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Criminal Jurisdiction over the Internet: Jurisdictional Links in the Cyber Era

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I. Introduction

A result of the creation of the Internet is that the real world no longer is the only space in which interpersonal interaction occurs.[1] Now, a completely new, somehow parallel-to-reality plane exists that escapes geographical limitations. It forces redefinition of the concepts of sovereignty and jurisdiction.[2] Individual countries, to some extent grouped, have begun to seek any foothold that allows them to regulate and punish behaviours undertaken by Internet users.

This study is a critical analysis of solutions used to determine the scope of criminal jurisdiction in cyberspace. Considering the intensive development of social interactions undertaken using the Internet, it appears justified to move away from a rigid model of jurisdictional rules and shift to a discursive model based on weighing the interests of states.

The considerations are divided into six parts. Section II presents a short description of a method based on classical jurisdictional rules. Section III includes

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1 See *inter alia*: Stine Gotved, "Time and space in cyber social reality" (2006) 8 New Media & Society 467–86; Toni C Antonucci, Kristine J Ajrouch and Jasmine A Manalel, "Social Relations and Technology: Continuity, Context, and Change" (2017) 3 Innov Aging 1–9.

2 Michael N Schmitt, Liis Vihul (eds), *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (CUP 2017) 12; Dan L Burk, "Muddy Rules for Cyberspace" (1999) 21 Cardozo L Rev 121, 122; Michael N Schmitt, Liis Vihul, "Respect for Sovereignty in Space" (2017) 95 Tex L Rev 1639; Joanna Kulesza, *International Internet Law* (Roudlegde 2012) 2–3.

a discussion of traditional approach defects, particularly considering those features that prevent the application of that traditional approach to behaviours undertaken using cyberspace. Section IV discusses an alternative method of determining scope of jurisdiction based on important elements of the social situation (jurisdictional links). Sections V and VI parts are devoted to an analysis of individual nexuses. In Section VII, the method of weighing the significance of the links is presented. This method allows granting a particular state the right to regulate or impose a penalty for a given behaviour on the Internet.

II. Principles of jurisdiction as a traditional method of establishing jurisdiction in criminal cases

The jurisdiction principles are currently the substantive basis for making claims for regulation or penalisation.[3] To demonstrate the existence of the power to legislate and enforce the law, the state relies on one of the four main jurisdictional principles: territoriality,[4] the active personality principle,[5] the passive personality principle[6] and the protective principle.[7] This catalogue is broadened in the case of competences that constitute *ius puniendi*,[8] in which the authorisations are also based on the principle of vicarious jurisdiction[9] and the rule of universal jurisdiction.[10] The above are confirmed by argumentation conducted in the context of disputes

3 Adria Allen, "Internet Jurisdiction Today" (2001) 22 Nw J Int'l L & Bus 69, 75; Ray August, "International Cyber-Jurisdiction: A Comparative Analysis", (2002) 39 ABLJ 531, 534; Christopher Kuner, "Data Protection Law and International Jurisdiction on the Internet (Part I)" (2010) 18 International Journal of Law and Information Technology 176, 188–191; Kulesza (n 2) 6.

4 Cherif M Bassiouni, *Crimes Against Humanity: Historical Evolution and Contemporary Application* (CUP 2011) 279; *"Extraterritorial criminal jurisdiction. Council of Europe"* European Committee on Crime Problems (1992) 3 Criminal Law Forum 441, 446.

5 Cedric Ryngaert, *Jurisdiction in International Law* (2nd Ed, OUP 2015) 89; Bassiouni (n 4) 279; Danielle Ireland-Piper, "Prosecutions of Extraterritorial Criminal Conduct and the Abuse of Rights Doctrine" (2013) 9 Utrecht L Rev 68, 74; William R Slomanson, *Fundamental Perspectives on International Law* (Wadsworth Publishing 2010) 250.

6 Ryngaert (n 5) 93; Bassiouni (n 4) 279; Geoffrey R Watson, "The Passive Personality Principle" (1993) 28 Tex Int'l LJ 1 18; Jonathan O Hafen, "International Extradition: Issues Arising under the Dual Criminality Requirement" (1992) BYU L Rev 19, 218; John G McCarthy, "The Passive Personality Principle and Its Use in Combatting International Terrorism" (1989) 13 Fordham Int'l LJ 298, 301.

7 Ryngaert (n 5) 97; Bassiouni (n 4) 279; *Extraterritorial* (n 4) 451.

8 Kai Ambos, "Punishment without a Sovereign? The Ius Puniendi Issue of International Criminal Law: A First Contribution towards a Consistent Theory of International Criminal Law" (2013) 33 OJLS 293, 297–8; Andrzej Sakowicz, *Zasada ne bis in idem w prawie karnym* (Temida2 2011) 138.

9 Ryngaert (n 5) 103; *Extraterritorial* (n 4) 452.

10 Ryngaert (n 5) 106; *The Princeton Project on Universal Jurisdiction (Program in Law and Public Affairs Princeton University 2001)* 28; Hafen (n 6) 219; Bassiouni (n 4) 280.

over competences between countries, in which individual parties derive their rights from the facts of the application of these principles.[11] Recourse to a given principle is made to justify the right to exercise state authority.

All jurisdiction principles mentioned above have evolved in the course of the historical development of international law.[12] They are, in fact, of a customary nature. They refer to the bonds existing between a specific social situation and the state. Over the centuries, however, there has been a specific looping in this area. Its effects are particularly strongly felt in today's realities. Historical analysis permits advancing the thesis that the rules of jurisdiction have developed as a legal description of socially significant connections and have slowly "ossified". As social relationships evolved and new connections developed that were of great importance, no new jurisdictional rules were created; instead, there was an attempt to enter such relationships and connections into already existing content. This approach also has been applied to social situations that occur in cyberspace.

Particularly noteworthy in this context are two circumstances, the recognition of which is essential for describing the weaknesses of the classical jurisdictional model.

First, the jurisdiction rules were included in the national legal systems at a time when virtually all human activities were of a physical nature. Social situations that were regulated by law were clearly defined in space.[13] The resulting consequences were characterised by a small spatial scope, which in principle was easy to predict from an ex-ante perspective. This point is evidenced by academic examples used to discuss cross-border crimes, in terms of elements such as causing

[11] Ellen S Podgor, "Cybercrime: Discretionalnary Jurisdiction" (2008–2009) 47 U Louisville L Rev 727, 729.

[12] Howard J Grootes, "Territorial Jurisdiction in Cyberspace" (2002) 4 Or Rev Int'l L 17, 28; *Tallin* (n 2) 51.

[13] Georgios I Zekos, "State Cyberspace Jurisdiction and Personal Cyberspace Jurisdiction" (2007) 15 International Journal of Law and Information Technology, 1, 20.

a result by an archery shot.[14] Cross-border was a marginal problem; therefore, it did not require the development of sophisticated, dogmatic instruments.

Second, the system of analysed principles was developed many years before the modern concept of human rights was verbalised.[15] Consequently, the former does not consider the rights of the individual, which directly affects how the limits of the state's jurisdiction are determined.[16] The jurisdictional principles focus on inter-state relations. The reference point here is the need for protection of the sovereignty of independent entities of international law, which has important consequences; an inter-state dispute can always be resolved ex post at the political level.[17] Such a situation is unacceptable when considering an individual's right to become familiar with the content of the law in force.

III. Defectiveness of the traditional method based on jurisdictional principles

Determining the limits of state jurisdiction based on the system of existing jurisdictional rules is currently counter-effective. Patching a leaky system by means of *ex post* political arrangements does not solve the problems that 21st century

[14] Eduard Treppoz, "Jurisdiction in Cyberspace" (2016) 26 Swiss Rev Int'l E L 273, 275.

