Vol XIII, Issue 1

THE ELSA LAW REVIEW

LEGACY COLLECTION

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THE ELSA LAW REVIEW LEGACY COLLECTION

This Issue is part of the Legacy Collection, a special edition of the ELSA Law Review comprising of the following issues:

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These issues have been collected from 2020 until 2024, but due to publication and internal difficulties not published on schedule. They have now been reviewed and compiled, and are presented here, as part of the Legacy Collection.

The Legacy Collection offers special recognition to authors of articles comprising these issues. Their works are preserved and displayed in the context of the Legacy Collection, which is also meant to contextualise the work into the legal landscape of the years during which it was written.

This Edition also includes a Foreword From the Future, a special addition to the ELSA Law Review to honour authors of these articles and thank them for their contributions.

Below is the list of contributors for the publication of this Issue in the Legacy Collection.

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FOREWORD FROM THE FUTURE

Dear Readers,

As we present this long-awaited issue of the ELSA Law Review, we wish to address and sincerely apologise for the significant delay in its release. We know that many of you have been eagerly anticipating this publication, and it is with genuine regret that we acknowledge the impact of this delay on our contributors, readers, and the broader ELSA Network.

This issue reflects the hard work, dedication, and expertise of each contributor who has shared their research and insights. It is a testament to the importance of our mission to promote legal scholarship and cross-border dialogue on human rights issues. Unfortunately, despite the passion and commitment invested by our team, we encountered challenges that led to unforeseen delays. We take full responsibility for this oversight, and we are grateful for your patience.

In response to these setbacks, we have stepped forward to implement crucial improvements to our publication process. We have worked tirelessly to introduce systems and practices that will make our future publications faster and more sustainable. We are confident that our processes are now more robust and equipped to meet the demands of regular, high-quality publication.

With the Legacy Collection, we renew our commitment to providing a platform for meaningful legal discourse and human rights advocacy. We are determined to uphold the standards of excellence that our readers and contributors expect and deserve, and we promise that we will do all we can to ensure that future issues of the ELSA Law Review are published on schedule.

A special thanks goes to all the legal experts in our newly established Academic Board, visible on the ELR website and from ELR XV onwards, who pledge their time and effort to the ELR. Finally, we thank our predecessors and their Publications Teams for identifying flaws with the publication process and giving us the opportunity to remedy them. Thank you all for your support, patience, and trust. We look forward to sharing this and many future issues with you.

Warm regards,

Niko Anzulović Mirošević
Vice President in charge of Academic Activities, International Board of ELSA 2024/2025

&

Velina Stoyanova
Director for Publications, ELSA International Team 2024/2025

FOREWORD

I am very pleased as Patron of the ELSA Law Review to be able to provide this foreword to the current edition on human rights and legal innovations.

Innovations are often born from moments of great change in history. Without a doubt we are living through a moment of great transformative change and here I am not just referring to the global pandemic.

Extra-judicially, I have pinpointed a number of global challenges which may require legal innovations as a response. For the purposes of this foreword, I would like to concentrate on just one of these challenges: climate change, which has recently been described as 'the biggest threat to security that modern humans have ever faced'.[1]

In recent years, there has been a growing trend of seeking legal remedies for climate change issues before the courts. It seems that some consider that the courts are a more direct and approachable forum than waiting for policy changes from governments. In the so-called *Urgenda* case[2] the Dutch Supreme Court, upholding the judgment of the national Court of Appeal and relying on the European Convention on Human Rights, ordered the Dutch government to reduce greenhouse gas emissions by 25% by the end of 2020 in line with its human rights obligations. Another example comes from Germany, following a complaint brought by young climate activists, the German Federal Constitutional Court earlier this year held that the 2019 German Federal Climate Change Act was partially unconstitutional.

At the international level, individuals and organisation are also using the Council of Europe's system for protecting human rights to help tackle environmental problems. A number of the international legal standards developed by the Council of Europe including the European Convention on Human Rights, the European Social Charter and the Bern Convention on the conservation of European wildlife and natural habitats have successfully been invoked to help make progress on environmental issues.

The European Court of Human Rights has already developed a rich environmental human rights jurisprudence. The Court has so far ruled on some 300 environment-related cases, applying

[1] Sir David Attenborough in his address to the UN Security Council on 23 February 2021.
[2] ECLI:NL:HR:2019:2007.

concepts such as the right to life, free speech and family life to a wide range of issues including pollution, man-made or natural disasters and access to environmental information, recognising positive obligations on the part of the State.

No direct and specific right to a healthy environment, environmental protection, or nature conservation exists under the European Convention on Human Rights. Such a right was not contemplated when drafting the Convention, as environmental issues were not yet considered topical or a priority at that time. The European Convention differs in this respective from some of the other regional human rights instruments which include a right to a healthy environment. Of course, the Convention's focus is on protecting the rights of individual persons. It is true in this sense that the European Convention is anthropocentric (the human person is the starting point for the Convention in its analysis of rights) and not eco-centric. In other words, it does not in terms protect biodiversity (including endangered species and irreplaceable habitats), protected landscapes or built heritage.

However, two elements, in particular, have permitted the Court to develop its current environmental case-law in a manner which to some extent has already accepted that the human rights of the individual person, as protected by the substantive provisions of the Convention, cannot be completely divorced from his ecological surroundings. These two elements are the living instrument doctrine and developments in international law as analysed through the principle of harmonious interpretation. In this way the Court has contributed to developing human rights law.

Developments at the international level have enabled the Court to strengthen its reasoning in protecting individuals affected by environmental issues. The Court has relied on a selection of international instruments in its judgments over the years.[3]

How will the European Court of Human Rights respond in the future to climate change litigation which is increasingly being brought before the Court? What legal innovations will be needed? Of course, I cannot suggest any concrete answers to those questions as there are currently pending cases before the Court. However, I would like to mention a few issues being raised before the

[3] The Rio Declaration on Environment and Development (1992), the Council of Europe Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (1993), the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters (1998), the Convention on the Protection of the Environment through Criminal Law (1998), as well as various EC directives.

Court in two pending cases.

The first case, *Duarte Agostinho and Others v. Portugal and Others (communicated case)* - 39371/20 concerns the greenhouse gas emissions from 33 Contracting States, which, in the applicants' submission, contribute to global warming and result, *inter alia*, in heatwaves which are affecting the applicants' living conditions and health. The applicants complain, *inter alia*, of the failure by these 33 States to comply with their undertakings, in the context of the 2015 Paris Agreement on Climate Change (COP21), to keep the increase in global average temperature well below 2° C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5° C above those same levels.

In the second case, *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland (communicated case)* 53600/20 the applicants are, on the one hand, an association under Swiss law for the prevention of climate change and of which hundreds of elderly women are members, and on the other, four elderly women (between 78 and 89) who complain of health problems which undermine their living conditions during heatwaves. Since 2016 they have made unsuccessful requests to a number of authorities urging them to make up for their failure to take the necessary measures to meet the 2030 goal set by the 2015 Paris Agreement on climate change (COP21), in particular to limit global warming to well below 2 degrees Celsius compared to pre-industrial levels. The Swiss Federal Court dismissed as inadmissible a number of applications by the applicants.

Are classical civil and political rights, such as those found in the European Convention, amenable to being interpreted so as to grant effective protection in climate change related disputes through the use of evolutionary or living instrument type approaches? Should courts step in where policy makers are hesitating? What are the boundaries between law and politics?

There are a number of legal hurdles in litigating climate change cases successfully before the European Court of Human Rights. What are these?

The European Court of Human Rights has consistently held that the Convention does not provide for the institution of an *actio popularis* and that its task is not normally to review the relevant law and practice *in abstracto*, but to determine whether the manner in which they were applied to or affected the applicant gave rise to a violation of the Convention. Therefore, to succeed before the Court applicants must show that they have been directly affected by the alleged violation. Since there is no right to nature preservation as such under the Convention, in

order to fall within the scope of private and family life, complaints relating to environmental issues have to show that there was an actual interference with the applicant's private sphere, and that a level of severity was attained.[4] Therefore, by its very nature, and due to requirements of causality and harm, the adjudication of climate change disputes poses some challenges for the traditional way these legal doctrines have been construed in practice.

Yet legal innovations at the international level are ongoing in respect of climate change. For example, an independent international expert panel has just proposed a legal definition of 'ecocide'. It is the hope by the panel that the definition might serve as the basis for consideration of an amendment to the Rome Statute of the International Criminal Court adding a new crime to international law.

At the Council of Europe level, successive presidencies, and various other parts of the Council of Europe, have called for existing legal tools to be further strengthened. For example, the Parliamentary Assembly of the Council of Europe has repeatedly recommended an amendment or an additional protocol to be added to the European Convention, providing for the right of individuals to a healthy and viable environment.

As President of the European Court of Human Rights I do believe that the law can lead and is not simply destined to follow political reality. Yet, there are challenges for courts, in particular International Courts, as I have outlined, in dealing with climate change issues. When considering whether to expand human rights norms the Court must also take into consideration the necessity of maintaining acceptance and support among the States Parties to the Convention.

I know that there are great expectations on the role that courts will play in environmental and climate change issues especially from you, young law students. I would like to see environmental law being taught more systematically in university courses[5] and the link between environmental law on one side and human rights on the other being strengthened.

Over its 70 year history the European Convention on Human Rights has repeatedly proved itself capable of adapting to new human rights challenges, I believe the same will be true of climate change. The European Court of Human Rights will play its role within the boundaries of its

[4] *Fadeyeva v. Russia*, no. 55723/00, § 70, ECHR 2005-IV.
[5] The Council of Europe's HELP programme (Human rights Education for Legal Professionals) has launched a new online course on the environment and human rights. Council of Europe HELP (coe.int).

competences as a court of law forever mindful that Convention guarantees must be effective and real, not illusory.

Kind regards,

Robert Spano,
President of the European Court of Human Rights (2020 - 2022)

LETTER FROM THE EDITORS

Dear Reader,

The Editorial Board of the ELSA Law Review proudly presents the first issue of the XIII volume of the ELSA Law Review which focuses on human rights and legal innovations. The ELSA Law Review (ELR) is a biannually published, peer-reviewed and student-edited journal, published by the European Law Students' Association (ELSA) under the patronage of Robert Spano, President of the European Court of Human Rights and in collaboration with Catolica Global School of Law.

In a world of dynamic ideological systems, unprecedented challenges and inventive, resourceful solutions, innovation has grown to quintessentially characterize the rigorous regulatory frameworks that have consequently permeated the legal world within the past decade. This edition of the ELSA Law Review seeks to explore these intense innovations that have defined the practice of previously existing rules and regulations, as well as to shed light on novel and emerging areas of law. Society has undoubtedly changed in 2020 and 2021, adapting to the new working reality and even the legal profession, which has always been identified as a traditional and unsusceptible to change, the legal industry has undergone significant changes in several previous years.

The first issue of the XIII volume of the ELSA Law Review broke all the records with 64 received submissions. The six selected articles reflect the current developments of the legal field and represent the diversity of the legal profession at its finest, covering the topics ranging from climate change to LGBTQI+ rights and cyber warfare, putting the ELSA Law Review in the center of legal happenings. The opening piece focuses on climate change and the ongoing struggle for self-determination and is followed by an article focusing on interaction between intellectual property law and innovation law, putting the prevention of patent abuse in the spotlight. The third article covers the topic of the LGBTQI community and the asylum process, while the fourth article covers a very relevant topic – the question of compulsory vaccination as a primary protection method against the ongoing pandemic. The janus-headed derogation regime under the European Convention on human rights is at the heart of the fifth article, and lastly, the sixth article focuses on cyber warfare, international human rights law and international

humanitarian law.

Moreover, this issue of the ELSA Law Review incorporates the foreword from Robert Spano, President of the European Court of Human Rights, who is also the Patron of this Law Review. Having the honour to share President Spano's words with European law students has been a crucial factor in recognition of the ELSA Law Review in human rights circles, and we cannot express how proud and grateful we are for this patronage.

As this edition marks the end of the term of this Editorial Board, we as the Editor in Chief and the Director for Publications would like to share words of gratitude towards everyone included in the development and evolution of such a prestigious publication as the ELSA Law Review is. Firstly, we extend our sincerest gratitude to the Deputy Editor in Chief, Ali Aguilera Djoubi who was leading the Editorial Board for the term 2020/2021, consisting of six dedicated young professionals. Alexandra Gaglione, Ekaterina Kasyanova, Alessia Zorneta and Beatrice Marone, Maisie Beavan and Antonette Pereschino, who have been serving as Academic Editors, Linguistic Editor and Technical Editor, respectively, deserve a special recognition for their creativity, knowledge and patience – maintaining the academic quality of ELSA's Flagship publication is definitely not an easy task and they achieved it to perfection. Secondly, we need to thank Gonçalo Saraiva Matias, Dean of Católica Global School of Law and his colleagues for the peer-review and years of fruitful cooperation. Thirdly, we need extend our gratitude to our long-term publishing partner, Wolf Publishers, who conduct the typesetting and publication of the ELSA Law Review, helping us to make the ELSA Law Review as accessible as possible – both in paper form in the libraries across Europe and in the e-book format published in the ELR library.

We hope you enjoy reading the first issue of the 2021 ELSA Law Review and we are very much looking forward to witnessing the development of the ELSA Law Review as well as the legal profession in the years to come!

Best wishes,

Maja Rajić
Editor in Chief

&

Bernadetta Semczuk
Director for Publications

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FOUNDATIONS OF SAND: CLIMATE CHANGE AND THE ONGOING STRUGGLE FOR SELF-DETERMINATION

Sarah Honan[6]

Abstract

Conceptualising climate devastation within the international human rights framework reminds us of the very human tragedies which result from environmental damage. Distinguishing the whims of an unpredictable earth from the foreseeable consequences of anthropogenic climate change, a human rights approach incorporates the ongoing climate catastrophe into the history of mass atrocity and violence. This article reviews and critiques an emerging literature on the intersection of climate change and the right to self-determination, specifically focusing on small island developing states (SIDS). In particular, the shortcomings of current strategies being employed to advance climate justice through UN human rights mechanisms are identified, largely owing to an overly individualistic approach which is unsuited to addressing the needs of collectivist societies and cultures. By understanding the rich history and actual legal consequences and responsibilities of the right to self-determination, an appreciation of its normative force in the climate justice debate can be gleaned. It is concluded that framing self-determination as the foundation of all climate change threatened rights constitutes a compelling tool of legal advocacy within UN human rights mechanisms.

