pennings, G., *Reproductive Tourism as Moral Pluralism in Motion*, Journal of Medical Ethics, Vol. 28, No. 6, 2002, pp. 337–341.

12 Sometimes, crafty intermediaries attract exhausted infertile couples or individuals by offers of ART treatments combined with vacations ('fertility holidays'). See Speier, A., *Fertility Holidays: IVF Tourism and the Reproduction of Whiteness*, New York University Press, New York, 2016.

13 For more details on these forms of reproductive tourism see e.g., Vida, P., *Surrogate Tourism and Reproductive Rights*, Hypatia, Vol. 28, No. 2, 2013, pp. 274–289.

14 *Z and another v C and another* [2011] EWHC 3181 (Fam).

15 *Ibid.* [2].

fronted by cases such as this, it is no exaggeration to say that we are living in the cyberprocreation era.[16]

More often than not, those engaging in reproductive tourism do not have the advantage of the reliable legal advice, counselling and support.[17] This is true in particular in relation to cross-border surrogacy arrangements. Unregulated form of surrogacy means that there are on the one side vulnerable surrogates, and on the other intended parents who are legally unprotected from unpredictable outcomes. Ethical concerns[18] aside, cross-border surrogacy arrangements, raise serious legal problems. Among these, the most salient is the question of recognition in the country of residence of the intending parent(s) of legal parenthood established in the country of birth. International and regional organisations have responded cautiously to the practice of cross-border surrogacy and emphasised the need to regulate the practice. In 2019, the UN Special Rapporteur on the sale of the child expressed concerns about the practice of cross-border commercial surrogacy in a Report presented to the Human Rights Council.[19]

At the same time, legislative endeavours to address private international law issues concerning children born through cross-border surrogacy have been ongoing since 2011 at the Hague Conference on Private International Law ('HCCH'),[20] whilst the jurisprudence of the European Court of Human Rights ('ECtHR' or 'the Court') on cross-border surrogacy dates back to 2014, when the pivotal case of *Mennesson v France*[21] reached the Court. It has been followed by a number of

---

16 See Swink D.; Reich, B., *Outsourcing Reproduction: Embryos and Surrogacy Services in the CyberProcreation Era*, Ethics and Business Law Faculty Publications, Vol. 14, 2011, pp. 1-62.

17 See comment by Baker J in *Re T (a child) (surrogacy: residence order)* [2011] EWHC 33 (Fam) [2].

18 Deonandan, R.; Green, S.; van Beinum, A., *Ethical Concerns for Maternal Surrogacy and Reproductive Tourism*, Journal of Medical Ethics, Vol. 38, 2012, pp. 742-745.

19 UN Special Rapporteur on the Sale of the Child, *Report of the Special Rapporteur on the sale and sexual exploitation of children, including child prostitution, child pornography and other child sexual abuse material*, A/74/162, 2019, [https://documents-dds-ny.un.org/doc/UNDOC/GEN/N19/216/49/PDF/N1921649.pdf?OpenElement], Accessed 20 July 2023. In the Report, the Special Rapporteur noted the presence of abusive practices in both unregulated and regulated contexts and expressed concerns that the practice of engaging surrogate mothers in States with emerging economies to bear children for more wealthy intending parents from other States entails power imbalances and presents risks for both the children and surrogate mothers.

20 See Hague Conference on Private International Law, Parentage / Surrogacy Project, 2011-to date, [https://www.hcch.net/en/projects/legislative-projects/parentage-surrogacy], Accessed 20 July 2023.

21 *Mennesson v France*, Application No. 65192/11, ECHR 2014 (extracts). Decided jointly with the case of *Labassee v France*, Application No. 65941/11, 26 June 2014. The ECtHR faced the question of the inability of children born in a foreign jurisdiction through a gestational surrogacy arrangement and their intended parent(s), to obtain recognition in the country of residence of the intended parent(s) of the parent-child relationship legally established between them in the country of birth. The Court ruled that the child's right to respect for his or her private life, which encompasses the right to identi-

other cases involving surrogacy arrangements with a cross-border element.[22] It is beyond the scope of this paper to analyse the work of the HCCH or the ECtHR case-law; the aim is to merely illustrate the policy consequences of the complexities of cross-border reproduction in the era of modern technologies.

3. INTERNATIONAL PARENTAL CHILD ABDUCTION AND FACIAL RECOGNITION TECHNOLOGIES

This section explores the interface between facial recognition technology ('FRT') powered by artificial intelligence ('AI')[23] and international parental child abduction. The section starts with a brief overview of the EU policy on the use of the FRT, and the fundamental rights considerations that surround the use of FRT, including by the public sector, law enforcement and border management. It then sets out the instruments that govern parental child abduction in the EU, before considering whether, in the light of the fundamental rights and other considerations, it would be appropriate to use FRT to locate abducted children and abducting parents in the EU in proceedings for the return of abducted children under the 1980 Hague Convention on the Civil Aspects of International Child Abduction.

3.1. Facial recognition in the EU

Facial recognition technology (FRT)[24] makes it possible 'to detect, identify and verify a person or an object from a digital image or video footage based on specific

---

ty, required that domestic law provide a possibility of recognition of the legal relationship between a child born through a surrogacy arrangement abroad and the intended father, where he is the biological father. The Court emphasised that 'respect for private life require[d] that everyone should be able to establish details of their identity as individual human beings, which include[d] the legal parent-child relationship' and that 'an essential aspect of the identity of individuals [was] at stake where the legal parent child relationship [was] concerned'. *Mennesson v France* [96].