[15] *Tallin* (n 2) 179; Wojciech Burek, *Zastrzeżenia do traktatów z dziedziny praw człowieka* (Instytut Wydawczniczy EuroPrawo 2012) 45; Anne Clunan, "Redefining Sovereignty: Humanitarianism's Challenge to Sovereign Immunity" in Noha Shawki and Meacheline Cox (eds), *Negotiating Sovereignty and Human Rights: Actors and Issues in Contemporary Human Rights Politics* (Padstow 2009) 7–27; Jean L Cohen, *Globalization and Sovereignty: Rethinking Legality, Legitimacy, and Constitutionalism* (CUP 2012) 159–78; Dominik Zając, *Odpowiedzialność karna za czyny popełnione za granicą* (KIPK and Wolters Kluwer 2017) 246; Oona A Hathaway, "International Delegation and State Sovereignty" (2008) 71 Law & Contemp Probs 115, 145–8; Stephen D Krasner, *Sovereignty: Organized Hypocrisy* (Princeton University Press 1999) 125; Robert Jackson, *Sovereignty: The Evolution of an Idea* (CUP 2007) 114–34. The above trend was reflected in the case law of the ICTY, in which it was noted: „the impetuous development and propagation in the international community of human rights doctrines, particularly after the adoption of the Universal Declaration of Human Rights in 1948, has brought about significant changes in international law, notably in the approach to problems besetting the world community. A State-sovereignty-oriented approach has been gradually supplanted by a human-being-oriented approach. Gradually the maxim of Roman law *hominum causa omne jus constitutum est* (all law is created for the benefit of human beings) has gained a firm foothold in the international community as well." – *Prosecutor v Dusko Tadic a/k/a "Dule", Decision on the Defence Motion or Interlocutory Appeal on Jurisdiction, Decision of 2 October 1995*, <http://www.icty.org/x/cases/tadic/acdec/en/51002.htm> (accessed 5 November 2018).

[16] Greg Y Sato, "Should Congress Regulate Cyberspace" (1997) 20 Hastings Comm & Ent LJ 699, 716–7.

[17] Jedynie jako przykład wskazac należy tutaj na sprawe Cuttinga – see John B Moore, *Report on Extraterritorial Crime and the Cutting Case* (United States Department of State 1887).

societies face in this respect.[18] Two major defects exist in the traditional system. First, recourse to jurisdictional rules does not allow for a categorical *ex ante* determination, *i.e.*, at the moment of making decisions about a given behaviour, of the content of the norm binding the perpetrator. Second, it is not possible to sensibly weigh these principles and, consequently, to determine the content of the law in force.

A. Lack of recognisability of the jurisdictional basis at the moment of action or omission of individual

Traditional jurisdictional rules describe the powers of the state without a consistent separation between prospective and responsive competences.[19] The first group of competences decide on the possibility of shaping future behaviour of perpetrators.[20] The second group allow punishing the individual in the case of breaking the law, which regulates his or her behaviour.[21]

The first group includes the competence to set regulatory norms.[22] Thus, the state influences how people behave, indicating, for example, that one should move to the right side of the road and should not download illegal software from the network. This competence is prospective because it is not an answer to a past event but rather is supposed to model future behaviour. The second group includes the right to punish. It has a responsive character and allows only a subsequent reaction to a past event (crime). For the modelling of future behaviours to be possible, it must be possible to determine the content of the standard binding the entity at the moment of action or omission.[23] The criterion of the application of a norm in space must therefore be based on an element of social situations that is recognisable *ex ante*.

Not all of the proposed rules meet the above criteria. Some of them refer, for example, to the place in which the effects of behaviour or financial gain occur.[24]

[18] Edward Lee, "Rules and Standards for Cyberspace" (2002) 77 Notre Dame L Rev 1275, 1279, 1281; Kulesza (n 2) 30; Zekos (n 13) 15; Jennifer Daskal, "Borders and Bits" (2018) 79 Vand L Rev 179, 222; Jennifer Daskal, "The Un-Territoriality of Data" (2015) 124 Yale L J 326, 330; Uta Kohl, *Jurisdiction and the Internet* (CUP 2007) 59.

[19] *Extraterritorial* (n 4) 458. The document indicates the following: "Legislative jurisdiction and judicial jurisdiction coincide in the case of criminal law. The national courts apply, in principle even with respect to offences which may have been committed outside national territory".

[20] Edward Lee (n 18) 1314; C Alchourron, E Bulygin, *Normative Systems*, (Springer 1971) 42.

[21] Hans Kelsen, "The Pure Theory of Law and Analytical Jurisprudence" in *What is Justice? Justice, Law and Politics in the Mirror of Science* (University of California Press 1971) (1957) 275.

[22] Zhang Xinbao, Xu Ke, "A Study on Cyberspace Sovereignty" (2016) 4 China Legal Sci 33, 59.

[23] Kohl (n 18) 116.

[24] Ryngaert (n 5) 76; Hafen (n 6) 216; *Extraterritorial* (n 4) 446; Treppoz (n 14) 279.

Considering the nature of these circumstances, the perpetrator might not even be able to predict whether the effects will occur in the geographical space of another state.

The inability to recognise the content of the norm at the moment of action excludes the possibility of its use in the process of assessing the behaviour of the perpetrator. This limitation not only results from the principle of *nullum crimen sine lege*[25] but also finds a deeper practical justification. It is impossible to require a certain behaviour from someone but at the same time not give him a chance to recognise what the behaviour should be. Therefore, at the level of defining the scope of competence for standardisation, it is necessary to reject all of those jurisdictional principles that are based on future and uncertain circumstances.

B. Lack of possibility to weigh the principles of jurisdiction

Even when, based on the realities of a given social situation, it is possible to determine which jurisdictional principle is applicable, doing so will not eliminate the conflict of jurisdiction.[26] In international law, there is no universally accepted hierarchy in this respect.[27] In the case of the Lotus tanker,[28] the Permanent Court of International Justice has unequivocally indicated that the only circumstance limiting the state's exercise of competence is the sovereignty of other states and

[25] Mohamed Shahabuddeen, "Does the Principle of Legality Stand in the Way of Progressive Development of Law?" (2004) 2 J Int'l Crim Just 1007, 1008; Franz von Liszt, "The Rationale for the Nullum Crimen Principle" (2010) 5 J Int'l Crim Just 1010.

[26] Jack L Goldsmith, "Against Cyberanarchy" (1999) 40 University of Chicago Law Occasional Paper, 1, 16.

[27] Ryngaert (n 5) 271; Florian Jessberger, W Kaleck, *Concurring Criminal Jurisdictions under International Law, The European Center for Constitutional and Human Rights (ECCHR)*, <https://www.ecchr.eu/fileadmin/Gutachten/Expert_Opinion_Concurrent_Jurisdictions_en_Verantwortung_Voelkerstraftaten.pdf> (accessed 5 November 2018); *General principles of international criminal law, ICRC Advisory Service on International Humanitarian Law,* <https://www.icrc.org/eng/assets/files/2014/general-principles-of-criminal-icrc-eng.pdf> (accessed 5 November 2018), 1; *Tallin* (n 2) 56.

[28] *Lotus Case, Publications of the Permanent Court of International Justice. Series A.-No. 70, September 7th, 1927, Collection Of Judgments, The Case of the S.S. LOTUS,* <https://www.icj-cij.org/files/permanent-court-of-international-justice/serie_A/A_10/30_Lotus_Arret.pdf> (accessed 5 November 2018); Schmitt and Vihul (n 2) 1650.

the binding norms of international law.[29] In practice, this ruling means that in the event of a conflict of jurisdiction, diplomatic pressure and the speed of the state's actions are crucial. There are no precise criteria that would allow us to clearly state which country has a stronger power to regulate. The victim of the above situation is first an individual who remains in a situation of uncertainty—even when it is determined which jurisdictional principles apply to his or her activity. A person who resides in the territory of Germany who downloads data protected by copyright from a site whose content is stored on servers located in the United States will thus not be able to determine which law is binding on him or her. Moreover, to demonstrate their own competence in the field of regulation and criminalisation of behaviour, both Germany and the US will invoke the principle of territoriality in its objective variant.[30]

Thus, application of the traditional jurisdictional principles does not allow for the resolution of the fundamental problems associated with the method of attributing responsibility for crimes of a cross-border nature.

