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CRIMINAL LIABILITY AND VIRAL HOMICIDE – CAN IT BE PROSECUTED AS A CRIME AGAINST HUMANITY?[1]

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Keywords: COVID-19 pandemic, viral homicide, criminal responsibility, International Criminal Court, crimes against humanity, cyberattacks.

ABSTRACT

Background: *One of the current topics at the international level is the COVID-19 pandemic, which has changed the lives of all people globally and caused economic and human losses. In legal scientific discourse, there are repercussions.*

Methods: *To uncover scientific knowledge and results, the authors apply qualitative research methods such as content analysis, the legal dogmatic method, and methods of induction and deduction. Essential tools that authors use in this research are primary legal texts of the International Criminal Court (ICC) and other international treaties, as well as the case law of the ICC, the European Court of Human Rights (ECtHR), the International Court of Justice (ICJ),* ad hoc *and internationalised and mixed (hybrid) tribunals, and secondary legal sources.*

Results and Conclusions: *This paper is based on the hypothetical situation of the deliberate creation and spread of a pandemic that resulted in enormous human losses. The authors examine the central question, which is whether viral homicide could be prosecuted as a crime against humanity before the ICC. The authors conclude that existing provisions of Art. 7 of the Rome Statute could not be interpreted so broadly as to encompass viral homicide as a crime against humanity. Expanding the scope of Art. 7 of the Rome Statute to cover viral homicide would violate basic principles of criminal law such as* nullum crimen sine lege *and* lex certa.

1 INTRODUCTION

At a time of globalisation, technical and technological progress, and the desire for power in global politics, social relations are developing rapidly, thus creating new challenges for the legal system. In addition, the world has been facing a pandemic that has changed everyone's lives and posed new challenges. Given the number of victims and the socio-economic consequences of the pandemic, it is clear to everyone that we need a global response to the pandemic.[2]

This paper does not intend to enter into a discussion of the origin of COVID-19. Instead, the paper is based on a hypothetical situation wherein State X, being a non-party state to the Rome Statute, and the Head of State (or individuals acting in a more or less official capacity, such as government officials) ordered the creation of a deadly virus for research purposes

2 According to the World Health Organization, as of April 2023, there have been over 6 million confirmed deaths due to coronavirus infection. See 'WHO Coronavirus (COVID-19) Dashboard' (*World Health Organization*, 4 May 2023) <https://covid19.who.int> accessed 10 May 2023.

in a laboratory that was not equipped for this type of research. Accordingly, a deadly virus escaped, causing a global pandemic and the death of over 250,000 people worldwide. Furthermore, this research is inspired by a hypothetical case introduced at the International Criminal Court Moot Court Competition for 2021 at the Grotius Centre for International Legal Studies of the Leiden University in The Hague, the Netherlands.

So far, no significant legal and scientific attention has been paid to the issue of criminal responsibility/accountability in international criminal law for deliberately creating and spreading a deadly virus.[3] In this regard, in our research, we used the existing literature on international criminal law, particularly the variety of academic papers that address some isolated issues of criminal responsibility, elements of crimes against humanity, cyberattacks, cyberspace and the jurisdiction of the International Criminal Court (ICC). On the other hand, in arguing and proving the hypotheses, we consulted and used the jurisprudence of the ICC as well as the case law of *ad hoc* tribunals, in the first place, the International Criminal Tribunal for the former Yugoslavia and the International Criminal Tribunal for Rwanda, respectively, and the views of the European Court of Human Rights (ECtHR), the latter representing one of the most effective and influential regional international human rights courts.

Regarding the above, the authors examine whether *contempora*ry international criminal law judicial bodies possess and could exercise jurisdiction over the deliberate creation and spread of a deadly virus and whether the ICC can functionally establish its jurisdiction over nationals of a non-party state (a country that is not a member of the Rome Treaty system). The general hypothesis set out in the paper is that contemporary international criminal law lacks an answer to the intentional creation and spread of a deadly virus. Therefore, the elaborating (collateral) hypothesis reads that creating and spreading a deadly virus cannot be treated and prosecuted as a crime against humanity under the provision in Art. 7.1. neither as a crime against humanity of murder under Art. 7.1. (a) nor as a crime against humanity or other inhumane acts set out in a provision in Art. 7.1. (k) of the Rome Statute.

In order to come to scientific knowledge and results, the authors apply qualitative research methods such as content analysis, the legal dogmatic method, and methods of induction and deduction. Essential tools that authors use in this research are primary legal texts (Rome Statute (treaty), Elements of Crimes (non-treaty based source), and Rules of Procedure and Evidence (non-treaty based document) of the ICC, other international treaties, the case-law of the ICC, the ECtHR, the International Court of Justice (ICJ), *ad hoc* and internationalised and mixed (hybrid) tribunals, and secondary legal sources (commentaries, books and law reviews).

2 INTERNATIONAL CRIMES *STRICTO SENSU* AND VIRAL HOMICIDE

The ICC is a permanently formed, structured and organised international criminal judicial body established by an international multilateral treaty, the Rome Statute, which was adopted on 17 July 1998 after long and sometimes unpromising negotiations and which entered into force four years later, on 1 July 2002. The aim of establishing the ICC was to punish individuals accountable for (grave) violations of international humanitarian law. *Ratione materiae*, the ICC is responsible for international crimes *stricto sensu*, i.e., genocide

3 For additional information referring to AIDS and biological weapons, the following sources can be recommended: Alan Whiteside, *HIV & AIDS: A Very Short Introduction* (2nd edn, OUP 2016) ch 1, doi: 10.1093/actrade/9780198727491.003.0001; Sandy R Primrose, Microbiology of Infectious Disease: Integrating Genomics with Natural History (OUP 2022) ch 27.