22 An overview of the ECtHR case law can be found here: European Court of Human Rights, Press Unit, *Factsheet – Gestational Surrogacy*, 2022, [https://www.echr.coe.int/Documents/FS_Surrogacy_eng.pdf], Accessed 19 July 2023. For a more detailed analysis see e.g., Trimmings, K., *Surrogacy Arrangements and the Best Interests of the Child: The Case Law of the European Court of Human Rights* in: Bergamini, E.; Ragni, C., *Fundamental Rights and Best Interests of the Child in Transnational Families*, Intersentia, Cambridge, 2019, pp. 187-207; Cammu, N.; Vonk, M., *The Significance of Genetics in Surrogacy* in: Trimmings *et al., op. cit.,* note 5; and Tryfonidou, A., *Surrogacy in the ECtHR and European Institutions* in: Trimmings *et al., op. cit.,* note 5.

23 For a detailed analysis of various aspects of artificial intelligence see Barfield, W.; Pagallo, U., (eds.), *Research Handbook on the Law of Artificial Intelligence*, Edward Elgar Publishing, Cheltenham, 2018.

24 For a detailed overview of face recognition systems see Adjabi, I., *et al.*, *Past, Present, and Future of Face Recognition: A Review*, Electronics, Vol. 9, No. 8, 2020, p. 1188.

facial or other features.'[25] It enables the comparison of digital facial images with the view of establishing whether they are of the same person.[26] When footage obtained from video cameras (CCTV) deployed in public spaces is compared with images in databases, this is known as 'live facial recognition technology'.[27] In the EU, the discussion about facial recognition technology has grown considerably in recent years. As the technology becomes more advanced, concerns have been raised in terms of surveillance, privacy, consent, accuracy and bias.

3.1.1. EU Fundamental Rights Agency: key considerations

In its 2019 Focus Paper,[28] the EU Fundamental Rights Agency set out the key aspects that must be considered before deploying facial recognition technologies in real life applications.

First, a clear and sufficiently detailed legal framework must regulate the deployment and use of facial recognition technologies. In deciding when the processing of facial images is necessary and proportionate, the following two issues have to be considered: first, the purpose for which FRT is being utilised; and second, the protections in place to safeguard persons whose facial images are being processed from adverse effects. [29] Forms of facial recognition that involve a very high degree of intrusion into fundamental rights are unlawful.

Second, the processing of facial images for verification purposes must be distinguished from the processing of facial images for identification purposes.[30] The former means that two facial images are compared to determine if they are of the same person whereas the latter occurs when 'a facial image is run against a database or watchlist of facial images'.[31] This distinction is important as the processing of

---

25 European Commission, *Study on the Use of Innovative Technologies in the Justice Field*, 2020, p. 13, [https://op.europa.eu/en/publication-detail/-/publication/4fb8e194-f634-11ea-991b-01aa75ed71a1], Accessed 20 July 2023. For a detailed overview of FRT that links the technical and the socio-political discourse on the topic see Introna, L.; and Nissenbaum, H., *Facial Recognition Technology: A Survey of Policy and Implementation Issues*, Lancaster University Management School Working Paper 2010/030, [https://eprints.lancs.ac.uk/id/eprint/49012/1/Document.pdf], Accessed 10 May 2023.

26 O'Flaherty, M., *Facial Recognition Technology and Fundamental Rights*, European Data Protection Law Review, Vol. 6, 2020, pp. 170-173, 170.

27 *Ibid*.

28 European Union Agency for Fundamental Rights, Facial Recognition Technology: Fundamental Rights Considerations in the Context of Law Enforcement, 2019, [https://fra.europa.eu/en/publication/2019/facial-recognition-technology-fundamental-rights-considerations-context-law], Accessed 12 March 2023.

29 *Ibid.*, p. 33.

30 *Ibid*.

31 *Ibid*.

facial images for identification purposes carries a higher risk of interference with fundamental rights, and therefore, the necessity and proportionality assessment must be more rigorous.

Third, so-called 'live facial recognition technologies' are particularly challenging. This form of employment of FRT raises concerns over imbalance of power between the State and the citizen. These concerns must not be underestimated, especially as citizens are likely to be unaware that their facial image is being compared against a database/watchlist and considering the higher level of error when compared to the use of facial images taken in controlled environment (e.g., a police station).[32] Therefore, 'live facial recognition technologies' should not be routinely employed, and their use should be 'strictly limited to combatting terrorism and other forms of serious crime, or to detect missing people and victims of crime.'[33]

Fourth, FRT algorithms provide only probabilities that two images are of the same person; they do not give a conclusive result. In the law enforcement sphere, there is therefore a possibility that a person will be erroneously flagged. Such incidents must be curtailed, and persons identified by the technology must be 'treated in a dignified in manner'.[34]

Fifth, public authorities normally entrust the development and procurement and of FRTs to private companies. In this process, such companies such be contractually bound to build fundamental rights considerations into technical specifications of the technologies they develop and/or procure.[35] It is imperative to ensure that data protection and non-discrimination requirements in particular are placed at the centre of all technical specifications.[36]

Sixth, it is essential that a fundamental rights impact assessment is carried out invariably with the view of guaranteeing a fundamental rights compliant application of FRTs in all contexts.[37] This assessment must cover in a comprehensive way all the rights that are potentially affected, and private companies should provide

---

32 *Ibid.*, p. 34.

33 *Ibid*.

34 *Ibid*.

35 *Ibid*.