IV. Jurisdictional links as arguments for the existence of state competence

In the doctrine of international law, the thesis according to which state competences are limited only by the sovereignty of other entities and the binding norms of international law is commonly accepted.[31] It is most clearly expressed in the Lotus judgment already discussed. These powers of the state are derived from sovereignty. From the perspective of the present study, the most important of them

[29] *Lotus Case* (n 28): "It does not, however, follow that international law prohibits a State from exercising jurisdiction in its own territory, in respect of any case which relates to acts which have taken place abroad, and in which it cannot rely on some permissive rule of international law. Such a view would only be tenable if international law contained a general prohibition to States to extend the application of their laws and the jurisdiction of their courts to persons, property and acts 'outside their territory, and if, as an exception to this general prohibition, it allowed States to do so in certain specific cases. But this is certainly not the case under international law as it stands at present. Far from laying down a general prohibition to the effect that States may not extend the application of their laws and the jurisdiction of their courts to persons, property and acts outside their territory, it leaves them in this respect a wide measure of discretion which is only limited in certain cases by prohibitive rules; as regards other cases, every State remains free to adopt the principles which it regards as best and most suitable". See also: Ryngaert (n 5) 22–6; Christopher Greenwood, "Sovereignty: A View from the International Bench" in Richard Rawlings, Peter Leyland and Alison Young, *Sovereignty and the Law: Domestic, European and International Perspectives* (OUP 2013) 258; Roman Kwiecień, *Teoria i filozofia prawa międzynarodowego* (Difin 2011) 115.

[30] *Extraterritorial* (n 4) 446; Hannah L Buxbaum, "Territory, Territoriality, and the Resolution of Jurisdictional Conflict" (2009) Articles by Maurer Faculty, Paper 132, 642; David G Post, "Against "Against Cyberanarchy" (2002) 17 Berkeley Tech LJ 1365, 1381; Daskal, The Un-Territoriality (n 18) 326; Kohl (n 18) 11.

[31] Zając (n 15) 73.

are the right to regulate behaviours[32] and the right to impose punishment on an individual.[33] Together, they constitute the law of punishment (*ius puniendi*).[34] The state can prohibit specific behaviour under the threat of punishment (regulatory aspect *ius puniendi*) and punish a person breaking this prohibition (repressive, procedural aspect of *ius puniendi*). The two competences are coupled together such that the imposition of punishment is possible only when the behaviour of the offender constitutes a violation of the law binding him or her at the moment and place of action or omission.

To effectively enforce the law, the state tries to show that a given social situation influences the interpersonal relationships under its protection.[35] This approach is the surest means of avoiding the accusation that its actions interfere with the sphere of exclusive rights of other states. If a given situation is connected, even non-exclusively, with the X-state, then it cannot be said that the state of Y has exclusive power over it. For this purpose, the state refers to the existence of certain elements of social situations which, from the perspective of international law, testify to the relationship that exists between them and the social situation. These elements (*e.g.*, territory and citizenship) are referred to as jurisdictional links.[36] They form the basis for validation arguments (regulatory aspect) and penalisation arguments (repressive aspect). The more important the relationship becomes the stronger will be the state's claim to set the norm or punish violation of the law.

In addition to the interests of particular states, in the process of defining the limits of spatial effectiveness of norms, it is necessary to consider the individual's rights. The individual has its own interests, the existence of which has been recognised and which are protected by the international system of human rights protection.[37] Therefore, these interests must be considered in the frames of the

[32] Willis L M Reese, "Legislative Jurisdiction" (1978) 78 Colum L Rev 1587; Austen L Parrish, "Evading Legislative Jurisdiction" (2013) 87 Notre Dame L Rev 1673, 1677; John H Knox, "A Presumption Against Extrajurisdictionality" (2010) 104 Am J Int'l L 351, 355; John H Knox, "Legislative Jurisdiction, Judicial Canons, and International Law" (2009) 100 Wake Forest Univ Legal Studies Paper No. 1349127, 2.

[33] Anthony Duff, "Responsibility, Citizenship and Criminal Law" in Anthony Duff & Suart Green (eds), *Philosophical Foundations of Criminal Law* (OUP 2011) 127.

[34] *Extraterritorial* (n 4) 456; Tomasz Ostropolski, *Zasada jurysdykcji uniwersalnej* w *prawie międzynarodowym* (Instytut Wydawczniczy EuroPrawo 2008) 20; Michał Płachta, Jurysdykcja państwa w sprawach karnych wobec cudzoziemców (1992) 111/112 Studia Prawnicze 98.

[35] Kohl (n 18) 20.

[36] Treppoz (n 14) 275; Marek Wasiński, Jurysdykcja legislacyjna państwa w prawie międzynarodowym publicznym, (2002) 673 Państwo i Prawo 56, 61; Knox, Legislative (n 32) 102; Kohl (n 18) 15.

[37] Hathaway (n 15) 146; Cohen (n 15) 178–9; Alette Smeulers and Fred Grünfeld, *International Crimes and Other Gross Human Rights Violations: A Multi- and Interdisciplinary Textbook* (Brill Nijhoff 2011) 7; Jackson (n 15) 124.

validation and penalisation discourses. The individual has the right to become acquainted with the content of the binding law. He or she has also a right to act within the limits of a compatible legal system.[38] Any ambiguity with respect to the validity of standards cannot have negative consequences for the individual. This requirement is particularly emphasised in the case of criminal law regulations. To this extent, the values protected by human rights are the basis of negative validation or penalisation arguments. They do not support the claim of any sovereign entity, but only block some of them—in the event of their being contrary to the content of human rights.

Only the joint consideration of positive and negative penalisation and validation arguments allows us to determine whether a given country has the power to regulate a given social situation or to punish a violation of law.

A. Concept of jurisdictional links and the specificity of behaviour undertaken in cyberspace

The discursive approach[39] outlined above can be successfully applied in defining the limits of state authority over the behaviour of the Internet. To this end, certain specific features of social situations that occur in cyberspace are considered.

The central point for considering the scope of jurisdiction of a state is the individual's behaviour and its consequences,[40] referred to collectively as the social situation. Such a "social situation" is a phenomenon occurring in a space-time composed of many elements. Some of them can constitute a relationship between the social situation and the state (they are referred to above as jurisdictional links). The implementation of the behaviour using the Internet does not modify the above

[38] Beth Van Schaack, "Crimen Sine Lege: Judicial Lawmaking at the Intersection of Law and Morals" (2008) 97 Geo LJ 119, 172–88; Shahram Dana, "Beyond Retroactivity to Realizing Justice: A Theory on the Principle of Legality in International Criminal Law Sentencing" (2008–2009) 99 J Crim L & Criminology 857, 867.

[39] Andrzej Grabowski, *Juristic Concept of the Validity of Statutory Law A Critique of Contemporary Legal Nonpositivism* (Springer 2013) 455.

[40] The perception of the Internet network as a separate space should be rejected—this approach does not explain anything, at the same time making it difficult to rationally assess the relationship between behaviour and the state seeking to normalize or punish. In the literature, it is rightly recommended to move away from the metaphor of "space" for Internet infrastructure. On the basis of this study, the term "cyberspace" is used only as a shorthand, describing the social situations that are undertaken with the usage of the Internet infrastructure. See Dan Hunter, "Cyberspace as Place and the Tragedy of the Digital Anticomons" (2003) 91 California Law Review 439, 447–52; Treppoz (n 14) 280.

perspective.[41] Additionally, in the case of Internet crimes, the state's competences are limited to exerting a specific influence on the behaviour of individuals. The point of reference is not cyberspace[42] but rather the social situation—or, more broadly, the crime in which the individual takes part. Cyberspace as such is not subject to regulation—just as the seas are not regulated—but rather only the behaviour of seafarers sailing on ships.[43]

The use of cyberspace for undertaking behaviours, however, results in the transformation of the social meaning of the elements of a social situation that constitutes jurisdictional links. It is possible to indicate here three important modifications.

First, as a rule, in the case of cybercrimes, the physical location of the perpetrator is different from where the socially significant effect of their operation occurs.[44] In the pre-Internet era, the behaviour of the perpetrator affected above all the people around him. Hence, the territory in which he undertook the behaviour was a very important jurisdictional link. Currently, the fact of commission might be invisible to nearby surroundings. A link in the form of the place that a behaviour occurs therefore loses its significance.

