The Role of the Internet in International Law-Making, Implementation and Global Governance

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Abstract

This paper delves into influence of the internet on international law and global governance, a phenomenon that increased incrementally over the last decade before the COVID-19 emergency precipitated it.

It posits that the *digital world* birthed whole new 'territories' where the practice of states and other actors is recorded and displayed, but it also exists independently from the physical realm. With respect to *law-making*, the internet acts as both a sounding board for, and an originator of, international practice. New technologies and social networks have also certainly increased the availability of information to governments and the public regarding violations of international norms. Yet, they have created a new – online – environment in which internationally wrongful acts can be committed. This further qualifies, yet does not make less significant, the relevance of the internet for the *implementation* of international law.

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The paper further submits that technological power has become a fundamental force of leverage in *global governance*, akin to economic, military, and political might for states and a wide range of non-state actors alike. Big Tech companies and other corporations but also civil society, social and political groups, and individuals are all potential stakeholders participating formally and informally (or to be included) in the sharing of power.

Notwithstanding the difficulty to articulate a concept that comprehensively rationalises the impact of the internet on the processes and structures of international law and governance, the paper highlights a gap between the theory and practice of international law and offers a contribution in this direction.

Keywords

internet – international law-making – implementation of international law – customary international law – global governance – technology's power

I. Introduction

To date, legal scholarship has generally focused on the ways international law governs opportunities and dangers arising from 'the internet'.[1] Little attention, if any, has been given to the question of how new technologies have changed traditional international law-making processes as well as the implementation of international rules. Hence, this paper does not dwell on the role that international law plays for 'the internet'.[2] It rather aims to understand how the internet has changed the very concept, nature and internal structures of international law. This question is addressed by distinguishing between

1 The term 'the internet' is here and henceforth used to refer to all 'Internet Protocol (IP)-based services', as defined by Matthias K. Kettemann, *The Normative Order of the Internet. A Theory of Rules and Regulations Online* (Oxford: Oxford University Press 2020).

2 On *Internetvölkerrecht* ('international internet law' or 'international law of the internet') see the seminal work by Antonio Segura-Serrano, 'Internet Regulation and the Role of International Law' in: Armin von Bogdandy and Rüdiger Wolfrum (eds), *Max Plank UNYB* (online edn, Leiden: Koninklijke Brill 2006), 191-272; and Michael N. Schmitt, 'Taming the Lawless Void: Tracking the Evolution of International Law Rules on Cyberspace', Texas National Security Review 3 (2020), 32-47; In the extensive literature on the internet and international law, see also Jack Goldsmith, 'Unilateral Regulation of the Internet: a Modest Defence', EJIL 11 (2000), 135-148; Franz C. Mayer, 'Europe and the Internet: the Old World and the New Medium', EJIL 11 (2000), 149-169; Yochai Benkler, 'Internet Regulation: a Case Study in the Problem of Unilateralism', EJIL 11 (2000), 171-185; Thomas Schultz, 'Carving up the Internet: Jurisdiction, Legal Orders, and the Private/Public International Law Interface', EJIL 19 (2008), 799-839; Martha Finnemore and Duncan B. Hollis, 'Constructing Norms for Global Cybersecurity', AJIL 110 (2016), 425-479; Kal Raustiala, 'Governing the Internet', AJIL 110 (2016), 491-503; Eyal Benvenisti, 'Upholding Democracy Amid the Challenges of New Technology: What Role for the Law of Global Governance?', EJIL 29 (2018), 9-82.

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international law-making and implementation of international law, the latter including ascertainment, interpretation, and international responsibility.

As we shall see, information and communication technologies have mostly indirectly affected the procedure for the conclusion of treaties. With respect to the impact of the internet on the formation of international rules, therefore, the focus will be on international customary law. Moreover, because the interactions between law-making and implementation are particularly strong in relation to customs, the analysis will also show that the impact of the internet on implementation is stronger on customs than on treaties. Paragraphs II and III provide insights, but they do not tackle directly question of legitimacy of the primary sources of international law as a result of the internet's role for international law and, in particular, for customary international law.[3] They highlight, however, the existence of a gap between the theory and practice of international law and aim to offer a contribution in this direction.

Paragraph II submits that the *digital realm* has birthed whole new 'territories' where the practice of states and other actors is recorded and displayed, but it also exists independently from the physical realm. It does not only provide for a wide range of materials that may serve as *evidence* of *lex lata* but it also offers a range of normative materials that global actors, in the ordinary course, use and treat as customary international law *de lege ferenda*. With respect to *law-making*, therefore, the internet acts as both a sounding board for, and an originator of, international practice.

Albeit mostly indirectly, the procedure for the conclusion of treaties is also affected by information and communication technologies.

Paragraph III advances the proposition that the internet does not generally contribute to make international law more effective.

The internet has certainly increased the availability of information regarding breaches of international law – particularly but not exclusively human rights violations, as all fields are affected by the pervasiveness of the internet. Yet, to more information available to governments and the public has not necessarily corresponded a decrease in the violations of international norms or a major advancement in the effectiveness of international law. New technologies and social networks have also created a new – online – environment in which internationally wrongful acts can be committed. This qualifies, but it does not diminish or make less significant, the relevance of the internet for the *implementation* of international law.

While the issue of internet governance *per se* is beyond the scope of this paper, paragraph IV discusses some of the implications of the internet for

3 For a general appraisal of the issue, see Julian Kulaga, 'The Legitimacy of Rules of Customary International Law and the Right to Justification', HJIL 79 (2019), 785-814.

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global governance and the socio-legal changes brought about by it. It submits that technological power has become a fundamental force of leverage in *global governance*, akin to economic, military, and political might for states and a wide range of non-state actors. The interface between international law and the internet affects the relationships and the power balance between the Global South and Global North in terms of positive law and participation in processes of norm development. Moreover, Big Tech companies and other corporations but also civil society, social and political groups, and individuals are all potential stakeholders participating formally and informally in the sharing of power – or to be included therein.

Paragraph V draws some preliminary conclusions and attempts to rationalise the impact of the internet on global governance and the formation and implementation of international law. That the impact of the internet particularly on the making of international law remains elusive, and hard to articulate as a concept, does not make this work's contribution to the effort less important. The changes brought by the internet to the processes and structures of international law and global governance are real and only bound to become more evident in the future. This phenomenon has been going on for several decades now, although modern technologies increased incrementally over the last decade. The COVID-19 emergency precipitated it.

II. International Law-Making Processes

Legal scholarship has long acknowledged the increase in the number and frequency of multilateral forums where States meet to develop or discuss new rules of written international law. There is wide recognition that the intensification of practice within international organisations and conferences (such as the United Nations General Assembly's Sixth Committee, codification conferences, etc.) has increased the adoption of multilateral treaties.