36 See also Castelluccia, C.; Le Métayer Inria, D., *Impact Analysis of Facial Recognition: Towards a Rigorous Methodology*, Centre for Data Ethics and Innovation, 2020, [https://inria.hal.science/hal-02480647/document], Accessed 14 April 2023. The authors suggest that standards for the testing, validation and certification of FRT should be clearly defined and verifiable by independent third parties. They should provide 'guarantees regarding the compliance of these systems with essential requirements, for example in terms of accuracy, absence of bias and database security.'

37 European Union Agency for Fundamental Rights, *op. cit.,* note 28, p. 34. See also Castelluccia *et al., op. cit.,* note 36. For an example in a related area see e.g., privacy impact assessment tool proposed by

public authorities with all necessary information.[38] Trade secrets or confidentiality considerations should not obstruct the process.[39]

3.1.2. Proposed Artificial Intelligence Act ('AI Act')

The proposed AI Act from April 2021[40] classifies different AI applications depending on their risks and implement varying degrees of restrictions.[41] The Proposal considers AI under four different categories: unacceptable risk, high-risk, limited risk and minimal risk.[42] In cases of unacceptable risk, AI systems considered a clear threat to the safety, livelihoods and rights of people will be banned.[43] This includes so-called social credit scores, such as a controversial system seen in China, and applications that can be seen as manipulating human behaviour.[44] Facial recognition falls within the next category - i.e., high-risk. High-risk cases include the use of AI in critical infrastructure, law enforcement, migration and border patrol, employment and recruitment, and education.[45] The proposal requires that these applications implement strict security controls, maintain logs of how the

---

the French Data Protection Agency (CNIL), *Privacy Impact Assessment (PIA)*, [https://www.cnil.fr/en/privacy-impact-assessment-pia], Accessed 20 July 2023.

38 Castelluccia *et al., op. cit.,* note 36.

39 *Ibid*. See also Council of Europe Commissioner for Human Rights, *Unboxing Artificial Intelligence: 10 steps to protect Human Rights – Recommendation*, 2019, [https://rm.coe.int/unboxing-artificial-intelligence-10-steps-to-protect-human-rights-reco/1680946e64], Accessed 20 July 2023.

40 Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, COM/2021/206 final ('AI Act Proposal'). In addition to the proposed AI Act, the EU legal framework pertinent to facial recognition includes the so-called Law Enforcement Directive (Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA). This instrument applies to both domestic and cross-border processing of personal data by competent authorities to prevent, investigate, detect or prosecute criminal offences and execute criminal penalties, including safeguarding against and preventing threats to public security.

41 For a detailed analysis of the proposed Regulation see e.g., Veale, M.; and Zuiderveen Borgesius, F., *Demystifying the Draft EU Artificial Intelligence Act — Analysing the Good, the Bad, and the Unclear Elements of the Proposed Approach*, Computer Law Review International, Vol. 22, No. 4, 2021, pp. 97-112.

42 For a detailed analysis see European Parliament, Regulating Facial Recognition in the EU, 2021, pp. 24-31, [https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/698021/EPRS_IDA(2021)698021_EN.pdf], Accessed 20 July 2023.

43 European Commission, *Regulatory Framework Proposal on Artificial Intelligence*, [https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai], Accessed 13 May 2023.

44 Cheung, A.; and Chen, Y., *From Datafication to Data State: Making Sense of China's Social Credit System and Its Implications*, Law & Social Inquiry, Vol. 47, No. 4, 2022, pp. 1137-1171.

45 AI Act Proposal, *op. cit.,* note 40, Annex III.

technology is used for auditing,[46] and provide data to users on how the AI operates. Furthermore, it requires some human oversight of the technology in use.[47] This category still allows for the use of (so called) 'remote biometric identification systems', such as live facial recognition, subject to strict requirements.[48] Live use of this technology in publicly accessible spaces for law enforcement purposes is prohibited in principle, but narrow exceptions are strictly defined and regulated.

The bill is currently being amended by members of the European Parliament and EU Member States. The negotiations have seen a fierce debate over the use of facial recognition technologies.[49] Some MEPs and civil society organisations are of the view that, given the inherent risks of violations of fundamental rights, the AI Act should ban the use of facial recognition in public places.[50] This view is shared by some EU Member States. For example, Germany has said that it supports a full ban on the use of facial recognition in public places.[51] Other countries such as France, want to make exceptions for using facial recognition to protect national security.[52]

It is essential that the European legislator gets this right, not only in order to ensure the protection of the safety and fundamental rights of EU citizens but also because the EU is aspiring to lead the development of new global norms to make sure AI can be trusted. It is hoped that by setting the standards, the EU can pave the way to ethical technology worldwide.

3.1.3. Fundamental rights considerations

Recent developments in the field of AI powered FRT are not only of a potential use to private enterprises but are of interest also to the public sector, law enforcement and border management not excluding.[53] Such application scenarios include for example situations where a FRT would identify individuals in a crowd, and being connected to video surveillance systems (CCTV) monitoring outdoor areas,

---

46 *Ibid.*, Art 12.

47 *Ibid.*, Art 14.

48 *Ibid.*, Art 5(1)(d).

49 For a detailed analysis see European Parliament, *op. cit.,* note 42, p. 34.

50 European Digital Rights (EDRi), *Will the European Parliament Stand Up for Our Rights by Prohibiting Biometric Mass Surveillance in the AI Act?*, 2022, [https://edri.org/our-work/will-the-european-parliament-stand-up-for-our-rights-by-prohibiting-biometric-mass-surveillance-in-the-ai-act/], Accessed 10 April 2023.