Second, the range of the social effects of crime is now widening, becoming available to a wide and undefined number of potential recipients.[45] An example is that placing illegal software on a public Internet server has social effects in many

[41] Such approach is widely represented in the literature. See *inter alia*: Goldsmith (n 26) 32: "Transactions in cyberspace involve real people in one territorial jurisdiction either (i) transacting with real people in other territorial jurisdictions or (ii) engaging in activity in one jurisdiction that causes real-world effects in another territorial jurisdiction. To this extent, activity in cyberspace is functionally identical to transnational activity mediated by other means, such as mail or telephone or smoke signal.". See also: Joel P Trachtman, "Cyberspace, Sovereignty, Jurisdiction, and Modernism" (1998) 5 Indiana Journal of Global Legal Studies 561, 568. In opposition, see: Post (n 30) 1365.

[42] There is also a different approach in the literature, see, among others: Zekos (n 13) 1–2.

[43] The metaphor of the sea is very often used to describe cyberspace, see, among others: Treppoz (n 14) 273–4; Kohl (n 18) 40; Kulesza (n 2) 19.

[44] Michael E O'Neil, "Old Crimes in New Bottles: Sanctioning Cybercrime" (2009) 9 Geo Mason L Rev 237 263.

[45] Zekos (n 13) 6; Mike Keyser, "The Council of Europe Convention on Cybercrime" (2003) 12 J Transnational Law & Policy 287, 294.

countries. This example, in turn, entails a situation in which many states can exert a claim to regulate or impose punishment for the behaviour of the individual.

Third, a characteristic feature of the behaviours undertaken on the Internet is the lack of predictability of the range of consequences and of their multiple locations.

The change in the spatial scope of the social effect of the perpetrator's behaviour and the unpredictability of this scope entail the modification of the scope of state competences.[46] The state claims the right to regulate or punish a given behaviour due to the influence that this behaviour has on social relationships covered by the protection of that state. Although in the pre-Internet era, the physical presence of the perpetrator determined the extent of such influence, physical presence has marginal significance at present.

In the course of the validation and penalisation discourse, traditional arguments (*e.g.*, referring to the place of behaviour) and characteristics for online realities (*e.g.*, based on the location of the server) are intertwined with each other. All of them must be evaluated from the perspective of the interests they describe. Thus, one can formulate reasonable arguments— subject to weighing and considering the interests of both states and individuals—in isolation from rigid jurisdiction rules.

The adoption of the above approach appears justified for two reasons.

First, in the absence of a set hierarchy of jurisdictional principles, entering individual elements of the social situation into their content is pointless. Doing so only leads to the blurring of the differences between important and negligible social interests. At the same time, it does not constitute any added value.

Second, one cannot lose sight of the issue considered here, which concerns the power of the state over the individual. The discursive approach allows for the inclusion of negative arguments based on the values recognised by international law, which are protected by human rights.

The use of a single category (an interest) instead of many jurisdictional principles allows for the construction of universal and more-flexible validation and penalisation arguments. Determining the interests that underlie such arguments enables the meaningful weighing of such arguments. Bearing in mind the above, it appears necessary to transfer the analysis from the level of principles to the level of jurisdictional links (interests).

Further considerations are addressed from the perspective of the two functions that these links perform in the process of introducing and enforcing penal regulations. First, from the perspective of competence to legislate (legislative jurisdiction), they are elements of validation arguments decisive for the effectiveness

[46] See *inter alia* Daskal, Borders (n 18) 185–6.

of norms binding the individual. Second, in terms of the right to enforce the law (*ius puniendi sensu stricto*), they justify extending court jurisdiction to the perpetrator and imposing a penalty on him under the majesty of law. Such distinction is important because in the doctrine of criminal law, the distinction between the validation and penalisation arguments is often omitted. This omission, in turn, results in the transfer of structures based on the fiction of the place committing the act (effective territoriality)—which constitutes an element of penal argumentation—to the plane of validation.

B. Jurisdictional links as validation arguments

A feature of a legal norm is validity.[47] The fact that the standard is in force implies an obligation of the individual to proceed in a certain manner, as described in the standard. The question of whether (and to what extent) a given sentence of a directive character is binding is determined by the validation grounds (arguments).[48] Indication can be made here to establish a norm in accordance with the procedure,[49] but also—most important from the perspective of the considerations discussed here—acting within the limits of the competence of the state.[50] Such limits are defined precisely by referring to jurisdictional links.

To regulate a given social situation, the legislator uses the following (simplified) argumentation.

1. A potential social situation X is characterised by a connection with the state of Y either because the individual performing the behaviour is a citizen of state Y; because behaviour leads to interaction with the citizens of state Y; or because the place of behaviour is the territory of state Y.

2. Hence, the potential social situation of X remains within the competence of the State of Y.

3. Thus, state Y has the right to regulate how the individual shall behave in the potential social situation of X.

To make a reasonable decision about the spatial scope of the norm, it is necessary to construct such a validation argument, which is effective at least when

[47] Kelsen (n 21) 267.
[48] Grabowski (n 39) 445; Zając (n 15) 38.
[49] Grabowski (n 39) 489.
[50] Zając (n 15) 39.

the perpetrator behaves.[51] Because the norm is to provide specific instructions to an individual, its content cannot remain undefined for the moment of action or omission. Enforcement of law against an individual is not meant to build the state's international position but rather to regulate social relationships. Such an approach translates directly into the criteria for the admissibility of validation arguments raised in the discourse. They can only be based on circumstances that are recognisable to a model citizen at the time of his or her behaviour.

Recognition does not mean, however, the existence of such a circumstance at the moment of action or omission. In practice, however, it is occasionally possible to predict future interference that will occur with high certainty. This accuracy will occur in two cases.

First, the perpetrator acting outside the territory of state X makes a targeted attack on objects located in its territory.[52] For example, knowing where the server is located and who owns the data, a hacker might try to break into an Internet server located in the US to destroy important data and cause harm to the property of an American firm.

Second, the act of the perpetrator can, by its very nature, be associated with the induction of a specific consequence, the extraterritorial nature of which will be highly probable. For example, a person can create an online auction in which one can buy material promoting Nazism,[53] and the auction website will be available from anywhere in the world. In both cases, it will be possible to determine at the moment of behaviour that the behaviour of the perpetrator will affect the social situation of another country. In these cases, constructing a valid validation argument is not excluded, because of predictability of circumstances, which constitutes a jurisdictional link.

In contrast, all elements of a social situation whose future occurrence is not predictable for a model citizen cannot form the basis of an effective validation argument. Because the content of the norm is to shape the perpetrator's behaviour,

[51] Carly Henek, "Exercise of Personal Jurisdiction Based on Internet Web Sites" (2000) 15 St John's Journal of Legal Commentary 139, 145; Scott Isaacson, "Finding Something More in Targeted Cyberspace Activities", (2016) 68 Rutgers U L Rev 905, 914.

[52] Cindy Chen, "United States and European Union Approaches to Internet Jurisdiction and Their Impact on E-Commerce" (2004) 25 U Pa J Int'l L 423, 431; Treppoz (n 14) 282; Emily Lanza, "Personal Jurisdiction Based on Internet Conracts" (2000) 24 Suffolk Transnational L Rev 125, 127; *Calder v Jones*, 465 U.S. 783 (1984) <http://cdn.loc.gov/service/ll/usrep/usrep465/usrep465783/usrep465783.pdf> (accessed 5 November 2018); Suomputer Law Review and Technology Journal 2003, vol. VIII at 51; Frank B Arenas, "Cyberspace Jurisdiction and the Implications of Sealand" (2003) 88 Iowa L Rev 1165, 1186; Isaacson (n 51) 919.

[53] *Yahoo! Inc. v La Ligue Contre Le Racisme et L'antisemitisme* 433 F.3d 1199 (9th Cir. 2006) <https://caselaw.findlaw.com/us-9th-circuit/1144098.html> (accessed 5 November 2018) (*Yahoo! v LICRA*). See also: Allen (n 3) 70–5; Hathaway (n 15) 1186; Kohl (n 18) 93.

its validity must be based on such relationships between deed and territory; that is, they must be noticeable *ex ante*.