(defined in 1948), crimes against humanity (the International Law Commission (ILC) of the United Nations still works on an international treaty on the prevention and punishment of the named 'group' of crimes), war crimes (serious breaches of customary and conventional international humanitarian law), and the crime of aggression (defined in the Kampala Amendments from 2010). When it comes to applicable law, the ICC adjudicates based on the Rome Statute, the Elements of Crimes as well as the Rules of Procedure and Evidence, with the Rome Statute taking precedence in the event of a conflict of norms.[4]

Acts of ordering the creation of a deadly virus (viral homicide) in an unequipped laboratory and ordering the outbreak be kept from the World Health Organisation (WHO), which resulted in mass human devastation, cannot be linked with the most heinous crime of genocide via aggression (crime against peace) or a war crime. This is because the crime of genocide implies a list of acts that must be 'committed with intent to destroy, in whole or in part, a national, ethnic, racial or religious group'.[5] Thus, acting as viral homicide in this particular case cannot be properly linked to the intention to destroy any specific group of people.[6] Furthermore, the situation in question cannot be adequately linked to a war crime either since a war crime involves a list of unlawful acts committed during an armed conflict, which is not the case here.[7] Also, the situation in question cannot be coherent with the notion of the crime of aggression, which implies 'the use of armed force by a State against the sovereignty, territorial integrity or political independence of another State, or in any other manner inconsistent with the Charter of the United Nations' (Rome Statute, Article 8*bis*).[8]

But what about crimes against humanity? In this sense, Art. 7.1. of the Rome Statute prescribes that crimes against humanity mean any of the illegal acts enumerated in paragraphs (a)-(k), 'when committed as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack'. Considering the nature of all those acts listed in paragraphs (a)-(k), the case at hand could be brought into connection to the murder in Art. 7.1 (a) and other inhumane acts prescribed in Art. 7.1 (k).[9]

2.1 Viral Homicide and Cyberattacks

The focus of this paper is to discuss the possibility of prosecuting viral homicide before the ICC, but its importance is not restricted to this crime. The literature in the past decade has been discussing the possibility of a wider interpretation of the ICC Statute to include

4 Gilbert Bitti, 'Article 21 and the Hierarchy of Sources of Law Before the ICC' in Carsten Stahn (ed), *The Law and Practice of the International Criminal Court* (OUP 2015) ch 18, 411.

5 The 1948 United Nations Convention on the Prevention and Punishment of the Crime of Genocide, Article II Claus Kreß, 'The ICC's First Encounter with the Crime of Genocide' in Carsten Stahn (ed), *The Law and Practice of the International Criminal Court* (OUP 2015) ch 27, 669.

6 For more, see: Enis Omerović, 'Zahtjev za znatno uništenje značajnoga dijela skupine: relevantnost kvantitativno-kvalitativnog kriterija' (2021) 13 (26) Anali Pravnog fakulteta Univerziteta u Zenici 13.

7 Michael A Newton, 'Charging War Crimes: Policy and Prognosis from a Military Perspective' in Carsten Stahn (ed), *The Law and Practice of the International Criminal Court* (OUP 2015) ch 29, 732; Anthony Cullen, 'The Characterization of Armed Conflict in the Jurisprudence of the ICC' in Carsten Stahn (ed), *The Law and Practice of the International Criminal Court* (OUP 2015) ch 30, 762; Enis Omerović, 'Ratni zločini kao sustavno kršenje ljudskih prava i zaštite osoba u uvjetima oružanih sukoba' (2021) 5 (5) Godišnjak Pravnog fakulteta 155.

8 Roger S Clark, 'The Crime of Aggression' in Carsten Stahn (ed), *The Law and Practice of the International Criminal Court* (OUP 2015) ch 31, 778; Enis Omerović, 'Agresija u međunarodnom pravu: zločin države i krivična odgovornost pojedinca' (2022) 2 (19) Društvene i humanističke studije 417.

9 Darryl Robinson, 'Crimes against Humanity: A Better Policy on "Policy"' in Carsten Stahn (ed), *The Law and Practice of the International Criminal Court* (OUP 2015) ch 28, 705.

cybersecurity, and the results of these discussions are interconnected with the outcome of this paper.

Using cyberspace has become crucial for both users and organisations due to its importance as a convenient instrument of social communication, commercial activities, and governmental service.[10] However, hackers and cyberattackers have taken advantage of this to conduct malicious activities against users.[11] Examples of hacking into business servers containing personal information have increased in recent years.[12] In 2013, cyberthieves invaded the servers, made headlines across the US, and accessed the data of 40 million customers and the personal data of up to 70 million individuals, such as addresses and phone numbers.[13] The target business faced lots of challenges because of this attack where class-action lawsuits, lost customers and stockholders, and damages to the reputation are all considered as damages of the malicious cyberattack.[14] In 2015, the US Office of Personnel Management was a target of a hacker who stole the information of more than 22 million job applicants and current employees from this office.[15] According to Hull, the average number of data breaches continues to increase, and the average cost per breach is 4 million USD.[16] These costs, in most cases, lead to loss of business due to the loss of consumer trust in the wake of a breach. Again, according to Ponemon Institute (cited in Statisa), the cost that a company victim incurs ranges from direct cost to indirect cost or loss, such as the impact of the data breach on the company's reputation, and so on.

It is undisputed that such cybercrimes committed by individuals may be prosecuted under national jurisdiction. But when it comes to cyberattacks, the traditional notion of territoriality in international law seems almost quaint.[17] At the same time, an international jurisdiction for a non-state or individual responsibility for a global or international cybercrime is currently difficult to establish. It has been suggested that the ICC has jurisdiction over

10 Biswajit Tripathy and Jibitesh Mishra, 'A Generalized Framework for E-Contract' (2017) 8 (4) International Journal of Service Science, Management, Engineering, and Technology 1; Syrine Guerbouj, Hamza Gharsellaoui and Sadok Bouamama, 'A Comprehensive Survey on Privacy and Security Issues in Cloud Computing, Internet of Things and Cloud of Things' (2019) 10 (3) International Journal of Service Science, Management, Engineering, and Technology 32, doi: 10.4018/IJSSMET.2019070103; Mohamad Albakjaji et al, 'The Legal Dilemma in Governing the Privacy Right of E-Commerce Users: Evidence from the USA Context' (2020) 11 (4) International Journal of Service Science, Management, Engineering, and Technology 166, doi: 10.4018/IJSSMET.2020100110..

11 Christophe Feltus, 'Deriving Information System Security and Privacy from Value Cocreation Theory: Case Study in the Financial Sector' (2019) 10 (4) International Journal of Service Science, Management, Engineering, and Technology 1, doi: 10.4018/IJSSMET.2019100101; Radia Belkeziz and Zahi Jarir, 'An Overview of the IoT Coordination Challenge' (2020) 11 (1) International Journal of Service Science, Management, Engineering, and Technology 99; Dominik Krimpmann and Anna Stühmeier, 'Big Data and Analytics: Why an IT Organization Requires Dedicated Roles to Drive Sustainable Competitive Advantage' (2017) 8 (3) International Journal of Service Science, Management, Engineering, and Technology 79.

12 Yutaka Mizuno and Nobutaka Odake, 'A Study of Development and Formation of Personal Information Trust Service in Japan' (2017) 8 (3) International Journal of Service Science, Management, Engineering, and Technology 108.