States have also 'many more occasions than they used to have to express views as to customary international law. This has increased the quantity of what States say'.[4] Information and communication technologies therefore

4 Tullio Treves, 'Customary International Law' in: Rüdiger Wolfrum (ed.), *MPEPIL* (online edn, Oxford: Oxford University Press 2006), para. 11. In his dissenting opinion in the ICJ, *South West Africa Cases* (Ethiopia v. South Africa), back in 1966 Judge Tanaka already argued that when a court is trying to discern whether a certain customary norm of international law exists, General Assembly Resolutions can be used as evidence of general practice, suggesting that the General Assembly can accelerate the formation of customary law by serving as a forum in which a state 'has the opportunity, through the medium of the organization, to declare its position to all members of the organization and to know immediately their reaction on the same matter' (ICJ Reports 1966, 248, 291-293 [291]).

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have also contributed to the acceleration of the formation of customary rules in various fields of international law.[5]

What has gone largely unnoticed, however, is the qualitative, rather than quantitative, changes brought about by the internet in relation to international law-making processes. This phenomenon is directly relevant to the formation of customary rules.

The impact of the internet is widespread and could probably be detected in relation to most, if not all, general rules. For the purposes of this essay, two instances will show the interaction between international law-making processes and the internet.

Perhaps the most compelling evidence of the power of the internet arose out of 'September 11', when broadcast images of the smoking twin towers backed President Bush's declaration of 'no safe havens for terrorists' and the US right of intervention, i. e. the right to target terrorists wherever they are found. The internet did not only show the whole world the terrorist attack against United States at the same time as it was happening. It was in and by itself one of the components of the armed response by the United States leading a coalition of the willing.

As a result, no one did at the time – or would nowadays – seriously challenge that on 11 September 2001 the US suffered an armed attack legitimately triggering the exercise of the right of individual and collective self-defence, within the terms of Article 51 United Nations (UN)-Charter and international solidarity clauses drawing upon it.

Hadn't we all witnessed the twin towers falling and disintegrate carrying with them the life of almost three thousand men and women and leaving more than six thousand others injured, would North Atlantic Treaty Organization (NATO) allies have immediately issued a declaration invoking NATO's Article 5 mutual assistance clause? Would statements of solidarity have been made at all corners of the world? Would the US and the international community's response have been the same?

Actions happened on the ground, declarations in international forums and state chancelleries. But they also took place through and on the *virtual space* of the internet.

It is submitted that the internet played a *pivotal role* in the decision-making and law-making processes which led to the encapsulation of terrorist attacks in the notion of 'armed attack' for the purposes of self-defence, and to the expansion of its legitimate targets. It is further submitted that this role cannot be described merely in terms of an *accelerator* of processes already

5 See, e. g. Luigi Condorelli, 'Consuetudine internazionale', in: Rodolfo Sacco (ed.), *Digesto delle Discipline Pubblicistiche III* (Torino: Utet 1989), 490-512.

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underway and/or of an *amplifier* of state and other actors' behaviours. The internet did affect the very formation, and the content, of international law. A further instance, taken from the most recent practice, will help to enlighten this dimension of the internet's role on international law-making.

The COVID-19 emergency, even before it unleashed its catastrophic economic and social consequences, raised in a dramatically topical way the problem of the *existence* of an international duty of states to cooperate with one another in the fight to contain the pandemic.

In the very aftermath of the COVID-19 outbreak, we witnessed teams of medical experts departed from China to be deployed to Russia and Western Europe, as well as from Russia to Italy and other European Union countries. Accounts spread over the internet. The internet did not only serve the purpose of political propaganda for the states plastically and physically deploying their men and means on the territory of other states. By offering instances of cooperation, the internet provided the evidence needed to state that a general obligation to cooperate in the fight against the pandemic existed and was effective. But it also played a more substantive role – a constitutive one, so to say.

The internet provided a platform – the *virtual space* – which added itself to the material space on the ground (where real men and means were deployed). Unlike the latter, the virtual space is visible worldwide and can be viewed simultaneously and at multiple times at all corners of the world.

The 'digital realm birthed whole new territories'[6] where the practice of states and other international actors is recorded and displayed for all to see, but it is also given a distinct existence, independently from the physical realm. The internet acts as both a sounding board for, and an *originator* of, international practice.[7]

It is submitted that digital behaviours are a form of international practice that can *generate* customary law, even in the absence of a corresponding practice outside the internet and the digital realm generated by it.[8]

In contemporary international setting, international practice is not simply spread through recourse to modern technologies of written and visual representation. The internet does not only enhance the relevance of a state behav-

6 The expression is taken from Shoshana Zuboff, *The Age of Surveillance Capitalism* (London: Profile Books Ltd 2009), 4.

7 The term 'international practice' is used here and elsewhere as encompassing the two traditional components of customs (*usus* and *opinio juris*), on which see *infra*, III.1.

8 And the often-repeated criticism *vis-à-vis* UN General Assembly resolutions – that they can only reflect *opinio juris sive necessitatis* but may not be constitutive of state practice – should not apply to digital behaviours – unless one can point to a divorce between digital behaviour and 'real' world state practice.

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iour with the corresponding *opinio juris*.[9] The internet advances knowledge about existing rules, but it also influences current and future developments of international law.

What has been said about the *virtual* deployment of doctors and medical equipment may apply to other state behaviours during the pandemic. And similar considerations could also be extended with suitable contextualisations to many rules of customary international law.

Because international practice is directly relevant only to the formation of international customs, the impact of the internet on the conclusion of treaties is less evident. Nevertheless, it exists and can be traced at least in the following two respects.

First of all, the so-called 'virtual diplomacy' bears its most immediate fruits on treaties, rather than customs. Zoom and other platforms have taken the place of diplomatic conferences as we traditionally had known them for the past two centuries. In this respect, the use of information technologies to help conduct international relations activities has profoundly affected the *procedure* for the conclusion of treaties – a development only accelerated by the COVID-19 emergency.

Moreover, and most importantly, there is an osmosis between the formation of customs and the conclusion of treaties.[10] Treaties may be concluded to codify or in derogation of general rules. Subsequently, such treaties can provide guidance on the content of customary international law. Additionally, treaties can expand obligations of states in comparison with customary international law. Sometimes treaty rules precede the emergence of corresponding customs. Or treaty practice can simply help to consolidate and/or clarify the content of customary rules.

Treaty making processes and the formation of customary international law are intertwined in many and multiple ways. In so far as the internet and the digital realm affect the existence of customs, therefore, they also have an impact, depending on the context and the circumstances, on treaties.

III. Implementation of International Law

For the purposes of this article, implementation refers to the identification of international rules as well as to international responsibility, dispute-settlement, and enforcement.

9 The two traditional components of customs (*usus* and *opinio juris*), generally referred to here and elsewhere as 'international practice', are examined *infra*, III.1.

10 See Treves (n. 4), para. 92: 'What increasingly characterizes contemporary customary international law is the strict relationship between it and written texts.'