The catalogue of validation arguments (jurisdictional links) is open. Nothing prevents a state from claiming to regulate a given social situation, for example, because that situation is connected with a high probability of causing some type of effect within its territory.[54] International law does not introduce any limits in this area. Many states might theoretically invoke many different elements of the same social situation and, on this basis, make claims to regulate this situation.

C. Jurisdictional links as penal arguments

The occurrence of jurisdictional links also justifies the imposition of punishment on a person who has committed violations of the applicable law. The state claims the competence to punish specific behaviours because of the negative effect they had on the social relationships under its protection. In this case, the state does not fulfil the right to normalise the social situation but only the competences to perform the functions of criminal law: retributive, compensatory, and protective functions.[55]

In the case of *ius puniendi*, the argumentation for the existence of competences on the side of the state is constructed a little differently:

1. An act of perpetrator X is characterised by a relationship with state Y either because the perpetrator X is a citizen of state Y; because the act violates the interests of state Y or interests protected by state Y; or because the place of committing the act or its consequences is the territory of state Y.
2. Hence, the act of perpetrator X remains within the competence of the State of Y.
3. Thus, state Y has the right to impose punishment on the perpetrator X.

As a social phenomenon, crime is not limited to the behaviour of the perpetrator. It consists of several other circumstances, such as the result or the fact of victimisation, which have a subsequent nature. Although they influence the

[54] Chen (n 52) 435.

[55] Jan Jodłowski, *Zasada prawdy materialnej w postępowaniu karnym. Analiza w perspektywie funkcji prawa karnego* (Wolters Kluwer 2015) 248–312; Christopher W Mullins and Dawn L Rothe, "The Ability of the International Criminal Court to Deter Violations of International Criminal Law: A Theoretical Assessment" (2010) 10 Int'l Crim L Rev 771, 776–84; Peer Stolle, Tobias Singelnstein "On the Aims and Actual Consequences of International Prosecution of Human Rights Crimes" in Tobias Singelnstein *et al* (eds), I*nternational Prosecution of Human Rights Crimes* (Springer 2007) 38–56; George P Fletcher, *Basic Concepts of Criminal Law* (OUP 1998) 12.

assessment of the behaviour of the perpetrator, they are not completely dependent upon him from the perspectives of place and time.

Responding to the need for punishment, the state acts reactively to the behaviour that has already occurred. There is no need to regulate the behaviour of the perpetrator *ex ante* (in fact, doing so is impossible), but only to apply to that behaviour an appropriate means of response, ensuring the implementation of the criminal law function (*ex post* perspective). The social situation lost its potential character and became real. All important elements that can indicate the relationship of the event with the state have occurred and are possible to prove. There is no uncertainty, which was an inseparable feature of a potential social situation.

Creating penalisation arguments based on circumstances that are not recognised by the perpetrator *ex ante* does not necessarily mean excessive restriction of the rights of the individual. The condition for imposing a penalty is to show that the perpetrator act was an infringement of the law binding him at the time of the action or omission.[56] For this purpose, it is necessary to perform validation argumentation to determine the content of the norm regulating a given behaviour. If it is determined that the perpetrator had the right to behave as he behaved, imposition of punishment will be impossible. Individual legal systems even introduce special legal instruments, collectively referred to as the requirement of double criminality. It follows from the above that each state can exercise its competences to a large extent but only on the condition that the basis for its assessment will be a standard coinciding with the norm binding the individual at the time of action.

V. Jurisdictional links included in the jurisdictional principles as validation and penalisation arguments

Analysing the normative content of the jurisdictional principles shaping the scope of the criminal jurisdiction of individual states, it is possible to derive those elements of social situations from them that are in fact jurisdictional links.[57] To switch from a model based on principles to a discursive model, which is based on

[56] Zając (n 15) 260.
[57] See also: Daskal, Borders (n 18) 227.

weighing the significance of links, it is necessary to extract the jurisdictional links from the jurisdictional principles.

A. Territoriality principle

The basis of the principle of territoriality is the space in which an act is committed or, more broadly, a crime occurs. Thus, the territory plays the role of a jurisdictional link. In the course of development, the principle of territoriality has lost its homogeneous character. Currently, its two variants are distinguished: simple and effective.[58]

In the case of the simple variant of the territoriality principle, the territory is understood as a place of a presence of the perpetrator at the time of his act or omission. From this perspective, a person who from his flat in Berlin publishes paedophile content on an American server commits his or her action on the territory of Germany. The link in the form of territory thus understood constitutes an extremely strong basis for validation and penalisation arguments. The state, as a sovereign entity, has as a rule the right to supervise all aspects of social life that occur within its borders.[59] In the pre-Internet era, the effects of the crimes committed above all affected the closest surroundings of the place in which the perpetrator acted. Thus, the place of action or omission coincided with the place in which the public order was breached. These points all speak in favour of granting a territorial connection a very significant meaning. Not without significance is the fact that a territorial connection is also characterised by the highest stability and recognisability.

In addition to the principle of territoriality in a simple approach in the doctrine of international law, the principle of effective territoriality also developed.[60] The jurisdictional link in the form of territory is understood here as the place in which the consequences of a specific act or abandonment of the perpetrator occur. In this case, the states use the fiction of committing an act on their own territory, citing other circumstances than the place of the perpetrator's physical presence.[61]

Classically defined territoriality refers to one circumstance—the presence of the individual in space. Within this approach, there can be no conflict of jurisdictions—science does not address cases of bilocation. The case of effective territoriality is different; the relationship between crime and state is to be

[58] August (n 3) 537; Ryngaert (n 5) 76; Keyser (n 45) 300; Hathaway (n 15) 1840; Kohl (n 18) 24.

[59] *Extraterritorial* (n 4) 446; Treppoz (n 14) 275; Zekos (n 13) 7; Kriangsak Kittichaisaree, *Public International Law of Cyberspace* (Springer 2017) 24.

[60] *Tallin* (n 2) 57; Hafen (n 6) 216; *Extraterritorial* (n 4) 446; Ireland-Piper (n 5) 78; Post (n 30) 1381–4; Podgor (n 11) 730; Kohl (n 18) 89–94.

[61] Ryngaert (n 5) 75.

demonstrated by the occurrence of a specific effect in its territory. Such criteria are extremely diverse. For example, such an occurrence might take the form of, among others, the place of damage,[62] the location of the server on which the data are stored,[63] or the availability of certain content posted on the Internet from the territory of the state.[64]

The diverse nature of the elements that constitute the principle of territoriality in its effective approach will affect the diversification of the strength of the validation and penal arguments based on them (the method of weighing them will be presented in the last part of the work).

As indicated above, the essential feature of the jurisdictional link constituting the basis of the validation argument is its recognisability at the moment of undertaking the behaviour. Such a circumstance is certainly a place to evaluate the behaviour.[65] However, there is a serious doubt concerning whether these elements of the social situation can be treated similarly. This doubt forms the basis for links drawn from the principle of effective territoriality. They are subsequent to behaviour. Here, the important element connecting behaviour with the territory is the change actually caused by the perpetrator's previous behaviour. For obvious reasons, previous behaviour cannot be simultaneous with the behaviour itself. The circumstance that underpins the principle of effective territoriality often cannot be the basis for an effective validation argument.

Circumstances derived from the content of the principle of effective territoriality, however, can successfully co-create penalisation arguments. The essence of a crime is to do evil, which is its consequence. The enforcement of the punishment is subsequent to the act. It only requires demonstrating that the behaviour has had a specific effect on internal social relationships. The space that this evil affects is a very important point of reference from the perspective of criminal law objectives. After all, it is the community of this place that has been harmed, and it is the prerogative of the community to satisfy the sense of justice. The stronger the influence of the crime on a given country's population, the stronger the claim to impose a penalty for it.

B. Personality principle

The basis of the personality principle is the relationship existing between the individual and the state. That relationship has an autonomous character and is independent of the place in which an individual is at the time of action

[62] Chen (n 52) 435; Treppoz (n 14) 276.
[63] See *inter alia*: Goldsmith (n 26) 21.
[64] *Yahoo! v LICRA* (n 53).
[65] Kohl (n 18) 144.

or omission. The personal bond is considered here from the perspective of the relationship between the addressee of the norm and the state.[66] The person against whom the state claims the right to regulate behaviour or impose punishment must have a feature that testifies to its relationship with the state exercising competences. In fact, every state claims a competence to exercise to some extent power over individuals who have a special relationship with them. One aspect of this approach is the extension of state authority to individuals' behaviour abroad.[67] States thus discipline their citizens or other dependent individuals.