13 R Chaudhary and M Lucas, 'Privacy Risk Management' (2014) 5 (37) Internal Auditor 71.

14 Ibid.

15 Gary P Schneider, *Electronic Commerce* (12th edn, Cengage Learning 2016).

16 Gordon Hull, 'Successful Failure: What Foucault Can Teach Us about Privacy Self-Management in a World of Facebook and Big Data' (2015) 17 (2) Ethics and Information Technology 89, doi: 10.2139/ssrn.2533057.

17 KL Miller, 'The Kampala Compromise and Cyberattacks: Can There Be an International Crime of Cyber-Aggression?' (2014) 23 (2) Southern California Interdisciplinary Law Journal 217; Enis Omerović and Damir Imamović, 'Alternativni pristupi i prijedlozi za rješavanje jurisdikcijskih sukoba uzrokovanih sajber kriminalom' (Law and Digitalization: International Scientific Conference, Faculty of Law University of Niš, 2021) 75.

certain cybercrimes.[18] According to the definition of the crime of aggression established at the Kampala conference in 2010, in order to prosecute a cyberattack as a crime of aggression, the prosecution must establish that there was a state action that rose to the level of armed force and traditional armed attacks committed by state actors would have to be interpreted widely.[19] The cyberattack could qualify as a 'use of armed force' if interpreted under a target-based or effect-based approach when the cyberoperation likely to cause the damaging consequence normally produced by kinetic weapons would be the use of armed force.[20] Examples of state-supported cyberattacks may be found in the malware 'Stuxnet', developed by the US in cooperation with Israel to disable the Iranian nuclear reactor in Natanz, as openly admitted by Obama, or paralysing Estonia's infrastructure and economy in 2007 for 22 days with the spring cyberattack.[21]

While cyberattacks would be typically analysed as possible crimes of aggression, viral homicide would potentially fall under crimes against humanity under Art. 7 of the ICC Statute. However, it is possible to qualify cyberattacks as crimes against humanity as well if the widespread or systematic cyberattack is directed against the civilian population with the knowledge of the attack as required by Art. 7 (1) of the ICC Statute. The criteria of widespread attack are not difficult to fulfil; for example, in 2016, Yahoo was a victim of a data breach where the hackers stole user information of at least 1 billion accounts.[22] Possible examples of an attack directed against humanity are an attack on the informational infrastructure of hospitals or cyberattacks on smart cars. However, they would not cover typical cyberattacks conducted with the intent to cause material damage.[23] It remains open whether widespread cyberattacks with the purpose of stealing data may be considered to be a crime against humanity as they target privacy as part of human dignity. In fact, the most vulnerable industries that suffer from data breaches are healthcare (31 million records were stolen in 2017) and financial organisations due to the sensitive data that are stored in their digital system. The WannaCry worldwide cyberattack that took place in May 2017 is a good example where the NHS online systems in the UK were paralysed by encrypting the stored data and demanding a ransom for activating and retrieving the data again. Providing cybersecurity in these cases became more difficult because of the use of 'cloud computing', where the individuals' information and customers' databases are installed on various servers located across geographical boundaries, with different jurisdictions, accessed by everyone who is capable of doing so and from anywhere in the world with no temporal boundaries.[24] The individuals do not have the ability to protect the information that is stored in the company or governmental system; instead, they have to rely on the protection that the company or organization offers.[25] Finally, it could be argued that the discussion on the international prosecution of cyberattacks as a potential crime against humanity contributes to the analysis of viral

18 Omerović and Imamović (21) 83-8.

19 David Weissbrodt, 'Cyber-Conflict, Cyber-Crime, and Cyber-Espionage' (2013) 22 (2) Minnesota Journal of International Law 347.

20 Anne-Laure Chaumette, 'International Criminal Responsibility of Individuals in Case of Cyberattacks' (2018) 18 (1) International Criminal Law Review 1.

21 Marcel Hendrapati et al, 'Qualifying Cyber Crime as Crime of Aggression in International Law' (2020) 13 (2) Journal of East Asia and International Law 397, doi: 10.14330/jeail.2020.13.2.08.

22 'Advertising & Marketing' (*Statista*, 2018) <https://www.statista.com/markets/417/topic/479/advertising-marketing> accessed 10 May 2023.

23 Chaumette (n 24) 20.

24 Albakjaji et al (n 13).

25 I Il-Horn Hann et al, 'Overcoming Online Information Privacy Concerns: An Information-processing Theory Approach' (2007) 24 (2) Journal of Management Information Systems 13; Robert J Kauffman et al, 'A Survey of Consumer Information Privacy from the Accounting Information Systems Perspective' (2011) 25 (2) Journal of Information Systems 47, doi: 10.2308/isys-10091.

homicide and its potential perception and prosecution as the latter international crime, as will be the focus of this paper.

Nowadays, new technology has rapidly been used internationally and developed such that traditional international law is unable to be updated with technological development. This has created a challenge to the current legal frameworks.[26] The lack of precise legal rules that define what is permitted and what is prohibited has led to a weakness in curbing malicious practices globally.[27]

The rise of cyberattacks is considered a challenge for international law and its principles. An example of this is that Art. 2 (4) of the United Nations Charter provides that states are forbidden from using cyberattacks against other states. Moreover, Art. 51 of the United Nations Charter and customary international law has granted the right of states to use powers against armed attacks, including malicious cyberattacks that cause injury, significant damage, or death.[28] This is confirmed by the international judiciary that states have the right to respond to cybercrimes if they pose a serious threat to their essential interests.

In terms of cybercrimes, there are some areas of ambiguity in interpreting international legal rules. According to the ICJ's *Congo* ruling[29] and the *Wall* Advisory Opinion,[30] the Court limited the right to self-defence in the case of cyberattacks that fulfil the requirements of Art. 51, which provides that armed attacks, including cyberattacks, should cause significant harm to a victim state.[31]

The concept of an attack has been defined as an act of violence that results in physical injury or harm. Accordingly, a cyberattack is considered an attack that causes physical harm or injury. Hence, a victim state has the right to respond to such an attack. However, cyberattacks that only result in significant economic damages are not afforded under this definition.

Regarding the cyberattacks conducted by a group of people (proxies), international legal rules are uncertain about the determination of the identity of cyberattackers. In this regard, the right of a victim state to self-defence is also limited. The victim state should establish the relationship/connection between the proxy and a supporting state, which is very difficult.[32]

To raise international responsibility of a supporting state, Art. 8 of the Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA from 2001) has adopted a very narrow approach where a state is responsible for the actions taken by private entities if these entities act under the state's supervision, direction, and guidance. Nowadays, most cyberattacks against a state are conducted by third parties or private entities which are supported by other states. However, to establish the liability of a supporting state, international law has a very strict perspective that allows states to

26 Zlatan Meskic et al, 'Transnational Consumer Protection in E-Commerce: Lessons Learned from the European Union and the United States' (2022) 13 (1) International Journal of Service Science, Management, Engineering, and Technology 1, doi: 10.4018/IJSSMET.299972.