Identification encompasses both rule ascertainment and interpretation. Interpretation is commonly understood as the process of determining the content and scope of rules, while a rule ascertainment is concerned with whether the rule exists – for instance, whether an international agreement exists. Now, while the existence of treaty rules is generally undisputed, in relation to customary international law, rule ascertainment and content determination are tightly intertwined and may be difficult to distinguish.[11]

Another point that needs to be clarified concerns the area of overlap and interconnection between formation, on the one hand, and identification of international law, on the other hand. Again, while the two concepts are interlinked also with respect to treaties, the interrelations are particularly strong in relation to customary international law.

'Formation and Evidence of Customary International Law'[12] was the original title and theme of the topic dealt with by the International Law Commission (ILC) between 2012 and 2018, before it decided, in 2013, to eliminate from the title 'formation' and to substitute 'evidence' with 'identification'.[13] 'Identification of Customary International Law' is the title finally retained by the ILC and the output of that ILC's work, the 'Draft conclusions on identification of customary international law',[14] concern the methodology for identifying rules of customary international law. While no instrument was concluded under the auspices of the UN on their basis, the ILC Draft conclusions offer a practical guidance on how the existence and content of customary rules are to be determined but also, notwithstanding their changed title, on the formation processes of customary international law.

11 There are cases where the existence of a rule is undisputed but where its content is imprecise or disputed, but usually both the existence and the content of a customary international law rule need to be determined. Very few rules of customary international law are clear and straightforward. Customary international humanitarian law is a good example: A study by the International Committee of the Red Cross provided a list of detailed rules (the prohibition of indiscriminate attack, precautions, and other fundamental principles of humanitarian law) that can be considered as customary rules. Also, certain fundamental aspects of the law on the use of force (such as the right to self-defence and the prohibition of interventions) are reflected in customary international law with more or less clear meaning.

12 ILC, 'Report on the Work of its Sixty-fourth Session', (2012) *General Assembly Official Records*, Sixty-seventh Session, Supplement No. 10 (UN Doc. A/67/10), 108, para. 157.

13 ILC, 'Report on the Work of its Sixty-fifth Session', (2013) *General Assembly Official Records*, Sixty-fifth Session, Supplement No. 10 (UN Doc. A/68/10), 93, para. 64. On the initial phase of the work of the ILC on this topic, see Lorenzo Gradoni, 'La Commissione del diritto internazionale riflette sulla rilevazione della consuetudine', Riv. Dir. Int. 97 (2014), 667-698.

14 ILC, 'Identification of Customary International Law: Text of the draft conclusions as adopted by the Drafting Committee on second reading', (2018) ILCYB, Vol. II, Part One (UN Doc. A/CN.4/L.908, <http://legal.un.org>). For an analytical guide to the work of the ILC on the topic of the identification of customary international law, see <http://legal.un.org>.

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As the ILC's commentary to draft conclusion 1, adopted on first reading in 2016, notes:

> 'Dealing as they do with the identification of rules of customary international law, the draft conclusions do not address, directly, the processes by which customary international law develops over time. Yet in practice identification cannot always be considered in isolation from formation; the identification of the existence and content of a rule of customary international law may well involve consideration of the processes by which it has developed. The draft conclusions thus inevitably refer in places to the formation of rules; they do not, however, deal systematically with how rules emerge, or how they change or terminate.'[15]

Identification and formation are obviously not the same thing, but they are in many ways closely related, for it would be impossible to proceed to the identification of customs, without gaining at least a general conception of its formation. In this respect, the analysis the follows sheds light also on the internet's role in relation to international law-making, as outlined in the previous paragraph.

In particular, the requirement – for the identification of customary international law – to ascertain 'a general practice' that is 'accepted as law' reflects the fact that rules of customary international law evolve through a general practice and *opinio juris*. In other words, the two constituent elements of customary international law are also the twin criteria for its identification,[16] as we shall now see.

The next paragraph reviews the scholarly debate about the nature of customary international law and assesses the content of the Draft conclusions, with a view to exploring the role played by the internet – in the ILC's view – in the identification of customary rules. The subsequent paragraph examines case studies of implementation of international rules through information and communication technologies and draws some preliminary conclusions on the relevance of the internet for the purposes of the implementation – both in the theory and practice – of international law.

1. Identification of Customary International Law

According to its most widely accepted definition, an international custom arises out of a general practice (*usus*) that is accepted as law (*opinio*

15 ILC, 'Report on the Work of its Sixty-eighth Session', (2016) *General Assembly Official Records*, Sixty-eighth Session (UN Doc. A/71/10), 81, para. 4 of Commentary to Conclusion 1.

16 Michael Wood, 'The Evolution and Identification of the Customary International Law of Armed Conflict', Vand. J. Transnat' l L. 51 (2018), 727-736 (728).

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juris).[17] It thus requires a repeated behaviour, sufficiently widespread and representative as well as consistent, undertaken with a sense of legal right or obligation, i. e. accompanied by the belief that that behaviour is mandated by law.

While commentators have taken very different positions on the connection between acceptance and *opinio juris*, it is generally recognised that practice does not need to be constant or absolutely uniform for a custom to be established.[18] To the contrary, a breach may even reinforce the existence of the rule; this happens when the actor infringing the rule seeks to justify its behaviour by invoking an exception, or because of possible circumstances precluding wrongfulness, in the particular case.[19] It follows that a state can be bound by customary international law even if it has not agreed to or accepted the rule.[20]

Implied in the notion of custom is also the element of time. The requirement of time is a relative one: the more widespread is the practice, the less

17 See Art. 38 para. 1 lit. b) ICJ-Statute, which defines 'international custom, as evidence of a general practice accepted as law'. For a recent, thorough critique of this traditional approach – espoused here –, as a 'rulebook conception' of international customary law, which 'does not accurately describe the range of normative materials that global actors, in the ordinary course, use and treat as customary international law', see Monica Hakimi, 'Making Sense of Customary International Law', Mich. L. Rev. 118 (2020), 1487-1537 (1487).

18 See Anthea Elisabeth Roberts, 'Traditional and Modern Approaches to Customary International Law: A Reconciliation', AJIL 95 (2001), 757-791 (773): 'deducing modern custom purely from *opinio juris* can create utopian laws that cannot regulate reality. For a reaffirmation that *opinio juris* and acceptance are two distinct, different but correlative concepts and phenomena, see László Blutman, 'Conceptual Confusion and Methodological Deficiencies: Some Ways that Theories on Customary International Law Fail', EJIL 25 (2014), 529-552, according to whom, however, a practice's 'generality suggests that, in international interactions, the number or weight of the state actions belonging to this class overwhelmingly exceed the number or weight of state actions that are inconsistent with this pattern. […] In this sense, general practice is not material or objective in nature' (543).