In the case of the analysed link, there is a noticeable difference between its significance as an element of the validation argument and the significance of a penalising argument based on it.

A personal relationship can become the basis for a validation argument. Its existence is recognisable *ex ante*—the person executing the behaviour will usually be aware of his nationality or permanent residence. However, this argument is relatively weak. In most cases, in the course of a validation discourse, it will give way to an argument based on a territory connector. It is impossible to imagine that a person travelling from State X to the State of Y would somehow transfer the entire legal system binding that person in his homeland. One cannot require the person to, for example, drive the vehicle with the left hand in right-hand traffic (this point is important, for example, in determining who is the perpetrator of a car accident). Behaviour must be consistent with how the community operates.

In practice, however, there will be a certain group of norms, the extraterritorial effectiveness of which will be possibly based on the personal link. They refer to situations in which the behaviour of the individual is morally reprehensible from the perspective of the value system of the forum state and at the same time constitutes an expression of an individual decision of the perpetrator (and is not the result of necessary involvement due to, for example, the nature of social life). Such situations include, for example, acts of a paedophile nature, from which the state will be able to ban its citizens.[68]

The significance of the penal argument based on personal bond is different. The argumentation for extending the law is additionally strengthened by various circumstances. The community has a strong need to account for the evil performed

[66] *Tallin* (n 2) 62.

[67] Lanza (n 52) 126; Ryngaert (n 5) 90; Hafen (n 6) 218; Titi Nguyen, "A Survey of Personal Jurisdiction Based on Internet Activity: A Return to Tradition", (2004) 19 Berkeley Tech LJ 519, 520; Keyser (n 45) 315; According to the Article 22 of the Convention on Cybercrime. Reference, ETS No.185. Opening of the treaty, Budapest, 23/11/2001: "Each Party shall adopt such legislative and other measures as may be necessary to establish jurisdiction over any offence established in accordance with Articles 2 through 11 of this Convention, when the offence is committed: [...] by one of its nationals, if the offence is punishable under criminal law where it was committed or if the offence is committed outside the territorial jurisdiction of any State".

[68] Keyser (n 45) 306.

by a person who is part of such a community. Moreover, in view of the growing respect of the principle of *ne bis in idem*, associated with the ban on the issue of own citizens,[69] imposing a punishment is often the only instrument to satisfy the social sense of justice.

C. Passive personality principle

The principle of passive personality is in a sense the reverse of the principle of active personality. In this case, the competence for regulating and imposing punishment is based on the relationship between the State and the entity whose good has been violated by the offense (victim). The point of reference is here infringed legally protected values (life, health, property, but also the right to be forgotten),[70] which can be linked to a specific state by a person who is a disposer of such values (*e.g.*, the owner of a thing).[71] The state claims the right to protect the interests of entities that undertake their activities under the protection of such state's jurisdiction. The scope of this protection is defined not only by the place of specific activity or passivity but also by the nationality of the persona or the place of registration of the legal entity.[72]

The use of the abovementioned personal link as the basis for the validation argument entails significant problems. The perpetrator until the moment of action does not remain in any relationship with the forum state. At the same time, it is often unpredictable ex ante whose property will be involved in a given future social situation. In many cases, the perpetrator has no real opportunity to recognise the nationality of the person with whom he or she engages in a specific social situation, *e.g.*, proposing the presentation of pornographic content. This ambiguity is particularly common in the case of interaction in cyberspace, in which the principle is anonymity. Moreover, information distributed via the Internet influences an undefined group of people, each of whom can be subject to the protection of a different legal system. Even when it is possible to unambiguously determine ex ante the circle of entities to which a given information arrives, the question arises concerning the possibility of a sensible solution towards which the state will have the competence to regulate such behaviour.

The doubts outlined above are missing if the analysed link is considered the basis of the penal argument. The claim to impose a penalty will be justified by the

[69] Ryngaert (n 5) 90; *Extraterritorial* (n 4) 448.
[70] Daskal, Borders (n 18), 209.
[71] Watson (n 6) 18; Hafen (n 6) 218; McCarthy (n 6) 301; August (n 3) 541; *Tallin* (n 2) 64.
[72] *Extraterritorial* (n 4) 451; Zając (n 15) 423.

fact that the entity being under state protection is harmed.[73] However, such claim is no longer as strong as in the case of effective territoriality. The crime committed there indirectly affected the national public order. In the case of a connector based on the "origin" of a legal good, such a circumstance does not constitute a connecting entity.

D. Protective principle

The protective principle is based on a jurisdictional link in the form of essential state interests.[74] The criterion of the disposer of legally protected value, inscribed in the content of the principle of passive personality, is here supplemented with additional elements clarifying the character of the good itself. In the classical approach, the analysed principle referred to those interests whose security conditions the existence of the state as a sovereign political organism.[75] In the second half of the twentieth century, individual countries also began to refer to the need to protect values of a supra-individual character, whose security lies in the interest of the state due to the benefits (for example, securing the market balance by prohibiting the corruption of own entrepreneurs).[76]

Depending upon the type of interest appearing in a given social situation as the base of the argument, the strength of the validation or penalising argumentation is different.

The state has strong competences to normalise these behaviours, which are directed at interactions with legally recognised interests of such a state.[77] There is no doubt that state X is entitled to regulate the question of addressing data on government servers or to determine the procedure for obtaining access to such data. Only state X is interested in the proper protection of this sphere of public life. At the same time, there will be no element of uncertainty here in principle.

[73] Regula Echle, "The Passive Personality Principle and the General Principle of Ne Bis In Idem" (2013) 9 Utrecht L Rev 56, 57.

[74] *Extraterritorial* (n 4) 451; Matthew Garrod, "The Protective Principle of Jurisdiction over War Crimes and the Hollow Concept of Universality" (2012) 12 International Criminal Law Review 763, 776; Edward T. Meyer, "Drug Smuggling and the Protective Principle: A Journey Into Uncharted Waters" (1979) 39 Louisiana L Rev 1189, 1190; Slomanson (n 5) 252; *Tallin* (n 2) 63.

[75] Hafen (n 6) 217.

[76] *Extraterritorial* (n 4) 454. The global nature of the interests (legal goods) determined in this way means that in the analyzed scope the protection principle is sometimes identified with the principle of universal jurisdiction. However, this approach does not seem legitimate. In the case of a protective principle, the state relies on a supranational good and undertakes to establish specific regulations in this respect. In the case of a universal rule, these regulations are derived from customs and general principles of law.

[77] *Extraterritorial* (n 4) 451; Ryngaert (n 5) 97; Jared Beim, "Enforcing a Prohibition on International Espionage" (2018) 18 Chi J Int'l L 647, 670.

State legal goods have a special character and thus are recognisable—for example, due to the domain address or by the introduction of used signs (for example, by the official stamp "secret").

The situation will be slightly different in the case of supra-individual goods, somehow inscribed in the content of the existing jurisdictional principle. They are not reflected in objectively perceived reality. A legal good such as "market equilibrium" lacks a tangible substrate, which can lead to a lack of identifiability of the relevant link. Moreover, based on the jurisdictional link thus described, many states can claim the competence for regulation. In fact, no state is entitled to that competence more than another, because all states indicate the same jurisdictional link.

The doubts outlined above are weakened if the link-based interest protected by the state is considered an element of the penal argument. In both the case of state interest and those cases of a transnational character, the state has a strong non-exclusive claim to impose a penalty. In the first case, that claim will result from the need to pay for the attack on the political organism. In the second country, the forum will appear on behalf of the international community interested in securing a particular interest.

E. Vicarious jurisdiction

The essence of the principle of substitute criminalisation is to impose a punishment in the name of the originally authorised state.[78] Under this principle, the forum state imposes a penalty if the perpetrator of a crime committed abroad is currently on its territory.[79] The circumstance that is the basis of the competence, remain in the country—it is not related to the perpetrator's behaviour itself, or even with its result. Therefore, the circumstance cannot be the basis for constructing an effective validation argument.