[6] Having completed an LLB from Trinity College Dublin in 2020, Honan is currently an LLM Candidate specialising in international law at the University of Cambridge. Committed to the use of interdisciplinary research to develop normative legal theory, Honan focuses her research on the potential legal avenues for advancing collective human rights in international fora. She has also worked with organisations including the Center for Reproductive Rights and International Lawyers for West Papua. She is grateful to Dr. Donna Lyons of Trinity College Dublin for her feedback on this article.

1. Introduction

Political negotiation, securitisation and increasingly, human rights advocacy have all been deployed in attempts to avert climate catastrophe through international law.[7] However, what if there was a principle so sacrosanct to all three spheres that it could simultaneously transcend and coalesce these efforts; the right to self-determination. Conceptualising climate devastation within the international human rights framework reminds us that climate change is about 'the human misery resulting directly from the damage we are doing to nature'.[8] Distinguishing the whims of an unpredictable Earth from the foreseeable consequences of anthropogenic climate change, a human rights approach incorporates the ongoing climate catastrophe into the history of mass atrocity and violence.

This paper explores an emerging literature on the intersection of climate change and the right to self-determination, specifically focusing on small island developing states (SIDS).[9] In Part I, a brief account of strategies being employed to advance climate justice through UN human rights mechanisms is provided to illustrate the shortcomings of an individualistic understanding of the climate change threat. Part II appraises the current conception of self-determination to highlight its actual legal consequences and concurrent obligations. Part III then explores the different responsibilities which flow from these obligations.

Finally, I conclude that framing self-determination as the foundation of all climate change threatened rights constitutes a compelling tool of legal advocacy within UN human rights mechanisms.[10] In accordance with the prevention principle propounded by broader

[7] The three major multilateral agreements are: United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107 (UNFCCC); Kyoto Protocol to the United Nations Framework Convention on Climate Change (adopted 11 December 1997, entered into force 16 February 2005) 2303 UNTS 161 (Kyoto Protocol); Paris Agreement under the United Nations Framework Convention on Climate Change (adopted 12 December 2015, entered into force 4 November 2016) Reg No 54113 (Paris Agreement). Shirley Scott has written extensively on the, thus far, failed efforts to bring climate issues within the remit of the United Nations Security Council: Shirley Scott, 'The Securitisation of Climate Change in World Politics: How Close have We Come and would Full Securitisation Enhance the Efficacy of Global Climate Change Policy?' (2012) 21(3) Rev EC Int'l Envtl L 220, 228.

[8] Mary Robinson, 'Foreword' in Stephen Humphreys (ed), *Human Rights and Climate Change* (CUP 2010) xviii. See generally, Ottavio Quirico and Mouloud Boumghar, *Climate Change and Human Rights: An International and Comparative Law Perspective* (Routledge 2016); Bridget Lewis, *Environmental Human Rights and Climate Change: Current Status and Future Prospects* (Springer 2018); Sumudu Atapattu, *Human Rights Approaches to Climate Change: Challenges and Opportunities* (Routledge 2016).

[9] Edward Cameron and Marc Limon, 'Restoring the Climate by Realising Rights: The Role of the International Human Rights System' (2012) 21(3) Rev EC Int'l Envtl L 204, 206.

[10] This paper approaches the right to self-determination broadly as a foundational principle of the UN and as part of customary international law, for its basic legal content we will look to ICCPR and ICESCR Article 1; International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR); International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR).

For reasons of scope, it will not address the rich debate of who constitutes a 'people' that has dominated legal

environmental law, it should not be considered a reactionary tool. By waiting for the damage to be done, the right of self-determination is not just violated but potentially obliterated.

2. The Problem of the Individual

Founding a human rights based claim to mitigate or even prevent the consequences of climate change largely revolves around the attribution of responsibility or obligations to assist those most vulnerable to large-scale rights deprivation.[11] The normative character of the UN human rights framework, combining both customary and positive law, judicial and advisory bodies, legal obligations and ethical expectations, encourages the proposition that it can 'draw attention to the human face of climate change'.[12] While true, it also betrays a weakness of the approach, namely that the UN framework, imbued with Western individualistic values, is unsuited to addressing the needs of collectivist societies and cultures. Indeed, it is possible that invoking institutional human rights standards 'augments existing and unsustainable power structures'.[13]

Wewerinke-Singh illustrates how all major rights categories are implicated by climate change; group rights (self-determination, International Covenant on Civil and Political Rights (ICCPR) and International Covenant on Economic, Social and Cultural Rights (ICESR) Article 1), civil and political rights (the right to life, Article 6 ICCPR), cultural rights (the right to enjoy one's own culture, Article 27 ICCPR) and socioeconomic rights (the right to health, Article 12 ICESR).[14] A World Health Organisation (WHO), United Nations Children's Fund (UNICEF) and Lancet co-publication also demonstrated the direct threats posed to children's rights under the Convention on the Rights of the Child (CRC) by States' persistent inability both to develop and implement adequate sustainable development goals (SDGs).[15] Despite evidence of climate induced displacement spanning two decades, international refugee law has failed to answer 'the movement of people spurred by climatic rather than directly political upheaval' owing to the

discourse since decolonisation but endorses the Kantian model which defines 'people', 'not in terms of any shared ascriptive characteristic - such as language, ethnicity, religion, or attachment to land - but in terms of a people's capacity for autonomy and independence'; Susannah Willcox, 'Climate Change Inundation, Self-Determination, and Atoll Island States' (2016) 38 Hum Rts Q 1022, 1026.

[11] Philip Alston and Ryan Goodman, *International Human Rights* (OUP 2012) 1537.

[12] Siobhan McInerney-Lankford et al, 'Human rights and climate change: a review of the international legal dimensions' (World Bank 2011) 55.

[13] Ole Pedersen, 'Climate Change and Human Rights: Amicable or Arrested Development?' (2010) 1(2) J Human Rights and the Environment 236, 257.

[14] Margaretha Wewerinke-Singh, *State Responsibility, Climate Change and Human Rights under International Law* (Hart Publishing 2019) 122.

[15] Helen Clark et al, 'A future for the world's children? A WHO–UNICEF–Lancet Commission' (2020) 395 Lancet 605; Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC).

nebulous line dividing voluntary movement and forced displacement.[16]

The UN Human Rights Committee (HRC) made progress in this regard by acknowledging the threat to life posed by climate change as a possible violation of the ICCPR.[17] Concerning climate migration, it was concluded in *Teitiota*, however, that the immediacy of the risk faced by the claimant did not trigger Article 6 protection and therefore New Zealand had not violated this right by deporting him.[18] In a powerful dissent, Committee member Duncan Laki Muhumuza emphasised precisely why an individualistic and reactive approach to these issues is incompatible with the vindication of human rights, stating it would be 'counterintuitive to the protection of life, to wait for deaths to be very frequent and considerable'.[19] Implicit in his Opinion is the reality that Kiribati alone is incapable of taking the affirmative steps necessary to protect its population and consequently the deportation is 'like forcing a drowning person back into a sinking vessel, with the "justification" that after all there are other voyagers on board'.[20]

Thus, we must inquire whether there is a mechanism within the UN human rights framework that can potentially aid all the voyagers and the ship itself, as opposed to the individuals lucky and able enough to swim to shore.[21]

3. The Potential of the Collective

The principle of self-determination is a rarity among protected rights; prominently placed in the UN Charter, enshrined as positive law in multiple treaties, widely accepted as customary international law and regarded by many as enjoying *jus cogens* status and an *erga omnes* norm.[22] Its

[16] Jane McAdam, 'Climate Change "Refugees" and International Law' (Winter 2008) Bar News: J NSW Bar Assoc 27; Vikram Kolmannskog, 'Climate Change, Environmental Displacement and International Law' (2012) 24 J Int'l Development 1072.

[17] Human Rights Committee, 'General Comment No. 36, The right to life (Article 6)' (2018) UN Doc CCPR/C/GC/36; *Portillo Cáceres et al v Paraguay,* Human Rights Committee, Comm No 2751/2016, UN Doc CCPR/C/126/D/2751/2016 (2019); *Ioane Teitiota v New Zealand*, Human Rights Committee, Comm No 2728/2016, UN Doc CCPR/C/127/D/2728/2016 (2020).

[18] *Teitiota* (n 17) para 9.12.

[19] ibid Annex 2 para 5.

[20] ibid para 6.

[21] Without national or international policies in place to facilitate climate migration it will likely only be the young and financially able who can make the necessary journey, leaving persons with particular vulnerabilities in greater danger; Jon Barnett and Michael Webber, 'Migration as Adaptation: Opportunities and Limits' in Jane McAdam (ed), *Climate Change And Displacement: Multidisciplinary Perspectives* (Hart Publishing 2010) 41; United Nations High Commissioner for Refugees (UNHCR), 'Summary of Deliberations on Climate Change and Displacement' (Bellagio, Italy 22 - 25 February 2011) para 26.

[22] Charter of the United Nations (24 October 1945) 1 UNTS XVI (UN Charter) Articles 1, 55, 73; ICCPR and ICESCR (n 4) Article 1; ILC, 'Report on the Work of Its 66th Session' (7 July - 8 August 2014) UN Doc A/69/10 including self-determination in a non-exhaustive list of *jus cogens* norms; *Case Concerning East Timor (Portugal v Australia)* (Judgment) [1995] ICJ Rep 90, para 29 recognising the *erga omnes* character of self-determination.

history is one of transformation from aspirational principle to binding legal standard.[23] Self-determination under the ICCPR and ICESCR encapsulates three main elements: 1) the right to determine political status; 2) the right to pursue economic, social and cultural development and; 3) the right to permanent sovereignty over natural resources (PSNR). To understand how SIDS - whose physical existence is jeopardised by climate change - may apply the right of self-determination to their current plight we must first consider its close connection to dismantling colonialism, then outline its specific importance for indigenous peoples and finally explore the consequences of mass migration for peoples ability to realise this right.

3.1 Colonial Legacies

Under the decolonisation movement in the latter half of the twentieth century, the UN acknowledged the relationship between self-determination and colonialism through the Declaration on the Granting of Independence to Colonial Countries, recognising that nationhood is not an automatic realisation of the right but it entails 'complete freedom, the exercise of their sovereignty and the integrity of their national territory… to freely pursue their economic, social and cultural development'.[24] In a perverse irony however, the Oceanic SIDS which benefited from decolonisation by gaining territorial integrity are the same States now most acutely threatened by dispossession through rising sea levels and a toxic atmosphere.

Formal decolonisation has been followed by an era of neo-colonialism through globalisation, economic subjugation and appropriation of the atmospheric commons.[25] Historical exploitation has left SIDS largely unable to implement adaptation strategies that could determine their survival.[26] SIDS are living under both the legacy and ongoing effects of colonialism. Thus, ways must be found to prevent 'past injustices from producing catastrophic loss in light of climate change'.[27]

Through a novel legal proposal, Bordner contends that 'although conduct today exacerbating climate vulnerability was carried out decades ago, colonial powers remain responsible for redress by virtue of their unextinguished duties to protect and promote self-determination' based on the

[23] Antonio Cassese, *International Law* (2nd edn, OUP 2005) 43.
[24] Declaration on the Granting of Independence to Colonial Countries and Peoples, UNGA Res 1514 (XV) (14 Dec 1960).
[25] John Baylis et al, *The Globalisation of World Politics: An Introduction to International Relations* (8th edn, OUP 2019) 8; Antony Anghie, 'The Evolution of International Law: Colonial and Post-colonial Realities' (2006) 27(5) Third World Q 739, 749; Leigh Raymond, *Reclaiming the Atmospheric Commons: The Regional Greenhouse Gas Initiative and a New Model of Emissions Trading* (MIT Press 2016) 5.
[26] Autumn Skye Bordner, 'Climate Migration & Self-Determination' (2019) 51(1) Columbia HR LRev 183.
[27] ibid 233.

principles espoused in *Nauru v Australia* and the recent advisory opinion on *Chagos*.[28] Both cases affirmed that the obligation on colonial powers to promote the self-determination of former colonies persists after formal independence, that infringement of PSNR by multiple actors does not preclude liability and that forced migration without remediation represents an incomplete 'decolonisation of territory in a manner consistent with the right of peoples to self-determination'.[29] Climate change poses a threat to the very same rights and obligations invoked in these cases thus leading Bordner to conclude that 'such claims [in the context of climate migration] are not only valid, but quite viable'.[30] The consequences or remedies of this kind of action will be considered in Part III.