19 ICJ, *Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v. United States), merits, judgement of 27 June 1986, ICJ Reports 1986, 14, 88, para. 186: 'It is not to be expected that in the practice of States the application of the rules in question should have been perfect, in the sense that States should have refrained, with complete consistency, from the use of force or from intervention in each other's interna1 affairs. The Court does not consider that, for a rule to be established as customary, the corresponding practice must be in absolutely rigorous conformity with the rule. In order to deduce the existence of customary rules, the Court deems it sufficient that the conduct of States should, in general, be consistent with such rules, and that instances of State conduct inconsistent with a given rule should generally have been treated as breaches of that rule, not as indications of the recognition of a new rule. If a State acts in a way prima facie incompatible with a recognized rule, but defends its conduct by appealing to exceptions or justifications contained within the rule itself, then whether or not the State's conduct is in fact justifiable on that basis, the significance of that attitude is to confirm rather than to weaken the rule.'

20 On the existing tension between the principle of consent and non-consensual international rulemaking, see Andrew T. Guzman and Jerome Hsiang, 'Some Ways that Theories on Customary International Law Fail: A Reply to László Blutman', EJIL 25 (2014), 553-559.

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time is needed for the formation of an international custom. As with general practice, there exists no agreed upon formula for identifying with precision 'how much time must transpire to generate a rule of customary international law'.[21] Recent developments show that customary rules may come into existence rapidly.[22]

Following the classical two-element approach, the ILC Draft conclusions state that it is not sufficient to identify a general practice; it is necessary to verify that this practice be accompanied or motivated by a belief that it is mandated (or permitted) under international law.[23] The requirement that a general practice be accepted as law (*opinio juris*) means that the practice in question must be undertaken with a sense of legal right or obligation. It is acceptance as law (*opinio juris*) that distinguishes a general practice, as an element of customary international law, and other conduct that, even if general, is not creative, or expressive, of customary international law.[24] The requirements of practice and *opinio juris* are addressed separately.[25]

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21 Michael P. Scharf, Milena Sterio and Paul R. Williams, *The Syrian Conflict's Impact on International Law* (Cambridge: Cambridge University Press 2020), 50.

22 On the rapid formation of customary rules in times of rapid flux – explained through the 'Grotian Moment' concept, see Michael P. Scharf, *Customary International Law in Times of Fundamental Change: Recognizing Grotian Moments* (Cambridge: Cambridge University Press 2013) as well as Michael P. Scharf, 'Accelerated Formation of Customary International Law', ILSA J. Int'l & Comp. L. 20 (2014), 305-341: In the cases of Nuremberg, the continental shelf, and space law, the Grotian Moments led to rapid formation of fundamental principles of customary international law: 'the case studies indicate that in addition to responding to technological, economic, or societal change, Grotian Moments are in part made possible by geopolitical realignment, often following war' (338). The 'Grotian Moment' concept is to be distinguished from the controversial notion of instant custom: 'Grotian Moments represent instances of rapid, as opposed to instantaneous, formation of customary international law. Grotian Moments require some underpinning of State practice, whereas advocates of the concept of instant custom argue that customary law can form in the absence of State practice' (340). On so-called 'instant' international customary law, see Bin Cheng, 'United Nations Resolutions on Outer Space: "Instant" International Customary Law?', IJIL 5 (1965), 23-48, reprinted in Bin Cheng, *Studies in International Space Law* (Oxford: Oxford University Press 1997), 125; Diego Germán Mejía-Lemos, 'Some Considerations Regarding "Instant International Customary Law", Fifty Years Later', IJIL 55 (2015), 85-108.

23 See ILC Draft conclusion 2: 'To 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*).'

24 Draft conclusion 8 states that practice 'must be sufficiently widespread and representative, as well as consistent. Provided that the practice is general, no particular duration is required.' Draft conclusion 9 further provides: 'The requirement, as a constituent element of customary international law, that the general practice be accepted as law (*opinio juris*) means that the practice in question must be undertaken with a sense of legal right or obligation. A general practice that is accepted as law (*opinio juris*) is to be distinguished from mere usage or habit.'

25 See Draft conclusion 3, para. 2: 'Each of the two constituent elements is to be separately ascertained. This requires an assessment of evidence for each element.'

Dealing with 'identification', the Draft conclusions list a wide range of forms of evidence for each element. Yet, none of the Conclusions or the Commentaries expressly mentions the role of new information and communication technologies or the digital realm. The internet comes into play only indirectly, in relation to the '[t]eachings of the most highly qualified publicists of the various nations', which 'may serve as a subsidiary means for the determination of rules of customary international law' (Draft conclusion 14) – a provision included in Part Five under the heading 'Significance of certain materials for the identification of customary international law'.[26]

As the Chair of the ILC Drafting Committee clarified:

> 'The purpose of this draft conclusion is to address the role of teachings (in French, *doctrine*) as subsidiary means for the identification of customary international law. In following closely the language of Article 38, paragraph 1 (d), of the Statute of the International Court of Justice, it provides that such works may be resorted to as a subsidiary means for determining a rule of customary international law. The term "teachings" is to be understood in a broad sense, *including for instance audiovisual materials*.'[27]

The ILC might have had in mind, for example, the UN Audiovisual Library of International Law, a permanent collection of lectures on virtually every subject of international law, given by leading international law scholars and practitioners from different regions, legal systems, cultures, and sectors of the legal profession.[28] It is a free online international law research and training tool created in 2008 by the Codification Division of the UN Office of Legal Affairs, and maintained by the latter for promoting knowledge of international law, under the UN Programme of Assistance in the Teaching, Study, Dissemination and Wider Appreciation of International Law.

Now, the express acknowledgment that the teachings of scholars may include teachings in 'non-written' forms such as audiovisual, is a recognition that new technologies and modern forms of communication are useful *tools*

26 The other 'materials' singled out for their particular practical role are: 'Treaties' (Draft conclusion 11); 'Resolutions of international organizations and intergovernmental conferences' (Draft conclusion 12), and 'Decisions of courts and tribunals' (Draft conclusion 13).

27 Statement of the Chair of the Drafting Committee, Mr. Charles Chernor Jalloh, introducing the third report of the Drafting Committee for the seventieth session of the International Law Commission, which concerns the topic 'Identification of Customary International Law', 25 May 2018, 15, emphasis added (UN Doc. A/CN.4/L.908, available at <http://legal.un.org>). Under Art. 38, para. 1 lit. d) ICJ Statute, 'judicial decisions and the teachings of the most highly qualified publicists of the various nations [… are] subsidiary means for the determination of rules of law.'

28 The lectures – organised by subject matter and accompanied by related materials such as lecture outline, presentation slides, references, recommended readings, etc. – are available at <http://www.un.org>.

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in explicating the law, including international law. Yet, the reference made exclusively in relation to 'teachings of the most highly qualified publicists' which are a subsidiary means for determining rules of customary international law, is a lacuna that needs to be addressed.

The internet offers different categories of materials that are frequently invoked in the identification of 'a general practice' and 'acceptance as law' (*opinio juris*). Even before the outbreak of COVID-19, it had become more and more frequent for international legal scholars to use the internet in lectures and power-point presentations. The pandemic emergency has only accelerated a process already underway – and dramatically so.

