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ORIGINAL ARTICLE

INTERNATIONAL LAW AND PRACTICE

Methodology of identifying customary international law applicable to cyber activities

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Abstract

What is striking about recent scholarship on the application of customary international law to cyber activities is how little has been dedicated to the preliminary question of how one identifies the applicability of existing rules of customary international law to cyber operations. Yet, the answer to this preliminary question holds the key to answering many of the questions which arise regarding whether existing rules of customary international law apply to cyber activities. This article seeks to answer the preliminary question. After providing background on the nature of customary international law, and in light of recent scholarly trends and what is often implied in literature on cyber activities, it makes the argument that rules of customary international law are not interpretable. Accordingly, reference must be made to state practice accepted as law for the purpose of identifying applicable customary international law; the article provides guidance on how this should be done. For a precedent of state practice to be relevant to determining the existence of a customary rule applicable to a cyber activity, pursuant to the International Court's jurisprudence, the precedent must not have significant distinguishing features from the cyber activity concerned. For determining whether a precedent of *opinio juris* recognizes the existence of a customary rule applicable to the cyber activity, it is necessary to determine whether the relevant state pronouncement intended to accept as law a rule applicable thereto. In anticipation of objections, the article also addresses the practicability of the approach laid out.

Keywords: customary international law; cyber activities; methodology; *opinio juris*; state practice

1. Introduction

Cyber technologies, which for the purpose of the present article connote technologies relating to digital communication,[1] pose many difficulties relating to the identification and application of international law. Indeed, numerous volumes – particularly over the past few years – have been written on the application of various areas of international law to the use of cyber technologies.[2]

*Special thanks to Guy Keinan, Odyne Berger, and two anonymous reviewers for their comments on earlier versions of this article, as well as to the participants in the conference on 'The Evolving Face of Cyber Conflict and International Law: A Futurespective', American University, Washington DC, June 2022. All opinions are solely my own.

[1]See, e.g., 'The Cyber Security Vulnerability Dictionary', *Vulcan*, 26 October 2021, available at www.vulcan.io/blog/cyber-security-vulnerability/.

[2]See, e.g., H. Harrison Dinniss, *Cyber Warfare and the Laws of War* (2012); L. Baudin, *Les cyber-attaques dans les conflits armés* (2014); J. D. Ohlin, K. Govern and C. Finkelstein (eds.), *Cyber War: Law and Ethics for Virtual Conflicts* (2015); M. N. Schmitt (ed.), *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (2017); F. Delerue, *Cyber Operations and International Law* (2020); H. Lahmann, *Unilateral Remedies to Cyber Operations* (2020); N. Tsagourias and R. Buchan (eds.), *Research Handbook on International Law and Cyberspace* (2021).

While much of this literature discusses the application of treaty rules to the use of cyber technologies, the literature frequently engages with the application of customary international law.

Scholars who have written on the application of international law to cyber operations have sometimes touched upon issues of methodology in identifying customary international law.[3] Yet, what is striking about the recent scholarship is how little has been dedicated to the question of how one identifies the applicability of *existing rules* of customary international law to cyber operations.[4] In other words, very little attention has been given to the question of methodology for determining the applicability to cyber operations of rules of customary international law which did not develop with cyber operations in mind. For example, the second edition of the Tallinn Manual – probably the most influential piece of academic literature regarding international law and cyber operations – simply states that its authors:

> were unanimous in their estimation that existing international law applies to cyber operations ... Accordingly, the task of the International Groups of Experts [which drafted the successive Manuals] was to determine how such law applies in the cyber context, and to identify any cyber-unique aspects thereof.[5]

Yet, the answer to the preliminary question of determining the relevance of (pre)existing customary international law to cyber operations holds the key to answering many of the questions which arise regarding whether existing rules of customary international law apply to cyber activities. Accordingly, the purpose of this article is to provide a guiding answer to the question how one identifies whether existing rules of customary international law are applicable to cyber activities; or, perhaps to be more precise, whether existing state practice accepted as law is relevant for identifying customary international law applicable to cyber activities.

One might question the practical value of an article focusing on pre-cyber-age (so-to-speak) rules of customary international law in identifying applicable customary international law to cyber operations. Indeed, in recent years, a growing number of states have published their positions on the application of international law to cyber operations.[6] Moreover, there is little reason to doubt that many such statements constitute the acceptance as law (*opinio juris*) of the states which authored them.

However, there are several reasons why these statements – as things currently stand and for the foreseeable future – generally do not relieve the need to have recourse to rules of customary international law already in existence prior to the widespread use of cyber technologies to determine the legality of cyber operations. *First*, most of the states which have pronounced their positions – at least beyond general recognition of the applicability of international law, or areas thereof, to cyber operations – are western states. While some Latin American states have expressed their legal positions as well,[7] as far as I am aware no African state has expressed detailed positions on the application of international law.[8] Similarly, Asian states too have remained silent on the

[3]See, e.g., M. Roscini, *Cyber Operations and the Use of Force in International Law* (2014), 24–30; K. Kittichaisaree, *Public International Law of Cyberspace* (2017), 18–20.

[4]For exceptions see H. Lahmann, 'Information Operations and the Question of Illegitimate Interference under International Law', (2020) 53 *Israel Law Review* 189, at 206–9; D. Akande, A. Coco and T. de Souza Dias, 'Drawing the Cyber Baseline: The Applicability of Existing International Law to the Governance of Information and Communication Technologies', (2022) 99 *International Law Studies* 4.

[5]See Schmitt, *supra* note 2, at 3. See, similarly, Kittichaisaree, *supra* note 3, at 16; Delerue, *supra* note 2, at 13.

[6]Many of the national positions are conveniently collated in 'List of Articles: National Positions', *Cyber Law Toolkit*, available at cyberlaw.ccdcoe.org/wiki/List_of_articles#National_positions.

[7]D. B. Hollis (Rapporteur), Improving Transparency – International Law and State Cyber Operations: Fourth Report, OAS Doc. OEA/Ser.Q, CJI/doc 603/20 rev.1 (2020).

[8]See the very abstract remarks of Kenya in Official Compendium of Voluntary National Contributions on the Subject of How International Law Applies to the Use of Information and Communications Technologies by States Submitted by Participating Governmental Experts, UN Doc. A/76/136 (2021), at 52–4.

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application of international law to cyber operations, with the exceptions of Japan, to a lesser extent Singapore, and precariously Iran.[9] As is well established, for the development of customary international law, state practice accepted as law must be representative of different geographical regions and interests of states.[10] The absence of major geographical regions from the discussion on the application of international law to cyber operations undermines any claim that the recent flurry of government statements is sufficiently representative.

Second, the states which have expressed their positions are often in disagreement. Take for example the discussion on the concept of 'attack' under international humanitarian law (IHL) – a concept crucial for determining the applicability of rules concerning distinction, proportionality, and precautions to acts in the conduct of hostilities.[11] Some states consider that only acts which cause physical damage, or death or injury to persons, can amount to 'attacks';[12] others consider that causing the loss of functionality of cyber infrastructure can, too, amount to an 'attack';[13] and others, still, also consider that additional disruptive cyber operations, such as the deletion of data, can amount to an 'attack'.[14] Such lack of uniformity prevents custom on the matter from developing.[15]

Third, the fact remains that, while these statements cover significant ground on the application of international law to cyber operations, they hardly cover the entire corpus of rules of international law potentially relevant to cyber operations. Thus, few statements address in detail the application of the law of neutrality to cyber operations.[16] Similarly, for example, very few address questions relating to the inviolability of state property.[17] For these reasons, it is usually necessary to determine whether pre-existing rules of customary international law apply to cyber operations.

As for the article's structure, it will begin with more general observations on the nature of customary international law (Section 2). These observations will inform many of the arguments in

[9]See UN Doc. A/76/136 (2021), ibid., at 44–50 (Japan), 83–5 (Singapore). A statement attributed to the General Staff of the Iranian Armed Forces, in what appears to be a rough translation from Farsi, is available on a news website. See 'General Staff of Iranian Armed Forces Warns of Tough Reaction to Any Cyber Threat', *Nour News*, 18 August 2020, available at www.nournews.ir/En/News/53144/General-Staff-of-Iranian-Armed-Forces-Warns-of-Tough-Reaction-to-Any-Cyber-Threat.

[10]*North Sea Continental Shelf (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands)*, Judgment of 20 February 1969, [1969] ICJ Rep. 3, para. 73; International Law Commission (ILC), Draft Conclusions on Identification of Customary International Law, UN Doc. A/73/10 (2018), at 136 (CICIL).

[11]See, e.g., P. Bretton, 'Le problème des "méthodes et moyens de guerre ou de combat" dans les protocoles additionnels aux Conventions de Genève du 12 août 1949', (1978) 82 RGDIP 32, at 47; M. Sassòli, *International Humanitarian Law* (2019), 348–9; D. Fleck, 'Methods of Combat', in D. Fleck (ed.), *The Handbook of International Humanitarian Law* (2021), 170, at 174.

[12]J. R. Knudsen (ed.), *Military Manual on International Law Relevant to Danish Armed Forces in International Operations* (2016), 290; Hollis, *supra* note 7, para. 43 (Peru); R. Schöndorf, 'Israel's Perspective on Key Legal and Practical Issues Concerning the Application of International Law to Cyber Operations', (2021) 97 *International Law Studies* 395, at 397–8; UN Doc. A/76/136 (2021), *supra* note 8, at 6 (Australia), 119 (United Kingdom). See also Hollis, *supra* note 7, para. 43 (Chile).

[13]See Hollis, ibid., paras. 44 (Guatemala, Ecuador), 45 (Bolivia); 'The Application of International Law to State Activity in Cyberspace', *Department of the Prime Minister and Cabinet*, 1 December 2020, para. 25 (New Zealand), available at www.dpmc.govt.nz/sites/default/files/2020-12/The%20Application%20of%20International%20Law%20to%20State%20Activity%20in%20Cyberspace.pdf; UN Doc. A/76/136 (2021), ibid., at 50 (Japan); 'Italian Position Paper on "International Law and Cyberspace"', *Ministry of Foreign Affairs and International Cooperation*, 2021, at 9–10, available at www.esteri.it/mae/resource/doc/2021/11/italian_position_paper_on_international_law_and_cyberspace.pdf.

[14]'Droit international appliqué aux opérations dans le cyberespace', *Ministère des Armeés*, 2019, at 13 (France); UN Doc. A/76/136 (2021), *supra* note 8, at 36–7 (Germany).

[15]See, e.g., *Asylum (Colombia/Peru)*, Judgment of 20 November 1950, [1950] ICJ Rep. 266, at 277; *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion of 8 July 1996, [1996] ICJ Rep. 226, para. 71.

[16]See the very broad references in 'Droit international appliqué', *supra* note 14, at 17; Schöndorf, *supra* note 12, at 397–8 (Israel); UN Doc. A/76/136 (2021), *supra* note 8, at 59–60 (Netherlands), 78 (Romania), 89 (Switzerland); 'Italian Position Paper', *supra* note 13, at 10.

[17]'International Law and Cyberspace: Finland's National Positions', *Ministry for Foreign Affairs*, 2020, at 2, available at um.fi/documents/35732/0/Cyber+and+international+law%3B+Finland%27s+views.pdf/41404cbb-d300-a3b9-92e4-a7d675d5d585?t=1602758856859.

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the sections of the article which will follow. Then, in light of recent scholarly trends and what is often stated or implied in literature on cyber activities, the article will make the argument that rules of customary international law are not interpretable (Section 3), making it necessary to refer (back) to state practice accepted as law for the purpose of identifying applicable customary international law. The article will seek to provide guidance on how this should be done (Section 4). In anticipation of objections to the guidance laid out, the article will address the practicability of the approach laid out (Section 5).

2. The nature of customary international law

For many years, various theories have been provided on the nature of customary international law.[18] It would be beyond scope of the present article to adequately analyse this rich literature. Rather, I shall briefly lay out the approach I have followed. As a starting point, we should ask *how* international law binds. As the late Prosper Weil wrote: '[l]e droit international existe, je l'ai rencontré'.[19] That is, states usually abide by international law and certainly invoke it, but most importantly recognize it as law – that is how we know it exists.[20] Perhaps more significantly, states very rarely query why international law in general – or customary international law in particular – is binding.[21]

According to states, how does customary international law become binding? In contrast to what may have been the situation in previous times, the past few years have seen a substantial number of states express their position on this question, in light of the International Law Commission's invaluable work on the identification of customary international law. States have overwhelmingly supported the position that state practice and acceptance as law, or *opinio juris*, are *constitutive* elements of customary international law.[22] Pertinently for the next section of this

[18]See T. Treves, 'Customary International Law', *Max Planck Encyclopedia of Public International Law*, November 2006, paras. 7–9, available at www.opil.ouplaw.com/home/MPIL. See, e.g., D. Anzilotti, *Cours de droit international* (1929), 73–4. See also K. Strupp, 'Les règles générales du droit de la paix', (1933) 47 RCADI 259, at 303–4; J. L. Kunz, 'Roberto Ago's Theory of a "Spontaneous" International Law', (1958) 52 AJIL 85; G. I. Tunkin, 'Remarks on the Juridical Nature of Customary Norms of International Law', (1961) 49 *California Law Review* 419, at 423; J. Crawford and T. Viles, 'International Law on a Given Day', in K. Ginther et al. (eds.), *Völkerrecht zwischen normativem Anspruch und politischer Realität. Festschrift für Karl Zemanek zum 65. Geburtstag* (1994), 45, at 66–8; B. Stern, 'Custom at the Heart of International Law', (2001) 11 *Duke Journal of Comparative & International Law* 89, at 99–100 (translated by N. Byers and A. Denise, 2001); M. Kamto, 'La volonté de l'état en droit international', (2004) 310 RCADI 9, at 269–75.