3.2 Indigenous Peoples

Territorial integrity and PSNR are Western incarnations of rights that for many indigenous peoples possess distinctive spiritual and cultural value. The United Nations Human Rights Council (UNHRC) have consistently recognised the specific implications that climate change entail for indigenous peoples' right to self-determination with the Special Rapporteur on the rights of indigenous peoples highlighting self-determination as 'a key right in the areas of climate change and climate finance because of its links with land rights and the right of indigenous peoples to participate in processes and decisions affecting them'.[31] Unfortunately, the predominant narratives of international climate policy debate in the human rights sphere 'problematically position [vulnerable populations] to speak for an entire planet under threat', while those 'identified as imminent climate refugees are being held up like ventriloquists to present a particular (Western) "crisis of nature"'.[32] Pivoting the discussion to encompass the right to self-determination can avoid the tendency to present indigenous people as hapless victims of climate change, as mere 'evidence' void of agency.[33]

In order to vindicate these rights, the international human rights framework must recognise that aside from PSNR, the social and cultural rights encompassed by self-determination 'transcend the

[28] ibid 241; *Certain Phosphate Lands in Nauru (Nauru v Australia)* (Judgment) [1992] ICJ Rep 615; *Legal Consequences of the Separation of the Chagos Archipelago* (Advisory Opinion) [2019] ICJ GL No 169.
[29] *Chagos* (n 28) para 178.
[30] Bordner (n 26) 242.
[31] UNHRC, 'Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights' (15 January 2009) UN Doc A/HRC/10/61 para 40; UNHRC, Res 10/4 (2009) UN Doc A/HRC/10/29, 12; UNHRC, 'Report of the Special Rapporteur on the rights of indigenous peoples' (2017) UN Doc A/HRC/36/46, para 40.
[32] Carol Farbotko and Heather Lazrus, 'The First Climate Refugees? Contesting Global Narratives of Climate Change in Tuvalu'(2012) 22(2) G Envtl Change 382.
[33] Amy Maguire and Jeffrey McGee, 'A Universal Human Right to Shape Responses to a Global Problem? The Role of Self-Determination in Guiding the International Legal Response to Climate Change' (2017) 26(1) RECIEL 54, 62.

idea of land as a means of physical survival or subsistence'.[34] Theorised in different ways - an 'indigenous right to environmental self-determination', a collective decision-making framework - this approach essentially affirms the principle of *Western Sahara* that when debating the 'destiny' of a people, we must support the 'free and genuine expression of the will of the peoples concerned'.[35] However obvious such a statement seems, it has not been the lived and historical experience of indigenous peoples and now, in the context of climate change, needs restating since international environmental law and policy is already dominated by the interests of those least affected by its impacts.

3.3 Mass Migration

As noted in Part I, climate induced migration and persons who have been termed 'climate refugees' are at the epicentre of current environmental human rights discourse.[36] Narratives depicting 'the loss of islands to rising seas as a foregone conclusion and climate migration as inevitable' and consequently the disappearance of entire nations, 'represents a continuing strand of colonial narratives that cast islands and their peoples as peripheral and, therefore, expendable'.[37]

Mitigation strategies to minimise the adverse effects of climate change are endorsed by all UN sources addressing the mass migration issue while simultaneously accepting it as 'an adaptation strategy and needs to be supported as such'.[38] A stable population and sovereign territory are essential elements of statehood under the Montevideo Convention and although statehood is not a necessary component for self-determination it is indisputable that its loss poses the risk of obliterating the identity of a people as such.[39] Even if robust international legal frameworks were implemented to protect the rights of climate migrants they are still 'on the move absent a country—with all of its attendant legal, economic, and cultural markers—to which to return'.[40]

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[34] Wallace Coffey and Rebecca Tsosie, 'Rethinking the Tribal Sovereignty Doctrine: Cultural Sovereignty and the Collective Future of Indian Nations' (2001) 12 Stan L & Pol Rev 191, 205.

[35] D Kapua'ala Sproat, 'An Indigenous People's Right to Environmental Self-Determination: Native Hawaiians and the Struggle Against Climate Change Devastation' (2016) 35(2) Stan Envtl LJ 157; Willcox (n 4) 1022; *Western Sahara* (Advisory Opinion) [1975] ICJ Rep 12, 162.

[36] The relationship between climate change and migration was also recognised as a threat to self-determination in UNHRC, Res 35/20 (2017) UN Doc A/HRC/RES/35/20 2. Although the term 'climate refugee' is doctrinally inaccurate it does 'indicate a growing awareness that these populations require, and are entitled to, specific attention in international legal responses to climate change'; Maguire (n 33) 57.

[37] Bordner (n 26) 183.

[38] UNHCR (n 21) para 40.

[39] Montevideo Convention on the Rights and Duties of States (adopted 26 December 1933, entered into force 26 December 1934) 165 LNTS 19.

[40] Maxine Burkett, 'The Nation Ex-Situ: On Climate Change, Deterritorialised Nationhood and the Post-Climate Era' (2011) 2 Climate L 345, 349.

With no attendant right to claim territory elsewhere and faced with the physical disappearance of their homeland as opposed to the temporal uninhabitability of war and conflict, the reality of mass climate migration generates questions of law that the international human rights system has never even conceived of contemplating. How we answer these questions very much depends on our ambition; whether we maintain the fiction that the past is best suited to provide future solutions or whether we concede that the current situation is unprecedented thereby demanding dynamic and unorthodox measures.

4. The Responsibilities of the Whole

Placed 'apart from and before' all other rights in the ICCPR and ICESCR, the actualisation of self-determination is 'an essential condition for the effective guarantee and observance of individual human rights and for [their] promotion and strengthening'.[41] As climate change continually pierces holes in the hull of this vessel, we must look to the remedies available for those aboard. The conclusion that existing mechanisms are 'insufficient to address the structural violence underlying climate vulnerability' is unavoidable but the burgeoning literature on self-determination and climate change offers novel legal perspectives on mitigation and adaptation strategies.[42]

Relying on values expressed in *Nauru* and *Chagos*, Bordner asserts that colonial powers are vested with 'moral and legal obligations to assist former colonies with self-determination-preserving adaptation strategies'.[43] In the former case, Nauru sought monetary damages and equitable relief (the remediation of affected lands) but Australia settled out of court, depriving us of the knowledge of what these found obligations practically entail. The latter case, as an advisory opinion, is not binding but provides an authoritative statement of law that Britain has 'an obligation… to complete the decolonisation of Mauritius' by ending its administration of Chagos 'as rapidly as possible'.[44] The legal process of procuring this statement took a decade.[45] Contribution from the Global North, especially former colonial powers, to adaptation strategies that prioritise maintaining SIDS' right to self-determination by preserving territorial integrity and PSNR are, I argue, the optimal approach but highly unlikely given the timeframe imposed by

[41] Human Rights Committee, 'General Comment No. 12, The right to self-determination of peoples (Article 1)' (1984) UN Doc HRI/GEN/1/Rev9 (Vol I) para 1.
[42] Bordner (n 25) 223.
[43] ibid 184.
[44] *Chagos* (n 28) para 182.
[45] *Chagos Arbitration (Mauritius v UK)* (2015) 31 RIAA 359. Mauritius, Mauritius initiated arbitration proceedings against the United Kingdom on 20 December 2010.

climate change. Reluctance to concede territory to this phenomenon does not negate the reality of climate migration and many islanders see proactive movement as 'preferable to holding off until the full effects [come] to bear on them'.[46]

Unfortunately the human rights implications of such migration, and self-determination in particular, are currently unanswered by the international legal system. Willcox identifies three possibilities for migrating peoples: 1) re-establishing sovereignty through jurisdiction over a new territory; 2) forming a 'deterritorialised state', or 3) 'free association or integration' with existing States.[47] Legally, the first option is preferable owing to the status of territorial sovereignty as the 'privileged vehicle for the collective self-determination of peoples'.[48] It is also obviously encumbered by the fact that there are 'no uninhabited territories lying around that states can 'discover' and 'occupy'.[49] Forming a 'deterritorialised state' or the establishment of a permanent government in exile necessitates a radical reappraisal of the very concept of the nation state, an option that may be afforded to the powers of the Global North but relying on the historical experiences of indigenous and island peoples, I would contend that such a deconstruction of the foundations on which the UN rests is a privilege unlikely to be granted to those in the Global South.[50] While the first two options theoretically preserve SIDS' sovereign status and international legal personality, if history is anything to go by, the third approach represents a fundamental threat to self-determination. Even if host nations recognised the internal sovereignty of migrant peoples, the 'settler-colonial world is replete with examples demonstrating that such "sovereignty within sovereignty" arrangements severely limit the autonomy of indigenous peoples'.[51] The widely criticised form of limited self-government afforded to indigenous peoples in the US, New Zealand and Australia (the most likely host countries) is the very best case scenario whereas in reality there is 'no precedent for granting any measure of self-government to immigrant communities'.[52] Language surrounding this discourse is also troubling, with the term 'host nations' implying some right of exile as opposed to the creation of a shared space.

Willcox acknowledges this paradox, that the value other nations place in their own right to self-determination makes the prospect of islanders obtaining new territory as a self-determining

[46] Elizabeth Ferris, Michael Cernea and Daniel Petz, 'On the Front Line of Climate Change and Displacement: Learning from and with Pacific Island Countries' (Brookings Inst and LSE 2011) 20.
[47] Willcox (n 10) 1022.
[48] E. Tendayi Achiume, 'Migration as Decolonisation' (2019) 71 Stan LRev 1509, 1515.
[49] Sumudu Atapattu, 'Climate Change: Disappearing States, Migration, and Challenges for International Law' (2014) 4 Wash J Envtl L & Pol'y 1, 19.
[50] Burkett (n 40) 346; McAdam (n 21) 116.
[51] Bordner (n 26) 226.
[52] ibid 228.

people rather unlikely.[53] Equally, it seems difficult to imagine the global powers which are largely insulated from the most immediate threats of climate change and who dominate UN negotiations accepting Willcox's 'pluralistic account of sovereignty, self-determination, and statehood, in which each is understood as a continuum of entities rather than as a fixed category of identical actors'.[54] With the advantages and shortcomings of these proposals highlighted, what we are left with is the undeniable normative power and weight behind the principle of self-determination. Caron famously wrote, 'inasmuch as nature declines to negotiate, it is we and our laws which must adapt'.[55] Since that statement was made thirty years ago the international legal system has proved itself just as obstinate as nature. We must therefore employ other means to open 'the door for the exertion of normative pressure on members of the international community, especially developed States'.[56]

People die, people migrate, the realities of extreme poverty in the Global South have been on full view for decades without any coordinated and decisive human rights response to end these avoidable tragedies. By speaking to the loss of homeland, of shared history, of heritage there just may be a chance to engage the public imagination in a new way. Other areas of law shun the invocation of narrative or moral principles to advance an agenda, however this is exactly what the international human rights framework is predicated on. It is a peer review system founded on normative pressure. Undoubtedly, the 'slow violence' of colonialism and appropriation of the atmospheric commons has incurred an 'ecological debt' owed to SIDS by the Global North, but the question remains whether that debt will be repaid before the ship has sunk.[57]

5. Conclusion

Born from the wreckage of war, mass destruction and genocide the UN human rights framework was fully cognisant of man's capacity for violence. It did not, and arguably could not, envisage that in less than a century the world would face a boundless existential threat, endangering not only the right to self-determination but the concepts of sovereignty and statehood. The political approach to climate negotiations, characterised by a logic of reciprocity, has been undermined by the 'law of the least ambitious program' or in other words, adoption of the fewest possible

[53] Willcox (n 10) 1035.
[54] ibid 1037.
[55] David Caron, 'When Law Makes Climate Change Worse: Rethinking the Law of Baselines in Light of a Rising Sea Level' (1990) 17 Ecology LQ 621, 653.
[56] Maguire (n 33) 64.
[57] Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (HUP 2011); Bradley Parks and J Timmons Roberts, 'Climate Change, Social Theory and Justice' (2010) 27(2) Theory, Culture & Society 134.

obligations to maintain current power dynamics.[58] However, the 'life of nations is too valuable to put it into an old boat with big holes floating on the stormy seas of world politics'.[59] By overlooking the right of self-determination for SIDS today, the international human rights system fails to understand that their fate foreshadows our future.[60]

Over the course of this paper, I have endorsed a recalibration of the current human rights law approach to climate change by positioning the principle of self-determination at the centre of the debate. The time of writing, during the Covid-19 pandemic, is an interesting juncture at which to ponder an invisible danger to humanity by proving that when the will exists, rapid response is possible despite fears of market instability and curtailment of individual liberties. However, it raises another unfortunate truth of geopolitics - only when the 'right' lives, those in the Global North, are at stake is decisive action taken. Invoking self-determination is not an instant solution to the difficulties of grounding climate justice within the UN human rights framework but it may act as a tugboat, mooring the arguments to one of the most sacrosanct and steadfast foundations of international law.

[58] Arild Underdal, 'One Question, Two Answers' in Edward Miles et al (eds), *Environmental Regime Effectiveness: Confronting Theory with Evidence* (MIT Press 2001) 3.15; Paul Harris, *What's Wrong with Climate Politics and How to Fix It* (Polity Press 2013) 23.
[59] Raphael Lemkin, *Totally Unofficial* (YUP 2013) 144.
[60] Bordner (n 26) 184.

BUSINESS AND INNOVATION: THE NEW FRONTIERS OF KNOWLEDGE TRANSFER VIA AN OPEN DATA PERSPECTIVE

Federica Paolucci[61]

Abstract

Data are creating an inedited panorama oriented toward innovation by conquering a privileged place in the market of the so-called 'data driven society'. Most of the time, the literature is focusing on the economic value and the way through which those data are collected, but we are, at the opposite, analysing how all of this can be used by promoting an alternative path that looks further in the future. Open data are bringing up a huge novelty building a pioneering way of dealing with data by harnessing quality over quantity. In particular, this movement is peculiar of the internet itself, as it spreads from the very first idea of the web: it has the aim of sharing knowledge and information with everyone, everywhere. Therefore, after giving an analysis of what open data are and how they work, we are going to devote the second part of this paper to the important challenges that are arising at legal level: in particular, involving intellectual property rights and privacy. In the third and final part of this paper, we will explore the possible benefits for the private sector by examining some case studies and we will find out how a reasoned use of open data can foster both innovation and protection of the copyrighted works, trying to imagine what the future is going to look like as those data are, above all, promoting a reallocation of knowledge and, consequently, of power.

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1. Introduction

The digital revolution has rapidly changed our contemporaneity: almost anything in our lives – from groceries, to studying – is based on a string of data. Trying to understand what the real value of data is, a huge part of the literature is defining it as 'the new oil',[62] whereas the real value of data is the data itself, meaning that whoever is capable of reading them, extracting the precious information clustered in the dataset, has access to an unbelievable amount of knowledge that is not likely obtainable through traditional means. Used well, data can foster the creation of a more equal environment and a large-scale collaborative societal change, encouraging innovation and building a less enclosed monopolistic digital sphere. Data are an incredible opportunity, as we are going to see, but they are also empowering just the ones that can afford to read them, to have proper access and, lastly, who is capable of extracting useful information from them. Data are reallocating knowledge[63] and, doing so, they are reallocating power too.