Moreover, it is not only academic teachings but the entire life of peoples and nations that has moved, in hitherto unimaginable proportion, from the physical space of the real world to the virtual – but not less real – virtual space of the internet. States, international organisations, non-governmental organisations (NGOs), and other non-state actors, including groups of all sorts and individuals, are on the internet: their actions and inactions, accomplishments and wrongful acts, reactions to events and failures to act; what they do right and what they do wrong; the situations that they address, and the challenges that remain standing and beg for action but are not (or not appropriately) dealt with. All of this is available through the internet, mostly open access, free of charge, worldwide: across countries, cultures, language barriers.

It is commonplace that the proliferation of legal databases and more generally the development of modern technologies have enormously increased the means and speed of communications across the globe and immensely facilitated the task of seeking information about the practices followed by other jurisdictions, governmental and non-governmental organisations, and other actors.[29]

The recognition of the instrumental value of the internet in spreading knowledge about international law or even the attribution to modern communication and information technologies of an *explanatory* function of international rules, however, fall short of the true impact of the internet on international law. The internet offers a wide range of materials that may serve as *evidence* for the purposes of the identification of customary rules. Also in this respect, the ILC's work presents a lacuna.[30]

In addition to being paramount as evidence of *lex lata*, the internet offers a range of *normative materials* that global actors, in the ordinary course, may

29 See Condorelli n. 5.

30 On the obstacles faced by the ILC itself to conduct its own work remotely, in the absence of in-person meetings, through video-conferencing or otherwise, during the pandemic, see Sean D. Murphy, 'Effects of the COVID-19 Pandemic on the Work of the International Law Commission', EJIL 114 (2020), 726-728.

use and treat as customary international law *de lege ferenda*. The digital realm *originates* (at least part of the very) behaviours that contribute to the emergence of customary rules. Take, for example, the right of humanitarian intervention: internet related means and activities can be relevant to the question of whether a rule that authorises humanitarian intervention exists and, in the affirmative, under what circumstances.[31] The first is a question about the existence of the rule, the latter relates to content determination.

The internet plays a role for the purposes of the identification and the formation of customary international law alike, for the two concepts are – as explained above – interrelated.

2. International Responsibility

Even before the advent of the internet, international law offered different examples of the use and relevance of visual technologies in various areas, the pioneering field being international criminal law.

Videos documenting war crimes and other serious human rights breaches have long been used as evidence for the prosecution for international crimes.

In 1945-1946, at the Nuremberg trial – which can be considered as the birth point of international criminal law – the chief prosecutor Justice Jackson showed to the horror of the judges and the press corps, the real footage images of the movies which the British and the American soldiers took from the concentration camp Bergen-Belsen.[32]

31 In early December 1992, for example, when outgoing U. S. President George H. W. Bush sent the contingent of Marines to Somalia to lead a UN-sanctioned multinational force aimed at restoring order in the conflict-ridden country, as part of a mission called Operation Restore Hope, news media showed pictures and videos of the 1,800 US Marines arriving in Mogadishu. Backed by the U. S. troops, international aid workers were soon able to restore food distribution and other humanitarian aid operations – which were also broadcasted through the internet. Sporadic violence continued, however, including the murder of 24 UN soldiers from Pakistan in 1993. As a result, the UN Security Council authorised the arrest of General Mohammed Farah Aidid, leader of one of the rebel clans. On 3 October 1993, during an attempt to make the arrest, rebels shot down two of the U. S. Army's Black Hawk helicopters and killed 18 American soldiers. As horrified internet viewers watched images of the bloodshed – including footage of Aidid's supporters dragging the body of one dead soldier through the streets of Mogadishu, cheering – President Bill Clinton immediately gave the order for all American soldiers to withdraw from Somalia by 31 March 1994. Other Western nations followed suit.

32 In *Judgment at Nuremberg,* a 1961 American courtroom drama film directed by Stanley Kramer, for the first time a Hollywood director used the real footage images of the movies which the American soldiers took from Bergen-Belsen and inserted them into a feature film in the famous reconstruction of the movie showings at the real Nuremberg trials of 1946. Stanley Kramer actually shot much of the movie on site in Nuremberg, and many of the scenes were filmed in the very same building where the real trial was held. On the re-usage of visual evidence, at the time used as real evidence in the real trial, and now used to shock the movie-going spectators of the feature film, see, for example, <https://youtu.be/zM4ZQANR0dU>.

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In recent years, digital evidence has taken an increasing role in almost all investigative activities both at the national[33] and international level.[34] Images were routinely presented as evidence in trials before the *ad hoc* international criminal tribunals, most notably the International Criminal Tribunal for the former Yugoslavia (ICTY),[35] which also undertook a major digitisation project to convert audio-visual recordings of its court proceedings to high-resolution digital video files, as part of its Legacy Strategy.[36] Digital evidence is now standard practice before the International Criminal Court (ICC).

The so-called 'open-source digital evidence' is a new type of digital evidence: information publicly available, acquired through the Internet, which may include, among others, social media content, images, videos, and audio recordings on websites.[37] The internet has changed the value and use of digital evidence. But new methods for information gathering and dissemination have also created significant challenges. Digital information, including from social media, can be biased and manipulated, raising issues of reliability and credibility. Digital evidence to be of use, must be not only discovered, but also verified and authenticated.[38]

33 On the handling of digital evidence in national proceedings, see the international standards developed in 2012 (last reviewed and confirmed in 2018) by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) to harmonise practices between countries: ISO/IEC 27037 Guidelines for Identification, Collection, Acquisition, and Preservation of Digital Evidence, available at <https://www.iso.org>.

34 See Lindsay Freeman, 'Digital Evidence and War Crimes Prosecutions: The Impact of Digital Technologies on International Criminal Investigations and Trials', ILJ 41 (2018), 283-336; See also Rossella Pulvirenti, 'Internet and International Criminal Accountability: Towards a Human-Centred Approach' in: Angelo Jr Golia, Matthias Kettemann, and Raffaela Kunz (eds), *International Law and the Internet* (Baden-Baden: Nomos forthcoming), critically assessing in a human rights perspective how the use of internet has served the goals of international criminal law – retribution, deterrence and restorative justice.

35 The vast archival holdings of the ICTY exceed 9.3 million entries and include photographs, diaries, maps, diagrams, exhumation records, x-rays, radio intercepts, audio recordings, and videotapes. For a sample selection of images presented as evidence in ICTY trials, see <www.icty.org>.

36 The digitisation project will permanently preserve and facilitate public access to the Tribunal's hearings. The purpose of the preservation and accessibility of the records and archives is to secure a long-lasting and positive impact of the ICTY in the former Yugoslavia and beyond.

37 Nikita Mehandru and Alexa Koenig, 'Open Source Evidence and the International Criminal Court', HHRJ (online) 32 (2019), at <https://harvardhrj.com>.