27 Albakjaji et al (n 13).

28 Jackson Adams and Mohamad Albakjaji, 'Cyberspace: A New Threat to the Sovereignty of the State' (2016) 4 (6) Management Studies 256, doi: 10.17265/2328-2185/2016.06.003.

29 *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)* ICJ Rep 2005 (ICJ, 19 December 2005) 168.

30 *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory* (Advisory Opinion) ICJ Rep 2004 (ICJ, 9 July 2004) 136.

31 Mohamad Albakjaji and Reem Almarzoqi, 'The Impact of Digital Technology on International Relations: The Case of the War Between Russia and Ukraine' (2023) 6 (2) Access to Justice in Eastern Europe 1, doi: 10.33327/AJEE-18-6.2-a000203.

32 Jackson Adams and Mohamad Albakjaji, 'Cyberspace: A Vouch for Alternative Legal Mechanisms' (2016) 1 (1) Journal of Business and Cyber Security 10.

indirectly conduct cyberattacks against other state by using private entities. According to the mentioned Art. 8, a conclusion can be driven that it is usually impossible to prove the connection between these entities and the states supporting them. Koh has stated that 'these rules are designed to ensure that States cannot hide behind putatively private actors to engage in conduct that is internationally wrongful'.[33]

Regarding the concepts of direction and control, the ICJ has adopted a very restrictive approach. In the *Nicaragua* case, Nicaragua claimed that there had been a relationship between the cyberattacks conducted by rebel groups and the US. Although this group was provided with all kinds of military and financial support from the latter state, which is deemed as evidence of a connection between the rebel group and the US, the ICJ held that such support was not considered as the US's involvement or use of force against Nicaragua. The Court stated that such support did not go against Art. 2(4) of the United Nations Charter.[34]

In this regard, the Court claimed that Nicaragua should prove that there was an 'effective control' by the US over the rebellious group (The Contras). Hence, financial or military support was not considered an effective control by which Nicaragua could raise the US's international responsibility for violation of the international law principle of the prohibition of the use of force. Interestingly, this standard of proof was not completely confirmed or accepted by the International Criminal Tribunal for the former Yugoslavia (ICTY), which considered that establishing state responsibility for this particular type of attribution requires another form of the state's involvement in the preparation and control of military operations.[35] For instance, in the *Tadic* case,[36] the ICTY introduced the 'overall control' test.

2.2 Can Viral Homicide Be Prosecuted as a Crime Against Humanity?

2.2.1 Actus reus of crime against humanity

For a person to be prosecuted for a crime against humanity, the principles of Art. 7 of the Rome Statute have to be met. Therefore, his/her actions must be qualified as an attack. Furthermore, Art. 7 clearly states that the attack must be 'widespread or systematic' and directed against 'any civilian population, with knowledge of the attack'. Thus, the *actus reus* and *mens rea* requirements must undoubtedly be fulfilled.[37] The ICC articulated the following so-called contextual elements in the *Ruto* case, which must be met cumulatively: 1) The attack was directed against any civilian population; 2) there is a state or organisational

33 Harold Hongju Koh, 'International Law in Cyberspace' (USCYBERCOM Inter-Agency Legal Conference on the Roles of Cyber in National Defense, Fort Meade, Maryland, 18 September 2012) 6 <https://harvardilj.org/2012/12/online_54_koh> accessed 10 May 2023.

34 *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v United States of America)* (Merits) ICJ Rep 1986 (ICJ, 27 June 1986) 14.

35 For comparison, see: Peter Margulies, 'Sovereignty and Cyber-Attacks: Technology's Challenge to the Law of State Responsibility' (2013) 14 (2) Melbourne Journal of International Law 496.

36 *Prosecutor v Tadic* IT-94-1-A (ICTY, Appeals Chamber, 15 July 1999).

37 *Exempli causa* – see: Kai Ambos, 'Crimes Against Humanity and International Criminal Court' in Leila Nadya Sadat (ed), *Forging a Convention for Crimes Against Humanity* (CUP 2011) ch 13, 279, doi: 10.1017/CBO9780511921124.016; M Cherif Bassiouni, 'Crimes against Humanity: The Case for a Specialized Convention' (2010) 9 (4) Washington University Global Studies Law Review 575; Leila Nadya Sadat, 'Crimes against Humanity in the Modern Age' (2013) 107 The American Journal of International Law 334, doi: 10.2139/ssrn.2013254; Darryl Robinson, 'Defining "Crimes Against Humanity" at the Rome Conference' (1999) 93 (1) American Journal of International Law 43, doi: 10.2307/2997955..

policy; 3) the attack is widespread or systematic; 4) there is a nexus between the individual act and the attack; 5) there is knowledge of the attack.[38]

The notion and the concept of the attack can be perceived and defined as 'an unlawful act of the sort enumerated in Article 3 (a) to (I) of the Rome Statute'.[39] Such an attack, in this regard, does not need to involve armed forces and the military,[40] which means it can be nonviolent. However, 'applying pressure on the population to act' in a particular way 'may come under the purview of an attack' if performed 'on a massive scale or in a systematic manner'.[41]

Further, the acts of the accused must be 'part of the "attack" directed against the civilian population'.[42] The phrase 'directed against' specifies that 'the main object of an attack is the civilian population'.[43] Although the acts need to be committed amid the attack against the civilian population or away from it, they could still, if sufficiently connected, be part of that particular attack. Therefore, the crime must not be an 'isolated act'.[44] 'When it is so far removed from that attack that, having considered the context and circumstances in which it was committed, it cannot be reasonably said to have been part of the attack'.[45]

It is crucial to consider whether the civilian population was a 'primary object of the attack' since it 'cannot be an incidental victim'.[46] The Pre-Trial Chamber in the *Ruto* case determined that a group of civilian victims 'must be distinguished by nationality, ethnicity or other distinguishing features'.[47]

Further, under the Elements of Crimes, the policy to commit the attack 'requires that the State or organization actively promote/encourage attack against a civilian population'. In the *Ruto* case, the Pre-Trial Chamber determined that one of the circumstances that had to be considered was 'whether the group had explicitly articulated an intention to attack the civilian population'.

The Elements of Crimes provided with the explanation that 'such a policy may in exceptional circumstances be implemented by a deliberate failure to take action, which is consciously aimed at encouraging such an attack, but the existence of such a policy cannot be inferred solely from the absence of governmental or organizational action'.[48] The *Muthaura* case[49]

38 *Corrigendum of the Decision Pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya* ICC-01/09-19 (ICC, Pre-Trial Chamber II, 31 March 2010) para 79.