[19]P. Weil, 'Le droit international en quête de son identité: cours général de droit international public', (1992) 237 RCADI 11, at 47: 'international law exists, I met it'.

[20]See ibid., at 47–9; Sir R. Jennings and Sir A. Watts (eds.), *Oppenheim's International Law* (1992), 14.

[21]See also M. Byers, *Custom, Power and the Power of Rules: International Relations and Customary International Law* (1999), 144; H. Thirlway, 'Concepts, Principles, Rules and Analogies: International and Municipal Legal Reasoning', (2002) 294 RCADI 265, at 304.

[22]UNGA Sixth Committee (67th Session), Summary Record, UN Doc. A/C.6/67/SR.20 (2012), para. 107 (Canada); ibid., UN Doc. A/C.6/67/SR.21 (2012), para. 111 (Poland); UNGA Sixth Committee (68th Session) Summary Record, UN Doc. A/C.6/68/SR.17 (2013), para. 109 (France); ibid., UN Doc. A/C.6/68/SR.25 (2013), paras. 14 (Mexico), 26 (Malaysia); UNGA Sixth Committee (69th Session), Summary Record, UN Doc. A/C.6/69/SR.20 (2014), para. 27 (China); ibid., UN Doc. A/C.6/68/SR.23 (2014), para. 86 (United Kingdom); ibid., UN Doc. A/C.6/69/SR.25 (2014), paras. 81 (Israel), 107 (Austria), 127 (Nordic countries); ibid., UN Doc. A/C.6/69/SR.26 (2014), paras. 2 (Portugal), 29 (Greece), 38 (Ireland), 43 (Czech Republic), 75 (Japan), 83 (Romania), 93 (South Africa), 100 (Spain), 109 (India); ibid., UN Doc. A/C.6/69/SR.27 (2014), paras. 8 (Iran), 34 (Jamaica), 65 (Indonesia), 70 (Republic of Korea); UNGA Sixth Committee (70th Session), Summary Record, UN Doc. A/C.6/70/SR.21 (2015), para. 26 (Belarus); ibid., UN Doc. A/C.6/70/SR.22 (2015), paras. 40 (United States), 48 (Australia), 81 (Chile), 108 (Turkey); ibid., UN Doc. A/C.6/70/SR.23 (2015), paras. 2 (Slovenia), 15 (Viet Nam); UNGA Sixth Committee (71st Session), Summary Record, UN Doc. A/C.6/71/SR.21 (2016), para. 130 (Netherlands); ibid., UN Doc. A/C.6/71/SR.22 (2016), para. 44 (Thailand); ibid., UN Doc. A/C.6/73/SR.20 (2018), para. 81 (Italy); ibid., UN Doc. A/C.6/73/SR.21 (2018), paras. 19 (Mauritius), 24 (Slovakia), 30 (Sudan), 45 (Brazil), 71 (Germany); ibid., UN Doc. A/C.6/73/SR.22 (2018), para. 44 (Russia); ibid., UN Doc. A/C.6/73/SR.23 (2018), paras. 17 (Ecuador), 58 (Cuba); ibid., UN Doc. A/C.6/73/SR.24 (2018), paras. 36 (El Salvador), 40 (Bulgaria); Identification of Customary International Law: Comments and Observations Received from

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article, I am unaware of any state considering that additional or alternative elements are relevant in identifying customary rules.

Of course, implicit in this method of determining the nature of customary international law is a state-centred analysis. Others have favoured broadening the scope of actors relevant in determining the nature of sources of international law, such as international courts and tribunals.[23] However, considering state-centred and horizontal nature of international law,[24] I believe such positions go too far.

A few additional observations should be made regarding the subjective element of customary international law. There is sometimes disagreement regarding the appropriate name of this element. While the term enshrined in Article 38(1)(b) – 'accepted as law' or '*acceptée comme étant le droit*' – is often employed, the Latin term *opinio juris* is employed as much – if not more. The latter derives from the longer term *opinio juris sive necessitates*.[25] While directly translating to mean 'legal opinion or necessity',[26] it in essence refers to 'the view (or conviction) that what is involved is (or, perhaps, should be) a requirement of the law, or of necessity'.[27]

Yet, the term *opinio juris* is often employed by states ritually; basically, as a synonym for 'accepted as law'.[28] One rarely finds states using on their own accord the full term '*opinio juris sive necessitatis*'.[29] Moreover, there also does not seem to be a significant difference between 'acceptance as law' and *opinio juris*, even when the latter is understood literally. One would need to

Governments, UN Doc. A/CN.4/716 (2018), at 27 (Singapore); 'La pratique suisse relative à la détermination du droit international coutumier', *United Nations*, 2016, at 7, available at legal.un.org/ilc/sessions/68/pdfs/french/icil_switzerland.pdf (Switzerland). For similar positions of other states, outside the context of the ILC study, see *Accordance with International Law of the Unilateral Declaration of Independence by the Provisional Institutions of Self-government of Kosovo*, Response by Albania to Questions Asked by the Judges, para. 3, available at www.icj-cij.org/public/files/case-related/141/17886.pdf; *Territorial and Maritime Dispute (Nicaragua v. Colombia)*, Colombia's Comments on Nicaragua's Written Reply to the Question put by Judge Bennouna on 4 May 2012 (Afternoon), para. 12, available at www.icj-cij.org/public/files/case-related/124/17758.pdf; *Questions relating to the Obligation to Prosecute or Extradite (Belgium v. Senegal)*, Reply of Belgium to the Question Put by Judge Greenwood, para. 8, available at www.icj-cij.org/public/files/case-related/144/17640.pdf; *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965*, CR 2018/23, at 13 (Belize); *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965*, CR 2018/26, at 31 (Vanuatu); *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965*, Written Reply of Guatemala to the Question put by Judge Cançado Trindade, at 1, available at www.icj-cij.org/public/files/case-related/169/169-20180910-OTH-04-00-EN.pdf; *Jadhav (India v. Pakistan)*, CR 2019/2, para. 91 (Pakistan).

[23]J. d'Aspremont, *Formalism and the Sources of International Law* (2011), 212.

[24]M. N. Shaw, *International Law* (2017), 156–7.

[25]See *North Sea Continental Shelf* cases, *supra* note 10, para. 77. Cf. F. Gény, *Méthode d'interprétation et sources en droit privé positif* (translated by J. Mayda, 1954), 246.

[26]Cf. A. X. Fellmeth and M. Horwitz, *Guide to Latin in International Law* (2009), 208.

[27]H. Thirlway, *The Sources of International Law* (2014), 57.

[28]See UNGA Sixth Committee (68th Session), Summary Record, UN Doc. A/C.6/68/SR.19 (2013), para. 31 (Cuba); UN Doc. A/C.6/68/SR.25, *supra* note 22, paras. 14 (Mexico), 26 (Malaysia), 77–78 (Israel); UNGA Sixth Committee (69th Session), Summary Record, UN Doc. A/C.6/69/SR.24 (2014), para. 50 (Chile); UN Doc. A/C.6/69/SR.20, *supra* note 22, para. 27 (China); UNGA Sixth Committee (69th Session), Summary Record, UN Doc. A/C.6/69/SR.22 (2014), para. 29 (France); UNGA Sixth Committee (69th Session), Summary Record, UN Doc. A/C.6/69/SR.23 (2014), para. 88 (Slovakia); UN Doc. A/C.6/69/SR.26, *supra* note 22, paras. 38 (Ireland), 43 (Czech Republic), 85 (Romania), 94 (South Africa); UN Doc. A/C.6/69/SR.27, *supra* note 22, paras. 34 (Jamaica), 70 (Republic of Korea); UNGA Sixth Committee (70th Session), Summary Record, UN Doc. A/C.6/71/SR.20 (2016), para. 51 (Nordic countries); UN Doc. A/C.6/71/SR.21, *supra* note 22, paras. 14 (Australia), 137 (Sudan); UN Doc. A/C.6/71/SR.22, *supra* note 22, para. 44 (Thailand); UN Doc. A/C.6/73/SR.22, *supra* note 22, para. 44 (Russia); UN Doc. A/C.6/73/SR.24, *supra* note 22, para. 40 (Bulgaria). Cf. UN Doc. A/C.6/69/SR.26, *supra* note 22, paras. 76 (Japan), 78 (Germany); UN Doc. A/C.6/70/SR.22, *supra* note 22, para. 92 (Spain).

[29]For rare examples see UN Doc. A/C.6/70/SR.21, *supra* note 22, para. 66 (Poland); UN Doc. A/C.6/73/SR.21, *supra* note 22, para. 4 (Portugal). It seems that the only state in recent years to object on principle to the use of the term 'accepted as law' is Portugal, which submitted that 'the expression "accepted as law" was too closely associated with a mere voluntary adherence to law that echoed the decision in the 1927 case S.S. *"Lotus" (France v. Turkey)*, whereas the expression "*opinio juris*" implied rather a conviction of the existence of, or the necessity to comply with, a certain legal obligation'. See UN Doc. A/C.6/69/SR.26, *supra* note 22, para. 4.

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be naïve to believe a state would have 'view' or 'conviction' that something is or should be law without some form of acceptance in that process.[30]

If the subjective element of customary international law is the equivalent to acceptance as law, this would mean that it is a unilateral juridical act (*acte juridique*)[31] – 'the exercise of a power, i.e. a manifestation of will intended to produce the legal consequences determined by this will'.[32] It is unilateral since the legal effects of one state's acceptance as law are not dependent on any other state.[33] While there must indeed be acceptance as law attached to the practice on the part of a generality of states for a customary rule to develop[34] – and in this sense legal effects are dependent on other states – this does not vitiate from the proposition that the acceptance as law on the part of each state is an independent exercise.

3. Applying existing rules of customary international law to cyber operations by interpreting those rules?

A technique which has been both expressly and implicitly employed in quite a broad range of scholarship seeking to apply existing rules of customary international law to cyber operations is that of interpretation.[35] The contention in this scholarship is not (solely) that one may engage in interpretation to properly comprehend a state's practice or to give meaning to the *opinio juris* pronounced by a state.[36] Rather – and this is the key point – it appears to be argued or presumed that rules of customary international law, once in existence, can be interpreted without needing to have recourse to the state practice accepted as law which gave rise thereto in determining their scope and content.

This trend in scholarship on international law applicable to cyber operations should be considered in light of a broader recent trend in international legal scholarship of considering that rules of customary international law can be the subject of interpretation.[37] Significantly, there seems to be growing interaction between the trend in cyber-focused international law scholarship and the broader scholarly trend on interpretability of customary international law.[38] Given that the generalist scholarship has focused in great detail on the questions of interpretation of rules of

[30]Cf. Sir G. Fitzmaurice, 'The General Principles of International Law Considered from the Standpoint of the Rule of Law', (1957) 92 RCADI 1, at 102. See also O. Elias, 'The Nature of the Subjective Element in Customary International Law', (1995) 44 ICLQ 501, at 511–13.

[31]Cf. C. Santulli, 'Rapport général : contribution au colloque de Poitiers sur l'interprétation en droit international', (2011) 115 RGDIP 297, at 302.

[32]R. Ago (Special Rapporteur), Second Report on State Responsibility, in 1970 YILC, Vol. 2, at 186. See also J. d'Aspremont, 'Softness in International Law: A Self-Serving Quest for New Legal Materials', (2008) 19 EJIL 1075, at 1078–9.

[33]E. Kassoti, *The Juridical Nature of Unilateral Acts of States in International Law* (2015), 2–3.

[34]See, e.g., *North Sea Continental Shelf* cases, *supra* note 10, para. 74.

[35]K. Mačák, 'Military Objectives 2.0: The Case for Interpreting Computer Data as Objects under International Humanitarian Law', (2015) 48 *Israel Law Review* 55, at 66; A. S. Deeks, 'Confronting and Adapting: Intelligence Agencies and International Law', (2016) 102 *Virginia Law Review* 599, at 669; Schmitt, *supra* note 2, at 20; S. Wheatley, 'Foreign Interference in Elections under the Non-intervention Principle: We Need to Talk About "Coercion"', (2020) 31 DJCIL 161, at 174–5; P. Roguski, 'Violations of Territorial Sovereignty in Cyberspace – an Intrusion-based Approach', in D. Broeders and B. van den Berg (eds.), *Governing Cyberspace: Behaviour, Power, and Diplomacy* (2020), 65, at 81; M. N. Schmitt and S. Watts, 'Collective Cyber Countermeasures', (2021) 12 HNSJ 373, at 399–400; Akande, Coco and de Souza Dias, *supra* note 4, at 18–19. More cautious: Lahmann, *supra* note 4, at 207–8. See also O. Chasapis Tassinis, 'Customary International Law: Interpretation from Beginning to End', (2020) 31 EJIL 235, at 236.