38 On the collection of, and reliance on, so-called user-generated evidence, that is footage that an ordinary citizen – the user – records on their smartphone, in an effort to achieve legal accountability, see Rebecca J. Hamilton, 'New Technologies in International Criminal Investigations', ASIL Proc. 112 (2018), 131-133; see also Beth Van Schaack, 'Innovations in International Criminal Law Documentation Methodologies and Institutions' (2019), at SSRN: <https://ssrn.com/abstract=3329102>; Rebecca J. Hamilton, 'Social Media Platforms in International Criminal Investigations', Case Western Reserve Journal of International Law 52 (2020), 213-223.

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Another area where the role of the internet has become most prominent for the purposes of accountability is human rights. As it has been effectively put,[39] to say that mobile technologies, social media, and increased connectivity are having a significant impact on human rights practice would be an understatement. From videos of rights violations to eyewitness accounts disseminated on social media, human rights practitioners have access to more data today than ever before. There has been, however, no corresponding decline in human rights breaches.[40]

The internet can both significantly facilitate and impede the exercise of human rights. The internet offers a powerful technology for society and individuals to express their rights, but also an environment in which such rights can be curtailed by powerful states, public and private institutions, and individuals.[41] Moreover, social media platforms have been beset with hate speech, misinformation, disinformation, incitement of violence, and other content that can also cause real-world harm.

International human rights rules emerged long before the internet and social media were widespread, and were written and ratified for use by states, not for private companies. They must therefore be interpreted and adapted for this new purpose.[42] Lack of clarity about the nature of human rights obligations of private actors such as Big Tech companies, market actors, and consumers, coupled with their growing power and influence over public

39 Sam Dubberley, Alexa Koeing and Daragh Murray (eds), *Digital Witness: Using Open Source Information for Human Rights Investigation, Documentation, and Accountability* (Oxford: Oxford University Press 2020), also on the types of evidentiary considerations specific to digital evidence.

40 On the current 'twilight' or 'end-times' of human rights, where human rights are at best the 'last utopia', see Stephen Hopgood, *The Endtimes of Human Rights* (New York: Cornell University Press 2013); Samuel Moyn, *The Last Utopia: Human Rights in History* (Cambridge, MA: Belknap, for Harvard University Press 2010); Eric A. Posner, *The Twilight of Human Rights Law* (Oxford and New York: Oxford University Press 2014). See also: Emile M. Hafner-Burton, *Making Human Rights a Reality* (Princeton, NJ: Princeton University Press 2013); David P. Forsythe, 'Hard Times for Human Rights', Journal of Human Rights 16 (2017), 242-253.

41 Christopher T. Marsden, 'Transnational Internet Law' in: Peer Zumbansen (ed.), *Oxford Handbook of Transnational Law* (Oxford and New York: Oxford University Press 2020), available at <https://ssrn.com/abstract=3552918>.

42 See Michael Lwin, 'Applying International Human Rights Law for Use by Facebook', Yale Journal on Regulation (2020), available at <https://ssrn.com/abstract=3681581>, proposing a framework for the use of international human rights law by social media companies; Molly K. Land, 'The Problem of Platform Law: Pluralistic Legal Ordering on Social Media' (2019), available at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3454222>. On the basic differences between physical searches of tangible property and electronic searches of digital evidence under national law, and a normative framework for applying the Fourth Amendment to searches of computer hard drives and other storage devices, Orin S. Kerr, 'Searches and Seizures in a Digital World', Harv. L. Rev. 119 (2005), 531-585.

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affairs, has long been one of the most pressing human rights issues in the digital age.[43] The term 'cybersecurity' was coined to refer to the protection of information and communication technologies from unauthorised access or attempted access.[44]

Due to its enormous scope and global reach, the human rights implications of the internet could not be overestimated. All international law fields, however, are affected by the pervasiveness of the internet. Videos documenting war crimes and other serious human rights breaches, for example, often serve the case for or against humanitarian intervention.[45] By way of further exemplifications, the internet offers satellite images of environmental degradation. And it plays a role in national elections, which in turn affect international politics; online national election campaigns also speak of the kind of democracy that states now days consider as part of an international right to democracy.[46]

At no time in history, has there been more information available to governments and the public about violations of international norms (particularly, but not exclusively human rights violations): more and more of these violations are, or can be, ascertained and documented through the internet,

43 An area of internet governance with particularly important human rights implications is the Domain Name System (DNS), which matches computer addresses to human-friendly domain names and is governed by a private, multi-stakeholder body, the Internet Corporation for Assigned Names and Numbers (ICANN), which is in turn transitioning from U. S. supervision to full privatisation. ICANN has recently adopted in its organisational bylaws a 'Core Value' of respecting 'internationally recognised human rights'. See Monika Zalnieriute, 'Reinvigorating Human Rights in Internet Governance: The UDRP Procedure Through the Lens of International Human Rights Principles', Columbia Journal of Law and Arts 43 (2020), 197-235, discussing in a human rights perspective the new Uniform Domain Names Disputes Resolution Policy (UDRP) procedure created by ICANN in 1998.

44 Although definitions can vary, see Martha Finnemore and Duncan B. Hollis, 'Constructing Norms for Global Cybersecurity', AJIL 110 (2016), 425-479.

45 See n. 31. The overflow of information generated during disasters can be as paralysing to humanitarian response as the lack of information. This flash flood of information is often referred to as Big Data, or Big Crisis Data. Patrick Philippe Meier, *Digital Humanitarians: How Big Data Is Changing the Face of Humanitarian Response* (Boca Raton, FL: CRC Press 2015).

46 The 2020 and previous US Presidential elections offer a prominent example of the role of the internet in national elections. The Internet is now a part of American democracy. A majority of Americans are online and many of them use the internet to learn political information and to follow election campaigns, while candidates invest heavily in web and e-mail campaign communication tools in order to reach prospective voters, as well as to communicate with journalists, potential donors, and political activists. Moreover, voters are influenced by what they see on the internet. On the dynamics of the US 2000 elections, see Bruce Bimber and Richard Davis, *Campaigning Online: The Internet in U. S. Elections* (Oxford: Oxford University Press 2003). See also Jens David Ohlin, 'A Roadmap for Fighting Election Interference', AJIL *Unbound* 115 (2021), 69-73.

beyond the specific purposes of criminal prosecutions. Increased detection of international breaches has not resulted, however, in a higher degree of effectiveness of the relevant rules of international law.

The internet allows the detection of major breaches, it does not necessarily advance the effectiveness of international law. This does *qualify*, but it does not diminish or make less significant, the relevance of the internet for the purposes of implementation of international law.

IV. Technological Power as a Leverage of Global Governance

While the guiding principle of post-1945 global governance was multilateralism,[47] post-Cold War global governance has increasingly become a multistakeholder governance.[48]

States remain the primary and most powerful actors and international organisations still retain a considerable role, but civil society, corporations, social and political groups, and the like are all potential stakeholders in many areas.[49] Internet governance is the one area in which the shift to multistakeholder governance is particularly evident.[50]

The internet started as a US phenomenon, 'a niche government-academic project to allow academics and military folks to communicate together',[51]

47 Multilateralism 'is an institutional form which coordinates relations among three or more states on the basis of "generalized" principles of conduct […] without regard to the particularistic interests of the parties or the strategic exigencies that may exist in any specific occurrence.' John Gerard Ruggie, 'Multilateralism: the Anatomy of an Institution', IO 46 (1992), 561-598 (571).