39 *Prosecutor v Akayesu* ICTR-96-04-T (ICTR, Trial Chamber I, 2 September 1998) para 581.

40 Chile Eboe-Osuji, 'Crimes against Humanity: Directing Attacks against a Civilian Population' (2008) 2 African Journal of Legal Studies 118.

41 *Prosecutor v Akayesu* (n 43) para 581.

42 *Prosecutor v Popović* IT-05-88-A (ICTY, Appeals Chamber, 30 January 2015) para 577.

43 *Prosecutor v Ongwen* ICC-02/04-01/15 (ICC, Trial Chamber IX, 20 December 2019) para 34.

44 The Drafters here used the term 'group', implying crimes of collective nature. According to the Trial Chamber in *Tadić*, such crimes exclude single or isolated acts which, although possibly constituting war crimes or crimes against penal legislation, do not rise to the level of crimes against humanity. Accordingly, it was the Prosecution's duty to prove the existence of such a group.

45 *Prosecutor v Kunarac* IT-6-23&IT-96-23/-1 (ICTY, Appeals Chamber, 12 June 2002) para 100.

46 Ibid, para 90.

47 *Prosecutor v Muthaura et al* ICC-01/09-02/11 (ICC, Pre-Trial Chamber II, 23 January 2012) para 110.

48 Also, scholars have argued that 'state action or policy is essential to distinguish international crimes against humanity from domestic crimes punishable under domestic law'. See: Margaret M deGuzman, 'The Road from Rome: The Developing Law of Crimes against Humanity' (2020) 22 Human Rights Quarterly 335.

49 *Prosecutor v Muthaura et al* (n 51) para 158.

before the ICC also witnessed an 'organized nature'.[50] This was one of the critical elements of the attack, where it was stated that the attack might be considered organised if there was: 1) recruitment of new members specifically to participate in the attack; 2) provision of uniforms and weapons to the attackers; 3) precise identification of the targets of the attack.

Regarding the third condition, 'widespread or systematic', in the *Kunarac* case, the Appeals Chamber states that the word 'systemic' refers to 'the organized nature of the acts of violence and the improbability of their random occurrence'.[51] In the *Katanga* case, the Pre-Trial Chamber noted that 'the attack, even if carried out over a large geographical area or if it was directed against a large number of victims, must still be thoroughly organized and follow a regular pattern'.[52] In the *Bemba* case, it was stated that a 'State organizational policy' constituted groups of persons that are in control of a specific territory and can execute 'a widespread or systematic attack against a civilian population'. It is suggested that the attack should follow a regular pattern made by such policy or by any organisation.[53]

Regarding the fourth condition, the Appeals Chamber in the *Popović* case[54] stated that 'the "nexus" requirement is fulfilled by an act which is objectively a part of the attack, coupled with knowledge on the part of the accused that there is an attack on the civilian population and that his act is part thereof'.

Having in mind these standards from the jurisprudence of the ICC, ICTY, and the International Criminal Tribunal for Rwanda (ICTR), in a particular hypothetical case, the Prosecution would have to prove that the act of ordering the creation of a virus (whether for research or otherwise) is part of a systematic/widespread attack directed against the civilian population. More specifically, the Prosecution would have to prove that the creation of the virus in an unequipped laboratory is an attack that is part of a broader systematic attack against the civilian population. Furthermore, the accused person must be the person who 'is (alongside other members) in control on a specific territory and can execute a widespread or systematic attack against a civilian population'. The 'widespread' criterion, in our case, was met since the creation and spread of the virus caused the deaths of over 250,000 people.[55]

2.2.2 Mens rea in the crime against humanity

Since *mens rea* in crime against humanity is nowhere clarified,[56] when determining the lowest threshold for enumerated acts, we must refer to the provision described in Art. 30 of the Rome Statute, where it has been limited to 'intent and knowledge',[57] leaving out other

50 See also: M Cherif Bassiouni, *Crimes Against Humanity in International Criminal Law* (2nd edn, Martinus Nijhoff Publishers 1999) 24; Mathias Holvoet, *The State or Organisational Policy Requirement within the Definition of Crimes against Humanity in the Rome Statute: An Appraisal of the Emerging Jurisprudence and the Implementation Practice by ICC States Parties* (Brief 2, ICD 2013).

51 *Prosecutor v Kunarac* (n 49) para 94.

52 *Prosecutor v Katanga* ICC-01/04-01/07-717 (ICC, Pre-Trial Chamber I, 30 September 2008) para 396.

53 *Prosecutor v Bemba* ICC-01/05-01/08 (ICC, Pre-Trial Chamber II, 15 June 2009) para 81.

54 *Prosecutor v Popović* (n 46) para 570; *Prosecutor v Mrkšić and Šljivančanin* IT-95-13/1-A (ICTY, Appeals Chamber, 5 May 2009) para 41.

55 ICC Moot Court, 'Case before the International Criminal Court (ICC): Prosecutor versus Dragon Goodrider of Wessos, Appeal from the Pre-Trial Chamber's Decision on Confirmation of Charges' (*IBA ICC Moot Court*, 2021) 10 <https://iccmoot.com/wp-content/uploads/2020/12/ICCMCC-2021-Case.pdf> accessed 10 May 2023.

56 For more about mens rea of crime against humanity, see deGuzman (n 52) 377.

57 Rome Statute, Art. 30, 'Mental element: Unless otherwise provided, a person shall be criminally responsible and liable for punishment for a crime within the jurisdiction of the Court only if the material elements are committed with intent and knowledge'. See: Rome Statute of the International Criminal Court (as amended in 2010 and 2015) <https://iccforum.com/rome-statute> accessed 10 May 2023.

possible *mens rea* requirements such as, to a certain extent, recklessness (*dolus eventualis*). Art. 30 of the Rome Statute does not accommodate a lower threshold of intent than oblique intent. The Trial Chamber in the *Bemba* case was of the opinion that things that 'will occur in the ordinary course of events' means that a consequence is inevitably expected and is close to certainty. Consequently, *dolus eventualis* here does not apply since it implies foreseeing the occurrence of undesired and unwanted consequences as mere likelihood or possibility. The Chamber stated that if drafters wanted to include *dolus eventualis*, they would replace 'will' with 'may'. Advertent recklessness was abandoned by the Working Group on General Principles of Criminal Law in the Italian capital.

In *dolus directus* of the first degree, the Prosecution would have to demonstrate and prove that the accused actually knew his actions or omissions would cause objective elements of the crime, and there had to be concrete intent which could be done only where he explicitly expressed such knowledge and intent.