Open data can change this unbalanced equation by promoting the sharing of knowledge at every level, creating an environment where qualitative information is not just something for few. Since we are driving toward an era where economy is built around knowledge and since 'data is the new currency in the competitive world',[64] open data do not represent just a way of creating a more equal access to information but an opportunity to encompass innovation in a more inclusive way.[65] As long as the central value is openness and data are seen like common assets, this has the potential to allow any member of the society to use data to engage and participate in economic, social, political and cultural projects. This is what many Governments are already doing as, for instance, has been put forward by President Obama.[66]

The enthusiasm for such a revolution is massive, but coming to the subject of this paper, some issues and doubts are still arising. The transition from a system where data are closed and

[62] In respect of this quotation, see Joris Toonders, 'Data Is the New Oil of the Digital Economy', (Wired, July 2014) <https://www.wired.com/insights/2014/07/data-new-oil-digital-economy/> accessed 15 January 2021.

[63] Stefano Rodotà, *Tecnopolitica. La Democrazia e Le Nuove Tecnologie Della Comunicazione.* (Laterza, 2004) 150.

[64] The quote is from Anne-Laure Mention and Hardik Bhimani, 'Introduction. Open Data as an Enterprising Revolution: Opinions and Insights', in Anne-Laure Mention (eds), *Digital Innovation: Harnessing the Value of Open Data* (World Scientific Publishing Co. Pte. Ltd., 2019) 20.

[65] It is possible in the context of a knowledge society, as part of the literature is defining it, where information is not drowned by a blind fever for data and profit. *Ex multis,* Bridgette Wessels, 'Introduction', in Bridgette Wessels, Rachel Finn, Thordis Sveinsdottir and Kush Wadhwa (eds), *Open Data and the Knowledge Society* (Amsterdam University Press, 2017), 13–24.

[66] With regards of the Obama Administration, in 2013 it was released the Open Data Policy stating that this decision would be helpful in order to fuel private sector innovation by making governmental data open and accessible, as mentioned by the press release: 'Obama Administration Releases Historic Open Data Rules to Enhance Government Efficiency and Fuel Economic Growth', 9 May 2013 <https://obamawhitehouse.archives.gov/the-press-office/2013/05/09/obama-administration-releases-historic-open-data-rules-enhance-governmen> accessed 19 December 2021.

dispersed to an open one is not lacking legal challenges as long as many issues on the level of intellectual property, copyright and privacy need to be urgently addressed. How is it possible to preserve both the interests – on the one hand protection of ideas and patentability and, on the other hand, collaborative growth, knowledge transfer and innovation? How can private actors still gain profit in an open data scenario? These questions and more will be answered in the next pages.

2. Not just a philosophy: what is open data?

The Open Data Handbook[67] gives a quite clear definition: 'data is open if it can be freely accessed, used, modified and shared by anyone for any purpose - subject only, at most, to requirements to provide attribution and/or share-alike'.[68] Open data is mainly data that anybody can use, re-use and re-publish for any purposes[69]. It can be government data, but also data from either companies or non-profits.

There is a huge difference between open data and big data.[70] 'While big data is identified by size, open data is defined by its use[71]': open data brings up a perspective making of big data a more democratic use, and not a prerogative for few. We used many words trying to define what open data is, but it is still missing a very peculiar frame to stress: the concept of open itself.[72] This has been hailed to other 'open' movements, such as open science, open government, open innovation, open knowledge.[73] Not just an idea, but a real opportunity for business and private actors that can find a new productivity path by differentiating an attitude that relies on

[67] The Open Data Handbook is a guide provided by the Open Knowledge Foundation, an International Network, promoting digital education about open data and data literacy.

[68] ibid., 'Open Data' <https://opendatahandbook.org/glossary/en/terms/open-data/>, accessed December 2020.

[69] This formulation has been adopted also by the European Institutions in rec. 16 of the Directive (EU) 2019/1024 of 20 June 2019 on open data and the re-use of public sector information, where it is said that 'open data as a concept is generally understood to denote data in an open format that can be freely used, re-used and shared by anyone for any purpose'.

[70] By big data the referral is to the sum of digital data identifiable by the '4 Vs': volume, velocity, variety, veracity. There is a fifth V descending from the others that is value, as explained by many expert scholars such as Andrea De Mauro, Marco Greco, and Michele Grimaldi, 'A Formal Definition of Big Data Based on Its Essential Features', (2016) 3 *Library Review* 65, 122–35.

[71] Joel Gurin, 'Big Data and Open Data: What's What and Why Does It Matter?', (*The Guardian,* 15 April 2014), <http://www.theguardian.com/public-leaders-network/2014/apr/15/big-data-open-data-transform-government> accessed December 2020.

[72] As also underlined by Bridgette Wessels in 'Mobilising Open Data' (pp. 65–84), it is a very important point to stress as it is a bridge concept. Open can be referred to different notions, such as the ones of freedom, freedom of expression and movement, as recalled by the author. As the author recollects, the very concept of openness can be broadly found in the theory of the most important philosophers such as Plato and Popper.

[73] What is peculiar of all of them is the connection with the very first idea under the creation of the Internet and the WWW: to provide access to information to everyone everywhere at any moment. A concept and an idea that is far beyond the philosophical aims: they are building a *sui generis* way of promoting public and private value-creating activities.

proprietary data. As supported by part of the literature,[74] this new way of enhancing knowledge transfer would be a benefit for many categories by promoting transparency and stimulating innovation, in particular when dealing with open government data – meaning the plethora of information that States 'collects, produces, reproduces and disseminates'[75] in a very wide range of activities.

The concept of open data is endorsing open knowledge, fair, equal and democratic access to information, but, therefore, it is a very difficult notion to be defined in concrete. We can facilitate the understanding by pointing out some very strict characteristics: first of all, those data must be legally open, and by saying legally, we mean that those data are available under an open licence that permits free access, use, re-use and re-distribute those data.

Secondly, they must be technically open, meaning that the data must be available, without cost access or, at the most, with a very low fee, not higher than the costs of production; and, lastly, they must be provided in a machine-readable form.[76] More specifically, the possibilities within the development of an open data system are giving the opportunity to tailor a diverse way of using information and transferring knowledge. Those new practices are related with the possibility of producing new business based on the re-use of those information and, furthermore, on the promotion of original methods of using information as, for instance, by discussing essential societal problems. Just to mention - the enhancement of social participation or the creation of tailored products and services for certain groups or minorities[77] as well as the stimulation of competitiveness, innovation and the establishment of a data economy.[78]

Having pointed to the what and the why, it is interesting to talk about the who. Anybody can contribute to the open data discourse, both as user and as developer: these roles can be covered at the same time by public and private actors. However, open government data can be a tremendous resource both for entrepreneurs and governments achieving parallel aims: on the one hand, on the side of the public sector, they are mostly enriching transparency, participation,

[74] The referral is, among others, to Maria Teresa Borzacchiello and Max Craglia, 'The Impact on Innovation of Open Access to Spatial Environmental Information: A Research Strategy', (2012) 60 *International Journal of Technology Management*, 114–29.

[75] See Rec. 8 Directive (EU) 2019/1024.

[76] Meaning structured data 'that can be processed by computers without human intervention', as in the Open Government Data Act.

[77] As mentioned by Pauliina Lehtonen in 'Open Data in Finland - Public Sector Perspectives on Open Data' (*Next Media programme of TIVIT,* 2011).

[78] Yannis Charalabidis, 'The Open Data Landscape', in Yannis Charalabidis, Anneke Zuiderwijk, et al. (eds), *The World of Open Data* (1st ed., Springer International Publishing, 2018), 31-32, elaborated a table framing the possible benefits of open data: there is a plethora of categories going from political and democratic point of view to innovation and economy.

efficiency of government services[79]. On the other hand, it can help in developing new ways of business, as many examples in the world are showing: just to mention, Google, Apple and Uber, some of the most important digital companies in the world, are creating accurate maps, developing them on the base of national mapping agencies.[80]

It is quite intuitive why governments should open up their data, but it is still under discussion why private actors should join the movement and how opening data in the context of the PSI[81] could be profitable also for them. Interestingly, the goals of open data are often opposite to the ones of intellectual property rights, even if the proponents of the open movement are stressing the fact that we should build a collaborative environment without restrictions and constraints.[82] On the other hand, intellectual property movements have the aim to protect innovation via licensing, patenting and copyright. In particular in Europe the debate[83] lasted 23 years and delivered to the adoption of the Directive (EU) 2019/1024.

This is perfectly related to what we stated above and with the title of our research insofar as the whole society could benefit of those opened data: they represent a source that can contribute to business and develop innovation by harnessing the passage from a passive to an active and intelligent usage of information,[84] but many issues still need to be observed before claiming the possibility of promoting the path toward a 'data driven society'.[85]

2.1 How does open data work

Open data can ensure that power and knowledge would be shared: but how is this possible? In a world where the flow of data is every day bigger and bigger, the most important thing to ensure when dealing with open data is interoperability.[86] A data set has the purpose to be shared at some point: it is knowledge created to be transferred. But what if the recipient cannot read the dataset?

[79] According to the analysis in the already quoted Open Data Handbook in the section 'Why Open Data?', id., <https://opendatahandbook.org/guide/en/why-open-data/> accessed December 2020.

[80] See 'We Call on the Government to Work with Google, Apple and Uber to Publish More Map Data and Support the UK's Emerging Technologies', (*Theodi,* 20 November 2018), <https://theodi.org/article/we-call-on-the-government-to-work-with-google-apple-and-uber-to-publish-more-map-data-and-support-the-uks-emerging-technologies/> accessed December 2020.

[81] Shortening Public Sector Information; hereafter PSI.

[82] ibid., 'Introduction. Open Data as an Enterprising Revolution: Opinions and Insights'.

[83] Simone Aliprandi, *Il Fenomeno Open Data*, (1st ed., Ledizioni, 2014), 28-57 carefully recalled the legislative path from the 'Database Directive', Dir. 96/9/EC to the so-called PSI, Public Sector Information Directive 2003/98/EC.

[84] 'Intelligent data usage, including their processing through artificial intelligence applications, can have a transformative effect on all sectors of the economy', rec. 9 Dir. (EU) 2019/1024.

[85] Alex Pentland, 'The Data-Driven Society', (2013) 4 *Scientific American* 309, 78–83.

[86] 'We should work toward a universal linked information system, in which generality and portability are more important than fancy graphics techniques and complex extra facilities': this is what Sir Tim Berners Lee was saying in 1989 in 'Information Management: A Proposal', (*CERN,* 1990), <https://cds.cern.ch/record/369245/files/dd-89-001.pdf> accessed December 2020, even though it is perfectly fitting our discourse around open data.

This is the main issue on making open data work together and develop issues both at technical and legal level. Interoperability is about the ability of diverse systems and organisations to work together (inter-operate), inter-mixing different data sets. The essential idea, as also described by the Open Data Handbook, is 'to plug together different components in order to create a larger system'.[87] Without interoperability, datasets would not communicate between each other and we would live not in a 'data driven society',[88] but rather in a Tower of Babel: in the total inability to communicate.[89]

Starting from raw materials, interoperability can harness both creation of information and knowledge transferability. From a legal standpoint, it should allow data in for two or more different datasets to communicate together: that is why working with open licence[90] and open software would be the most suitable environment for open data. 'Opening data takes time, effort and money'[91]: it is important to understand which the return might be, and we are going to examine this aspect in the second part.

3. The legal side of opening data

3.1 IP, privacy and open data: a shortcut or not?

Opening data can be an incredible opportunity and different projects have been followed in the last decade involving both the public and private sector. Nonetheless, it is not everything clear and bright, since those open systems are difficult to be managed and are bringing up many challenges at technical and, moreover, legal level.

The main issues when dealing with open data are connected with the protection of intellectual property and privacy. The legal conditions to make a proper use of the databases in an open form is described in the Recital 26 of the revised Directive on the PSI: 'in relation to any re-use that is made of the document, public sector bodies may impose conditions, where appropriate through a

[87] See section 'What Is Open?', https://okfn.org, *ibidem*.
[88] Pentland (n 85).
[89] The issue with interoperability goes far beyond the understanding around open data: this is why the very first idea of open data has been promoted by Sir Tim Berners Lee as related to linked data that is about publishing and connecting structured data on the Web, using standard Web technologies to make the connections readable by computers, enabling data from different sources to be connected.
[90] Meaning, according to the open data definition, licences that are reusable, compatible and current, as explained by https://opendefinition.org/licenses/. Even though this is not the proper place for expanding on open licences, we believe it is important to underline some of the main features in this regard. Those licences, as a matter of fact, live within the limits and the frameworks of the copyright: there is no specific licence for open data, but there are numerous models that are articulated in three typos: licences requiring attribution and share-alike, requiring attribution only, and, thirdly, public domain waivers, creating a public domain (natural and real public domain comes when the exclusive rights expire). With regard to open licence, see S. Aliprandi (n 83) 28-57.
[91] Joel Gurin, 'Big Data and Open Data: How Open Will the Future Be', (2015) 3 *I/S: A Journal of Law and Policy for the Information Society* 10, 691–704.

licence, such as acknowledgment of source and acknowledgment of whether the document has been modified by the re-user in any way'.[92] In this norm we can find a general rule: all data can be open since the licence is open. The use and re-use of the data is totally depending on how the licence has been structured. In light of this we can modify our statement and add that all data can be open but not all data can be reusable: it depends on the licence the provider has adopted. In this regard, the aforementioned Rec. 26 encourages the use of open licences available online relying on open data format as it is the most suitable form for granting a wider use and re-use of data without any technological, financial, territorial limitation.[93]

Therefore, when opening data, there are some steps to be done in order to not encounter legal violation: here it is where we find the possible clash with the IP rights as both the data and the way those data are shared must be compliant with the law. When a public or a private actor decides to share its own research data or governmental data in an open form, it does not have to ask permission for doing it. However, it is quite obvious that there is not always a perfect resemblance: it frequently happens that who is sharing the data is not always the organisation that collected the information in the first place. In this case, there must not be any violation of third-parties' contents:[94] both for the selection and the arrangement of any database, the contents and the factual information should not be protected by copyright. Lastly, it is important to mention the Agreement on Trade Related Aspects of Intellectual Property Rights[95] (TRIPS) requiring the adoption – on the side of the World Trade Organization's Members – of tools able to legally protect the database. In this regard, at European Level the datasets should comply with the Database Directive:[96] this is requiring member states to implement sui generis right with specific regard to the extraction and re-utilization of the contents of datasets, protecting, though, also other related rights, such as trade secrets and unfair competition. Part of the literature suggests[97] that this is representing an obstacle to a full and concrete realisation of a wide-open

[92] Directive (EU) 2019/1024.