A penal argument in fact refers to the element of territory.[80] In this case, the state grants itself the power to punish the perpetrator due to the need to protect its own society and public order against further attacks by the perpetrator remaining

[78] Ryngaert (n 5) 102–3; Extraterritorial (n 4) 452.

[79] Ryngaert (n 5) 106.

[80] Michał Płachta, "Zastępcza represja karna w prawie polskim" in Piotr Hofmański and Kazimierz Zgryzek (eds), *Współczesne problemy procesu karnego i wymiaru sprawiedliwości: Księga ku czci Profesora Kazimierza Marszała* (Wydawnictwo Uniwersytetu Śląskiego 2003) 353.

within its borders. By imposing a punishment, the forum state also avoids the opinion of a rogue state that provides protection to criminals.[81]

F. Universal jurisdiction

The tragic events of the twentieth century brought a change in the perception of the role of states as guardians of value. Although the state was primarily responsible for safeguarding interests in its "own backyard", wars and humanitarian tragedies somehow forced states to change this approach.[82] States have taken responsibility for protecting certain universally recognised values (basic moral values) against the most serious categories of violations.[83] Thus, recognition has acquired a new jurisdictional link that can be defined as "the universal interest of the international community".[84]

Considering this link, the basis for the validation and penalisation argument, unlike other jurisdictional linkers, one can impute the character of prohibited or prescribed behaviour into the jurisdictional link itself. Each state has the right to punish committing genocide, for example.[85] However, no state has the power to shape universal standards of conduct in this respect; this point is described in international law.[86] In this case, the role of the state is basically only in the insertion of a specific norm of international law into national legal orders. The analysed link is therefore the basis for the penalisation argument.

VI. New jurisdictional links as validation and penalisation arguments

Observing the problem of crime committed with the use of the Internet, individual states began to claim the right to regulate and punish behaviour undertaken in cyberspace based on modified jurisdictional rules. This approach essentially meant extending the application of the norms of a given country by

[81] Beim (n 77) 660.

[82] Mark Lewis, *The Birth of the New Justice: The Internationalization of Crime and Punishment 1919-1950* (OUP 2014) 80.

[83] Ryngaert (n 5) 114; Ostropolski (n 34) 47–8.

[84] Ryngaert (n 5) 106, 114; The Princeton (n 10) 28; Hafen (n 6) 219; Bassiouni (n 4) 280.

[85] Ryngaert (n 5) 116; Cynthia Sinatra, "The International Criminal Tribunal for the Former Yugoslavia and the Application of Genocide" (2005) 5 Int'l Crim L Rev 417, 417–8.

[86] August (n 3) 542.

reference to circumstances such as the location of the server or the language of the message being transmitted.[87]

The considerations presented here discuss the possibility of treating some of the "new circumstances" as autonomous jurisdictional links.[88] However, they are not comprehensive. The purpose of the argument is to show that the circumstances can be described using dogmatic tools and subjected to rational weighing.

A. Jurisdictional links related to computer infrastructure

Some states claim the right to regulate those activities performed in cyberspace that use elements of the IT infrastructure located on their territory. The claim is primarily indicated in this section for servers that collect data[89] (*e.g.*, illegal duplicate copies of software) and transmission devices.[90]

The presence of devices used to commit an act is used to prove the relationship of behaviour with the territory. This connection in turn allows us to construct effective validation and penalisation arguments, which refer to the interference of behaviour in the internal relationships of the state. The problem is, however, that the significance of the social situation in cyberspace focuses on the sender and recipient of information. The mere "storage" of a digital record, often encrypted, does not interfere with social relationships that are protected by the state of the server's location.[91] Not without significance is the fact that specific data can be stored simultaneously on many servers, located in different countries.[92]

The possibility of using the location of ICT infrastructure elements as a validation argument appears significantly limited due to the unpredictability of the transmission route or the storage location. The average user of the network will not even be able to determine the path of data transfer or where they are physically stored.[93]

The possibility of constructing penal arguments is slightly different. There will be no obstacles related to the lack of predictability here. Both the location of

87 Daskal, The Un-Territoriality (n 18) 355.

88 In the course of deliberations, the technical aspects of the Internet were omitted. In this respect, see, among others: Chen (n 52) 426–7.

89 *Yahoo! v LICRA* (n 53). See also: Chen (n 52) 447; Goldsmith (n 26) 21; Jennifer Daskal, "Law enforcement Access to Data Across the Borders: The Evolving Security and Rights Issues" (2016) 8 J National Security Law & Policy 473, 490.

90 Hunter (n 40) 477; Zekos (n 13) 14; Daskal, Borders (n 18) 188; Daskal, The Un-Territoriality (n 18) 326; O'Neil, (n 44) 254.

91 Daskal, The Un-Territoriality (n 18) 371.

92 Kirstern E. Eichensehr, "Data Extraterritoriality", (2016) 95 Tex. L. Rev. 145, 145; Daskal, Borders (n 18) 223.

93 Burk, (n 2) 123; Zekos (n 13) 15; Daskal, The Un-Territoriality (n 18) 366; Grootes (n 12) 17: "There really is no "there" there in cyberspace, but mere geographic probabilities or uncertainty".

servers and the means of data transmission can be proved during the process.[94] Moreover, the state in which the server is located has the potential to effectively block illegal content—for example, in criminal proceedings.[95]

B. Place of domain registration

Some states try to extend their jurisdiction to domain registration criteria.[96] An example is the USA.[97] Each webpage is referred to as an address ending in a so-called the top-level domain (TLD).[98] Such domains are divided into domestic domains (for example, .pl and .de) and functional domains (for example, .com and .org). The management of the TLD is performed by the ICANN organisation.[99] It has been established and operates in the US, giving the US real control over cyberspace.[100] In addition, individual countries manage national domains to a certain extent by controlling national DNS servers.[101]

Considering the criterion of the place of domain registration an element of the validation argument, wherever the address of the website is connected to the functional domain, determining the place of domain registration is virtually impossible or very difficult.[102] Lack of recognisability in this case excludes the possibility of constructing validation arguments. When the website address is based on the national domain, *prima facie* it is possible to predict the country of its registration.[103] In each case, however, the circumstance creates a relatively small relationship between the social situation and the state. A given website operating based on a specific domain lacks any social significance. Behaviour that occurs with the use of a specific domain does not interfere in principle with the internal relationships of the state of its registration.

Concerning penalisation arguments, nothing prevents such arguments from being constructed based on both the domestic and functional domains. However, the question concerning the power of such arguments remains valid. This claim

94 Xinbao, Ke (n 22) 43.
95 Zekos (n 13) 4.
96 Thomas R Lee, "In Rem Jurisdiction ind Cyberspace" (2000) 75 Wash L Rev 97, 116; Hathaway (n 15) 1827.
97 Edward Lee (n 18) 1332.
98 Thomas R Lee (n 96) 102.
99 Hunter (n 40) 479; Edward Lee (n 18) 1332; Xinbao, Ke (n 22) 43.
100 Xinbao, Ke (n 22) 51; Kulesza (n 2) 87.
101 Edward Lee (n 18) 1332; Thomas R Lee (n 96) 100.
102 Chen (n 52) 432; Hathaway (n 15) 1828.
103 Grootes (n 12) 17;

will be strengthened if it is shown that the state in question has a real possibility of blocking the domain.