[36]See Section 4, *infra*.

[37]See, e.g., Chasapis Tassinis, *supra* note 35, at 246; P. Merkouris, J. Kammerhofer and N. Arajärvi (eds.), *The Theory, Practice, and Interpretation of Customary International Law* (2022). For an earlier authority see *North Sea Continental Shelf* cases, *supra* note 10, at 181 (Judge Tanaka, Dissenting Opinion).

[38]See Lahmann, *supra* note 4, at 207–8; Chasapis Tassinis, ibid., at 236; Akande, Coco and de Souza Dias, *supra* note 4, at 15–19; Schmitt and Watts, *supra* note 35, at 399–400; K. Gorobets, 'Practical Reasoning and Interpretation of Customary International Law', in Merkouris, Kammerhofer and Arajärvi, ibid., at 389; W. G. Werner, 'Custom as Rewritten Law – The

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customary international law, it is useful to consider this broader trend in tandem with scholarship on cyber operations to properly comprehend what, in the eyes of its proponents, is involved in the interpretation of rules of customary international law.

From the various strands of recent scholarship supporting the notion of 'interpretability' of customary rules, it seems that the key proposition is that once a rule of customary international law has crystallized, one need *not* have reference to state practice and acceptance as law (*opinio juris*) which gave rise to the rule in question to determine the rule's applicability to a given situation.[39] Rather, by making use of interpretive technique(s) – that is, techniques for providing meaning to something[40] – one may elucidate existing rules of customary international law and thus determine their applicability to given situations.[41] While the precise interpretative techniques applicable in this context are somewhat less clear, the literature on the interpretability of customary international law often places emphasis on teleological interpretation – giving effect to the purported purpose of a given rule.[42]

To further elaborate on what the interpretability of customary international law potentially entails for cyber operations, some examples are useful. Consider the obligation a state owes to foreign nationals in its territory under customary international law to provide protection to their property – an obligation of particular relevance to foreign investors – associated with the concept of 'full protection and security' (FPS).[43] For the purposes of customary international law, this rule has been understood to obligate the state to provide protection from *physical* violence against the foreign person's property.[44] In the context of cyber operations:

> [t]he *physical security* approach would imply, for example, that failures in the exercise of due diligence against cyberattacks and cyberterrorism would not fall under the scope of the [FPS] standard unless some form of "physical" property (e.g. a hard drive or server) is affected.[45]

Text and Paratext of Restatement Reports', (2022) 11(3) *ESIL Reflections*. Cf. M. Lando, 'Identification as the Process to Determine the Content of Customary International Law', (2022) 42 *Oxford Journal of Legal Studies* 1040, at 1046.

[39]P. Merkouris, 'Interpreting the Customary Rules on Interpretation', (2017) 19 *International Community Law Review* 126, at 136.

[40]Cf. 'interpret, *v.*', *Oxford English Dictionary*, available at www.oed.com.

[41]See A. Orakhelashvili, *The Interpretation of Acts and Rules in Public International Law* (2008), 496; P. Merkouris, *Article 31(3)(c) VCLT and the Principle of Systemic Integration* (2015), 244–5.

[42]See *North Sea Continental Shelf* cases, *supra* note 10, at 181 (Judge Tanaka, Dissenting Opinion); Orakhelashvili, ibid., at 498–500; Merkouris, ibid., at 299; M. Fortuna, 'Different Strings of the Same Harp: Interpretation of Rules of Customary International Law, Their Identification and Treaty Interpretation', in Merkouris, Kammerhofer and Arajärvi, *supra* note 37, at 404. See also Schmitt and Watts, *supra* note 35, at 400.

[43]It should be noted that, today, foreign investments are often protected by investment treaties. In this regard, there is a debate whether their incorporation of the 'full protection and security' standard is merely a *renvoi* to the minimum standard of protection under customary international law, or whether they incorporate broader protections. Cf. C. Schreuer, 'Full Protection and Security', (2010) 1 JIDS 353, at 363; *El Paso v. Argentina*, ICSID Case No. ARB/03/15, Award, 31 October 2011, para. 522. Nevertheless, certain treaties refer directly to the customary minimum standard of protection as the applicable standard, so that – at the very least – customary international law remains the applicable law under these treaties. See, e.g., 2018 Agreement between the United States of America, the United Mexican States, and Canada, Art. 14.6, available at www.ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/agreement-between.

[44]See, e.g., *Gold Reserve v. Venezuela*, ICSID Case No. ARB(AF)/09/1, Award, 22 September 2014, paras. 622–623; C. McLachlan, L. Shore and M. Weiniger, *International Investment Arbitration: Substantive Principles* (2017), 335–6; A. Reinisch and C. Schreuer, *International Protection of Investments: The Substantive Standards* (2020), 586; E. Sipiorski, 'Full Protection and Security from Physical Security to Environmental Security: Its Limitations and Future Possibilities', in T. Ackermann and S. Wuschka (eds.), *Investments in Conflict Zones* (2020), 84, at 88–9. See also *Certain Iranian Assets (Iran v. United States)*, Judgment of 30 March 2023 (not yet published), para. 190. Without purporting to exhaustively address this argument, the contention has been made that state practice demonstrates that the obligation extends to non-physical harm to aliens; however, the state practice cited appears to be primarily limited to instances where there was a serious risk of physical violence. See S. Mantilla Blanco, *Full Protection and Security in International Investment Law* (2018), 289–96.

[45]See Mantilla Blanco, ibid., at 276–7 (emphasis in original).

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However, if customary international law is interpretable, the argument could be made that:

> [t]aking into account the fact that immaterial goods have acquired in the last decades an importance they did not have before, it would be logical to extend the scope of application of the FPS standard to attacks carried out by a third party to intangible assets.[46]

Conversely, if customary international law is not interpretable, one would need to have reference to state practice and *opinio juris* to determine whether the FPS standard extends to protection from cyber operations.

Similarly, consider the issue of 'collective' countermeasures. Under the customary law of state responsibility, '[t]he wrongfulness of an act of a State not in conformity with an international obligation towards another State is precluded if and to the extent that the act constitutes a countermeasure taken against the latter State'.[47] The practice which gave rise to this customary rule concerned measures taken by *an injured state* against the injuring state.[48] However, largely due to the disparities in cyber capabilities among states,[49] it has been suggested in recent years that a third state, upon request from an injured state, may adopt 'collective' countermeasures against the responsible state.[50] In other words, the third state's responsibility is precluded because it is adopting a countermeasure, despite the third state itself not being injured by an internationally wrongful act.[51] In justifying the possibility of recourse to 'collective' countermeasures, Michael Schmitt and Sean Watts expressly embrace the possibility of interpreting rules of customary international law, arguing that 'international law must be interpreted in a manner that affords states a practical remedy when facing clearly unlawful conduct'.[52] Yet, in the absence of the

[46]S. Manciaux, 'The Full Protection and Security Standard in Investment Law: A Specific Obligation?', in K. Fach Gómez, A. Gourgourinis and C. Titi (eds.), *International Investment Law and the Law of Armed Conflict* (2019), 218, at 223. See also D. Collins, 'Applying the Full Protection and Security Standard of International Investment Law to Digital Assets', (2011) 12 JWIT 225, at 236; E. De Brabandere, 'International Investment Law and Arbitration in Cyberspace', in Tsagourias and Buchan, *supra* note 2, at 196.

[47]ILC Draft Articles on Responsibility of States for Internationally Wrongful Acts, 2001 YILC, Vol. 2 (Part Two), Art. 22 (ARSIWA).

[48]See, generally, practice cited in G. Arangio-Ruiz (Special Rapporteur), Fourth Report on State Responsibility, 1992 YILC, Vol. 2 (Part 1).

[49]C. Henderson, 'A Countering of the Asymmetrical Interpretation of the Doctrine of Counter-Intervention', (2021) 8 *Journal on the Use of Force & International Law* 34, at 57–8.

[50]Minority view in Schmitt, *supra* note 2, at 132; S. Haataja, 'Cyber Operations and Collective Countermeasures under International Law', (2020) 25 *Journal of Conflict and Security Law* 33, at 48–9. See also G. Corn and E. Jensen, 'The Use of Force and Cyber Countermeasures', (2018) 32 *Temple International & Comparative Law Journal* 127, at 129–30. The justification is somewhat undercut since the injured state need not necessarily engage in a similar violation of international law in adopting countermeasures. See ARSIWA, *supra* note 47, at 129. Nevertheless, reciprocal countermeasures are the most straightforward way of meeting the proportionality requirement in adopting countermeasures. R. O'Keefe, 'Proportionality', in J. Crawford, A. Pellet and S. Olleson (eds.), *The Law of International Responsibility* (2010), 1157, at 1159. Cf. *Archer Daniels Midland Company v. Mexico*, ICSID Case No. ARB(AF)/04/05, Award, 21 November 2007, paras. 155–160.

[51]This should be distinguished from the narrower question whether countermeasures by a non-injured state are permissible in response to violations of *erga omnes* (*partes*) obligations – a question the ILC left open. See ARSIWA, ibid., at 137–9. In such instances, the non-injured state nevertheless has a legal interest in the fulfilment of the obligation in the specific circumstances. See *Barcelona Traction, Light and Power Company, Limited (New Application: 1962) (Belgium v. Spain)*, Second Phase, Judgment of 4 February 1970, [1970] ICJ Rep. 3, para. 33; *Questions relating to the Obligation to Prosecute or Extradite (Belgium v. Senegal)*, Judgment of 20 July 2012, [2012] ICJ Rep. 422, para. 68; *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (The Gambia v. Myanmar)*, Preliminary Objections, Judgment of 22 July 2022 (not yet published), para. 107.

[52]See Schmitt and Watts, *supra* note 35, at 403. The premise of the argument is debatable. Cf. *Appeal relating to the Jurisdiction of the ICAO Council under Article 84 of the Convention on International Civil Aviation (Bahrain, Egypt, Saudi Arabia, and United Arab Emirates v. Qatar)*, Judgment of 14 July 2020, [2020] ICJ Rep. 81, at 122–32 (Judge Cançado Trindade, Separate Opinion).

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possibility of interpreting existing customary rules, it seems difficult to justify the possibility of a third state adopting countermeasures, given the paucity of state practice on the matter.[53]

What is perhaps most striking about recent literature on the question of interpretability of customary rules is that, with isolated exceptions,[54] the authors of this literature seem to mostly agree that rules of customary international law are themselves interpretable. For example, in a recent edited volume on customary international law, the several articles therein dedicated to the subject of interpretation of customary international law all agree that customary rules are interpretable.[55] Is there a case for the contrary position?

3.1 The case for non-interpretability

The identification of a rule of customary international law is determined, as reaffirmed in Section 2, by the state practice and acceptance as law giving rise thereto. Indeed, not a single state appears to have considered that additional or alternative elements are relevant in the identification of customary international law. As the ILC underlined, the 'identification' – interchangeable with 'determination' – of rules of customary international law concerns both identifying the existence *and* identifying the content of rules.[56] When one interprets a rule, one is essentially engaging in an operation of identification of the rule, as the interpretation instructs what the rule actually is.[57] For example, when one interprets Article 2(4) of the UN Charter for the purpose of determining whether cyber operations causing severe financial harm are prohibited as a 'use of force',[58] one is in essence identifying the rule contained in Article 2(4).

Accordingly, when one contends that a rule of customary international law may be subject to interpretation, they presume that elements other than state practice and acceptance as law are relevant in identifying customary international law, as the interpretation determines the scope and content of the rule; namely, what the rule actually is. It should therefore follow that a customary rule in existence *cannot* be subject to interpretation, as this goes beyond the valid two-element methodology for the identification of customary international law. This is at least to the extent that

[53]See also *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States)*, Merits, Judgment of 27 June 1986, [1986] ICJ Rep. 14, para. 249. Very few states have recognized the lawfulness of 'collective' countermeasures: 'The Application of International Law to State Activity in Cyberspace', *supra* note 13, para. 22 (New Zealand); UN Doc. A/76/136 (2021), *supra* note 8, at 28 (Estonia). Others have expressly rejected their lawfulness: 'Droit international appliqué', *supra* note 14, at 8 (France); 'International Law Applicable in Cyberspace', *Government of Canada*, 2022, para. 37, available at www.international.gc.ca/world-monde/issues_development-enjeux_developpement/peace_security-paix_securite/cyberspace_law-cyberespace_droit.aspx?lang=eng.