[93] On this regard, as pointed out by Monica Palmirani and Dino Girardi in 'Open Government Data: Legal, Economical and Semantic Web Aspects', in Ahti Saarenpaa and Karolina Sztobryn (eds), *Lawyers in the Media Society. The Legal Challenges of the Media Society,* (University of Lapland Printing Centre, 2016), there are many open licence formats on the web, such as the Creative Commons Licences CC-BY 4.0 comprehending the release of packages conformant with the definition of Open Data provided by the Handbook and including the protection of the dataset according to the *sui generis* right as foreseen by European Directive 2004/48/EC.

[94] See 'How to Open up Data', <https://opendatahandbook.org/guide/en/how-to-open-up-data/>. With referral to the third-parties, it is also to be mentioned that it is important to prevent third-parties from using, reusing and redistributing data without explicit permission, as mentioned in the Handbook.

[95] 'WTO | Intellectual Property (TRIPS) Standards', <https://www.wto.org/english/docs_e/legal_e/27-trips_04_e.htm> accessed January 2021.

[96] Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31996L0009.

[97] See S. Aliprandi (n 140) 28-57.

environment as the legal demands are huge on the side of a stakeholder who is deciding to make its data available. However, the knowledge transfer cannot overcome the necessary balance represented by these necessary limits and frames, even though they may seem strict, in order to prevent the creation of a system that is open but a substantial *terra nullius* on the protection of copyrighted contents.

The second important balance to be assessed when looking at open data is represented by privacy. The interplay between the two legal regimes is enshrined in the fact that personal data cannot be disclosed. As long as open data cannot contain any personal data, the discourse is not having any side effect on the level of the Reg. (EU) 2016/679.[98] There is still a misconstruction around how protecting data and opening data can pursue the same goal:[99] they are two opposite but persistent forces toward two distinctive fundamental rights in our democratic society. Open data are willing to ensure transparency, accountability, economic growth, innovation, but, on the other hand, privacy is restraining the possibility of making those data available[100]. This should bring up a reflection on reconciling and combining those two different interests, by including, for instance, a privacy-by-design perspective into 'the data-life cycle',[101] meaning shaping the dataset, since the beginning, protecting both access to knowledge and privacy, without being the latter one an excuse for not taking actions in the direction of building up an open data ecosystem.

3.2 The European approach: the three Directives

Since the open data fever spread in the world,[102] the EU institutions have taken both legislative and non-legislative measures to encourage the uptake of open data. On the non-legislative front, the European Commission has been very active in the field of open data, providing for soft

[98] Regulation (EU) 2016/679, General Data Protection Regulation (hereafter GDPR).

[99] Some even claim GDPR is controversial to the concept of open data. GDPR deals exclusively with personal data. The only situation when GDPR directly affects open data is when open data includes personal data. According to GDPR, European citizens must give their clear and explicit consent to the processing of their data. Therefore, no personal data can be published for re-use without the consent of the affected party', as also mentioned by 'Protecting Data and Opening Data | Portale Europeo Dei Dati', <https://www.europeandataportal.eu/it/highlights/protecting-data-and-opening-data> accessed January 2021.

[100] There are, of course, few exceptions under the GDPR, when personal data can be published: on the legal base of the data processing, such as when the data subject agreed on the publishing of its own personal data, or when the publication is possible under a legitimate reason (such as in the case of a court decision) or if those data are anonymized, as far as it is foreseen by art. 6 Reg. (EU) 2016/679.

[101] Melanie Dulong de Rosnay and Katleen Janssen, 'Legal and Institutional Challenges for Opening Data across Public Sectors: Towards Common Policy Solutions', (2014) 3 *Journal of Theoretical and Applied Electronic Commerce Research* 9, 1–14.

[102] The EU adopted its first set of rules on the re-use of public sector information (the 'PSI Directive') already in 2003. Therefore, the movement started to be worldwide known in the early years of the 21st century, according to the historical reconstruction by Andreas Wiebe, 'Data Protection Law and the Open Research Data Pilot', in Nils Dietrich (ed.), *Open Data Protection Study on Legal Barriers to Open Data Sharing – Data Protection and PSI* (1st ed, Universitätsverlag Göttingen, 2017).

measures facilitating access to data. Its involvement has mainly included the engagement of the Member States through the Public Sector Information expert group (PSI Group), funding the Legal Aspects of Public Sector Information (LAPSI) network[103] and developing the EU Open Data Portal,[104] which provides access to data from the EU institutions and bodies for reuse, to name a few.

The EU adopted its first set of rules on the re-use of public sector information (the 'PSI Directive') already in 2003.[105] The aim of that Directive was not so much to make public data more accessible and encourage its re-use, but to ensure that, when public sector bodies decided to make data available, they did so in a fair and non-discriminatory manner. In 2013, the Directive was the object of a strong makeover, to adapt the documents to the key transformative technological transformations and to take advantage of the big data held and accumulated by public authorities.[106] In 2019, it entered into force the so-called Open Data Directive[107] overcoming the barriers that are still preventing a complete realisation of PSI and shifting the focus from a mere view on the public sector to a Directive devoted to open data.[108] The Directive is following the path at the legal level of what we already mentioned, trying to assess a balance with IP and privacy. A balance that should be maintained by the Member States when setting and implementing policies on the use of those data.

The implementation of the Open Data Directive is a memorable moment looking at the private stakeholders' involvement. Since now, as it is clear also by the short tour on the legislative path undertaken at European level, the focus has been on public sector data. With the new Directive, there is an important change and, contextually, the hope is that the private sector would sail the vessel of open data carpe-ing the diem and profiting of their use and re-use toward business and innovation.

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[103] See 'Legal Aspects of Public Sector Information (LAPSI) Thematic Network Outputs', (*Shaping Europe's digital future - European Commission,* 6 January 2015), <https://ec.europa.eu/digital-single-market/en/news/legal-aspects-public-sector-information-lapsi-thematic-network-outputs> accessed January 2021.

[104] 'European Open Data Portal', <https://data.europa.eu/euodp/en/home> accessed January 2021.

[105] Directive 2003/98/EC on the re-use of Public Sector Information, also known as PSI Directive.

[106] Directive 2013/98/EC amending 2003/98/EC.

[107] Directive (EU) 2019/1024 on open data and the re-use of Public Sector Information, also known as Open Data Directive.

[108] The Directive is, as also clarified above, excluding any application over data of third parties or data of which third parties hold IP rights. The focus of the Directive is on data held by some public bodies undertakings or being the result of publicly funded researches, as it is also examined by Sara Gobbato in 'Verso l'attuazione Della Direttiva (UE) 2019/1024 Sul Riutilizzo Degli Open Data Della PA: Nuove Opportunità per Le Imprese', (*MediaLaws - Law and Policy of the Media in a Comparative Perspective* - (blog), 15 July 2020), <http://www.medialaws.eu/rivista/verso-lattuazione-della-direttiva-ue-20191024-sul-riutilizzo-degli-open-data-della-pa-nuove-opportunita-per-le-imprese/> accessed 16 January 2021.

4. Business and innovation: open data for the private sector

4.1 Transferring knowledge via open data: an oxymoron or a new business model?

194 billion euros: this is the estimated[109] value that PSI data are going to acquire within the 2030, becoming an essential cornerstone of the Digital Single Market. This means an incredible opportunity by making those data more worthful. Hence, understanding what open data is and clustering the interest on the advantageous information for the peculiar business conducted by the corporation, it is an operation that enhances the creative thinking. Furthermore, open data are giving the opportunity also to start-ups and small businesses to have access to high level research conducted by public bodies, since, as a matter of fact, they do not often have the economic possibility to invest a lot of money into research.

Once a useful data set is identified a business owner should study how to integrate those data into their product and services. As underlined by Marya Gabriel, Commissioner for Digital Economy and Society, 'taxpayers have already paid for those data':[110] making them available and accessible is a resource for innovation and economic growth, as we mentioned through this research. Nonetheless, this is not a perspective shared with the other side of the moon, the public sector bodies, that are frequently seeing on open data another waste of time and resources: therefore, the real challenge is to identify the concrete advantages.

In this regard, we can distinguish between direct and indirect benefits generated by open data.[111] The direct advantages are mainly related with the realisation of market transactions creating a gross value added and new incomes via the establishment of a new way of implementing a peculiar service or product by sparing the costs. The indirect benefits are, instead, related to other fields such as the economic, political and social level, and they consist of saving time for the realisation of new services and products, harnessing awareness and information through a more equalitarian transfer of knowledge.

However, this is not something automatic, as far as the benefits via and within the use of open

[109] See 'Impact Assessment Support Study for the Revision of the Public Sector Information Directive', (*Shaping Europe's digital future*, 25 April 2018), <https://ec.europa.eu/digital-single-market/en/news/impact-assessment-support-study-revision-public-sector-information-directive> accessed 15 January 2021.

[110] 'Public sector information has already been paid for by the taxpayer. Making it more open for re-use benefits the European data economy by enabling new innovative products and services, for example based on artificial intelligence technologies. But beyond the economy, open data from the public sector is also important for our democracy and society because it increases transparency and supports a facts-based public debate', Marya Gabriel, 'Digital Single Market: EU negotiators agree on new rules for sharing of public sector data', (*European Commission,* 22 January 2019), <https://ec.europa.eu/commission/presscorner/detail/en/IP_19_525> accessed December 2020.

[111] Francesco Sciacchitiano 'Disciplina e Utilizzo Degli Open Data in Italia', (*MediaLaws - Law and Policy of the Media in a Comparative Perspective* - (blog), 8 February 2018), <http://www.medialaws.eu/rivista/disciplina-e-utilizzo-degli-open-data-in-italia/> accessed 24 January 2021.

data are to be put into a concrete analysis of the business and the product (or service), changing accordingly to the practical phenomena. Thus, in this last part we are going to examine how and whether this is possible, mentioning various case studies.

4.2 Case studies

4.2.1 The IT Startups survey

138 Swedish IT-entrepreneurs found essential (at the 43%) the use of open data for their business plan claiming, in addition, (the 82% of the interviewed) that access would support and strengthen it: this is the result of a survey conducted during three start-ups conferences held in Sweden during the 2011 and 2012.[112] Answering the question 'how do firms use open data to create value?',[113] it is to underline that the main advantages seem to support and strengthen the realisation of their business, as far as absence of open data would slow the innovative process. The main advantages can be summed up in five categories:[114] stimulate potential viability to ensure funding, provide information about potential markets, reduce development lead time, drive innovation beyond application, enhance already existing services and products, in particular in the field of IT and e-commerce.

4.2.2 Open Street Map

Touching the direct payoff, a very broad use of open data has been done in the field of online street maps. Corporations[115], such as Google and Uber, are using Open Street Map:[116] a community of mappers with the will to integrate those maps with data coming from municipalities, with a continuous and networked update.

4.2.3 Open Food Facts

This is a non-profit project developed in France. The platform[117] collects data about nutritional products sold all over the world in a collaborative way, by enabling the users to scan a product by downloading an app on their personal devices. The idea is to create a database collecting

[112] Of the 137 respondents of the survey, 86 were owners or founders of an IT business, as stressed by Erik Lakomaa and Jan Kallberg in 'Open Data as a Foundation for Innovation: The Enabling Effect of Free Public Sector Information for Entrepreneurs', (2013)*IEEE Access* 1, 558–63.
[113] See Gustavo Magalhaes and Catarina Roseira, 'Open Government Data and the Private Sector: An Empirical View on Business Models and Value Creation', (2020) 3 *Government Information Quarterly* 37, 101248.
[114] According to the analysis presented by Erik Lakomaa and Jan Kallberg in 'Open Data as a Foundation for Innovation: The Enabling Effect of Free Public Sector Information for Entrepreneurs', *ibidem.*
[115] Charalabidis (n 78) 31-32.
[116] 'Open Street Map', <https://www.openstreetmap.org/about> accessed December 2020.
[117] 'Open Data Food Facts', <https://fr.openfoodfacts.org/> accessed December 2020.

information about products all over the world with the aim of making available data about allergens and, on the other hand, on helping end-customers make healthier choices.

4.2.4 Microsoft and Alan Turing Lab

In 2020, Microsoft launched a ground-changing project called Open Data Campaign[118] with the willingness to close the data divide and to build the stage for a worldwide discussion on how data and knowledge should be transferred. The portal is taking into consideration different fields, from climate change to COVID-19, collaborating also with The Alan Turing Institute that had been leading an air quality project, with the support of Microsoft's AI for Earth program, collecting data from across London to understand air pollution. The two institutes are working together in the frame of the pandemic, demonstrating the value of data-sharing in order to support the City of London response to COVID-19.

5. Conclusion: what's next?

Without giving voice to grandiose rhetoric around their possible use,[119] it is clear that more is needed than just spare policymaking assessment in order to manage legal and technical issues related to the use and re-use of open data. In the light of the Digital Single Market, it is to be avoided any localised attempts, but it must be promoted – now more than ever, as long as we are assisting to the implementation process of the Open Data Directive – a solid and concrete European approach oriented toward programmes and accelerators, by making the private actors the real protagonists.