51 Politico, *Europe Edges Closer to a Ban on Facial Recognition*, 2022, [https://www.politico.eu/article/europe-edges-closer-to-a-ban-on-facial-recognition/#:~:text=And%20while%20the%20European%20Commission,locating%20armed%20and%20dangerous%20criminals], Accessed 19 June 2023.

52 *Ibid*.

53 O'Flaherty *et al., op. cit.*, note 26.

the FRT system would alert authorities to the presence of a missing person/child.[54] In another typical application scenario, authorities may take advantage of control points set up at certain places such as passport inspection points or security checkpoints at airports, where agents may intentionally or inadvertently compel the passengers to make eye contact, which is likely to result in a higher success of the true identity verification of the subject than in the previous application scenario.[55] When footage obtained from video cameras (CCTV) is compared with images in databases, this is known as 'live facial recognition technology'.[56]

Recent technological developments have resulted in increased accuracy of FRTs. This in turn has encouraged many public authorities across the world to start using, testing or planning the use of FRTs. For example, the police in the United Kingdom carried out several tests in real life situations such as sports events, even using real watch lists. Other law enforcement agencies tested the accuracy of the technology in larger tests with volunteers, such as the police in Berlin, Germany or in Nice, France.[57]

Using FRT affects a range of fundamental rights, and a number of questions arise from a fundamental rights perspective: is this technology appropriate for law enforcement and border management use? Which fundamental rights are most affected when this technology is deployed? What measures should public authorities take to guarantee that these rights are not violated?

The fundamental rights repercussions of using FRT differ substantially depending on the objective, context and extent of the employment of such technologies. Some of the fundamental rights concerns are caused by FRT's lack of accuracy.[58] For

---

54 Introna *et al., op. cit*., note 25, p. 20.

55 *Ibid.*

56 O'Flaherty *et al., op. cit*., note 26.

57 During the Nice carnival in February 2019: see Ville de Nice, *Rapport: Experimentation Reconnaissance Faciale*, 2019, [https://s3.documentcloud.org/documents/6350838/Bilan-Reconnaissance-Faciale.pdf], Accessed 15 April 2023.

58 In this context, it has been suggested that '[i]t will still be some time before FRT will be able to identify "a face in the crowd" (uncontrolled environments) with any reasonable level of accuracy and consistency. It might be that this is ultimately an unattainable goal, especially for larger populations. […] with large populations it will create many biometric doubles that then need to be sorted out using another biometric.' Introna *et al., op. cit*. note 25, p. 46. To this effect, some commentators have argued for multi-modal biometric systems, e.g., merging of face recognition with gait recognition (or even voice recognition) to carry out identification at a distance. Ibid. See also Goldenfein, J., *Facial Recognition is Only the Beginning*, 2020, [https://www.publicbooks.org/facial-recognition-is-only-the-beginning/], Accessed 12 April 2023. Crumpler W., *How Accurate are Facial Recognition Systems – and Why Does It Matter?*, 2020. [https://www.csis.org/blogs/strategic-technologies-blog/how-accurate-are-facial-recognition-systems-and-why-does-it], Accessed 20 July 2023. Schneier, B., *We Are Banning*

example, FRT has higher error rates when used on women and people of colour, which raises concerns over gender and racial bias similar to controversial practices such as racial profiling.[59] This can eventually lead to discrimination,[60] suggesting that 'such systems do not belong in societies with aspirations of egalitarianism.'[61] But, importantly, several fundamental rights concerns would remain even if there were a complete absence of errors. For instance, the way facial images are obtained and used - potentially without consent or opportunities to opt out - can have a negative impact on people's dignity. Meaningful consent 'recognises subjects as decision makers by providing them information and the capacity to accept or reject conditions of the system (for example, allowing people to opt out of a particular service or place if it requires enrolment in a system and identification).'[62] This includes situations when an organisation or a state authority that has endorsed the use of FRT must enrol relevant persons, e.g., employees, customers, members into the system gallery. Is it ever appropriate to compel participation in such image databases?[63] Similarly, the use of facial recognition technology can also have a negative impact on the freedom of assembly and the freedom of expression, if people fear that facial recognition technology is being used to identify them ('chilling effect'). Inability to act as one wishes may not necessarily be of a concern if such conduct would be harmful to others; indeed, the values of freedom and autonomy would surely be trumped by a security threat.[64] Moreover, there are possible long-term implications. Curtailing privacy by processing large amounts of personal data, including in particular individual faces, may ultimately affect the functioning of democracy, since privacy is a core value inherent to a liberal democratic and pluralist society, and a cornerstone for the enjoyment of fundamental rights. Finally, in a more general sense, some academic commentators have suggested that the subjects of facial recognition both 'lack recognition for their individual uniqueness' as well as 'struggle to obtain adequate recognition on a universal level', arguing that these types of 'misrecognition' may impair a person's identity formation.[65]

The risk of errors in matching faces is the most frequently raised fundamental rights concern. However, fundamental rights concerns stem commonly also from

---

Facial Recognition. We're Missing the Point, New York Times, 20 January 2020, [https://www.nytimes.com/2020/01/20/opinion/facial-recognition-ban-privacy.html], Accessed 10 April 2023.

59 Introna *et al., op. cit.*, note 25, p. 45.

60 O'Flaherty *et al., op. cit.*, note 26, p. 171.

61 *Ibid*.