[54]See Lando, *supra* note 38. Perhaps the main difference between mine and Lando's criticism of the interpretability line of scholarship is that Lando's 'article has built on certain assumptions, also made by the proponents of the interpretability of custom, to meet these proponents "on their turf"'. See ibid., 1065. Conversely, as will be seen below, I primarily take issue with the proponents' assumption that the interpretability of customary rules can be reconciled with the very nature of customary international law. See also M. Wood and O. Sender, 'Between Theory, Practice, and "Interpretation" of Customary International Law', *CIL Dialogues*, November 2022, available at cil.nus.edu.sg/blogs/between-theory-practice-and-interpretation-of-customary-international-law/.

[55]See N. Arajärvi, 'Misinterpreting Customary International Law: Corrupt Pedigree or Self-Fulfilling Prophecy?', in Merkouris, Kammerhofer and Arajärvi, *supra* note 37, at 40; P. Merkouris, 'Interpreting Customary International Law: You'll Never Walk Alone', in ibid., at 347; K. Gorobets, 'Practical Reasoning and Interpretation of Customary International Law', in ibid., at 370; Fortuna, *supra* note 42; R. Di Marco, 'Customary International Law: Identification versus Interpretation', in ibid., at 414; J. R. Morss and E. Forbes, '"And in the Darkness Bind Them": Hand-Waving, Bootstrapping, and the Interpretation of Customary International Law after *Chagos*', in ibid., at 432; N. Mileva, 'The Role of Domestic Courts in the Interpretation of Customary International Law: How Can We Learn from Domestic Interpretive Practices?', in ibid., at 453; C. Ryngaert, 'Customary International Law Interpretation: The Role of Domestic Courts', in ibid., at 481.

[56]See CICIL, *supra* note 10, at 123–4.

[57]M. K. Yasseen, 'L'interprétation des traités d'après la Convention de Vienne sur le droit des traités', (1976) 151 RCADI 1, at 9; M. Herdegen, 'Interpretation in International Law', *Max Planck Encyclopedia of Public International Law*, November 2020, para. 1, available at www.opil.ouplaw.com/home/MPIL.

[58]1945 Charter of the United Nations, Art. 2(4).

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the term 'interpretation' is not merely used to refer to discerning the existence and scope of state practice and *opinio juris*.[59] Indeed, 'interpretation' can also connote 'ascertain[ment] whether a given rule can claim to be part of the international legal order'.[60]

It follows that it is state practice in combination with acceptance as law which determine the content of the customary rule, and it is to these elements one should refer in seeking to determine whether – and, if so, how – a given matter is governed by customary international law. How one should go about this task will be the focus of Section 4; in the meantime, it suffices to make the relatively straightforward argument in this and the previous paragraphs.

It should be emphasized that this argument is not novel and has been stated or implied by scholars of far greater stature than myself, albeit primarily during times in which there was little pushback to this argument. For example, Tullio Treves observed that '[o]nce the content of a customary international rule has been ascertained there [is] no "linguistic veil" to be pierced in order to determine its meaning'.[61]

Despite suggestions to the contrary,[62] the ILC appears to have implicitly rejected the proposition that crystallized customary rules may be interpreted.[63] As Conclusion 2 of the ILC's Conclusions on Identification of Customary International Law stipulates, '[t]o determine the existence *and content* of a rule of customary international law, it is necessary to ascertain whether there is a general practice that is accepted as law (*opinio juris*)'.[64] The commentary appended to Conclusion 2 elaborates:

> To establish that a claim concerning the existence or the content of a rule of customary international law is well-founded thus entails a search for a practice that has gained such acceptance among States that it may be considered to be the expression of a legal right or obligation (namely, that it is required, permitted or prohibited as a matter of law). The test must always be: is there a general practice that is accepted as law?[65]

The proposition that customary rules are interpretable suggests something different; that one need not 'always' have reference to state practice and *opinio juris* to determine the content of a customary rule. Thus, it is difficult to see how the proposition that customary rules are interpretable may be reconciled with the ILC's position. Accordingly, in identifying the applicability of rules of customary international which existed prior to times when use of cyber technologies became widespread, one must have recourse to the state practice accepted as law which gave rise to those rules.

[59]As observed, this is not the intention of proponents of interpretability of customary rules. See notes 40–42 and accompanying text, *supra*.

[60]J. d'Aspremont, 'The Multidimensional Process of Interpretation: Content-Determination and Law-Ascertainment Distinguished', in A. Bianchi, D. Peat and M. Windsor (eds.), *Interpretation in International Law* (2015), 111, at 117. For example, in its position on the application of customary international law to cyber operations, Germany stated that 'uncertainties as to how international law might be applied in the cyber context can and must be addressed by having recourse to the established methods of interpretation of international law'. See UN Doc. A/76/136 (2021), *supra* note 8, at 44. While reliance has been placed on this passage to demonstrate that Germany recognized the interpretability of rules of customary international law, the isolated reference to 'interpretation' is simply too vague to persuasively rule out that it was not used in a broader sense. For the contrary understanding see P. Merkouris and N. Mileva, 'Introduction to the Series: Customary Law Interpretation as a Tool', (2022) 11(1) *ESIL Reflections*, at 8.

[61]See T. Treves, 'The Expansion of International Law (General Course on Public International Law)', (2019) 398 RCADI 9, at 142. See also R. Y. Jennings, 'The Progressive Development of International Law and its Codification', (1947) 24 BYIL 301, at 305; T. Meron, 'International Law in the Age of Human Rights: General Course on Public International Law', (2003) 301 RCADI 9, at 376.

[62]See Fortuna, *supra* note 42, at 400–1.

[63]See Wood and Sender, *supra* note 54.

[64]See CICIL, *supra* note 10, at 124 (former emphasis added).

[65]Ibid., at 125 (citation omitted).

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3.2 Contrary ICJ jurisprudence?

Some of the scholars who consider rules of customary international law interpretable have sought to deduce from the ICJ's jurisprudence recognition of the interpretability of customary rules. Accordingly, it is useful to analyse the main ICJ cases, in chronological order, on which reliance has been placed for the purpose of demonstrating the Court's recognition of the interpretability of customary international law. This is not to say that the analysis below is exhaustive of all the ICJ cases which have been invoked in illustrating purported interpretation of custom. Rather, they are the cases where reliance has been placed on the Court's express *reasoning* to justify the interpretability of rules of customary international law.[66]

Some may question why focus is placed on arguments based on ICJ jurisprudence, rather than other courts or tribunals. Indeed, the jurisprudence of other international courts and tribunals is relied upon as authority for the proposition that rules of customary international law are interpretable.[67] However, first, for reasons of space, it would be beyond the scope of the present article to consider every case referred to. Second, one cannot ignore the ICJ's paramount expertise in generalist issues of international law, in comparison with other international courts and tribunals.[68] Its jurisdiction is general,[69] rather than limited to rules enshrined in a specific instrument, as is the case for most international courts and tribunals, and therefore its expertise is expected to encompass customary international law. Its 15 judges are primarily persons who 'are jurisconsults of recognized competence in international law'.[70] This is not something which can be said about many international courts and tribunals. For some international courts and tribunals, the constitutive instruments provide that a judge's expertise need not always lie in international law;[71] in others, the expertise of many of the judges is, in practice, outside international law.[72]

[66]For example, some have relied on the evolution of the ICJ's jurisprudence on the customary international law governing transboundary harm to demonstrate 'how specific content and sub-obligations were particularized out of a general customary rule by means of interpretation'. See Merkouris and Mileva, *supra* note 60, at 7. Yet, this seems to speculate how the Court 'particularized' the 'content and sub-obligations'; the Court's assertive reasoning does not provide indications one way or another. See *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment of 20 April 2010, [2010] ICJ Rep. 14, para. 204; *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica)*, Judgment of 16 December 2015, [2015] ICJ Rep. 665, para. 104. See also *Dispute over the Status and Use of the Waters of the Silala (Chile v. Bolivia)*, Judgment of 1 December 2022 (not yet published), paras. 99–102. Similarly, *Burkina Faso/Mali* is sometimes discussed in scholarship on the interpretability of custom. This is due to the ICJ Chamber's identification of a customary rule of *uti possidetis*, doing so by opining that the rule is 'logically connected' with gaining independence. See Chasapis Tassinis, *supra* note 35, at 255. See also S. Talmon, 'Determining Customary International Law: The ICJ's Methodology between Induction, Deduction and Assertion', (2015) 26 EJIL 417, at 439–40; Morss and Forbes, *supra* note 55, at 439. However, the Chamber's recourse to logic was not for interpreting an existing rule, but for identifying a rule from scratch – beyond what many of the proponents of the interpretability of customary rules would allege is a correct methodology. *Frontier Dispute (Burkina Faso/Mali)*, Judgment of 22 December 1986, [1986] ICJ Rep. 554, paras. 20, 23. It should also be noted that specific composition of that Chamber of five judges may have played a role in its reasoning. At least three of the five judges expressed positions elsewhere which did not fully embrace the two-element approach for identifying customary rules. Cf. *North Sea Continental Shelf* cases, *supra* note 10, at 231–2 (Judge Lachs, Dissenting Opinion); M. Bedjaoui, *Towards a New International Economic Order* (1979), 189; G. Abi-Saab, 'Cours général de droit international public', (1987) 207 RCADI 9, at 176–7.

[67]See, e.g., Orakhelashvili, *supra* note 41, at 505–10; Fortuna, *supra* note 42, at 407–9.

[68]Cf. *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro)*, Judgment of 26 February 2007, [2007] ICJ Rep. 43, para. 403.

[69]1945 Statute of the International Court of Justice, Art. 36.

[70]Ibid., Art. 2. See C. F. Amerasinghe, 'Judges of the International Court of Justice – Election and Qualifications', (2001) 14 LJIL 335.

[71]1998 Rome Statute of the International Criminal Court, 2187 UNTS 3, Art. 36(3)(b)(i). See also Report of the Secretary-General Pursuant to Paragraph 2 of Security Council Resolution 808 (1993), UN Doc. S/25704 (1993), Ann., Art. 13.

[72]N.-L. Arold, 'The European Court of Human Rights as an Example of Convergence', (2007) 76 *Nordic Journal of International Law* 305, at 312–13. See also K. Dzehtsiarou and A. Schwartz, 'Electing Team Strasbourg: Professional Diversity on the European Court of Human Rights and Why it Matters', (2020) 21 *German Law Journal* 621, at 634–5.

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Accordingly, the ICJ's jurisprudence is most authoritative on questions relating to the nature of customary international law.

3.2.1 *The* Barcelona Traction *case*

Reference is sometimes made to a brief, isolated passage in *Barcelona Traction*.[73] This was a case which, *inter alia*, concerned the ability of an applicant state to exercise diplomatic protection on the basis of the nationality (Belgium) of shareholders of a company, incorporated in a third state (Canada), and in regard to measures taken by the respondent state (Spain) relating to the company. In this regard, the Court referred to its task of '*interpreting the general rule* of international law concerning diplomatic protection'.[74]

Should the Court's *dictum* in *Barcelona Traction* be understood as going beyond mere identification of the customary rule of diplomatic protection – considering 'interpret' can also connote law-ascertainment[75] – and referring to actual interpretation of a crystallized customary rule? Upon reading the *Barcelona Traction* second phase judgment in its entirety, it appears the Court refrained from any interpretation of a customary rule it already determined existed.[76] On the contrary, the Court expressed its desire to strictly follow the law developed by states.[77] Perhaps most instructive is the Court's explicit rejection of the applicability to corporations of the *Nottebohm* 'genuine connection' test of nationality of a natural person in determining an applicant state's ability to exercise diplomatic protection.[78] The application of the 'genuine connection' test would seemingly have been possible were the already recognized rule of nationality for diplomatic protection from *Nottebohm* 'interpreted',[79] instead of referring back to state practice.

3.2.2 *The* Nicaragua *case*

Another case to which reference is made for the purpose of proving the interpretability of customary rules is the *Nicaragua* case. There, the Court observed that '[r]ules which are identical in treaty law and in customary international law are also distinguishable by reference to the *methods of interpretation* and application'.[80] It has thus been argued that, '[i]n this way, the ICJ accepted that there are methods of interpretation, which are specifically tailored to the needs of customary international law'.[81]

Yet, before seeking to discern anything from this 'cryptic' passage in the *Nicaragua* case,[82] it is necessary to recognize that the passage's focus is on different means of implementation of parallel

[73]See, e.g., Merkouris, *supra* note 41, at 256.

[74]See *Barcelona Traction*, *supra* note 51, para. 54 (emphasis added).

[75]See, generally, d'Aspremont, *supra* note 60, and the quote accompanying note 60.

[76]Later in the judgment the Court did 'consider … that, in the field of diplomatic protection as in all other fields of international law, it is necessary that the law be applied reasonably'. However, this passage refers to applying considerations of equity in addition to the customary rule, rather than any interpretation of the rule itself. See *Barcelona Traction*, *supra* note 51, paras. 92–93; ibid., paras. 35–36 (Judge Fitzmaurice, Separate Opinion). Moreover, the Court appears to have abandoned this approach in the *Diallo* case. See, generally, *Ahmadou Sadio Diallo (Guinea v. Democratic Republic of the Congo)*, Preliminary Objections, Judgment of 24 May 2007, [2007] ICJ Rep. 582, paras. 77–94. See also P. N. Okowa, 'Case concerning Ahmadou Sadio Diallo (*Republic of Guinea v Democratic Republic of the Congo*) Preliminary Objections', (2008) 57 ICLQ 219, at 222–3.