In the *dolus directus* of the second degree, an offender need not have actual intent or will but must be aware, applying the knowledge element, that those required elements will be almost an inevitable and unavoidable way a thing turns out of his acts/omissions. The definition of oblique intent was significantly narrowed in the *Katanga* case, where the Trial Chamber had a legal reasoning that 'a person must know that his/her actions will necessarily bring about the consequence in question'. To put it differently, it becomes nearly impossible for an individual to contemplate that a consequence will not occur.

2.3 Can Viral Homicide Be Prosecuted as a Crime Against Humanity of Murder?

According to the Elements of Crimes, the crime against humanity of murder contains the following elements: 1) The perpetrator killed one or more persons; 2) The conduct was committed as part of a widespread or systematic attack directed against a civilian population, and 3) The perpetrator knew that the conduct was part of or intended the conduct to be part of a widespread or systematic attack against a civilian population.[58]

In a crime against humanity of murder, the Prosecution must prove that the accused has killed one or more persons, whilst the ICC provides that the term 'killed' is able to be interchanged with 'caused death'. Here we detect two problems. The first problem is the perpetrator – if a person merely ordered the virus to be created in an unequipped laboratory, and the virus escaped on its own, then that person did not physically cause the deaths of 250,000 people. However, on the other hand, if a person physically worked on creating a virus in an unequipped laboratory, then we can talk about a person who physically caused mass human devastation.

Another problem is the question of intent, which in the case of crime against humanity of murder covers the *dolus directus* of both the first and second degree. Accordingly, in the *Katanga* case, the ICC was of the determination that subjective elements of the crime of murder would be proven if 'where the perpetrator acted deliberately or failed to act (1) in order to cause the death of one or more persons or (2) whereas he or she was aware that death would occur in the ordinary course of events'. Considering this, it would be rather challenging to demonstrate that the accused, in this case, possessed the intention to kill civilians.

58 *Prosecutor v Akayesu* (n 43) para 589; *Prosecutor v. Rutaganda* ICTR-96-3 (Judgement and Sentence) (ICTR, 6 December 1999) para 80; *Prosecutor v Blaškić* IT-95-14-T (ICTY, Trial Chamber, 3 March 2000) para 217.

2.4 Can Viral Homicide Be Prosecuted as 'Other Inhumane Acts' under Art. 7. 1. (k) – Would It Violate the Principle of nullum crimen sine lege ?

The Rome Statute included 'other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or mental or physical health' in crimes against humanity. The Elements of Crimes provided a scanty explanation that 'character refers to the nature and gravity of the act', not clarifying what those include. Therefore, in this manner, we must refer to international case law. In the *Blaškić* case,[59] it was stated that this conduct constituted a 'severe violation of international customary law and human rights of a similar nature and gravity to the crimes referred to in Article 7(1)'.

Although similarity is the one which is obviously required, the Rome Statute used the word 'other', indicating that 'none of the acts constituting crimes against humanity according to Article 7(1) can be simultaneously considered as other inhumane acts'.[60] The Trial Chamber in the *Blaškić* case also emphasised that in determining whether an act meets the abovementioned requirements, 'consideration must be given to all factual circumstances', including the context in which it occurred.

2.4.1 The principle of nullum crimen sine lege under Art. 22(2) of the Rome Statute

Following Art. 22 of the Rome Statute, 'a person will not be held responsible if the conduct in question does not constitute a crime within the jurisdiction of the ICC'. In other words, an individual cannot be held responsible for an act that was not legally declared as criminal at the time the act was actually committed (*nullum crimen, nulla poene sine lege*).[61] The Rome Statute under no provision foresees spreading or creating of the virus nor any other kind of pandemic-mishandling as crimes against humanity. According to the historical interpretation of the Rome Statute, it could be fairly concluded that the drafters of this multilateral treaty did not intend to punish the creating and spreading of a virus as a distinct crime. There are no indications that such an act was incriminated as a crime against humanity in the Draft Statute.

Art. 22(2) explicitly forbids extending the definition of crimes by analogy whilst stating that all definitions are to be interpreted in favour of the accused. In the *Ntaganda* case,[62] the Chamber made a clear distinction between *analogia legis* and *analogia juris*, simultaneously prohibiting the use of analogy 'as a basis for imposing criminal responsibility in what amount to substantially new crimes'. The Chamber held that the 'use of analogy was allowed in the process of interpretation, in particular of a matter not covered by a specific provision or rule, by resorting to general principles of International Criminal Law, or general principles of criminal justice, or principles common to the major legal systems of the world'.

Presumably, the Trial Chamber's decision in *Katanga* case[63] most clearly testified to this, where it was stated that 'as opposed to ad hoc tribunals', the ICC must not under any circumstances resort to the creation of the law. Accordingly, the notions of crimes should not

59 *Prosecutor v Blaškić* (n 62) para 239.

60 *Prosecutor v Katanga* (n 56) para 452.

61 'No crime without law, no punishment without law' – for more, see Aly Mokhtar, 'Nullum Crimen, Nulla Poena Sine Lege: Aspects and Prospects' (2005) 26 (1) Statute Law Review 41, doi: 10.1093/slr/hmi005; Beth Van Schaack, 'Crimen Sine Lege: Judicial Lawmaking at the Intersection of Law and Morals' (2008) 97 The Georgetown Law Journal 119; Aleksandra Rychlewska, 'The Nullum Crimen Sine Lege Principle in European Convention on Human Rights: The Actual Scope of Guarantees' (2010) 36 Polish Yearbook of International Law 163.

62 *Prosecutor v Ntaganda* ICC-01/04-02/06 (ICC, Pre-Trial Chamber II, 24 March 2014) para 184.

63 *Prosecutor v Katanga* ICC-01/04-01-07 (ICC, Trial Chamber II, 7 March 2014) para 52.

be defined and comprehensively determined by applying analogy. Thus, the bench must refer only to the existing law, noting that there is no room for the use of a method of interpretation that could abandon the narrow approach and therefore considerably expand and broaden the definition of the crimes to those conducted by the drafters who had no intention to criminalise.