What the future is going to look like, it is difficult to foresee. Big data is changing the world for everyone: entrepreneurs, scientists, politicians, journalists, scholars. This is something that hardly will be moved backwards dealing with a scenario totally driven by the increased ability in collecting and analysing data. Hence, open data would mean a new qualitative approach opposite to the one reflecting the quantity of information: the future will deeply depend on how these two concepts are going to work together.

Open data are the opportunity to re-balance the reallocation of knowledge and power, facilitating the creation of not only a more transparent and accountable panorama at governmental level, but

[118] See 'Closing the Data Divide: The Need for Open Data', (*Microsoft On the Issues*, 21 April 2020), <https://blogs.microsoft.com/on-the-issues/2020/04/21/open-data-campaign-divide/>, accessed December 2020.

[119] As well as mentioned by Federico Guerrini, 'The Dark Side Of Open Data: It's Not Only How Much You Publish, But How And Why', (*Forbes*), 2015, <https://www.forbes.com/sites/federicoguerrini/2015/01/27/the-dark-side-of-open-data-its-not-only-how-much-you-open-but-how-and-why/> accessed 3 January 2021.

also harnessing the real value of the data market, providing access to qualitative information to everyone.

BALANCING STATE RESPONSIBILITY WITH PHYSICAL AND MORAL INTEGRITY: CAN VACCINES BECOME COMPULSORY IN ORDER TO PROTECT AGAINST A PANDEMIC?

Elpida Pentheroudaki[120]

Abstract

A pandemic tests all aspects of human civilisation, from the capacity of national health care systems and the alertness of the State mechanism, to the psychological stamina of the people themselves. As a result, human rights are not left unscathed. Though at first glance, it may seem that only the rights to health and access to medical infrastructure are mainly affected, the scope is much larger. The purpose of this article is not to side with any of the opposing opinions regarding vaccination, but to examine the issue thoroughly through some of the rights in conflict: The right to life (Article 2 of the European Convention for the Protection of Human Rights and Fundamental Freedoms, Article 6 of the International Covenant on Civil and Political Rights) and the right to health (Article 12 of the International Covenant on Economic, Social and Cultural Rights), on one side, and the right to respect for private and family life (Article 8 of ECHR, Article 17 of ICCPR) and the freedom of thought, conscience and religion (Article 9 ECHR, Article 18 ICCPR), focusing on the European Convention for the Protection of Human Rights and the International Covenant on Civil and Political Rights, in order to illustrate the conflict of rights on a global scale.

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1. Introduction

The discussion of balancing private and public interest in this medical domain has years to be developed with such pressure for immediate action. The most frequent issue has been the compulsory vaccination of children and thus, parental refusal. Two factors here, however, are different when dealing with a whole world in distress and therefore, must be taken into account; firstly, the urgency for immediate herd-immunity (in contrast to the 'future-orientated' preventive purposes of children's vaccination policies)[121] and secondly, the fact that vaccines will be administered to adult people as well, who hold the legally recognised ability to make decisions freely and individually, in contrast to very young children, and the right to hold personal beliefs and convictions and lead their life accordingly. In this sense, it is easier to interpret compulsory vaccination as a 'forced medical procedure'. One for the sake of public health, one will argue. As both sides have valuable insight to offer, it is of great importance to ponder over the issue, without dismissing it as having an 'obvious' solution, and strike the right balance. Heist decisions in whichever direction, can devalue the moral aspect of victory when we overcome such challenges. Taking a step back from the current State of things, the following debate is of crucial importance and must be considered in the context of various even more serious global medical emergencies, like pandemics or disease-outbreaks,that cannot be sufficiently controlled with low-impact measures, but require strong initiatives.

2. The Right to Life and Health

2.1 The International Covenant on Civil and Political Rights.

The Universal Declaration of Human Rights is part of the International Bill of Human Rights, along with the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the International Covenant on Civil and Political Rights (ICCPR). Article 3 of the Declaration introduces the right to life, liberty and security of a person.[122] Although the abolishment of the death penalty was at the heart of this article, the right to life is a non-derogable, core, multifaceted and fundamental one, as only through life can all other rights be realised and appreciated (speech, thought, expression, etc.). Individuals are entitled to be free from acts and omissions that are intended or may be expected to cause their unnatural or premature death and have the right to

[121] CDC (Centre for disease control and prevention), 'Why immunize', (Vaccines and Immunisation, 12 July 2018) <https://www.cdc.gov/vaccines/vac-gen/why.htm> accessed 20 November 2020.
[122] Universal Declaration of Human rights (adopted 10 December 1948 by the UN General Assembly), art. 3.

enjoy a life with dignity.[123] This right is interpreted broadly, as well as the term deprivation.[124] Intentional or foreseeable and preventable life terminating harm, either caused by an act or an omission, constitutes deprivation of life.[125] Applying this definition to a virus with a high mortality rate, it is a life threatening harm, reasonably foreseeable to contract once it has infected a certain percentage and consequently the omission of the State to take appropriate suitable measures may cost many lives. And here comes the question of vaccines; if they are the most effective tool to combat a virus, omitting to make them compulsory and, hence, immunising a smaller percentage of the population, constitutes deprivation of life for the people at risk in cases of widespread outbreaks? The lower the immunisation rate, the higher the risk of contracting the virus, the heavier the toll it takes, especially on vulnerable societal groups. The State is obliged to respect the right to life by refraining from conduct that can result in its deprivation, but also their responsibility extends to taking positive action against reasonably foreseeable life-threatening situations. Deprivation of life is, as a rule, arbitrary if it is inconsistent with international or domestic law. Nevertheless, a deprivation of life may be authorised by law and still be arbitrary, as the notion of 'arbitrariness' is not a synonym of 'against the law', but is interpreted so that to include elements of inappropriateness, injustice, as well as the absence of the elements of reasonableness, necessity and proportionality.[126] These arguments are most often used in order to conclude whether it was arbitrary to keep a person in custody, or if use of force by State officials was arbitrarily excessive. However, it is useful to observe them from a different point of view, from the issue in debate here. Supposing the measures a State takes to protect against a virus have most of the characteristics mentioned above, are inappropriate, insufficient, unreasonably ineffective and they lack the level of necessity and proportionality required to protect the population (the opposite of what happens when matters of excessive force are concerned), the lives lost have been deprived of arbitrarily?

As Article 6(1) of the ICCPR States, the right to life shall be protected by law. Article 2 requires that States Parties adopt legislative, judicial, administrative, educative and other appropriate measures in order to fulfil their legal obligations, the obligations undertaken cited in the

[123] International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR), art. 4.2 and art. 6; UN Human Rights Committee 'General Comment 36: The Right to Life' (124th session 8 October - 2 November 2018), U.N. Doc. CCPR/C/GC/36 (2019) paras 2-3.
[124] International Covenant on Civil and Political Rights, art. 6.
[125] UN Human Rights Committee, 'General Comment No. 36' (n 123) para 6.
[126] UN Human Rights Committee 'Van Alphen v. The Netherlands, Communication No 305/1988' (1988) UN Doc CCPR/C/39/D/305/1988 para 5.8; U.N. Human Rights Committee 'FongumGorji Dinka v Cameroon, Communication No 1134/2002' (2002) U.N. Doc CCPR/C/83/D/1134/2002, para 5.1.

Covenant.[127] This raises another responsibility for the State, to adopt the necessary legal framework to eliminate threats to the life of its citizens and address the general conditions that may give rise to such direct threats.[128] These general conditions may include various forms of social trouble such as the prevalence of life-threatening transmissible diseases. The creation of conditions for protecting the right to life and promoting a life with dignity is a fundamental State responsibility including, where necessary, measures designed to ensure immediate access to essential goods and services, such as health care, effective emergency health services and other measures designed to improve general conditions of living.[129] In this context, provided that a State secures equal access to virus vaccines,compulsory vaccination is a tool to succeed in all of the aforementioned goals, it facilitates the rapid improvement of adequate general living conditions during a virus outbreak (and for the future by eliminating disease) and supports immensely, but also alleviates the pressure on emergency health services. However, voluntary immunisation of a small percentage, if refusal percentages are greater, essentially lack of action from the State mechanism to embrace a medical tool to its full potential, still exposes (especially vulnerable social groups that cannot easily protect from a dangerous illness) to the risk of loss of life, or degradation of living conditions. During most of 2020, it has been proven that long periods of quarantine have a serious impact on low-income families, homeless people, and are almost impossible to be maintained in densely populated communities that depend on strong government-initiatives that can allow life to restart and return to its normal pace.[130] It is not only taking a person's life that violates article 6 of the Covenant but also placing a person's life in grave danger, as in this case.[131] Moreover, life is endangered when access to healthcare service is rendered unfeasible. The UN Human Rights Committee, in its views adopted concerning Communication No. 2348/2014, has stated that since the author was able to receive medical care in emergency state health care services, the national authorities complied with their obligation

[127] UN Human Rights Committee 'General Comment 31: The Nature of General Legal Obligation imposed on State Parties to the Covenant' (18th session - 26th May 2004) U.N. Doc. CCPR/C/21/Rev.1/Add.13 para 7.
[128] UN Human Rights Committee, 'General Comment No. 36' (n 123) para 26; UN Human Rights Committee 'Views adopted by the Committee under article 5 (4) of the Optional Protocol, concerning communication No. 2348/2014' (2018) UN Doc CCPR/C/123/D/2348/2014 para 11.3.
[129] General Comment 36 (n 123) para 26.
[130] Stefanie DeLuca, Nick Papageorge, Emma Kalish, 'The Unequal Cost of Social Distancing' (Johns Hopkins University and Medicine, 2020)
<https://coronavirus.jhu.edu/from-our-experts/the-unequal-cost-of-social-distancing> accessed 10 December 2020.
[131] UN Human Rights Committee 'Karen Noelia LlantoyHuamán v Peru' Communication No.1153/2003 (22 November 2005) UN Doc CCPR/C/85/D/1153/2003, Disserting opinion by committee member Hipolito SolariYrigoyen.

under article 6.[132] Circumstances from the past months, however, have demonstrated that access to emergency services can be seriously hampered when dealing with virus outbreaks (hence, violating article 6), whereas vaccination decreases the percentage of people requiring hospitalisation and preserves their availability. It is therefore crucial for national authorities to devise effective strategies, in sync with the epidemiological data.

2.2 The International Covenant on Economic, Social and Cultural Rights

In addition to the ICCPR, the International Covenant on Economic, Social and Cultural Rights includes Article 12, specifically citing the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.[133] It does not translate into people having a right to be healthy, but rather it highlights the obligation of State parties to ensure to their population the highest attainable standard of health.[134] Interdependent even with the realisation of the right to life, health is a prerequisite to enjoy life with dignity. The meaning of Article 12 is not confined to ensuring health care but it consists of a wide range of socio-economic factors that promote the conditions necessary to lead a healthy life, such as housing, safe and healthy working conditions, a healthy environment or access to health related education and information.[135] It is doubtful whether quarantine and self-distancing strategies alone, can ensure safe working conditions or an environment free of preventable disease.

However, the State cannot control all factors that influence human health, since many of them are genetic. Consequently, the right to health must be understood as a right to the enjoyment (preferably through legislative implementation and adoption of national health policies as efficiently as possible towards the full realisation of Article 12) of the services and the conditions necessary for the realisation of the highest attainable standard of health.[136] When combating a high risk-rate virus, securing accessibility to vaccines is a self-evident necessity, however, the 'conditions necessary for the realisation of the highest attainable standard of health' may require more than accessibility and voluntary vaccination, especially considering that transmissible

[132] UN Human Rights Committee 'Views adopted by the Committee under article 5 (4) of the Optional Protocol, concerning communication No. 2348/2014' (2018) UN Doc CCPR/C/123/D/2348/2014 para 11.4.
[133] International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR), art. 12; see also Universal Declaration of Human Rights (adopted 10 December 1948 by the UN General Assembly), art. 25.1.
[134] UN Committee on Social, Economic and Cultural Rights, Fact Sheet No. 16 (Rev.1), Chapter 4: Substantive provisions of the International Covenant on Economic, Social and Cultural Rights, art. 12.
[135] UN Committee on Social, Economic and Cultural Rights, 'General Comment No. 14: The Right to the Highest Attainable Standard of Health'(22th session 25 April-12 May 2000), UN Doc E/C.12/2000/4 para 4.
[136] ibid paras 9, 31, 36.

diseases go beyond frontiers, dynamic and collective decisions are needed.[137] The establishment of a system of urgent medical care, vaccine accessibility, epidemiological surveillance, support and promotion of immunisation programmes are facets of the right to health and treatment.[138] Efforts to practically secure these rights are only successful if they are proportionate to the magnitude of the threat in question, and thus, immunisation programmes and the strategy of their implementation must correspond to epidemiological data, proving whether voluntary vaccination will be effective or not. The Committee of ICESC has categorised as a core State obligation the adoption of a national health plan of action,periodically reviewed, that addresses the population's health concerns while paying special attention to marginalised groups, and immunisation against major infectious diseases has been characterised as a comparable priority.[139] The interests of vulnerable communities, which suffer mostly during quarantine periods,[140] must be paid special attention to, when adopting policies to face pandemics. Explicitly cited in General Comment 14 of the Economic and Social Council, obligations to respect the right to health include the duty to refrain from applying coercive medical treatments, 'unless on an exceptional basis for the prevention and control of communicable diseases'.[141] Whether and when a situation constitutes 'exceptional basis' will be analysed later in the context of proportionality.

In light of the arguments mentioned, when does a State violate its obligation regarding the right to health? Violations through acts of omission include the failure to take appropriate and necessary steps towards the full realisation of everyone's right to the highest attainable standard of health, to adopt or implement a national health policy ideal to ensure that for everyone, or to monitor its realisation at the national level.[142] Taking this into account, during periods of national medical distress, the most appropriate and necessary health policy that responds to current needs the most effective way may be compulsory vaccination.