[77]'Here as elsewhere, a body of rules could only have developed with the consent of those concerned.' See *Barcelona Traction*, ibid., para. 89.

[78]See *Barcelona Traction*, ibid., para. 70.

[79]*Nottebohm (Liechtenstein v. Guatemala)*, Second Phase, Judgment of 6 April 1955, [1955] ICJ Rep. 4, at 23.

[80]See *Military and Paramilitary Activities in and against Nicaragua*, *supra* note 53, para. 178 (emphasis added).

[81]See Merkouris, *supra* note 41, at 256. See, similarly, D. Alland, 'L'interprétation du droit international public', (2013) 362 RCADI 41, at 86.

[82]'Cryptic' is the adjective employed by both Oscar Schachter and Theodor Meron, respectively. See O. Schachter, 'Recent Trends in International Law Making', (1988) 12 *Australian Yearbook of international Law* 1, at 8; T. Meron, 'The Continuing Role of Custom in the Formation of International Humanitarian Law', (1996) 90 AJIL 238, at 246–7.

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treaty and customary rules,[83] rather than any purported interpretability of customary rules. Thus, the Court explained immediately afterwards that '[a] State may accept a rule contained in a treaty ... because the treaty establishes what that State regards as desirable institutions or mechanisms to ensure implementation of the rule'.[84] Accordingly, to read into an isolated passage a proposition as dramatic as that customary rules are interpretable – rather than making economical use of language by using a term which can also connote law-ascertainment – seems quite far-fetched. Moreover – and perhaps more pertinently – in the *Nicaragua* case, too, the Court did little to demonstrate that it, in actuality, sought to interpret an existing customary rule.

3.2.3 *The* Arrest Warrant *case*

Although reference is made less often to the *Arrest Warrant* case in literature supporting the interpretability of custom – perhaps since no explicit statement is made therein to actual 'interpretation' – it is nevertheless a case of interest due to the Court's reasoning therein. The case concerned an international arrest warrant issued by Belgium in April 2000 against Abdoulaye Yerodia Ndombasi – at the time the Foreign Minister of the Democratic Republic of the Congo – for alleged war crimes and crimes against humanity. The DRC's principal, if not sole,[85] legal ground in its submissions for the illegality of the arrest warrant was that it violated Yerodia's immunity *ratione personae*;[86] that is, an absolute immunity for the person from criminal process, as opposed to immunity *ratione materiae*, which would solely apply to acts conducted in an official capacity.

In determining the scope of immunity serving foreign ministers enjoy under customary international law, the Court stated that it 'must ... first consider the nature of the functions exercised by a Minister for Foreign Affairs'.[87] After surveying the nature of these functions, observing that a foreign minister 'occupies a position such that, like the Head of State or the Head of Government, he or she is recognized under international law as representative of the State solely by virtue of his or her office',[88] it went on to declare:

> The Court accordingly concludes that the functions of a Minister for Foreign Affairs are such that, throughout the duration of his or her office, he or she when abroad enjoys full immunity from criminal jurisdiction and inviolability. That immunity and that inviolability protect the individual concerned against any act of authority of another State which would hinder him or her in the performance of his or her duties.[89]

At face value, the Court's reasoning in identifying customary international law smacks of interpretation.[90] Instead of surveying state practice accepted as law to determine whether foreign

[83]Cf. P. M. Eisemann, 'L'arrêt de la C.I.J. du 27 juin 1986 (fond) dans l'affaire des activités militaires et paramilitaires au Nicaragua et contre celui-ci', (1986) 32 AFDI 153, at 172; A. Tzanakopoulos and A. Ventouratou, 'Nicaragua in the International Court of Justice and the Law of Treaties', in E. Sobenes and O. B. Samson (eds.), *Nicaragua Before the International Court of Justice* (2018), 215, at 240; O. Ammann, *Domestic Courts and the Interpretation of International Law* (2019), at 196, fn. 1201.

[84]See *Military and Paramilitary Activities in and against Nicaragua*, *supra* note 53, para. 178.

[85]*Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v. Belgium)*, Judgment of 14 February 2002, [2002] ICJ Rep. 3, para. 43.

[86]See *Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v. Belgium)*, CR 2001/10 (translation), at 21 (Masangu-a-Mwanza).

[87]See *Arrest Warrant*, *supra* note 85, para. 53.

[88]Ibid.

[89]Ibid., para. 54.

[90]N. Mileva, 'The Under-Representation of Third World States in Customary International Law: Can Interpretation Bridge the Gap?', University of Groningen Faculty of Law Research Paper No. 9/2020 (2019), at 9–10, fn. 63, available at papers.ssrn.com/sol3/papers.cfm?abstract_id=3513261.

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ministers enjoy immunity *ratione personae*, the Court referred to the functions of foreign ministers, the latter's similarity to other officials who enjoy immunity *ratione personae*, and concluded that foreign ministers, too, enjoy such immunity.[91]

Yet, a word of caution is necessary regarding a conclusion that the Court essentially recognized the interpretability of customary rules. In properly understanding the scope of a judgment, it is often indispensable to have recourse to the parties' pleadings. Formally, these 'show what evidence was, or was not, before the Court and how the issues before it were formulated by each Party'.[92] However, the pleadings also go some way in explaining why the Court in particular cases elaborates in detail, or asserts quite summarily, findings of law.[93] As the late James Crawford observed regarding one of custom's elements, 'the strictness of the Court's approach to *opinio juris* may depend on whether the state of the law is a primary point of contention between the parties to a dispute'.[94]

During the *Arrest Warrant* proceedings, the DRC was adamant that foreign ministers enjoy immunity *ratione personae* and that this immunity is absolute.[95] Conversely, while Belgium contended that Yerodia's immunity did not apply in regard to war crimes and crimes against humanity, Belgium maintained a more ambiguous position regarding whether the immunity was, to begin with, *ratione personae* in nature. In its counter-memorial, it began by stating that, 'ordinarily and as a matter of general proposition, Ministers for Foreign Affairs are immune from suit before the courts of foreign states, and the persons of Ministers for Foreign Affairs are inviolable'.[96] However, Belgium proceeded to refer to Sir Arthur Watts' Hague Lectures, where he opined, regarding, *inter alia*, immunity of foreign ministers, that 'specially favourable treatment is in general . . . accorded to State representatives where that is necessary to enable them to carry out their functions'.[97] Belgium sought to expand on this argument, claiming that '[i]mplicit in this appreciation is the proposition that the scope and application of these privileges and immunities are limited to circumstances involving the performance by the person concerned of official functions'.[98]

Yet, in the oral proceedings, the DRC, in laying out the points of agreement between the parties, stated that 'Belgium no longer seems to dispute the fact that, during their period of office, Ministers for Foreign Affairs enjoy the same immunity from suit in foreign courts as heads of State in office'.[99] Rather, the DRC described the point of disagreement as relating to whether an exception to foreign ministers' absolute immunity existed 'when accusations directed against Ministers in office relate to crimes under international law'.[100] Interestingly, while the DRC's description of the points of (non-)contention was seemingly at variance with what was stated in Belgium's counter-memorial, Belgium did not appear to take issue with the DRC's description.

[91]See also *Arrest Warrant*, *supra* note 85, para. 14 (Judge *ad hoc* Van den Wyngaert, Dissenting Opinion); Talmon, *supra* note 66, at 425; F. L. Bordin, *The Analogy between States and International Organizations* (2018), 18.

[92]*Request for Interpretation of the Judgment of 15 June 1962 in the Case concerning the* Temple of Preah Vihear (Cambodia v. Thailand) *(Cambodia v. Thailand)*, Judgment of 11 November 2013, [2013] ICJ Rep. 281, para. 69.

[93]See also, generally, I. Scobbie, 'Legal Reasoning and the Judicial Function in the International Court' (PhD thesis, University of Cambridge 1990).

[94]J. Crawford, 'Chance, Order, Change: The Course of International Law', (2013) 365 RCADI 9, at 59. See also M. Lando, 'Secret Custom *or* the Impact of Judicial Deliberations on the Identification of Customary International Law', (2022) 81 *Cambridge Law Journal* 550.

[95]*Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v. Belgium)*, Memorial of the Democratic Republic of the Congo of 15 May 2001, at 29, available at www.icj-cij.org/public/files/case-related/121/8305.pdf.

[96]*Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v. Belgium)*, Counter-Memorial of Belgium of 28 September 2001, at 118–19, available at www.icj-cij.org/public/files/case-related/121/8304.pdf.

[97]Sir A. Watts, 'The Legal Position in International Law of Heads of States, Heads of Governments and Foreign Ministers', (1994) 247 RCADI 10, at 103.

[98]See *Arrest Warrant*, Counter-Memorial of Belgium, *supra* note 96, at 118–19.

[99]Ibid., CR 2001/5 (translation), at 36 (d'Argent).

[100]Ibid.

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Indeed, in its oral pleadings, Belgium focused on whether an exception for war crimes and crimes against humanity existed regarding the immunity *ratione personae*.[101]

In this light, the Court was faced with a half-hearted attempt on Belgium's part to argue that immunity *ratione personae* was unnecessary for foreign ministers to exercise their functions, and thus inapplicable thereto, whereas the DRC sought to interpret Belgium's contentions in a manner that displayed no disagreement on this point. Thus, the Court's analysis on the general scope of foreign ministers' immunities – which Judge Oda described as 'address[ing] this question merely by giving a hornbook-like explanation'[102] – was essentially responding to the one precarious argument that was made in the case on the issue; and, pertinently, on the very terms of that argument. The absence of any detailed examination of state practice accepted as law – or even reference thereto – in this part of the judgment cannot be contemplated without regard to this near-absence of disagreement between the parties.

3.3 Interim conclusion

To summarize this section, I argue that rules of customary international law cannot conceptually be subject to interpretation. Moreover, the ICJ's jurisprudence provides, at best, very weak support for the proposition that customary rules are interpretable; in fact, the opposite would seem to be the better conclusion to reach from this jurisprudence.[103] On this basis, it follows that in determining the applicability of existing customary international law to cyber activities, one may not have recourse to interpretive techniques. Instead, one must have recourse to existing state practice accepted as law (*opinio juris*). Thus, for example, in the abovementioned instance of the customary FPS standard,[104] one cannot suffice by referring to the significance of intangible goods today to justify the applicability of the FPS standard to the protection of intangible assets from malicious cyber operations. One must have recourse to state practice accepted as law to determine the standard's applicability – with the answer likely to be negative.[105] Similarly, one cannot 'interpret' the existing customary international law on countermeasures to justify recourse to 'collective' countermeasures by a state with advanced cyber capabilities on behalf of a state with lesser capabilities;[106] here, too, only reference to state practice accepted as law can provide the answer whether such recourse is lawful.

Yet, in support of the position that customary international law is interpretable, the argument has been made that:

> [t]he requirements of widespread, representative, constant and uniform state practice accompanied by *opinio juris* would never be precise enough to account for newly emerging situations, that in any other case (and especially in the case of written instruments) would be easily addressed through the process of interpretation.[107]

Clearly, the advent cyber activities constituted a 'newly emerging situation'. However, do these potential difficulties render interpretation necessary? The following section of this article seeks to demonstrate the contrary.

[101]See, e.g., ibid., CR 2001/9 (translation), at 10 (David).

[102]See *Arrest Warrant*, *supra* note 85, para. 14 (Judge Oda, Dissenting Opinion).

[103]See also *Northern Cameroons (Cameroon v. United Kingdom)*, Preliminary Objections, Judgment of 2 December 1963, [1963] ICJ Rep. 15, at 37: 'if in a declaratory judgment it *expounds* a rule of customary law or *interprets* a treaty which remains in force, its judgment has a continuing applicability' (emphases added).

[104]See notes 43–6 and accompanying text, *supra*.

[105]See note 44, *supra*.

[106]See notes 47–53 and accompanying text, *supra*.

[107]See Merkouris, *supra* note 55, at 349.

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4. Determining the relevance of existing state practice and acceptance as law to cyber activities

In laying out a suggested methodology for determining whether existing practice and *opinio juris* carry relevance for the identification of applicable customary international law to a cyber activity, I shall address each element of customary international law in turn – first state practice and then *opinio juris*.

4.1 Determining the relevance of existing state practice

On the subject of determining whether precedents of state practice are relevant to a given situation, it must be conceded that the general rules laid out by states on the identification of custom do not provide too much guidance on the matter, and hence one may contend that there is genuine indeterminacy in the rules for identifying customary international law.[108] On the one hand, it would be somewhat absurd to consider that precedents of practice must involve the exact same circumstances as a particular given instance. On the other hand, the fact remains that it is state practice which – together with acceptance as law – crystallizes custom; hence, the respective precedents of state practice should remain the source for instruction on whether – and, if so, how – customary international law governs a particular set of circumstance.