It should be taken into consideration that the ICC had no grounds to deviate from the method of interpretation provided in the Vienna Convention on the Law of Treaties (VCLT). Instead, it had to rely on the General Rule, which allows interpretation in order 'to identify or confirm one of the ordinary meanings of the text and not to impart to it a meaning contrary to the terms employed by interpreting it to suit the desired result'.[64] The ICC also emphasised that although 'the Statute aimed to put an end to impunity for the perpetrators of the most serious crimes, it can under no circumstances be used to create a body of law extraneous to terms of the treaty'.[65]

This was also supported by the ECtHR case law. Furthermore, it has been widely stated that Art. 7 of the European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR) constitutes a ban on overly broad construction of criminal provisions, particularly by analogy.[66]

2.4.2 The lex certa principle

Lex certa requires that the act in question be unmistakeably and undoubtedly defined, determined, and criminalised. It is clear that Art. 7(1) (k) does not meet the abovementioned requirements. Provisions must not be determinable but precisely defined and, as such, must give an individual precise and reliable information about what is and what is not punishable.[67] Given that crimes against humanity are base crimes that form crimes against humanity when committed as part of a widespread or systematic attack, para. (k) broadens the definition to an extent not acceptable in international criminal law. Even if Defendant's conduct could be considered the production/use of biological weapons, it would still not be a crime against humanity since drafters did not criminalize that kind of conduct under Art. 7. It is worth remembering that the Rome Statute originally included an immediate ban on weapons of mass destruction or, to be more precise, on chemical and biological weapons, but it was dropped as the ban on weapons was narrowed to apply only to weapons listed in an annexe. Parties never adopted one, but nevertheless, this guides us to the conclusion that the sole purpose of this narrowing was to avoid a provision too broad. It becomes clear that the negotiators wanted to exclude this, and their will must be taken into account since they alone have the right to *analogia legis*.[68]

In this hypothetical case, the ICC would have to assess whether the act not provided for by the Statute represents 'other inhumane acts' with great caution, considering that the Elements

64 Ibid, para 56.

65 Ibid, para 55.

66 For example, the ECtHR in *SW v the United Kingdom* has stated that 'The guarantee enshrined in Article 7 (Art. 7), which is an essential element of the rule of law, occupies a prominent place in the Convention system of protection, as is underlined by the fact that no derogation from it is permissible under Article 15 (Art. 15) in time of war or other public emergency. It should be construed and applied, as follows from its object and purpose, in such a way as to provide effective safeguards against arbitrary prosecution, conviction and punishment'. See: *SW v United Kingdom* App no 20166/92 (ECtHR, 22 November 1995) para 34. Inter alia, see: Baskaya and Okçuoglu v Turkey App no 23536/94 and 24408/94 (ECtHR, 8 July 1999); *Cantoni v France* App no 17862/91 (ECtHR, 15 November 1996); *G v France* App no 15312/89 (ECtHR, 27 September 1995).

67 *Prosecutor v Blagojević and Jokić* IT-02-60-T (ICTY, Trial Chamber I, 17 January 2005).

68 *Prosecutor v Al Bashir* ICC-02/05-01/09-1 (ICC, Pre-Trial Chamber I, 4 March 2009).

of Crimes emphasised that the provisions in Art. 7 'must be strictly construed'. Allowing this to proceed, the ICC would justify any subsequent prosecution of certain conduct as other inhumane acts even if conditions outlined in VCLT are not met. All of this would lead to a dangerous deviation from the principle of legal certainty, possibly resulting in a conviction of many that are innocent, which is impermissible given that the criminal law has in its very beginnings recognised the maxim: 'Better that ten guilty persons escape than that one innocent suffer'. Considering the above arguments, we conclude that existing international criminal law does not have an answer to the deliberate creation and spread of a deadly virus, thus confirming our main hypothesis. The existing provisions of Art. 7 of the Rome Statute, it seems, could not be interpreted so broadly as to encompass viral homicide as a crime against humanity. Expanding the scope of Art. 7 of the Rome Statute to cover viral homicide would violate basic principles of criminal law such as *nullum crimen sine lege* and *lex certa.*

3 DOES THE ICC HAVE JURISDICTION OVER NON-PARTY STATE NATIONALS?

Here, we would like to remind the readers that our paper deals with a hypothetical situation in which the act of viral homicide occurred in a state that is not a member of the Rome Statute, and the virus spread to a neighbouring country that is a member of the Rome Statute and caused the death of 250,000 people on its territory. Therefore, the question arises whether the ICC has jurisdiction over a national of a non-Rome Statute state for an act whose consequence occurred on the territory of a Rome Statute member state. In cases where a state on which territory the (mis)conduct in question occurred is not a party to the ICC, this Court may exercise its jurisdiction only if that state or a state of which the person accused is national and accepts the jurisdiction of this international judiciary body.

3.1 Art. 12(2) (a) requires that the conduct in question, not the consequence, takes place in any part of the territory of a state party

The wording of Art. 12(2) (a) provides that the Court may exercise its 'jurisdiction when the conduct in question takes place in the territory of a State Party'. The drafters used 'crime' and 'conduct' in the Rome Statute, implying their distinct meanings. For instance, Art. 22 distinguishes the two terms stating that 'the conduct…constitutes a crime…'. Likewise, Art. 30 distinguishes 'consequence' from 'conduct' as two material elements. The analysis of the drafting history of the Rome Statute supports this claim considering there was a solid will to include a provision which would define conduct with a dual possibility: as an act or omission. The Draft Statute carefully prepared by the Preparatory Committee in 1996 (modified in 1997) defined 'conduct' under Art. 28 to 'constitute either an act or an omission, or a combination thereof'.[69] The provision was later deleted due to disagreement on the circumstances and conditions in which a person can incur criminal responsibility for an act of omission, but there was no disagreement about the meaning of the notion of conduct.

The Elements of Crimes suggest four elements: conduct, consequence, circumstances and *mens rea*, implying that conduct is merely an element of the crime and must not be interpreted as a crime in whole. Due to the way viruses spread, it is not very easy to control their movement. If this grew into a global pandemic, would it give any affected country the right to refer (to send) the case to the Prosecutor? If so, would that not be in collision with Art. 12?

69 Mohamed Elewa Badar, 'The Mental Element in the Rome Statute of The International Criminal Court: A Commentary from a Comparative Criminal Law Perspective' (2008) 19 Criminal Law Forum 473, doi: 10.1007/s10609-008-9085-6.