62 Introna *et al., op. cit.*, note 25, p. 46.

63 *Ibid.*

64 *Ibid*.

65 Waelen, A., *The Struggle for Recognition in the Age of Facial Recognition Technology*, AI Ethics, Vol. 3, 2023, pp. 215–222, following Charles Taylor's *The Politics of Recognition* (1992) and Axel Honneth's *The Struggle for Recognition* (1996).

the weak position of the individuals whose facial images are captured and processed. Fundamental rights affected include, among others, human dignity, the right to respect for private life, the protection of personal data,[66] non-discrimination, the rights of the child and the elderly, the rights of people with disabilities, the freedom of assembly and association, the freedom of expression, the right to good administration, and the right to an effective remedy and to a fair trial. All these rights are enshrined in international and regional human rights law, including the EU Charter of Fundamental Rights.

3.2. International parental child abduction

The key international instrument providing for a worldwide regulation of international parental child abduction is the 1980 Hague Convention on the Civil Aspects of International Child Abduction[67] ('the 1980 (Hague) Convention'). With currently 101 Contracting States,[68] the Convention can be viewed as one of the most successful family law instruments to be completed under the auspices of the Hague Conference on Private International Law.

Within the European Union, the operation of the 1980 Hague Abduction Convention has been modified by certain provisions of the Council Regulation (EU) 2019/1111 of 25 June 2019 on jurisdiction, the recognition and enforcement of decisions in matrimonial matters and the matters of parental responsibility, and on international child abduction (recast).[69] This EU instrument aims at creating even more ambitious rules on child abduction by imposing stricter obligations to assure the prompt return of a child.[70]

3.2.1. Locating the child and the abducting parent

Each Contracting State to the 1980 Convention must designate a so called 'Central Authority', which is responsible for the functioning of the Convention within

---

66 More generally, see Leenes, R.; De Conca, S., *Artificial Intelligence and Privacy – AI Enters the House Through the Cloud* in: Barfield *et al., op. cit.*, note 23, pp. 280-306.

67 Hague Convention on the Civil Aspects of International Child Abduction, 25 October 1980 ('1980 Hague Abduction Convention').

68 Hague Conference on Private International Law, *Status Table: Convention of 25 October 1980 on the Civil Aspects of International Child Abduction*, [https://www.hcch.net/en/instruments/conventions/status-table/?cid=24], Accessed 20 July 2023.

69 Council Regulation (EU) 2019/1111 of 25 June 2019 on jurisdiction, the recognition and enforcement of decisions in matrimonial matters and the matters of parental responsibility, and on international child abduction (recast) [2019] OJ L 178 ('Brussels IIa Recast Regulation').

70 See, generally, Trimmings, K., *Child Abduction within the European Union*, Hart Publishing, Oxford, 2013.

its territory.[71] In cases where, following the abduction, the whereabouts of the child are not known to the left-behind parent, the Central Authority is under the obligation to assist other competent authorities in locating the child.[72] This may be a situation where the abducting parent goes into hiding with the child, trying to prevent the child's return to the country of his/her habitual residence.[73] The question arises whether facial recognition software could be used to establish the whereabouts of such abducting parent and the child.

Not much has been written by academic commentators on the problem of locating children in international parental child abduction cases. The Hague Conference on Private International Law has emphasised on various occasions that 'Central Authorities, in seeking to locate children, should be able to obtain information from other governmental agencies and authorities and to communicate such information to interested authorities.'[74] The second Special Commission meeting of the Hague Conference to review the operation of the 1980 Convention encouraged Contracting States to include in their implementing legislation provisions giving wide powers to trial judges to locate a child even before the formal initiation of return proceedings. This should 'minimise delay in the initial location of the child, and thereby facilitate the initiation of return proceeding.'[75] It was also suggested that 'legislation may articulate powers for trial judges to direct third parties to disclose information about the location of children, or to issue a warrant for the authorities to make appropriate inquiries.'[76] Significantly, the Hague Conference Guide to Good Practice, Part 1 on Central Authorities states that 'Interpol can play a constructive and helpful role in locating abducted children.'[77] In some

---

71 1980 Hague Abduction Convention, *op. cit.* note 67, art 6. See also Hague Conference on Private International Law, *Guide to Good Practice under the Hague Convention of 25 October 1980 on the Civil Aspects of International Child Abduction: Part I – Central Authority Practice*, 2003, paras 4.10; 4.11; 5.24; and 5.25., [https://assets.hcch.net/docs/31fd0553-b7f2-4f34-92ba-f819f3649aff.pdf], Accessed 13 July 2023.

72 1980 Hague Abduction Convention, *op. cit.* note 67, art 7. Article 7(a) of the Convention imposes an obligation on Central Authorities to take appropriate steps to help locate a child.

73 E.g., *Re H. and Re S. and Another (Minors) (Abduction: Custody Rights)* [1991] 2 A. C. 476.

74 E.g., Hague Conference on Private International Law, *Conclusions and Recommendations of the Fourth Meeting of the Special Commission to Review the Operation of the Hague Convention of 25 October 1980 on the Civil Aspects of International Child Abduction*, 22–28 March 2001, para 1.9., [https://assets.hcch.net/upload/concl28sc4_e.pdf], Accessed 20 July 2023.

75 Hague Conference on Private International Law, *Report of the Second Special Commission Meeting to Review the Operation of the Hague Convention on the Civil Aspects of International Child Abduction*, 18-21 January 1993, [https://assets.hcch.net/docs/432981e4-238b-4ed4-a41e-bb239d5acdac.pdf], Accessed 10 June 2023.