There has in fact been significant discussion in the jurisprudence of the International Court – both the PCIJ and the ICJ – on questions regarding whether precedents of practice are relevant to the determination whether custom governs a particular matter. Save a few exceptions,[109] this jurisprudence is generally overlooked. However, the International Court has attained a persuasive approach, under which custom constitutes a workable source of international law while remaining true to the element of state practice. This jurisprudence will be analysed, distilling from the International Court's approach a methodology for determining the relevance of precedents of state practice in identifying customary international law applicable to cyber activities.

4.1.1 *The* Lotus *case*

In the *Lotus* case, upon laying out its methodology for determining whether a rule prohibited Turkey's prosecution of the French Lieutenant Demons following a high seas collision between the French-flagged *Lotus* and the Turkish-flagged *Boz-Kourt*, the PCIJ stated that relevant practice 'must be ascertained by examining precedents offering a close analogy to the case under consideration; for it is only from precedents of this nature that the existence of a general principle applicable to the particular case may appear'.[110]

Accordingly, in its search for a prohibitive customary rule, the PCIJ omitted from its consideration purported precedents of practice involving crimes committed against one state's nationals in another state's actual territory.[111] Similarly, it omitted considering precedents relating to the exercise of jurisdiction concerning single-vessel incidents, opining that 'it is impossible ... to make any deduction from them in regard to matters which concern two ships and consequently the jurisdiction of two different States'.[112]

[108]Cf. H. L. A. Hart, *The Concept of Law* (2012), 134; N. MacCormick, *Legal Reasoning and Legal Theory* (1978), 250–1.

[109]Cf. S. Yee, 'Report on the ILC Project on "Identification of Customary International Law"', (2015) 14 *Chinese Journal of International Law* 375, at 382–3; CICIL, *supra* note 10, at 137.

[110]*SS Lotus (France v. Turkey)*, PCIJ Rep Series A No 10, at 21. See also CICIL, ibid., at 137.

[111]The PCIJ observed that 'the offence produced its effects on the Turkish vessel and consequently in a place assimilated to Turkish territory in which the application of Turkish criminal law cannot be challenged, even in regard to offences committed there by foreigners'. See *Lotus*, *supra* note 110, at 22–3. Similarly, in his dissenting opinion, Vice-President Weiss, who opined that a permissive rule of international law would be necessary for a state to exercise judicial jurisdiction over extraterritorial offences, considered that, *inter alia*, precedents involving passive-personality jurisdiction generally could not constitute precedents for jurisdiction regarding a maritime collision. See ibid., at 45 (Vice-President Weiss, Dissenting Opinion). Cf. ibid., at 97 (Judge Altamria, Dissenting Opinion).

[112]Ibid., at 27.

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4.1.2 *The* North Sea Continental Shelf *cases*

In the *North Sea Continental Shelf* cases, the ICJ was tasked with determining the law governing the delimitation of a continental shelf between lateral states. In seeking relevant conduct of states regarding continental shelf delimitation between lateral costal states, the ICJ considered 'the case of median-line delimitations between opposite States as different in various respects, and as being sufficiently distinct not to constitute a precedent for the delimitation of lateral boundaries'.[113]

The ICJ's approach should be contrasted with Judge Ammoun's suggestion that the Court ought to have also considered practice concerning delimitation between opposite coastal states, as well as delimitations of other maritime zones, since '[t]he underlying concept common to all these stretches of water, which is decisive by way of analogy, is that they all proceed from the notion of the natural prolongation of the land territory of the coastal States'.[114] The Court's approach should also be contrasted with that of Judge *ad hoc* Sørensen, who opined in his dissenting opinion that it is artificial to distinguish between adjacent and opposite coastal states for the purposes of delimitation, referring to '[t]he difficulties of drawing a clear-cut distinction between the two types of geographical situations'.[115]

4.1.3 *The* Arrest Warrant *case (again)*

Returning to the *Arrest Warrant* case, discussed in Section 3, but focusing on the point of contention which clearly separated the parties therein on customary international law – namely, whether there existed an exception to the absolute immunity of ministers of foreign affairs when faced with charges of war crimes and crimes against humanity[116] – the ICJ was careful to narrowly delimit the practice relevant to its analysis. Thus, the ICJ rejected the relevance of the House of Lords *Pinochet* case,[117] as it did not attest to 'any form of exception to the rule according immunity from criminal jurisdiction and inviolability to incumbent Ministers for Foreign Affairs, where they are suspected of having committed war crimes or crimes against humanity'.[118]

Similarly, the Court rejected the relevance of provisions governing the (lack of) immunity of officials in office found in treaties and other instruments constituting international criminal tribunals – as well as the practice of such bodies – as these 'do not enable it to conclude that any such an [*sic*] exception exists in customary international law in regard to national courts'.[119] It should be noted that Judge *ad hoc* Van den Wyngaert criticized the Court for its 'minimalist approach by adopting a very narrow interpretation of the "no immunity clauses" in international instruments',[120] rather than taking instruction from purported general trends in practice.[121]

4.1.4 *The* Jurisdictional Immunities *case*

More recently, in the *Jurisdictional Immunities* case, upon assessing whether Germany was immune from proceedings in Italian courts regarding atrocities Germany committed during the Second World War on Italian territory, the Court was confronted with an argument that a territorial tort exception to state immunity precluded Germany's immunity – that is, an exception

[113]See *North Sea Continental Shelf* cases, *supra* note 10, para. 79. Cf. *North Sea Continental Shelf (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands)*, Reply submitted by the Federal Republic of Germany of 31 May 1968, ICJ Pleadings, Vol. 1, at 406.

[114]See *North Sea Continental Shelf* cases, *supra* note 10, at 124 (Judge Ammoun, Separate Opinion). Cf. ibid., at 160 (Vice-President Koretsky, Dissenting Opinion).

[115]Ibid., at 250–1 (Judge *ad hoc* Sørensen, Dissenting Opinion).

[116]See, particularly, note 100 and accompanying text, *supra*.

[117]*Regina v. Bow Street Metropolitan Stipendiary Magistrate, ex parte Pinochet Ugarte (No. 3)*, 119 ILR 135 (1999).

[118]See *Arrest Warrant*, *supra* note 85, para. 58.

[119]Ibid.

[120]Ibid., para. 27 (Judge *ad hoc* Van den Wyngaert, Dissenting Opinion).

[121]Ibid.

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to the foreign state's immunity from jurisdiction for matters concerning torts conducted on the forum state's territory.[122] Instead of examining general precedents regarding torts committed on the forum state's territory to determine the existence of a customary rule providing such an exception in the circumstances *in casu*, the Court confined its analysis 'to acts committed on the territory of the forum State by the armed forces of a foreign State, and other organs of State working in co-operation with those armed forces, in the course of conducting an armed conflict'.[123]

Quite revealing is the discussion on the Court's distinguishing criteria in some of the individual opinions appended to the 2012 judgment.[124] Judge Koroma emphasized the 'nearly limitless liability' resulting from incidents that occur during armed conflicts – as compared to traffic accidents and the like – that states could be exposed to.[125] Judge Keith went further, stressing that armed forces' acts during armed conflict 'are acts at the international, inter-State level, of a sovereign nature relating to the implementation of foreign, security and defence policies of the defendant State and are to be assessed according to international law'.[126]

Conversely, Judge *ad hoc* Gaja, seemingly addressing the points raised by the former Judges, dissected these justifications and refuted them.[127] First, in rhetorical fashion he observed that 'the conduct of all State organs is equally attributed to the State ... Why should a distinction be made between military and other organs of the same State?'.[128] Regarding the rationale mentioned by Judge Koroma, Judge *ad hoc* Gaja opined that '[t]he fact that military activities may cause injuries on a large scale does not seem a good reason for depriving the many potential claimants of their judicial remedy'.[129] Finally, it appears that Judge *ad hoc* Gaja considered the fact that reparation for violations of *jus cogens* norms was at stake as a reason why the form of 'tort' *in casu* militates in favour of an exception to immunity.[130]

4.1.5 Taking stock of the International Court's jurisprudence

In seeking to draw guidance from the cited jurisprudence of the successive International Courts, it should be conceded that it will often come down to the judgment of the person seeking to determine the existence of a customary rule where to draw the line regarding which precedents of conduct are relevant for determining whether a practice exists of relevance to a particular matter.[131] Moreover, the answer is extremely contextual, since each customary rule governs different types of matters in highly diverse circumstances. In this regard, Dapo Akande, Antonio Coco, and Talita de Souza Dias are correct in contending that 'the exercises of selecting, describing, and evaluating State practice and *opinio juris* are pervaded by subjectivity and are thus subject to different interpretations'.[132]

However, the above cases – particularly when the Court's position can be contrasted to those of individual judges[133] – provide helpful indicators where the line should be drawn when one seeks to determine whether precedents of state conduct are pertinent in identifying the existence of a

[122] *Jurisdictional Immunities of the State (Germany v. Italy: Greece Intervening)*, CR 2011/18, at 41–6 (Palchetti, Italy).

[123] *Jurisdictional Immunities of the State (Germany v Italy: Greece Intervening)*, Judgment of 3 February, [2012] ICJ Rep. 99, para. 65. See also ibid., para. 71.

[124] But see S. Yee, 'Article 38 of the ICJ Statute and Applicable Law: Selected Issues in Recent Cases', (2016) 7 JIDS 472, at 480.

[125] See *Jurisdictional Immunitiesof the State*, *supra* note 123, para. 6 (Judge Koroma, Separate Opinion).

[126] Ibid., para. 15 (Judge Keith, Separate Opinion).

[127] Ibid., paras. 9–10 (Judge *ad hoc* Gaja, Dissenting Opinion).

[128] Ibid., para. 9 (Judge *ad hoc* Gaja, Dissenting Opinion).

[129] Ibid.

[130] Ibid., para. 10 (Judge *ad hoc* Gaja, Dissenting Opinion).

[131] Ch. de Visscher, *Problèmes d'interprétation judiciaire en droit international public* (1963), 223.

[132] See Akande, Coco and de Souza Dias, *supra* note 4, at 16.

[133] See *Application for Review of Judgement No. 333 of the United Nations Administrative Tribunal*, Advisory Opinion of 27 May 1987, [1987] ICJ Rep. 18, para. 49.

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general state practice upon determining the existence of a customary rule applicable to the point at issue. It seems that the Court refrained from relying on precedents of conduct which could only at a relatively abstract level be analogous to the cases it was confronted with. Instead, it appears that the Court was only willing to consider instances of conduct which did not have significant distinguishing features from the instance at bar. This was so even where reasonable arguments could be – and were – made to ignore such distinctions.

How does this methodology apply to the identification of customary international law applicable in the cyber context? Consider the law governing blockade in armed conflict – the blocking of all enemy or third state navigation or flight to and from the adversary's territory or parts thereof.[134] A blockade's validity – and hence the legality of its enforcement – depends on fulfilment of certain conditions; in particular, it must be declared to all states and it must be effectively enforced.[135] This law is based on decades – and in the case of maritime blockade, centuries – of state practice in those domains.[136] According to the majority of authors of the Tallinn Manual, 'it is reasonable to apply the law of blockade to operations designed to block cyber communications into and out of territory under enemy control'.[137]

Yet, there are significant differences between blocking the navigation of vessels and the flight of aircraft, on the one hand, and blocking cyber communications, on the other hand, which render the practice regarding naval and aerial blockades irrelevant for identifying custom applicable to a cyber blockade. For one, a vessel or aircraft in breach of the blockade may be captured and condemned as prize, with title thereto passing to the capturing state;[138] it is difficult to conceive how capture and condemnation of data packets could occur. Moreover, the interference with third states' communications – save with the adversary – would be minimal in the cyber context. Indeed, a typical internet user does not control the route data packets take, and the versatility of the internet would generally mean that data packets would be rerouted, with the user not experiencing noticeable changes in their internet experience.[139] The same could not be said in the instance of a naval or aerial blockade, which would necessitate conscious changes in navigation and flight routes to avoid the blockade.[140]

Conversely, regarding notification of a naval or aerial blockade, there was – and is – nothing in the way of using cyber means in notifying a naval or aerial blockade, despite the absence of cyber technologies when the requirement of notification developed. Indeed, historically, notifications have been sent out through various means to get the message of the blockade communicated to other states; such means have included 'diplomatic means',

[134]For further detail see W. Heintschel von Heinegg, 'Blockade', *Max Planck Encyclopedia of Public International Law*, October 2015, para. 1, available at www.opil.ouplaw.com/home/MPIL.

[135]See, e.g., R. Y. Jennings, 'Nullity and Effectiveness in International Law', in R. Y. Jennings (ed.), *Cambridge Essays in International Law: Essays in Honour of Lord McNair* (1965), 64, at 66; L. Doswald-Beck (ed.), *San Remo Manual on International Law Applicable to Armed Conflicts at Sea* (1995), 177; *HPCR Manual on International Law Applicable to Air and Missile Warfare* (2013), 357–61.