C. Accessibility of data

The Internet provides one the possibility of unlimited information (data) distribution. However, some communications might be undesirable and fuel dangerous social phenomena (*e.g.*, glorifying Nazism or insulting religious feelings). Therefore, it is claimed that the state has the right to normalise and punish behaviour that leads to the creation of a message available in its territory.[104]

There are no obstacles preventing reference to the criterion of the availability of a message as a validation or penalisation argument.[105] It should be assumed that a message posted on the Internet reaches every country.[106]

The inability to reasonably rely on the accessibility argument stems not so much from the lack of predictability as from the inconclusive character. Thus, a claim to normalise or punish the same behaviour can be reported by several dozen countries. In this situation, it is impossible to determine who has a stronger power.[107]

In practice, reference to the criterion of the availability of a message will be reduced to demanding such a narrowing of its scope that it will not be available in the territory of a given country.[108] Such a request is, however, made not under criminal law but under private or administrative law. Moreover, the recipient of the request will not be the perpetrator here but rather the person who has the

[104] *Dow Jones and Company Inc v Gutnick* [2002] HCA 56; 210 CLR 575; *Yahoo! v. LICRA* (n 53); ECJ Hedjuk C-441/13 (2015). See also: Allen (n 3) 74; Chen (n 52) 434; Treppoz (n 14) 277; Edward Lee (n 18) 1288; Lanza (n 52) 132; Kohl (n 18) 47.

[105] The criterion for the availability of the message was used by France in the dispute with Yahoo! (*Yahoo! v LICRA*, n 53). The portal offered Nazi souvenirs in its auction house, the sale of which was prohibited in France. Among the many steps to block the auction, the French prosecutor's office also initiated criminal proceedings against Timothy Koogle, a former executive director. See, among others: Chen (n 52) 448; Grootes (n 12) 3–4; Kohl (n 18) 100.

[106] *Dow Jones v Gutnick* (n 104); Chen (n 52) 423; Zekos (n 13) 6; Kulesza (n 2) 15.

[107] For these reasons, the accessibility criterion is questioned as an enabling condition of regulation. See ECJ L'Oreal C-324/09 (2011). Studies suggest replacing them with the criterion of purpose. See among others Treppoz (n 14) 282; Goldsmith (n 26) 15; Isaacson (n 51) 922.

[108] *Yahoo! v LICRA* (n 53). See also: Chen (n 52) 447; Treppoz (n 14) 277–8; Daskal, Borders (n 18) 195; Allen (n 3) 83; Charmaine H Perdon, "The Regulation of Cyberspace" (1999) 73 Phil LJ 569, 595–7; Kohl (n 18) 228–9.

technical means of modifying such a coverage (*e.g.*, administrator of the auction site on which souvenirs from the period of Nazi Germany are sold).[109]

D. Language of the message

Due to the undecidable nature of the jurisdictional link in the form of a message, some countries have begun using the criterion of language.[110] Language can be a rational criterion that narrows the circle of information recipients and clarifies the scope of its effect. Moreover, it often coincides with the national criterion.

There are no formal obstacles preventing the construction of a meaningful language-based argument—both in the validation discourse and penalisation. The question is about their persuasive power. The language of the message should be considered in those cases in which it clearly identifies the information recipient. The situation is complicated in the case of common languages, in particular English, which is currently the *lingua franca* of cyberspace. Against this background, a problem of languages is also recognised as official in a larger number of countries (*e.g.*, Spanish, English, and German). Each of them will be able to rely on the same circumstance as a validation or penalisation argument, which will create further conflicts of jurisdiction.

VII. Process of weighing arguments based on a jurisdictional link

In international law, no universally accepted hierarchy of jurisdictional links has been developed. It appears necessary to present the method of weighing their significance. It will thus be possible to compare the strengths of the arguments that are based on them. The weighing method will be slightly different in the case of both types of arguments.

In the case of validation arguments, the weighing process must lead to an unambiguous determination of which directive of conduct applies to the person in a given classification. The effect of the validation discourse should be the answer to the question, "What is the norm applicable in situation X?" The person undertaking the activity must be able to determine the unambiguous content of the law binding him or her. This requirement does not mean that there will be any

[109] Chen (n 52) 452; Edward Lee (n 18) 1330.

[110] Treppoz (n 14) 282; Susan N Exon, "Personal Jurisdiction: Lost in Cyberspace?" (2003) 8 Computer L Rev & Tech J 21, 34.

certainty here. Rather, the need to unambiguously determine the content of one binding standard will be associated with a high risk of error.

Which of the arguments (interests) in favour of the right to regulate a given situation by state X will be considered the most important must be set *in concerto*. This process occurs in two stages.

First, the nature of the interests must be considered. International law has not developed a precise method of weighing them. There are no categories that can be characterised by greater recognition or recognisability. Moreover, the claim can be supported by many validation arguments, based on various links, which will be followed by their stronger binding power. When assessing the relevance of a country's interest, it is necessary to use the so-called rule of reason,[111] which is derived from four principles of international law: the principle of non-intervention,[112] the principle of equity,[113] the principle of proportionality,[114] and the prohibition of abuse of law.[115] From this perspective, an attempt to normalise a given social situation by the state with a less significant interest (weaker argument) can be treated as a violation of international law (rule of reason) and be the subject of proceedings before the International Court of Justice.

Second, one should verify whether the claim of the state who holds the strongest arguments is not blocked by negative premise. Such a negative premise is the lack of objective predictability (foreseeability) of the occurrence of a given jurisdictional link. If a given circumstance is unrecognisable *ex ante* (at the moment of behaviour), then it cannot be the basis for a validation argument. Consequently, this argument must be rejected, which can lead to a denial of the right to regulate a given behaviour by a state. An attempt to enforce such a denied right might also constitute a violation of international law or human rights.[116]

Note also that for some norms, conflict-of-law rules apply. This point will be true primarily in the case of private law.[117] In this respect, due to the existence of precise collision solutions, reference to the general rule of reason is not necessary.

The process of weighing penal arguments will be slightly different. The effect of penal discourse should be the answer to the question, "can the court of state X punish the perpetrator of the act?" There is no need to explicitly determine

[111] August (n 3) 535; Płachta (n 34) 122; Ryngaert (n 5) 143.
[112] Ryngaert (n 5) 144.
[113] Subir K Chattopadhyay, "Equity in International Law: Its Growth and Development" (1975) 5 Ga J Int'l & Comp L 381, 392; Władysław Czapliński and Anna Wyrozumska, *Prawo międzynarodowe publiczne. Zagadnienia systemowe* (C.H. Beck 2014) 138–42.
[114] Ryngaert (n 5) 148.
[115] Ryngaert (n 5) 150–1.
[116] Zając (n 15) 255–7.
[117] Lanza (n 52) 142; Daskal, Borders (n 18), 182–3.

which state has the exclusive right to punish. International law does not know the universally binding prohibition *ne bis in idem*.[118] Theoretically, it will be possible to punish the perpetrator repeatedly for the same act by various authorised states.

Imposing a punishment on an individual in principle does not interfere in the internal relationships of a foreign country. Against this background, however, there can be a violation of human rights. It is forbidden to punish a behaviour that did not constitute a crime based on the law binding the perpetrator at the time of commitment of the act. The law that binds the perpetrator at the time and place of the act is determined based on the validation arguments. If the punishment is inflicted by a foreign state but for an act that constitutes a crime also based on the law applicable to the perpetrator, there is no breach of the principle of *nullum crimen*.

VIII. Summary

The considerations presented above allow drawing the following final conclusions. First, shifting the burden of validation discourse from the plane of jurisdiction principles to the level of weighing the interests of individual entities allows more efficient settlement of conflicts of jurisdiction. Individual interests are subject to weighing—it is possible to compare their significance. Second, the application of the method based on the weighing of interests allows avoiding the deadlock that occurs when several states invoke the same jurisdictional principle—for example, in the case of effective territoriality. Third, by referring to the rule of reason derived from the four principles of international law recognised by civilised nations, individual states can question the possibility of applying foreign law to the regulation of specific social situations. Disputes can be resolved by diplomatic channels or before international law courts.

[118] Sakowicz (n 8) 89–133; Lech Gardocki, *Zagadnienia internacjonalizacji odpowiedzialności karnej za przestępstwa popełnione za granicą* (Wydawnictwo Uniwersytetu Warszawskiego 1979) 50; Barbara Nita, "Zasada ne bis in idem w międzynarodowym obrocie karnym" (2005) 709 Państwo i Prawo 18; Janusz Tylman, "Środki przymusu w postępowaniu karnym przeciwko cudzoziemcom" in Andrzej Szwarc (ed), *Przestępczość przygraniczna. Postępowanie karne przeciwko cudzoziemcom w Polsce* (Wydawnictwo Poznańskie 2000) 43.