48 *Ex multis,* Geoffrey Allen Pigman, *The World Economic Forum: A Multi-Stakeholder Approach to Global Governance* (London: Routledge 2006); Joost Pauwelyn, Ramses A. Wessel and Jan Wouters (eds), *Informal International Lawmaking* (Oxford: Oxford University Press 2012); Richard B. Stewart, 'Remedying Disregard in Global Regulatory Governance: Accountability, Participation, and Responsiveness', AJIL 108 (2014), 211-270; Kenneth W. Abbott, Jessica F. Green and Robert O. Keohane, 'Organizational Ecology and Institutional Change in Global Governance', IO 70 (2016), 247-277.

49 In transborder environmental protection, territorial disputes, internet governance, anticorruption, international human rights, and humanitarian law, for example, private businesses are increasingly supporting the implementation and enforcement of international law. On the role of corporations in the global legal order, see Jay Butler, 'The Corporate Keepers of International Law', AJIL 114 (2020), 189-220.

50 'The Internet is by no means the sole example of contemporary multistakeholderism. But it is one of the most elaborate examples and one in which the drive to multistakeholderism has had special and perhaps unique causes.' Raustiala (n. 2), 503.

51 Mark A. Lemley, 'The Splinternet', Duke Law Journal 70 (2021), 101-131 (102-103) (also available as Stanford Law and Economics Olin Working Paper #555, at SSRN: <https://ssrn.com/abstract=3664027 and http://dx. doi.org/10.2139/ssrn.3664027>).

before commercial entities were given unrestricted access to it in the early 90's, to become the truly global phenomenon that we know today. The internet 'flattened' the world, making it more diffuse and decentralised, with individuals and corporations as actors of influence increasingly detached from states.[52]

While many countries have dominant private internet players, they are not the same private players. Cooperation between networks at the national, regional, and international level to regulate the internet challenges our nation-state-centred universe. But there is also an ongoing nation-by-nation competition for who gets the internet.[53] Since the Arab spring showed in the early 2010s the power of the internet to foment a revolution, authoritarian regimes have used their power to control and to lock down the means of communication to prevent dissent from organising.[54]

We posit that technological power is a fundamental leverage in global governance, akin to economic, military, and political might. Because this is going to be a technology century, countries will sink or swim based on their brainpower in the Artificial Intelligence (AI), biotech, quantum computing, nanotech future that we're going to be living in.[55]

There is considerable discussion about the shape of the international system over the next 30 to 50 years. One question that has been asked is whether our Westphalian legal world, 'which rests heavily on geography, […] is an appropriate controlling vision of international law as we move further into the 21st century'.[56]

Although a number of developments are underway, geography remains central to the international system. The very concept of statehood, but also other concepts and principles of international law (such as the

52 See Thomas L. Friedman, *The World Is Flat: The Globalized World in the Twenty-First Century* (Further Updated and Expanded) (3rd edn, New York: Picador / Farrar, Straus and Giroux 2007), also for the thesis that the fall of the Berlin Wall in 1989 was the first in a series of events which not only meant the end of Cold War but also aided the establishment of global connectivity which flattened the world. See also Marsden (n. 41).

53 For the thesis that the internet is being balkanised and that the 'splintering' of the internet is a bad thing, and we should stop it, see Lemley (n. 51). On the distinction – amongst internet actors – between providers of internet access (telecoms companies) and providers of services and content (Google, Facebook, and other websites), see Marsden (n. 41).

54 It happened in India (in relation to Kashmir), Iran, Turkey, Malaysia, Brazil, and Pakistan. Various Arab countries have also blocked large parts of the internet at one time or another.

55 These lines belong to Nicholas Burns, 'Why Does Good Diplomacy Matter?', Harvard Magazine (23 March 2020).

56 Daniel Bethlehem, 'The End of Geography: The Changing Nature of the International System and the Challenge to International Law', EJIL 25 (2014), 9-24 (10-11).

principles of non-intervention or of state jurisdiction) are deeply rooted in the traditional notion of territorial geography, which depends on the extent of the territory of states.[57] Among the challenges to the traditional conceptions of an international system rooted in geography is that 'virtual space takes on dimensions and an importance that rivals physical space in the world of transactions, communications, and other engagements'.[58]

It is submitted that the virtual realm brought about by the internet changes the geography of statehood, but it does not make it less important. The very notion of geography is *expanded* to include the digital, in addition to the physical, space of a state. The regulation of the internet and internet access therefore raises profound questions of sovereignty.

For centuries, more powerful states have exerted a major influence in the formation of customary international law.[59] This largely remains true today. The interface between international law and the internet affects the relationships and the power balance between the Global South and Global North, in terms of positive law and participation in processes of norm development and implementation. A particularly critical concern is for states that are highly challenged by the digital divide. In developing countries with little access to the internet or countries with strong internet censorship regimes, that censor information online, it will be difficult to effectively use the internet to participate to international law-making processes as well as to ascertain state behaviours or document the violation of international rules. Equal *participation* to international law-making processes and implementation procedures as well as equal *impact* on such processes' and procedures' outcome, are desirable but unattainable goals, surely in the next few decades to come. In so far as technological power replicates the existing power balance, the internet is likely to both deepen and make harder to cure current divides.

The internet empowers states, but it also enhances the role of all stakeholders of international society, including corporations from the public and

57 'Borders and title to territory continue to matter.' Bethlehem (n. 56), 14.

58 Bethlehem (n. 56), 15.

59 'It has been observed that the collections of State practice give an unbalanced view, as they concern the practice of the relatively small group of the main powers. While there is some truth in this observation, it must also be stressed that the main powers engage in relations with most other States, so that the practice of almost all States is, at least in part, reflected in these collections. Moreover, in recent times a number of collections and reviews of practice of smaller and third world States have begun to appear. Important changes in the availability of manifestations of international practice have been brought about in recent times by electronic means of knowledge now widely available.' Treves (n. 4), para. 80.

the private sectors,[60] NGOs,[61] academia, and civil society. Scholars working on technology and internet governance traditionally focus on the exercise and limits of power by nation-states. But more recently, they have had to confront the practices – and the limits of power – of private companies and informal actors.[62]

Digital constitutionalism refers to efforts 'to articulate a set of political rights, governance norms, and limitations on the exercise of power on the internet'.[63]

The internet is global and decentralised, hence there is more communication of information from more sources. The internet has given the world access to multiple different sources of information and content, including misinformation. But it has also birthed new – virtual, digital – territories where international practice by multiple actors originates. This practice is relevant to the formation and implementation of international law, as outlined in the previous paragraphs. There is thus a nexus between internet governance and the impact of the internet on international law-making processes and the mechanisms of international responsibility.