[136]See, e.g., R. Sandiford, 'Évolution du droit de la guerre maritime et aérienne', (1939) 68 RCADI 555, at 573–5; N. Ronzitti, 'The 2006 Conflict in Lebanon and International Law', (2006) 16 *Italian Yearbook of International Law* 1, at 14; W. Heintschel von Heinegg, 'Aerial Blockades and Zones', (2013) 43 *Israel Yearbook on Human Rights* 263, at 269–71; E. Shamir-Borer, 'The Revival of Prize Law – An Introduction to the Summary of Recent Cases of the Prize Court in Israel', (2020) 50 *Israel Yearbook on Human Rights* 349, at 364–6; Y. Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (2022), 298.

[137]See Schmitt, *supra* note 2, at 505. See also A. Lenard, 'The Nascent Law of Cyber Blockades and Zones', (2016) 14 *New Zealand Yearbook of International Law* 94.

[138]J. Basdevant, 'Règles générales du droit de la paix', (1936) 58 RCADI 471, at 634–5; R. Katzir and S. Fikhman, 'Prize Law and the Unique Nature of the Law of Naval Warfare: Comments on Recent Israeli Jurisprudence', (2022) 52 *Israel Yearbook on Human Rights* 197, at 209–10.

[139]L. Matsakis, 'What Would Really Happen If Russia Attacked Undersea Internet Cables', *Wired*, 5 January 2018, available at www.wired.com/story/russia-undersea-internet-cables.

[140]See, e.g., R. Leckow, 'The Iran-Iraq Conflict in the Gulf: The Law of War Zones', (1988) 37 ICLQ 629, at 631; Heintschel von Heinegg, *supra* note 136, at 272; S. C. Neff, 'Disrupting a Delicate Balance: The Allied Blockade Policy and the Law of Maritime Neutrality during the Great War', (2018) 29 EJIL 459, at 463.

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telegraphy and print media.[141] There thus do not appear to be significant distinguishing features between notifying the blockade through cyber means – such as by emailing representatives of foreign governments or announcing the blockade on appropriate websites[142] – and the practice which gave rise to the notification requirement.[143]

4.2 Determining the scope of acceptance as law

Save instances in which silence would constitute acquiescence in the development of a certain customary rule – which would occur rarely, given the strict circumstances in which silence constitutes acquiescence under international law[144] – it seems that acceptance as law is most often manifested in the form of words. As noted in Section 2, acceptance as law constitutes a unilateral juridical act. A unilateral juridical act – and accordingly acceptance as law – must be interpreted above all by reference to the intention of its author.[145] This understanding is inherent in the concept of unilateral juridical act expressing the will or consent of its author.[146]

How should a state's intentions in its acceptance as law be discerned in determining whether it encompasses cyber activities, or at least certain kinds of cyber activities? It seems that the ordinary meaning of the words expressing the acceptance as law should constitute a starting point.[147] One should also have regard to the entire statement in which acceptance as law is expressed in order to understand the meaning of relevant parts of it, as well as other official statements made in connection with it,[148] since the context of an expression of *opinio juris* will likely inform the expression of *opinio juris* itself.[149] Take for example a Czechoslovakia statement in 1964 recognizing a prohibition on intervention extending to 'any external pressure exercised against the right of a State freely to choose a particular social system or political regime'.[150] Elsewhere in its statement it doubled-down on this sweeping approach,[151] while echoes of this approach may be found in other Czechoslovak statements from the same period.[152] Thus, reading the quoted statement in its context, there is little in the way of considering that Czechoslovakia's sweeping *opinio juris* – 'any external pressure' – was intended to encompass a prohibition extending to state-orchestrated disinformation

[141]See, e.g., H. Lauterpacht, *International Law* (1952), vol. 2, at 776; J. C. Colombos, *The International Law of The Sea* (1959), 659; D. P. O'Connell, *The Influence of Law on Sea Power* (1975), 130; P. Drew, *The Law of Maritime Blockade: Past, Present, and Future* (2017), 49.

[142]See, e.g., M. Fink, 'Naval Blockade and the Russia–Ukraine Conflict', (2022) 69 *Netherlands International Law Review* 411, at 419–20.

[143]See also *Department of Defense Law of War Manual* (2016), para. 13.10.2.2.

[144]*Temple of Preah Vihear (Cambodia v. Thailand)*, Merits, Judgment of 15 June 1962, [1962] ICJ Rep. 6, at 23; *Maritime Delimitation in the Indian Ocean (Somalia v. Kenya)*, Judgment of 12 October 2021, [2021] ICJ Rep. 206, para. 51. See also Sir D. Bethlehem, 'The Secret Life of International Law', (2012) 1 *Cambridge Journal of International and Comparative Law* 23, at 32–3.

[145]Unilateral Acts of States, 2006 YILC, Vol. 2 (Part Two), at 165; Reservations to Treaties, 2011 YILC, Vol. 2 (Part Three), at 275–6.

[146]See *Fisheries Jurisdiction (Spain v. Canada)*, Jurisdiction of the Court, Judgment of 4 December 1998, [1998] ICJ Rep. 432, para. 48; *Mobil Corporation, Venezuela Holdings BV v. Venezuela*, ICSID Case No. ARB/07/27, Decision on Jurisdiction, 10 June 2010, para. 93.

[147]*Anglo-Iranian Oil Co (United Kingdom v. Iran)*, Jurisdiction, Judgment of 22 July 1952, [1952] ICJ Rep. 93, at 104.

[148]See *Nuclear Tests (Australia v. France)*, Judgment of 20 December 1974, [1974] ICJ Rep. 253, para. 49; *Questions relating to the Seizure and Detention of Certain Documents and Data (Timor-Leste v. Australia)*, Provisional Measures, Order of 3 March 2014, [2014] ICJ Rep. 147, para. 43.

[149]Cf. R. Gardiner, *Treaty Interpretation* (2015), 197.

[150]Special Committee on Friendly Relations, 25th Meeting, UN Doc. A/AC.119/SR.25 (1964), at 5.

[151]Ibid.

[152]1966 Special Committee on Friendly Relations, 14th Meeting, UN Doc. A/AC.125/SR.14 (1966); 1967 Special Committee on Friendly Relations, 71st Meeting, UN Doc. A/AC.125/SR.71 (1967).

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campaigns on social media stoking fear regarding candidates running for government abroad so that those candidates will not be elected.[153]

In an expression of acceptance as law, sometimes a concept will be employed which has a specific meaning in international law, or at least in a certain field of international law.[154] For example, in the *Tunisia/Libya* case, the Court referred to '[t]he fact that the *legal concept* [of the continental shelf], while it derived from the natural phenomenon, pursued its own development';[155] that is, one distinct from the meaning of the scientific concept.

How does one identify whether the concept carries a specific meaning in an international legal context, rather than interpret it according to its ordinary meaning in context? Perhaps the most instructive case in this regard is *Spain* v. *Canada*, where one of the key questions facing the Court was whether Spain's submissions fell within Canada's Optional Clause declaration reservation, which excluded from the Court's competence 'disputes arising out of or concerning conservation and management measures taken by Canada with respect to vessels fishing in the [Northwest Atlantic Fisheries Organization] Regulatory Area ... and the enforcement of such measures'.[156] In interpreting the term 'conservation and management measures', the ICJ primarily referred to how the term has 'long been understood by States in the treaties which they conclude', as well as how it is used 'in the practice of States', including 'in their enactments and administrative acts'.[157] Ultimately, as indeed implied by the Court, the question whether a peculiar legal meaning of a concept is borne out from the practice of states is one that should be considered while giving weight to all evidence available. To this should be added, in reservation, that one should also seek to discern whether the expression(s) on the part of the state, or its other statements on the subject, indicate that a meaning different from the generally accepted legal meaning is actually intended.

It is useful to illustrate the relevance of legal concepts in the cyber context. States in their *opinio juris* have recognized the unlawfulness of conducting 'attacks' against civilian objects.[158] What cyber operations constitute 'attacks'? As evident from IHL instruments and state practice, the term 'attack' is an IHL concept;[159] it has a meaning peculiar in IHL.[160] Hence when states use the concept 'attack' in their *opinio juris*, it should be understood in its IHL meaning. This in turn informs whether states accepted as law the possibility of cyber operations amounting to 'attacks' and, if so, which cyber operations. It is beyond the scope of this article to provide a detailed

[153]Whether such *opinio juris* reflected or reflects customary international law is controversial. Cf. B. Baade, 'Fake News and International Law', (2019) 29 EJIL 1357, at 1364; O. Pomson, 'The Prohibition on Intervention Under International Law and Cyber Operations', (2022) 99 *International Law Studies* 180, at 219.

[154]See, broadly, Thirlway, *supra* note 21, at 290.

[155]*Continental Shelf (Tunisia/Libya)*, Judgment of 24 February 1982, [1982] ICJ Rep. 18, para. 42 (emphasis added).

[156]1994 Declaration by Canada Recognizing as Compulsory the Jurisdiction of the International Court of Justice, in Conformity with Article 36, Paragraph 2, of the Statute of the International Court of Justice, 1776 UNTS 9.

[157]See *Fisheries Jurisdiction*, *supra* note 146, para. 70.

[158]See, e.g., Proposal for the Structuring of IHL/ERW Discussions during CCW Experts' Meetings in 2004, Submitted by Sweden, UN Doc. CCW/GGE/VII/WG.1/WP.2 (2004), at 2; Application of International Humanitarian Law to the Use of Cluster Munitions, Submitted by Japan, UN Doc. CCW/GGE/2008-II/WP.2 (2008), at 2; UNSC, Verbatim Record, UN Doc. S/PV.6201(Resumption 1) (2009), at 15 (Cuba); UNSC, Verbatim Record, UN Doc. S/PV.7645 (2016), at 16 (Ukraine); UNSC, Verbatim Record, UN Doc. S/PV.7685 (2016), at 22 (Malaysia).

[159]See, e.g., 1977 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (AP I), 1125 UNTS 3, Art. 49(1); *Conference of Government Experts on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts: Second Session – Report on the Work of the Conference* (1972), vol. 1, at 148; *Official Records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts* (1978), Vol. 14, at 85; *Law of Armed Conflict at the Operational and Tactical Levels* (2001), para. 412 (Canada); *Australian Defence Doctrine Publication 06.4: Law of Armed Conflict* (2006), 5–1; *Joint Service Regulation (ZDv) 15/2: Law of Armed Conflict* (2013), para. 215 (Germany); Knudsen, *supra* note 12, at 290 (Denmark); *Manual of the Law of Armed Conflict* (2018), para. 2.2 (Norway).

[160]*Prosecutor v. Bosco Ntaganda*, Public redacted version of Judgment on the appeals of Mr Bosco Ntaganda and the Prosecutor against the decision of Trial Chamber VI of 8 July 2019 entitled 'Judgment', ICC-01/04-02/06, A.Ch., 30 March 2021, para. 29 (Judges Morrison and Hofmański, Separate Opinion on the Prosecutor's Appeal).

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analysis on how the term 'attack' has been understood by states, beyond the somewhat ambiguous definition in the First Additional Protocol to the Geneva Conventions which provides that 'attacks' are 'acts of violence against the adversary, whether in offence or in defence'.[161] However, it is worth recalling, from the Introduction, that states which have pronounced on the matter in the cyber context diverge in their current understanding of the concept 'attack', rendering it necessary to refer to (pre)existing state practice accepted as law on the matter.[162] A similar divergence is apparent in academic literature.[163] Nevertheless, in previous decades, it seems there was little disagreement in state practice that 'attack' in IHL referred to 'violent acts directed at harming the adversary (including the civilian population and civilian objects) through physical injury or destruction'.[164] It would follow that cyber operations causing physical damage to a civilian object – such as remotely commanding the internal fan of a computer, constituting a civilian object, to stop functioning and thereby causing the computer to overheat and catch fire – could constitute a violation of IHL, according to states' *opinio juris*.[165] Conversely, a cyber operation merely causing a computer to stop functioning, such as by deleting all the software thereon, would not fall within states' *opinio juris* which gave rise to the prohibition of attacking civilian objects, as physical destruction is not caused.[166]

5. A realistic methodology?

It is conceivable that the methodology espoused in this article for determining the relevance of existing state practice accepted as law for identifying existing rules of customary international law applicable to cyber activities will be criticized for being unrealistic or impractical. Therefore, in this section, I shall address some likely criticisms.

One likely criticism arises from arguments made by proponents of the interpretability of rules of customary international law, within the meaning explained in Section 3. In this regard, some seem to imply that the necessity of referring back to the relevant state practice and acceptance as law in determining whether something is governed by a customary rule – the methodology suggested in this article – is a burdensome task which is both impractical and does not reflect reality.[167]

However, I believe this position is quite far from the truth. First, it is a matter of fact that those interested in identifying the true scope of a rule, and particularly whether such or other rules are applicable to a given situation, very often have extensive reference to the practice of states. Indeed, from my own practical experience, states – or, more precisely, their legal advisers – do not simply take for granted stipulations in documents purporting to codify customary international law and merely interpret them. Rather, particularly when they are likely to be especially affected by a

[161]See AP I, *supra* note 159, Art. 49(1).

[162]See notes 11–15 and accompanying text, *supra*.