76 *Ibid.*

77 Hague Conference on Private International Law, *op. cit.* note 71, para 4.10. See also Saskatchewan (Canada), International Child Abduction: Locating your Child, [https://www.saskatchewan.ca/residents/justice-crime-and-the-law/child-protection/international-child-abduction/locating-your-child],

countries, parental child abduction is a criminal offence; in others, it is not. The Guide to Good Practice, however, explains that 'it is not necessary to institute criminal proceedings in order to seek such help, which may be obtained on the basis of a missing persons report.'[78]

3.2.2. Should FRT be employed in locating the child and the abducting parent?

Having explored the concept of facial recognition in the EU context and the concerns surrounding the use of such applications, let us consider now whether such technologies could be used in the context of international parental child abduction. There is a strong argument for employing FRT in cases of abductions of children by strangers – acts that amount to a criminal offence under domestic criminal laws of all EU Member States.[79] This is reflected in the proposed AI Act, under which the use of FRT for the purpose of tracing a missing child represents one of the narrowly defined exceptions to the employment of remote biometric identification systems in publicly accessible spaces for law enforcement purposes.[80] However, when it comes to children who have been abducted by their own parent, the argument in favour of the employment of FRT in the child abduction context becomes weaker, partly because of the lack of uniformity among the Contracting States to the 1980 Hague Abduction Convention in criminalising such abductions.

The matter of blanket retention of biometric data for law enforcement purposes of persons not convicted of a crime was addressed by the ECtHR in *S. and Marper v. the UK*.[81] The Court pointed out that such retention may be particularly damaging when it comes to children, 'given their special situation and the importance of their development and integration into society.'[82] Moreover, when facial recognition is used to prevent, detect and investigate crime, it is difficult to see how this may justify the processing of facial images of children below the age of criminal responsibility.

Another concern arises in cases where the child has been missing for a protracted period of time. Ageing, i.e., the time between an image is taken and when it is

---

Accessed 20 July 2023. The latter source lists police, Interpol, the FBI and border authorities as organisations that can assist in recovery of abducted children in Saskatchewan.

78 Hague Conference on Private International Law, *op. cit.* note 71, para 4.10.

79 For analysis of the interface between criminal law and AI more generally see Pagallo, U.; Quattrocolo, S., *The Impact of AI on Criminal Law, and Its Twofold Procedures*, in: Barfield *et al., op. cit.*, note 23, pp. 385-409.

80 European Commission, *Shaping Europe's Digital Future: Regulatory Framework Proposal on Artificial Intelligence*, [https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai], Accessed 21 July 2023.

81 *S. and Marper v the United Kingdom*, Application No. 30562/04 and 30566/04, Judgment, 4 December 2008 [GC].

82 *Ibid.*, para 124.

compared, negatively affects the accuracy of facial recognition technologies. Scientific research does not allow for conclusions on the reliability of a match when more than five years have passed. The same holds true for facial images of older people if compared to images taken many years earlier, and therefore is applicable also to the abducting parent. Nevertheless, two points must be made in this respect: first, cases of abducting parents going into hi ding for extended periods of time are relatively rare; and, second, the likelihood of the left-behind securing the return of the child under the 1980 Hague Convention diminishes with time as, under Article 12, the court in the return proceedings will have to consider whether the child is now settled in his/her new environment, and, if that's the case, consider refusing the return application.

At the same time, in some cases, the impact of FRT on the best interests of the child may also be positive. Facial recognition systems can contribute to protecting the right of the child to preserve their identity. In parental child abduction cases, given the illegal nature of the removal or the retention of the child by the abducting parent, the child's right to identity is often violated as he/she is separated from the left-behind parent without any contact taking place. In line with the United Nations Convention on the Rights of the Child[83] (to which all EU Member States are Parties), where a child is deprived of some or all of the elements of their identity, States must provide appropriate assistance and protection, with a view to quickly re-establishing the identity of the child.

Against this background, it is submitted here that facial recognition systems used by the police and border guards may help trace missing and abducted children in parental child abduction cases. However, States must ensure that the systems are human rights compliant (see above section 3.1.3. Fundamental rights considerations), not only vis-à-vis the abducted child but also the abducting parent whose whereabouts the authorities are seeking to trace for the purposes of return proceedings under the 1980 Hague Convention.

4. CONCLUSION

As this article has demonstrated, digitalisation has impacted also the field of international family law. Cross-border assisted reproduction, which invariably involves the use of the internet and other forms of digital technologies to connect the parties, is one example of such interaction. In this respect, cross-border surrogacy arrangements in particular demonstrate the legal complexities that often result from

[83] UN General Assembly, Convention on the Rights of the Child, 20 November 1989, United Nations, Treaty Series, Vol. 1577, p. 3, art 8.

such arrangements. Another example of the interface between international family law and digital technologies is the potential utility of AI-powered FRTs in the process of locating children and abducting parents in international parental child abduction cases under the 1980 Hague Abduction Convention. Although this is considered feasible, national legislators are urged to exercise caution to ensure that relevant legal frameworks guarantee protection of fundamental rights of the child and the abducting parent.