V. Concluding Remarks

This paper has explored the impact of the internet on the practice and theory of customary international law and showed that States' and non-state actors' behaviour has undergone radical change. International actors operate on and through the virtual space generated by the internet, and so does the

60 Because global electronic commerce continues to grow rapidly, for example, the most valuable public companies are now e-commerce giants not only in the US but also in China and Russia. The Internet and associated technologies such as blockchain and smart contract have transformed the supply chains of traditionally dominant industrial sectors such as automobile manufacture, petro-chemical refining, and aerospace engineering. Even in Europe, the European Commission has been driven by industry to proclaim the emergence of Industry 4.0, a new phase based on digitisation, the Internet of Things, cloud computing, AI, advanced robotics, blockchain, and smart contracts.

61 See e. g., Nina Hall, Hans Peter Schmitz and J. Michael Dedmon, 'Transnational Advocacy and NGOs in the Digital Era: New Forms of Networked Power', International Studies Quarterly 64 (2020), 159-167.

62 See Ramses A. Wessel, 'Regulating Technological Innovation through Informal International Law: The Exercise of International Public Authority by Transnational Actors' in: Michiel A. Heldeweg and Evisa Kica (eds), *Regulating Technological Innovation: A Multidisciplinary Approach* (London: Palgrave Macmillan 2011), 77-94.

63 The first research paper on 'digital constitutionalism' is Lex Gill, Dennis Redeker and Urs Gasser, 'Towards Digital Constitutionalism? Mapping Attempts to Craft an Internet Bill of Rights', The Berkman Center for Internet and Society Research Publication 15 (2015), available at <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2687120>.

law. The previous paragraphs described multiple ways in which states and other actors act through the internet, and showed that the internet permeates all fields of international law. This, however, has been only partially reflected in the theory of international law.

In the work of the ILC on the 'Identification of customary international law' referred to above,[64] there is but scant reference to audiovosual materials in relation to 'teachings of the most highly qualified publicists' as a subsidiary means for determining rules of customary international law (ILC Commentary to Draft conclusion 14). That the internet, let alone its power, is barely mentioned by the ILC – the subsidiary organ of the UN General Assembly entrusted with the mandate to promote the progressive development of international law and its codification[65] – does not make the digital realm less relevant or real. It merely points to a lacuna in mainstream legal scholarship, that this paper has attempted to address.

The case studies attest and demonstrate that international practice in the digital space is not only relevant to the formation of rules regulating the digital space itself ('international internet law' or 'international law of the internet'). It does also increasingly contribute to the emergence of customary rules outside the *Internetvölkerrecht*. The previous paragraphs provide support for the proposition that the digital realm has changed the traditional law-making processes, in particular for international customary law. In spite of the relevance of treaties, customary processes and rules remain an essential part of international law. Notwithstanding their widespread codification in treaties during the last century, the unwritten norms of customary law continue to play a crucial role in international relations.[66] And customary international law often forms at a much faster pace, especially but not exclusively with respect to areas of technological or other fundamental change.[67] In contrast to earlier times, in the modern era of instantaneous electronic communications and proliferation of diplomatic conferences, organisations and other forums for multinational diplomatic exchanges (including in the virtual space), international practice is being generated at an increasing pace and is becoming more and more widely disseminated over the internet.

64 *Supra*, III.

65 See Art. 13 UN-Charter: 'The General Assembly shall initiate studies and make recommendations for the purpose of: (a) promoting international co-operation in the political field and encouraging the progressive development of international law and its codification.'

66 On the continuing importance of customary international law and the primary reasons for customary international law's continuing vitality, see Treves (n. 4), paras 90-92.

67 'While one might tend to think of customary international law as growing only slowly, in contrast to the more rapid formation of treaties, the actual practice of the world community in modern times suggests that the reverse is more often the case.' Scharf (n. 22), 309.

The internet is part of the diversity of forms in which practice and its acceptance as law may be manifested. Hence, it provides at same time *evidence* for the identification of customary rules, and *normative materials* which may amount to the emergence and consolidation (or change in content) of those very same rules. With respect to *law-making*, the internet acts as both a sounding board for, and an originator of, international practice. In contemporary international settings, modern technologies are also a means for influencing international practice in relation to treaties, over time.

The internet has not generally contributed, however, to make international law more effective. New technologies and social networks have certainly increased the availability of information to governments and the public regarding breaches of international law. Yet, they have created a new – online – environment in which internationally wrongful acts can be committed. This qualifies, does not make less significant, the relevance of the internet for the *implementation* of international law.

Because of the pervasive power of internet communications as the medium across which all other media can be conveyed and recorded, it is difficult to conceive of any branch of international law including competition law, human privacy and electronic banking, without regard to the transformations created by the online environment. The internet entails important implications for most, if not all, areas of international law.

Yet, the impact of the internet on the making, interpretation, and implementation of international law remains elusive and hard to conceptualise. Elusiveness, however, should not be confounded with reality (or lack thereof).

In addition to communicating and sharing knowledge about, as well as contributing to the making and implementation of, international rules, the use of the internet also illuminates our understanding of the *power balance* in global governance as well as the relationship between law and power and the legitimacy of international law.

The internet has expanded the very notion of geography upon which our Westphalian nation-state-centred universe is premised, to include the digital, in addition to the physical, realm. The *digital world* has birthed whole new 'territories' where the practice of states and other actors is recorded and displayed, but it also exists independently from the physical realm. Technology's power is a fundamental leverage in global governance, akin to economic, military, and political might not only for states but also for a wide range of non-state actors, such as Big Tech corporations, social and political groups, and civil society.

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Whether or not it has changed our life for the better,[68] the internet contributes to shape the international landscape, international relations, the international legal order (or disorder), *and* international law's structures and processes.

International legal scholarship has failed so far to comprehensively assess the power of 'the internet'. This paper has focused the camera lens on the internet as a *game changer* not in the sense of a trigger of new rules and regulations applicable in the virtual space (*Internetvölkerrecht*), but as a changer of processes and structures, most notably, but not exclusively, of international customary law. The impact of the internet on the processes and structures of international law is real and bound to become more evident in the future. This phenomenon has been going on for several decades now, although modern technologies increased incrementally over the last decade. The COVID-19 emergency precipitated it.

68 See Lemley (n. 51), for the view that: 'What the internet did was something quite remarkable. It allowed people to connect outside those walled gardens. It allowed you to interact with someone who wasn't part of a preexisting community, who wasn't geographically near you, who wasn't in the same community of scholarship and the same community of thought with you. And that connection turned out to be extraordinarily and unexpectedly valuable' (103). 'The internet has also changed our lives for the better. Our phones improve our lives in ways we don't think about because we're not lost in a foreign country where we don't speak the language. We have a map that will get us where we want to go. We're not stuck on the highway with a flat tire and no way to communicate to anyone about that fact. We're not sitting in a restaurant waiting for a friend who cancelled or debating some arcane fact with our friends without a device in our pocket capable of accessing all of the world's information. […] These are things that became available because we have access to this intersecting universe of information' (123).