[163]Cf. Harrison Dinniss, *supra* note 2, at 197–9; M. N. Schmitt, 'Rewired Warfare: Rethinking the Law of Cyber Attack', (2014) 96 *International Review of the Red Cross* 189, at 203; T. McCormack, 'International Humanitarian Law and the Targeting of Data', (2018) 94 *International Law Studies* 222, at 239; Y. Dinstein and A. W. Dahl (eds.), *Oslo Manual on Select Topics of the Law of Armed Conflict* (2020), 22; L. Gisel, T. Rodenhäuser and K. Dörmann, 'Twenty Years On: International Humanitarian Law and the Protection of Civilians against the Effects of Cyber Operations during Armed Conflicts', (2020) 102 *International Review of the Red Cross* 287, at 313.

[164]*Prosecutor v. Ntaganda*, *supra* note 160, para. 29 (Judges Morrison and Hofmański, Separate Opinion on the Prosecutor's Appeal), quoting from ibid., Submission of Observations to the Appeal Chamber by Professor Corn et al. Pursuant to Rule 103, ICC-01/04-02/06-2589, 18 September 2020, para. 15. See also O. Pomson, 'Ntaganda Appeals Chamber Judgment Divided on Meaning of "Attack"', *Articles of War*, 12 May 2021, available at www.lieber.westpoint.edu/ntaganda-appeals-chamber-judgment-divided-meaning-attack/.

[165]See also Dinstein and Dahl, *supra* note 163, at 22.

[166]See also *Prosecutor v. Bosco Ntaganda*, Amicus Curiae Observations by Dr Jachec-Neale Pursuant to Rule 103, ICC-01/04-02/06-2591, 18 September 2020, para. 11.

[167]See Merkouris, *supra* note 39, at 134–5; Di Marco, *supra* note 55, at 430. Cf. Orakhelashvili, *supra* note 41, at 496.

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potential customary rule, they will have recourse to the materials available evidencing, *vel non*, the existence of a state practice accepted as law. This is the case, even though the workings of those practising international law tend to be concealed from the public eye – often for the purpose of allowing those practising to express themselves freely to their counselees.[168]

Nevertheless, in litigation, where parties to proceedings are frequently compelled to present publicly their analyses, participants often go to great lengths in bringing practice and statements of acceptance as law to demonstrate their positions – incidentally demonstrating the feasibility of the exercise of a thorough empirical analysis in determining the existence of a general state practice accepted as law. At time of writing, there have yet to be instances of international litigation where a significant disagreement existed on customary international law applicable to cyber operations.[169] However, other instances of litigation involving disputes on customary international law are indicative of the feasibility of a thorough empirical analysis. For example, in the *Chagos Archipelago* advisory proceedings, the question arose whether the right of self-determination – as it existed in in the years 1965–1968 – encompassed a right of the people to the territorial integrity of the entire non-self-governing territory, or whether part of the non-self-governing territory may be excised therefrom by the colonial power prior to the achievement of statehood by the people. The Court had recognized on previous occasions that the right to self-determination was of a customary nature, without pronouncing on the question of territorial integrity.[170] However, those states with direct interests in the subject-matter of the proceedings sought to demonstrate in relatively great detail that state practice and acceptance as law did, or did not, encompass a right to territorial integrity in such circumstances.[171]

Furthermore, rigorous analysis of the existing customary international law based on empirical evidence is what should be expected from serious practitioners and scholars.[172] States themselves have emphasized the necessity of this rigour.[173] After all, the existence and scope of a purported customary rule often have wide-ranging and serious implications for those subjects of international law bound thereby, and hence rigorous analysis will very often be commensurate to the importance of the issue at stake. For example, consider a situation where a foreign investor falls victim to a ransomware operation, which causes financial losses of millions of dollars.[174]

[168]Cf. M. Windsor, 'Consigliere or Conscience? The Role of the Government Legal Adviser', in J. d'Aspremont et al. (eds.), *International Law as a Profession* (2017), 355, at 358.

[169]Though there have been cases involving the application of treaty obligations to cyber operations. See, e.g., *Big Brother Watch v. United Kingdom*, Judgment of 25 May 2021, [2021] ECHR; *Application of the International Convention on the Elimination of All Forms of Racial Discrimination (Azerbaijan v. Armenia)*, Order of 7 December 2021, [2021] ICJ Rep. 405.

[170]See *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970)*, Advisory Opinion of 21 June 1971, [1971] ICJ Rep. 16, paras. 52–53; *Western Sahara*, Advisory Opinion of 16 October 1975, [1975] ICJ Rep. 12, paras. 54–59; *East Timor (Portugal v. Australia)*, Judgment of 30 June 1995, [1995] ICJ Rep. 90, para. 29.

[171]See, e.g., *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965*, Written Statement of the Republic of Mauritius of 1 March 2018, paras. 6.51–6.61, available at www.icj-cij.org/public/files/case-related/169/169-20180301-WRI-05-00-EN.pdf; ibid., Written Statement of the United Kingdom of 15 February 2018, paras. 8.55–8.58, available at www.icj-cij.org/public/files/case-related/169/169-20180215-WRI-01-00-EN.pdf; ibid., Written Statement of the United States of America of 1 March 2018, paras. 4.30–4.72, available at www.icj-cij.org/public/files/case-related/169/169-20180301-WRI-01-00-EN.pdf.

[172]See M. Wood (Special Rapporteur), Fourth Report on Identification of Customary International Law, UN Doc. A/CN.4/695 (2016), para. 15; O. Sender, 'The Importance of Being Earnest: Purpose and Method in Scholarship on International Law', (2022) 54 *Case Western Reserve Journal of International Law* 53, at 65.

[173]UNGA Sixth Committee (72nd Session,) Summary Record, UN Doc. A/C.6/72/SR.26 (2017), para. 42 (Israel); UN Doc. A/C.6/73/SR.20, *supra* note 22, para. 66 (China); UN Doc. A/C.6/73/SR.24, *supra* note 22, para. 4 (Viet Nam); UNGA Sixth Committee (73rd Session), Summary Record, UN Doc. A/C.6/73/SR.29 (2018), para. 15 (United States). See also K. Kaikobad et al., 'United Kingdom Materials on International Law: 2005', (2005) 76 BYIL 683, at 695; UNGA Sixth Committee (67th Session), Summary Record, UN Doc. A/C.6/67/SR.22 (2012), para. 76 (Spain).

[174]An entirely realistic sum; see, e.g., J. Wolff, 'Insurers Must Rethink Handling of Cyber Attacks on States', *Financial Times*, 29 August 2022, available at www.ft.com/content/aa147054-ec14-4a75-a183-bee345319948; 'Major Canadian Grocery Chain Says Cyberattack Cost $25 million', *CBC*, 15 December 2022, available at www.cbc.ca/news/canada/nova-scotia/sobeys-cyber-attack-25-million-1.6686838.

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Subsequently, the investor makes a claim against the host state for violating its customary FPS obligation.[175] Surely, a rigorous examination whether host states have an FPS obligation towards foreign investors vis-à-vis malicious cyber operations is commensurate to the millions of dollars which could be owed by the host state to the investor.

In any event, the task of examining practice in today's day and age is more straightforward than seemingly imagined. As the years progress, more and more inductive studies in various areas of international relations are conducted for the purpose of discerning the status of customary international law on a certain matter. Practitioners and scholars alike make reference to such studies, while scrutinizing and building upon them.[176] For example, in understanding whether 'collective' countermeasures are a valid basis for precluding international responsibility,[177] a vast repertoire of state practice relating to countermeasures is recorded in the ILC's work on state responsibility,[178] as well as in more recent scholarly works.[179] International law scholarship has come some way from the times, lamented by Georg Schwarzenberger in 1947, where the norm in literature was 'repetition of quotations from the very limited repertoire of diplomatic notes which are taken over from one textbook into another and only rarely supplemented by casual personal excursions of writers into the unknown wilderness of state papers'.[180] This is not to say that there is not contemporary literature for which Schwarzenberger's description is accurate;[181] rather, there have been improvements.

Implied sometimes in literature on international law and cyber activities is that recourse to interpretation of rules of customary international law, rather than confining analysis to state practice accepted as law, is necessary to overcome the difficult process of customary international law crystallization for the purpose of addressing contemporary challenges.[182] Yet, the sources of international law provide a solution to these strictures: the conclusion of a treaty. The reality of international law today is that rights and obligations are primarily found in treaties.[183] Of course, drafters of a given treaty do not generally foresee all future challenges which will arise regarding the subject-matter of a treaty, so that drafting a treaty on cyber-related issues will not necessarily provide comprehensive solutions to future problems.[184] Moreover, treaty negotiations are not a walk in the park. However, the failure of states, until now, to develop the law through treaty and address challenges related to cyber activities seems to be a lack of political will[185] – not any limitations or difficulties inherent in this process.

The fact that most rules of international law are treaty-based bears another important consequence. Recourse to customary international law is often not only unnecessary but also erroneous due to it not being the applicable law.[186] For example, it has been observed that '[t]he human right that is most susceptible to violation by cyber operations is the right to privacy'.[187]

[175]On the FPS standard and its potential applicability to cyber operations, see notes 43–6, *supra*.

[176]D. F. Vagts, 'International Relations Looks at Customary International Law: A Traditionalist's Defence', (2004) 15 EJIL 1031, at 1035; M. Wood (Special Rapporteur), Third Report on Identification of Customary International Law, UN Doc. A/CN.4/682 (2015), para. 44. See also P. Tomka, 'Custom and the International Court of Justice', (2013) 12 *The Law and Practice of International Courts and Tribunals* 195, at 197–8.

[177]See notes 47–53 and accompanying text, *supra*.

[178]See, in particular, Arangio-Ruiz (Special Rapporteur), *supra* note 48.

[179]See, e.g., M. Dawidowicz, *Third-Party Countermeasures in International Law* (2017); F. Paddeu, *Justification and Excuse in International Law* (2018), Ch. 6.

[180]G. Schwarzenberger, 'The Inductive Approach to International Law', (1947) 60 *Harvard Law Review* 539, at 564.

[181]See criticism in Sender, *supra* note 172, at 62.

[182]See Schmitt and Watts, *supra* note 35, at 398–9.

[183]See Sir F. Berman, 'Why Do We Need a Law of Treaties?', (2017) 385 RCADI 9, at 18.

[184]Cf. *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, Judgment of 13 July 2009, [2009] ICJ Rep. 213, paras. 63–66.

[185]A. Roberts, *Is International Law International?* (2017), 307.

[186]Cf. *Military and Paramilitary Activities in and against Nicaragua*, *supra* note 53, para. 181.

[187]See Delerue, *supra* note 2, at 264. See also Kittichaisaree, *supra* note 3, at 8–9.

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Considering that the right to privacy is enshrined in several international and regional human rights treaties,[188] it would generally be unnecessary to look beyond these instruments in determining whether the right to privacy had been violated in a given instance.[189] As alluded to earlier,[190] when a rule enshrined in a treaty is the applicable law, it is *necessary* to interpret the text of the treaty to determine the rule enshrined therein.[191]

6. Conclusion

If one is persuaded by the arguments made in this article, it follows that, in order to determine whether an existing rule of customary international law governs a certain cyber activity, it is necessary to have recourse to the relevant state practice and acceptance as law (*opinio juris*) and discern therefrom – and only therefrom – whether and how customary international law governs the cyber activity. For a precedent of state practice to be relevant in determining the existence of a customary rule applicable to a cyber activity, pursuant to the International Court's jurisprudence, the precedent must not have significant distinguishing features from the cyber activity concerned. For determining whether a precedent of *opinio juris* recognizes the existence of a customary rule applicable to the cyber activity, it is necessary to determine whether the relevant state pronouncement intended to accept as law a rule applicable thereto. Conversely, rules of customary international may *not* be subject to interpretation. To quote the ILC, again, '[t]he test must always be: is there a general practice that is accepted as law?'[192]

Admittedly, the present article does not provide shortcuts for the identification of customary international law applicable to cyber activities. Yet, it must be emphasized that, in addition to laying out a feasible methodology, it essentially lays out a methodology for implementing what states, the makers of customary international law, have only recently reaffirmed: the identification of customary international law must be grounded in state practice accepted as law.

[188]1950 Convention for the Protection of Human Rights and Fundamental Freedoms, 213 UNTS 221, Art. 8; 1966 International Covenant on Civil and Political Rights, 999 UNTS 171, Art. 17(1); 1969 American Convention on Human Rights: 'Pact of San José, Costa Rica', 1144 UNTS 123, Art. 11; 1989 Convention on the Rights of the Child, 1577 UNTS 3, Art. 16(1).

[189]See, e.g., K. E. Eichensehr, 'Not Illegal: The SolarWinds Incident and International Law', (2022) 33 EJIL 1263, at 1272–3; A. Coco, T. Dias, and T. van Benthem, 'Illegal: The SolarWinds Hack under International Law', (2022) 33 EJIL 1275, at 1284–5.

[190]See notes 57–8 and accompanying text, *supra*.

[191]I. Venzke, *How Interpretation Makes International Law* (2012), 1.

[192]See CICIL, *supra* note 10, at 125.

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