2.3 The European Convention of Human Rights

[137] ibid para 40.
[138] ibid para 16.
[139] ibid paras 43-44.
[140] Charlotte Gayer-Anderson, Rachel Latham, Catherine El Zerbi, Lucy Strang, Vivienne Moxham Hall, Gemma Knowles, Sally Marlow, Mauricio Avendano, Nick Manning, Jayati Das-Munshi, Helen Fisher, Diana Rose, Louise Arseneault, Hanna Kienzler, Nikolas Rose, Stephani Hatch, Charlotte Woodhead, Craig Morgan, Ben Wilkinson, 'Impacts of social isolation among disadvantaged and vulnerable groups during public health crises' (ESRC Centre for Society & Mental Health, King's College London, June 2020) <https://esrc.ukri.org/files/news-events-and-publications/evidence-briefings/impacts-of-social-isolation-among-disadvantaged-and-vulnerable-groups-during-public-health-crises/> accessed 27 December 2020.
[141] General Comment No. 14 (n 135) para 34.
[142] ibid paras 49, 52.

Finally, it is time to examine Article 2 of the European Convention of Human Rights (ECHR) and its implementation.[143] As one of the most fundamental provisions of the Convention, it is non-derogable under article 15 of the Convention and must be interpreted and applied so as to make its safeguards practical and effective.[144] Under article 2, the State not only has to refrain from the intentional and unlawful taking of life, but it has the duty for the adoption of appropriate measures to safeguard the lives of those within its jurisdiction.[145] Regarding the medical field, acts and omissions of the authorities in the field of health care policy may engage the State's responsibility under Article 2, since an individual's life can be put at risk through the denial of health care, generally available to the population.[146] Events like this have been nothing but rare in many countries during this pandemic, and expansion and maintenance of health-care facilities is a costly procedure, opposed to the cost-effectiveness and rapidity of vaccines.[147]

Article 2 encloses the general obligation to take measures to prevent dangerous situations and safeguard the life of its citizens, as it has been applied to accidents and natural disasters,[148] therefore, the uncontrolled spreading of a virus constitutes a situation demanding appropriate State action to avoid further loss of lives. The European Court's of Human Rights task is in this case, to determine whether, given the circumstances, the State did all that it was required to, so that to prevent the applicant's life from being avoidably put at risk. Obligation under Article 2 has been found to arise in a range of different contexts examined so far by the Court, from the health care sector, to the management of dangerous activities, including safety on board a ship or on building and road accidents, even situations where individuals are at risk resulting from their own action or behaviour.[149] The above list of sectors is not exhaustive,[150] and extensive virus outbreaks (and their consequences on all human activities dangerous or not), constitute a continuous

[143] Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as amended) (ECHR), art. 2.
[144] *McCann and Others v. the United Kingdom* App no 18984/91 (ECHR, 27 September 1995) para 146; *Kontrova v. Slovakia* App no 7510/04 (ECHR, 31 May 2007) para 51.
[145] *Hristozov and others v Bulgaria* App no(s) 47039/11, 358/12 (ECHR, 13 November 2012) para 106.
[146] ibid.
[147] Jason Horowitz, 'Italy's Health Care System Groans Under Coronavirus - a Warning to the World' (The New York Times, 17 March 2020) <https://www.nytimes.com/2020/03/12/world/europe/12italy-coronavirus-health-care.html> accessed 2 January 2021; Mary Geitona, Lorena Androutsou, Theodora Theodoratou, 'Cost estimation of patients admitted to the instensive care unit: A case study of the Teaching University Hospital of Thessaly' (2010) 13(2) Journal of Medical Economics <https://www.researchgate.net/publication/41720992_Cost_estimation_of_patients_admitted_to_the_intensive_care_unit_A_case_study_of_the_Teaching_University_Hospital_of_Thessaly> accessed 20 January 2021.
[148] *Oneryildiz v. Turkey* App no 48939/99 (ECHR, 30/11/2004); *M.Ozel and Other v. Turkey* App no(s). 14350/05, 15245/05, 16051/05 (ECHR, 2 May 2016); *Kolyadenko and others v. Russia* App no(s) 17423/05, 20534/05, 20678/05, 23263/05, 24283/05, 35673/05 (ECHR, 28/02/2012).
[149] *Furdik v. Slovakia* App no 42994/05 (ECHR, 2 December 2008).
[150] ibid.

high-risk situation.

It is uncontested that governments have an obligation for the health of their people. The WHO and the Council of the EU have stressed the huge role of vaccination in disease elimination. The Council underlines the importance of vaccination in preventable disease elimination, considers it a vital integral part of the healthcare system and notes that certain percentages of vaccinated people must remain above a certain threshold to ensure 'herd-immunity'.[151] The World Health Organisation considers immunisation as the most cost effective preventive health intervention, as it also serves as a strong defence against antimicrobial resistance and eradicates life threatening epidemics such as measles, polio, etc.[152]

The issue is better understood from the aspect of paragraph 2 of Article 8 (the right to privacy)of the European Convention, which introduces grounds on which derogations are allowed from Article 8, under specific conditions to prevent unlawful intervention. The protection of public health is one of those. The Court examines if the interference was clearly provided by law, pursued the legitimate aim of the protection of health and whether this was necessary in a democratic society, in other words whether a 'pressing social need exists'.[153] The compulsory vaccination schemes respond to a pressing social need to protect public health, relieve the burden on the healthcare system and allow for quarantine measures to be lifted and economic rebound to commence. The Court has assessed in the case of Solomakhin V. Ukraine that, even though the patient was vaccinated without his explicit consent, the interference with the applicant's physical integrity (protected under Article 8) could be said to be justified by the need to protect public health and the necessity to control the spreading of infectious diseases in the region.[154] The European Commission, as well, in the case of Carlo Boffa and Others v. San Marino, judged in favour of vaccination campaigns as the individual's obligation to defer to the general interest and not to endanger the health of others, when ensured that his own life is not in danger, does not surpass the margin of appreciation left to the State.[155] The spread of a highly infectious

[151] Council of the European Union, 'Notices from European Union Institutions, Bodies, Offices and Agencies, Council Conclusions on vaccination as an effective tool in public health' (2014) 57 (C438) Official Journal of the European Union <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2014:438:FULL&from=NL> accessed 18 December 2020.

[152] WHO, '10 Facts on Immunisation' (WHO, March 2018) <https://www.who.int/mongolia/health-topics/vaccines/10-facts-on-immunisation> accessed 18 December 2020.

[153] *Dudgeon v The United Kingdom* App no 7525/76 (ECHR, 22 October 1981) para 51; *Solomakhin v Ukraine* App no 24429/03 (ECHR, 15 March 2012) para 35. Article 8 and the terms of necessity and proportionality of the interference and the State's margin of appreciation will be developed more extensively in the chapter of proportionality.

[154] *Solomakhin v Ukraine* (n 153) para 36.

[155] *Carlo Boffa and 13 others v San Marino* App no 26536/95 (European Commission, decision of 15 January 1998).

disease and the cost-effective, rapid and sustainable solution vaccines offer may justify stricter measures. By increasing vaccination coverage rates, the State essentially takes action in order to be in line with its obligations under Article r2. In the instant case, the aim of the legislation introducing the obligation to vaccinate is to protect the overall health of society against infectious diseases, and it is in the State's and the person's best interest since it provides protection, irrespective of factors that can endanger the effectiveness of immunisation and thus, cost more lives.

Regarding risks that vaccines may pose to health, if the suitability for vaccination has been checked prior to injection and necessary precautions had been taken to ensure that it would not be to the applicant's detriment, then the balance of interests between the applicant's personal integrity and the public interest of protection health of the population is maintained and the health status of the individual is not endangered.[156] The State shall refrain from accidentally endangering the life of an individual when such risk is sufficiently established.[157] Since vaccines in order to be distributed to the population, are thoroughly examined, researched and experimented, going through several stages of testing, such risks to life are eliminated through these procedures.[158]

3. The Right to Private Life and Conscience

3.1 Private Life under the International Covenant on Civil and Political Rights

On the other side of this debate, the arguments against coercive medical procedures stem from the right of the individual to protect his privacy and thus, bodily integrity, and to lead life according to his convictions. Beginning with Article 17 of the ICCPR, no one shall be subjected to arbitrary or unlawful interference with his privacy. The UN Human Rights Committee has yet to specify the scope of the term 'privacy'. A rough definition would be for it to include activities generally expected to be free from unlawful, unjustified and disproportionate intrusions in a democratic society. Since in General Comment 16 of the Human Rights Committee, the example

[156] *Solomakhin v Ukraine* (n 153).
[157] *L.C.B. v. UK* App no 23413/94 (ECHR, 9 June 1998) paras 36-41.
[158] FDA, Vaccine Development 101 <https://www.fda.gov/vaccines-blood-biologics/development-approval-process-cber/vaccine-development-101> accessed 29 January 2021. For more information regarding emergencies and pandemics read chapter 'Special Considerations-Public Health Emergencies' as it is explained that making a vaccine rapidly available does not imply cutting down on safety procedures but rather promoting cooperation between government organisations, pharmaceutical companies and researchers. WHO, CoronaVirus disease: Vaccine Research and Development <https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccine-research-and-development> accessed 29 January 2021.

of body search is used in order to specify how an interference with this right must respect the person's dignity,[159] then the most intense interference with the human body, its puncture with the vaccine needle, falls within the scope of the article. From the jurisprudence of the Committee its scope seems rather wide as topics like changes to one's surname without consent,[160] interferences with a woman's reproductive health,[161] and compulsory HIV testing for Visa renewal, all fall under Article 17.[162]

In the view of the Committee this right is required to be guaranteed against all such interferences whether they emanate from State authorities or from natural or legal persons.[163] Article 17 of the Covenant protects against both unlawful and arbitrary interference; the term 'unlawful' signifies that an interference can take place only when it is envisaged by the law and the expression 'arbitrary' extends to an interference provided for under the law, but not in accordance with the provisions, aims and objectives of the Covenant or reasonable in the particular circumstances.[164] Since vaccination resides in the State's obligation to protect its people's health which is guaranteed by law, we have to examine whether its mandatory aspect is arbitrary, disproportionate in the particular circumstances. As the Committee has Stated in Communication No. 2273/2013, requiring obligatory HIV testing for Visa renewal was not proportionate to the legitimate aim pursued, the protection of public health, as it wasn't clearly proven how HIV restrictions on entry and residence alone based on a positive test, really secure and protect public health.[165] Proportionality is once again the most important aspect and it is why each case and each country's measures must be examined individually. No universal answer exists. Factors like urgency, effectives, or not, of alternative measures and the problems or inconveniences of each strategy, must be carefully compared and judged in relation to up-to-date epidemiological data.

As far as the Covenant on Economic and Social Rights is concerned, in General Comment No. 14 concerning the right to health, it is Stated that it contains the freedom to control one's health and body, the right to be free from interference, such as non-consensual medical treatment.[166]

[159] UN Human Rights Committee 'General Comment 16: The Right to Respect of Privacy, Family, Home and Correspondence, and Protection of Honour and Reputation' (32th session 8 April 1998), U.N. Doc. HRI/GEN/1/Rev.9 (Vol.1) (1998) para 8.
[160] UN Human Rights Committee, 'Communication No. 1621/2007' (100th session 11-29 october), U.N. Doc. CCPR/C/100/D/1621/2007.
[161] UN Human Rights Committee, 'Communication No. 1153/2003' (85th session 17 October-3 November 2005), U.N. Doc. CCPR/C/85/D/1153/2003.
[162] UN Human Rights Committee, 'Views adopted by the committee concerning Com. No. 2273/2013' (123th session 2-27 july 2018) U.N. Doc. CCPR/C/123/D/2273/2013.
[163] General Comment No. 16 (n 216) para 1.
[164] ibid paras 3-4.
[165] Views adopted by the committee concerning Com. No. 2273/2013 (n 219).
[166] General Comment No. 14 (n 135) para 8.

Compulsory vaccination (without consent of course) undoubtedly falls into the scope of non-consensual medical treatment.

Additionally, even though issues of public health are sometimes used by States as grounds for limiting the exercise of other fundamental rights, the limitation clause of Article 4 of the ICESCR, is primarily aimed at protecting the rights of individuals rather than to permit limitations by States, which must always be in accordance with the law and strictly necessary for the promotion of the general welfare in a democratic society.[167] That is why compulsory vaccination must be viewed as a means to promote individuals' rights (health, economic interests, returning to work, school or universities under normal circumstances) rather than a means to restrict them and therefore, should only applied in situations where it is an absolute necessity in order to ensure those rights when all of the less intrusive solutions have failed. Once again the notion of necessity must be examined, while paying the necessary attention to all rights concerned.

3.2 The European Convention of Human Rights

Finally, the European Convention of Human Rights also protects the right to private life. Article 8 states that everyone has the right to respect for his private life, which encompasses both the physical and moral integrity of a person.[168] In the case of Solomakhin v. Ukraine it is clearly stated that vaccination without the patient's consent constitutes a violation of Article 8.[169] The Court's decisions recognise that physical integrity concerns one of the most intimate aspects of private life[170] and it considers that the notion of personal autonomy is an important principle underlying the interpretation of Article's 8 guarantees.[171] Even minor interferences with one's physical integrity (minor medical interventions for example) constitute an interference with this right.[172]The question of the violation of Article 8 concerns two different situations depending on the circumstances; if the person is vaccinated against his will, his physical integrity is directly violated but if he is sanctioned for refusing vaccination, the legitimacy of this sanction is put in question through Article 8. This article promotes self-determination especially in the field of medical treatment and other healthcare strategies, allowing decision making, must be carefully

[167] ibid para 28.
[168] *X and Y v The Netherlands* App no 8978/80 (ECHR, 26 March 1985) para 22; *Matter v Slovakia* App no 31534/96 (ECHR, 5 July 1999) para 64; *Solomakhin v Ukraine* (n 153) para 33.
[169] *Solomakhin v Ukraine* (n 153) para 33.
[170] *Y. F. v Turkey* App no 24209/94 (ECHR, 22 July 2003) para 33.
[171] *Pretty v The United Kingdom* App no 2346/02 (ECHR 29 April 2002) para 61.
[172] *Glass v The United Kingdom* App no 61827/00 (ECHR, 9 March 2004) paras 82-83; *V. C. v. Slovakia* App no 18968/07 (ECHR, 8 November 2011) para 105; *Roger Acmanne and others v. Belgium* App no 10435/83 (European Commission, 10 December 1984) para 253.

examined and always preferred.