REFERENCES

BOOKS AND ARTICLES

1. Adjabi, I., et al*, Past, Present, and Future of Face Recognition: A Review*, Electronics, Vol. 9, No. 8, 2020, p. 1188
2. Barfield, W.; Pagallo, U. (eds.), *Research Handbook on the Law of Artificial Intelligence*, Edward Elgar Publishing, Cheltenham, 2018
3. Bergamini, E.; Ragni, C., *Fundamental Rights and Best Interests of the Child in Transnational Families*, Intersentia, Cambridge, 2019
4. Cheung, A.; Chen, Y., *From Datafication to Data State: Making Sense of China's Social Credit System and Its Implications*, Law & Social Inquiry, Vol. 47, No. 4, 2022, pp. 1137-1171
5. Cohen, G., *Patients with Passports*, Oxford University Press, Oxford, 2015
6. Dale, B.; Elder, K., *In Vitro Fertilisation*, Cambridge University Press, Cambridge, 1997
7. Deech, R., *Reproductive Tourism in Europe: Infertility and Human Rights*, Global Governance, Vol. 9, No. 4, 2003, pp. 425–432
8. Hird Chung, L., *Free Trade in Human Reproductive Cells: A Solution to Procreative Tourism and the Unregulated Internet*, Minnesota Journal of International Law, Vol. 15, 2006, pp. 263-296
9. Meniru, G.; Brinsden P.; Craft, I., *A Handbook of Intrauterine Insemination*, Cambridge University Press, Cambridge, 1997
10. Obasogie, O.K.; Darnovsky, M. (eds.), *Beyond Bioethics: Toward a New Biopolitics*, 2018.
11. O'Flaherty, M., *Facial Recognition Technology and Fundamental Rights*, European Data Protection Law Review, Vol. 6, 2020, pp. 170-173
12. Pennings, G., *Legal Harmonization and Reproductive Tourism in Europe*, Reproductive Health Matters, Vol. 13, No. 25, 2005, pp. 120–128
13. Pennings, G., *Reproductive Tourism as Moral Pluralism in Motion*, Journal of Medical Ethics, Vol. 28, No. 6, 2002, pp. 337–341
14. Sheriff, D.S. (ed.), *Infertility, Assisted Reproductive Technologies and Hormone Essays*, IntechOpen, London, 2019
15. Simopoulou, M. *et.al.*, *Discarding IVF Embryos: Reporting on Global Practices*, Journal of Assisted Reproduction and Genetics, Vol. 36, 2019, pp. 2447–2457
16. Speier, A., *Fertility Holidays: IVF Tourism and the Reproduction of Whiteness*, New York University Press, New York, 2016

17. Storrow, R., *Quests for Conception: Fertility Tourists, Globalization and Feminist Legal Theory*, Hastings Law Journal, Vol. 57, 2006, pp. 295-330
18. Swink D.; Reich, B., *Outsourcing Reproduction: Embryos and Surrogacy Services in the CyberProcreation Era*, Ethics and Business Law Faculty Publications, Vol. 14, 2011, pp. 1-62
19. Deonandan, R.; Green, S.; van Beinum, A., *Ethical Concerns for Maternal Surrogacy and Reproductive Tourism*, Journal of Medical Ethics, Vol. 38, 2012, pp. 742-745
20. Trimmings, K., *Child Abduction within the European Union*, Hart Publishing, Oxford, 2013
21. Trimmings, K.; Shakargy, S.; Achmad C., *Research Handbook on Surrogacy and the Law,* Edward Elgar Publishing, Cheltenham, 2024 (forthcoming)
22. Waelen, A., *The Struggle for Recognition in the Age of Facial Recognition Technology*, AI Ethics, Vol. 3, 2023, pp. 215–222
23. Veale, M.; Zuiderveen Borgesius, F., *Demystifying the Draft EU Artificial Intelligence Act — Analysing the Good, the Bad, and the Unclear Elements of the Proposed Approach*, Computer Law Review International, Vol. 22, No. 4, 2021, pp. 97-112
24. Vida, P., *Surrogate Tourism and Reproductive Rights*, Hypatia, Vol. 28, No. 2, 2013, pp. 274–289

ECHR

1. European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14, 4 November 1950, ETS 5
2. *Labassee v France*, Application No. 65941/11, 26 June 2014
3. *Mennesson v France*, Application No. 65192/11, ECHR 2014 (extracts)
4. *S. and Marper v the United Kingdom*, Application No. 30562/04 and 30566/04, Judgment, 4 December 2008 [GC]

EU LAW

1. Council Regulation (EU) 2019/1111 of 25 June 2019 on jurisdiction, the recognition and enforcement of decisions in matrimonial matters and the matters of parental responsibility, and on international child abduction (recast) [2019] OJ L 178
2. Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA
3. Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, COM/2021/206 final

INTERNATIONAL CONVENTIONS

1. Hague Convention on the Civil Aspects of International Child Abduction, 25 October 1980

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. *Re A* [2014] EWFC 55
2. *Re H. and Re S. and Another (Minors) (Abduction: Custody Rights)* [1991] 2 A. C. 476
3. *Re Z (A Child)* [2016] EWFC 34
4. *Re T (a child) (surrogacy: residence order)* [2011] EWHC 33 (Fam)
5. *Z and another v C and another* [2011] EWHC 3181 (Fam)

UNITED NATIONS SOURCES

1. UN Special Rapporteur on the Sale of the Child, *Report of the Special Rapporteur on the sale and sexual exploitation of children, including child prostitution, child pornography and other child sexual abuse material*, A/74/162, 2019, [https://documents-dds-ny.un.org/doc/UNDOC/GEN/N19/216/49/PDF/N1921649.pdf?OpenElement], Accessed 20 July 2023