3.2 ICC does not have universal jurisdiction

Art. 12 establishes that the ICC 'may exercise jurisdiction if the State in question is a party to the Rome Statute', and in regards to a non-party state 'only if that State accepts its jurisdiction'.[70] Universal jurisdiction was quite directly, explicitly, and irrevocably rejected as a way of establishing the Court's jurisdiction in the Statute's drafting, which leaves little scope for misinterpretation.[71] The US, with other states following, emphasised that: 'Universal jurisdiction or any variant of it was unacceptable', which resulted in the Bureau Compromise and Art. 12 'combining preconditions for the exercise of jurisdiction by the ICC and State acceptance'.[72] The ICC's first president confirmed this in his lectures, stating that the ICC does not have universal jurisdiction, 'and its jurisdiction is limited' to two most firmly established bases of criminal jurisdiction – territory and nationality of the alleged perpetrator.[73]

The objective territoriality condition was not met in the present hypothetical case since it 'encompasses States upon whose territory a part of the crime is committed rather than States where no part of the crime is committed but which merely experience ill effects'.[74] The Prosecution could refer to the *Al-Bashir* case to confirm that the ICC has jurisdiction even over non-party States, but unlike the present case, the Darfur situation has formally been referred, in accordance with the existing rules, to the Prosecutor by the United Nations Security Council (UNSC).

The Prosecution might try to justify universal jurisdiction stating that an unorthodox approach leaves an excellent chance for the perpetrators to go unpunished. In our opinion, the Drafters did not make such an error. The Rome Statute left the possibility for the UNSC to refer to a very serious and severe situation in which one or more grave crimes under Art. 5 appear to have been committed (where there is abundant evidence) to the Prosecutor. This allows the ICC 'to exercise jurisdiction over crimes committed on the territory of a non-Party State when authorized by the UNSC'.[75] Our opinion is that this is a sufficient guarantee to avoid the alleged perpetrator not being punished since it does not require consent from any territorial state or any state of nationality of the accused. An interpretation contrary to this article would lead to excessive arbitrariness.

3.3 The customary international law principle of 'effects doctrine' is inapplicable

Under Art. 21 of the Rome Statute, the Court shall apply the main principles and existing rules of international law. Nevertheless, such an approach is reserved as a second resort and shall be used after the Rome Statute and other significant documents, such as Elements of Crimes and Rules of Procedure and Evidence, have been thoroughly exhausted. Accordingly, customary international law is to be applied only where: (i) there is a lacuna in the ICC's internal (domestic) law, and (ii) the lacuna cannot be usefully and successfully filled by an international treaty, such as VCLT, and 'internationally recognized human rights'.

70 Dapo Akande, 'The Jurisdiction of the ICC over Nationals of Non-Parties: Legal Basis and Limits' (2003) 1 (3) Journal of International Criminal Justice 623, doi: 10.1093/jicj/1.3.618.

71 Otto Triffterer and Kai Ambos (eds), *Rome Statute of the International Criminal Court: A Commentary* (3rd edn, CH Beck, 2016).

72 ibid 680.

73 Philippe Kirsch, 'The International Criminal Court: Independence in a Context of Interdependence' (Frederick K Cox Lecture in Global Legal Reform, Case Western Reserve University School of Law, Cleveland, Ohio, 7 November 2005).

74 *Prosecution's Request for a Ruling on Jurisdiction under Article 19(3) of the Statute* ICC-RoC46(3)-01/18-1 (ICC, 09 April 2018) para 32.

75 Mark Klamberg (ed), *Commentary on the Law of the International Criminal Court* (Torkel Opsahl Academic E publisher 2017).

The provision we have discussed here leaves no ambiguity, making customary international law unfounded. The Prosecution might argue that the *Taylor* case[76] witnesses the ICC's jurisdiction based on the effects doctrine; however, that case is immaterial. As opposed to the situation in *Taylor*, where the charged acts occurred in their entirety in Sierra Leone, in the present case, all elements of the alleged conduct were committed in a non-party state, and only the effects were felt in other countries.

4 CONCLUDING REMARKS

Based on the analysis of primary and secondary sources of law, case-law, and the application of legal dogmatic methods and methods of induction and deduction, the authors believe that they have proved both the general and derived hypothesis from the introduction of the research paper, in the sense that contemporary international criminal law is silent regarding the deliberate creation of a deadly virus, that is to say, intentionally causing a pandemic. In addition, the ICC has no possibility of establishing jurisdiction in our hypothetical case – given that the perpetrator is not a citizen of the party to the Rome Statute, nor did the action occur in the territory of a state party. Therefore, it is proved that the effect-based doctrine is not applicable in this case.

As previously stated, this international judicial body establishes and exercises jurisdiction over four international crimes *stricto sensu*, none of which provides for incrimination for acts of intentionally causing a pandemic. The provision of Art. 7.1. (k) is not precisely defined and is intentionally left as a reserved category that is not exhaustively explained. As part of the examination of the derived hypothesis, it has been a question of whether the intentional provocation of a pandemic, i.e., the deliberate creation and spread of a virus, could be prosecuted as a crime against humanity or other inhumane acts. The case law of the ICC (and of other courts) to which we referred in proving the hypothesis of this research attempted to establish standards for the interpretation of, which is true, a very broad category of 'other inhumane acts'.

These legal standards are based on the provisions on the much-needed protection of human rights and fundamental freedoms laid down by the 1966 International Covenant on Civil and Political Rights (Art. 7), the 1950 European Convention on Human Rights (Art. 3), the 1969 Inter-American Convention on Human Rights (Art. 5) and the 1984 Convention against Torture (Art. 1) and are reduced to acts of torture, inhuman, or degrading treatment or punishment. Applying the above legal standards and using the rule of comparing the gravity and nature of prohibited acts prosecuted in judicial practice as a category of crimes against humanity – other inhumane acts – it would be challenging to prosecute intentionally causing a pandemic, from our hypothetical case, as a crime against humanity, given the *actus reus* of other inhumane acts as well as *mens rea* condition and standard required in the framework of crime against humanity. In light of the above, the authors consider that they have proved all three hypotheses set at the beginning of the research.

It is evident that the COVID-19 pandemic changed the lives of all people and caused enormous economic and human losses. This phenomenon certainly requires a global response. Considering the nature and gravity of such acts, one might add that international criminal law should answer such situations. Law is a social engineering tool; therefore, legal norms should follow the social context and events. One possible answer is an amendment to the Rome Statute. This process would criminalize these acts under some of the existing

76 *Prosecutor v Taylor, Charles Ghankay* SCSL-03-01-A (SCSL, Appeals Chamber, 26 September 2013) para 6, 13.

international crimes (given the nature, it could be a crime against humanity) and prescribe criminal responsibility for such acts that would incorporate gross negligence or recklessness.

It is certainly reasonable to ask how effective the Prosecution for such acts would be before the ICC, given that the ICC has limited jurisdiction. This may be an even more interesting question, especially given the fact of the problem of establishing jurisdiction over serious cybercrime in this digital age, particularly having in mind discussions about the possible establishment of the ICC jurisdiction over cyberattacks, which are a kind of transnational crime. Nevertheless, it remains to be very much seen whether future international criminal law will take this approach and would go in this direction.

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