The obligations of the State under Article 8 are mainly of negative nature, to abstain from interference with this right.[173] However competing private and community interests must be balanced in every democratic society. Paragraph 2 of article introduces the parameters of a legitimate interference; in accordance with the law, necessary in a democratic society and serving one of the aims set forth in the article's provisions. Concerning the rule of law, any infringement to this right must be compliant to domestic law but the legislation must also be accessible, precise and foreseeable, so that the individual knows how to behave.[174] Having the required legal basis, vaccination undoubtedly protects public health, a legitimate aim mentioned in paragraph 2 of Article 8. The parameter of necessity will be examined in the next chapter on proportionality.

Finally, Article 9 of the ECHR is also worthy of discussion. It secures the right to freedom of thought, conscience and religion and to manifest each one, a right also present in Article 18 of the International Covenant on Civil and Political Rights. This analysis will focus on conscience and convictions. Convictions are firmly held beliefs and certain criteria exist in the Court's jurisprudence to differentiate them from a simple opinion. Convictions falling under the protection of Article 9 must be genuinely-held,[175] deeply (or genuinely) held religious or other convictions, ethical, moral.[176] Additionally, convictions are not to be translated as 'opinions' or 'ideas', as they require a certain level of seriousness, cogency, cohesion and importance.[177] Furthermore, the objection to vaccination itself must have the characteristics of a conviction and not be opportunistic. To make it clearer, it must be motivated by a serious and insurmountable conflict between the obligation and a person's conscience or his deeply held beliefs, insurmountable meaning that objection or refusal is the individual's only choice.[178] Finally, the Court has established that a clear and direct link must exist between the act and the underlying belief, acts or omissions which do not directly express the belief concerned fall outside the protection of Article 9.[179] In our case however, having convictions against vaccines and refusing vaccination are clearly directly linked. In conclusion, the refusal to be vaccinated, tends to protect a fundamental right, the person's physical integrity, it expresses his own domination over his body

[173] *Kroon and others v The Netherland* App no 18535/91 (ECHR, 27 October 1994) para 31.
[174] *Dubska and Krejzova v The Czech Republic* App no(s) 28859/11, 28473/12 (ECHR, 15 November 2016) para 167.
[175] UN Human Rights Committee, 'Communications Nos. 1321/2004 and 1322/2004' (88th session 16 October- 3 November 2006) (2007), U.N. Docs CCPR/C/88/D/1321-1322/2004 para 8.2.
[176] *Bayatyan v Armenia* App no 23459/03 (ECHR, 7 July 2011) para 110.
[177] *Valsamis v Greece* App no 21787/93 (ECHR, 18 December 1996) para 25.
[178] *Bayatyan v Armenia* (n 176) para 110.
[179] *Eweida and others v The United Kingdom* App no(s) 48420/10, 36516/10, 51671/10, 59842/10 (ECHR, 15 January 2013) para 82.

and constitutes an expression of the principle of the free and informed consent. If refusal is not opportunistic or temporary, it is, I believe, of sufficient seriousness to fall under Article's 9 protection.

However the right to manifest one's convictions is not absolute. Article 9 paragraph 1 of the Convention contains two strands, one on the right to hold a belief and the other on the right to manifest that belief; the State cannot interfere with holding a belief or dictate one, but manifestations are bound to limitations under paragraph 2, the same three as in Article 8 of the Convention; having a basis in national law, being necessary and serving the legitimate aim of public health,[180] as manifestation can have an influence on other people's lives.[181] It is important to note that Article 9 does not explicitly refer to a right to conscientious objection.[182] It only protects convictions and any interference has to be in accordance with paragraph 2. Similar provisions exist in Article 18 of the International Covenant on civil and political rights as limitations on the freedom to manifest religion or belief may be applied only for those purposes for which they were prescribed and must be directly related and proportionate to the circumstances that legitimise their implementation.[183]

Regarding a case about vaccination, the European Commission in Boffa and Others V. San Marino supported that because the obligation to be vaccinated, as laid down in the legislation at issue, applies to everyone, whatever their religion or personal convictions, there has been no interference with Article 9.[184] Such justifications, however, appear to ignore the essence of having a different belief or religion, perhaps that of a minority. It should be unnecessary to explain that universal implementation doesn't justify being irrespective or indifferent towards various religions and convictions amongst people. It is therefore necessary to examine the concept of 'necessary in a democratic society for the protection of public health and proportionate to the legitimate aim pursued'.[185]

4. Proportionality

Proportionality is the notion that every decision comes down to. First and foremost, it is imperative to remind that all human rights are of interdependent,[186] none should be arbitrarily

[180] *Ivanova v Bulgaria* App no 52435/99 (ECHR, 12 April 2007) para 79.
[181] *Eweida and others v The United Kingdom* (n 179) para 80.
[182] *Bayatyan v Armenia* (n 176) para 110.
[183] UN Human Rights Committee 'General comment No.22 (48) on article 18' (27 september 1993), U.N. Docs CCPR/C/21/Rev.1/Add.4 para 8.
[184] *Carlo Boffa and 13 others v San Marino* (n 155).
[185] *Dudgeon v The United Kingdom* (n 153) paras 51-53.
[186] Ioannis Ktistakis, 'International Protection of the Human Rights' in C. Antonopoulos and K. Magliveras (eds), The

sacrificed for the sake of another, proportionality tests must be carried out regularly and innovative measures that avoid conflict of rights should be prioritised. Provided that the mandatory vaccination scheme is based on domestic law (and clearly aims to protect public health), it must also be necessary in a democratic society. That means that there must be no other alternatives of achieving the same goal that would interfere less with the fundamental right concerned, in our case physical integrity and the right to freedom of conscience.[187] Additionally, any interference must correspond to a 'pressing social need' and that is exactly why 'necessary' does not have the flexibility of being interpreted as 'useful' or 'desirable'.[188] Regarding now, the interpretation of necessity, it has been acknowledged by the European Court of Human Rights that the national authorities are in a more suitable position than an international judge to evaluate local needs and conditions, to decide both on the presence of an emergency, on the nature and scope of derogations necessary to avert it and a margin of appreciation is left to their discretion.[189] They consist of individuals who are familiarised with a country's ability to handle a pandemic crisis and on the other hand, of its limitations and the need for a change of strategy, if and when required. Moreover, a wider margin of appreciation is recognised where there is no unanimity within the member States concerning the importance of the interest at stake or the best means of protecting it, and also in cases where the State is required to strike a balance between competing private and public interests or Convention rights.[190] Since a universal vaccination scheme within the EU countries doesn't exist, the issue is handled in various ways (either with mandatory or voluntary policies);[191] thus, national authorities enjoy this wider margin of appreciation. That is not though an excuse for arbitrary violations as it is the duty of the nation authorities to demonstrate the existence of a pressing social need behind the interference.[192] The State has to balance the need to maintain pluralism, broadmindedness and respect the right of every individual for consent regarding interventions to one's body with its

Law of the International Society (2nd edition, NomikiBibliothiki S.A. 2014) pp. 611.

[187] *Biblical Centre of The Chuvash Republic v Russia* App no 33203/08 (ECHR, 12 June 2014) para 58.

[188] *Svyato-MykhaylivskaParafiya v Ukraine* App no 77703/01 (ECHR, 14 June 2007) para 116.

[189] *Ireland v. The United Kingdom* App no 5310/71 (ECHR, 18 January 1978) para 207; *Dudgeon v The United Kingdom* (n 153) para 52; General comment No. 14 (n 135) paras 43, 54.

[190] *Paradiso and Campanelli v Italy* App no 25358/12 (ECHR, 24 January 2017) para 182.

[191] M. Haverkate, F. D'Ancona, C.Giambi, K.Johansen, P.L.Lopalco, V.Cozza, E.Appelgren, 'Mandatory and recommended vaccination in the EU, Iceland and Norway: Results of the VENICE 2010 survey on the ways of implementing national vaccination programs' (2012) 17 (22) Eurosurveillance Journal <https://www.eurosurveillance.org/content/10.2807/ese.17.22.20183-en> accessed 1 February 2021; Olivia M. Vaz, Mallory K. Ellingson, Paul Weiss, Samuel M. Jenness, Azucena Bardají, Robert A. Bednarczyk, Saad B. Omer, 'Mandatory Vaccination in Europe' (2020) 145 (2) Pediatrics <https://pediatrics.aappublications.org/content/pediatrics/145/2/e20190620.full.pdf> accessed 1 February 2021.

[192] *Piechowicz v Poland* App no 20071/07 (ECHR, 17 April 2012) para 212.

responsibility to serve the interests of society as a whole and its welfare.Examples of approaches aiming to reconcile opposing rights exist in the Court's and the UN Human Rights Committee's jurisprudence. In the case of Bayatyan V. Armenia and on Communication 2218/2012, the Court and the UN Human Rights Committee respectively, both recognised the responsibility of governments to offer alternatives to military service to those whose religion or convictions prohibit the use of arms.[193]

The Human Rights Committee has recently published that in the face of the COVID-19 pandemic, States parties must take effective measures to protect the right to life and health of all individuals within their territory, it recognises that such measures may result in restrictions on the enjoyment of rights guaranteed by the Covenant and acknowledges the possibility for them to invoke Article 4 of the Covenant, allowing temporary derogations, if the life of the nation is endangered.[194] The importance of strict necessity and proportionality of any derogating measures is highlighted by the Committee,[195] but the important question here is whether declaring a country in a State of emergency,since the life of the nation is at risk, and implementing Article 4 of the Covenant, satisfies by itself the requirement of necessity to implement obligatory immunisation.

Even though vaccines are indeed the most cost-effective and useful way to eliminate disease, doubt surrounds the exigency to make vaccination mandatory. Comparative research has examined the policies EU countries adopt, and their results on the population's immunisation coverage. No clear link has been established that the step of making a vaccination mandatory alone, increases immunisation coverage.[196] In countries like France, Greece, Italy and Malta where vaccines against pertussis and measles are recommended, not mandatory, and the coverage is still very high. The label 'mandatory' on a vaccine does not automatically guarantee high vaccination coverage and many other factors affect it, such as prices for the recipient, information and promotional campaigns.[197] Even in countries that oblige the population to vaccinate, outbreaks due to failure to reach the necessary immunisation threshold still happen.[198] As far as ways to compel individuals to vaccinate are concerned, financial penalties to reduce vaccine refusal are of

[193] *Bayatyan v Armenia* (n 176) para 124; UN Human Rights Committee 'Communication No. 2218/2012, View adopted by the Committee at its 113th session' (19 May 2015) U.N. Docs CCPR/C/113/D/2218/2012 paras 7.7, 7.8.
[194] UN Human Rights Committee, 'Statement on derogations from the Covenant in connection with the COVID-19 pandemic' (30 April 2020) UN Docs CCPR/C/128/8.
[195] ibid.
[196] Asset Survey, 'Compulsory Vaccination and Rates of Coverage Immunisation in Europe' <http://www.asset-scienceinsociety.eu/reports/pdf/asset_dataviz_I.pdf> accessed 7 January 2021.
[197] Haverkate (n 191).
[198] Vaz (n 191).

doubtful efficiency as individuals who objected to vaccination were approximately twice as likely to live in areas of higher socioeconomic resources, making financial disincentives ineffective because those likely to refuse may also have the ability to pay the price.[199]

On the matter of consent and personal autonomy, the European Court on the case of Jehovah's witnesses of Moscow v. Russia regarding one's right to deny blood transfusion and thus, endanger his life, has hinted that when there is no indication of the need to protect third parties, such as the case of mandatory vaccination during an epidemic, the State must refrain from interfering with the individual freedom of choice in the sphere of health-care.[200] The biggest identifying element of vaccines, opposed to other medical interventions ,is clearly recognised by the court; refusing vaccination also influences third parties as it is a strategy that works only through achieving and maintaining high immunisation rates, only when people cooperate for the greater good.

5. Conclusion

On the 1st of July 2020, the Grand Chamber of the European Court of Human Rights held a hearing on the case of Pavel Vavricka and others v. the Czech Republic, where parents refused to have their children vaccinated. Until the Court delivers a judgment, we should conclude by highlighting the importance of an education-based approach on vaccination, conciliatory of the rights in conflict, opposed to mandates. Refusal is mainly fuelled by lack of information, doubt or fear rather than deep convictions against vaccines.[201] A highly-doubtful population must be interpreted as a reminder to improve educational and promotional programmes even more. Maybe the key is familiarising the population with the science and research behind vaccine creation, the safety procedures and thus, creating a relationship of trust between patient and physician, instead of more aggressive tactics like mandates. Vaccination is a collective measure, only effective if welcomed by the population. Living in a community requires contributing to its welfare, taking a step forward and creating a barrier against disease. Hence, educating on the matter, dissolving any doubt or misinformation around it, will encourage people to trust in science, while maintaining their moral integrity, consciously consenting to medical intervention and this way, truly realising its value for the human life, a life with dignity and free of disease.

[199] ibid.

[200] *Jehovah's witnesses and others v Russia* App no 302/02 (ECHR, 10 June 2010) para 136.

[201] MR Gualano, E Olivero, G Voglino, M Corezzi, P Rosello, C Vicentini, F Bert, R. Siliquini, 'Knowledge, Attitudes and beliefs towards compulsory vaccination; a systematic review' (2019) 15 (4) Human Vaccines and Immunotherapeutics<https://www.tandfonline.com/doi/full/10.1080/21645515.2018.1564437> accessed 2 February 2021.

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