WEBSITE REFERENCES

1. Castelluccia, C.; and Le Métayer Inria, D., *Impact Analysis of Facial Recognition: Towards a Rigorous Methodology*, Centre for Data Ethics and Innovation, 2020, [https://inria.hal.science/hal-02480647/document], Accessed 14 April 2023
2. Council of Europe Commissioner for Human Rights, *Unboxing Artificial Intelligence: 10 steps to protect Human Rights – Recommendation*, 2019, [https://rm.coe.int/unboxing-artificial-intelligence-10-steps-to-protect-human-rights-reco/1680946e64], Accessed 20 July 2023
3. Crumpler W., *How Accurate are Facial Recognition Systems – and Why Does It Matter?*, 2020, [https://www.csis.org/blogs/strategic-technologies-blog/how-accurate-are-facial-recognition-systems-and-why-does-it], Accessed 20 July 2023
4. European Union Agency for Fundamental Rights, *Facial Recognition Technology: Fundamental Rights Considerations in the Context of Law Enforcement*, 2019, [https://fra.europa.eu/en/publication/2019/facial-recognition-technology-fundamental-rights-considerations-context-law], Accessed 12 March 2023
5. European Commission, *Regulatory Framework Proposal on Artificial Intelligence*, [https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai], Accessed 13 May 2023
6. European Commission, *Shaping Europe's Digital Future: Regulatory Framework Proposal on Artificial Intelligence*, [https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai], Accessed 21 July 2023
7. European Commission, *Study on the Use of Innovative Technologies in the Justice Field*, 2020, [https://op.europa.eu/en/publication-detail/-/publication/4fb8e194-f634-11ea-991b-01aa75ed71a1], Accessed 20 July 2023
8. European Court of Human Rights, Press Unit, *Factsheet – Gestational Surrogacy*, 2022, [https://www.echr.coe.int/Documents/FS_Surrogacy_eng.pdf], Accessed 19 July 2023
9. European Digital Rights (EDRi), *Will the European Parliament Stand Up for Our Rights by Prohibiting Biometric Mass Surveillance in the AI Act?*, 2022, [https://edri.org/our-work/

will-the-european-parliament-stand-up-for-our-rights-by-prohibiting-biometric-mass-surveillance-in-the-ai-act/], Accessed 10 April 2023

10. European Parliament, Regulating Facial Recognition in the EU, 2021, [https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/698021/EPRS_IDA(2021)698021_EN.pdf], Accessed 20 July 2023
11. French Data Protection Agency (CNIL), *Privacy Impact Assessment (PIA)*, [https://www.cnil.fr/en/privacy-impact-assessment-pia], Accessed 20 July 2023
12. Goldenfein, J., *Facial Recognition is Only the Beginning*, 2020, [https://www.publicbooks.org/facial-recognition-is-only-the-beginning/], Accessed 12 April 2023
13. Hague Conference on Private International Law, *Conclusions and Recommendations of the Fourth Meeting of the Special Commission to Review the Operation of the Hague Convention of 25 October 1980 on the Civil Aspects of International Child Abduction*, 22–28 March 2001, [https://assets.hcch.net/upload/concl28sc4_e.pdf], Accessed 20 July 2023
14. Hague Conference on Private International Law, *Guide to Good Practice under the Hague Convention of 25 October 1980 on the Civil Aspects of International Child Abduction: Part I – Central Authority Practice*, 2003, [https://assets.hcch.net/docs/31fd0553-b7f2-4f34-92baf819f3649aff.pdf], Accessed 13 July 2023
15. Hague Conference on Private International Law, Parentage / Surrogacy Project, 2011-to date, [https://www.hcch.net/en/projects/legislative-projects/parentage-surrogacy], Accessed 20 July 2023
16. Hague Conference on Private International Law, *Report of the Second Special Commission Meeting to Review the Operation of the Hague Convention on the Civil Aspects of International Child Abduction*, 18-21 January 1993, [https://assets.hcch.net/docs/432981e4-238b-4ed4-a41e-bb239d5acdac.pdf], Accessed 10 June 2023
17. Hague Conference on Private International Law, *Status Table: Convention of 25 October 1980 on the Civil Aspects of International Child Abduction*, [https://www.hcch.net/en/instruments/conventions/status-table/?cid=24], Accessed 20 July 2023
18. Introna, L.; and Nissenbaum, H., *Facial Recognition Technology: A Survey of Policy and Implementation Issues*, Lancaster University Management School Working Paper 2010/030, [https://eprints.lancs.ac.uk/id/eprint/49012/1/Document.pdf], Accessed 10 May 2023
19. Politico, *Europe Edges Closer to a Ban on Facial Recognition*, 2022, [https://www.politico.eu/article/europe-edges-closer-to-a-ban-on-facial-recognition/#:~:text=And%20while%20the%20European%20Commission,locating%20armed%20and%20dangerous%20criminals], Accessed 19 June 2023
20. Saskatchewan (Canada), International Child Abduction: Locating your Child, [https://www.saskatchewan.ca/residents/justice-crime-and-the-law/child-protection/international-child-abduction/locating-your-child], Accessed 20 July 2023
21. Schneier, B., *We Are Banning Facial Recognition. We're Missing the Point*, New York Times, 20 January 2020, [https://www.nytimes.com/2020/01/20/opinion/facial-recognition-ban-privacy.html], Accessed 10 April 2023
22. Ville de Nice, *Rapport: Experimentation Reconnaissance Faciale*, 2019, [https://s3.documentcloud.org/documents/6350838/Bilan-Reconnaissance-Faciale.pdf], Accessed 15 April 2023