Beyond the Freedom of Expression in the Cyberspace based on Social Construction of Technology Perspective

Agus Raharjo[1], Rini Fidiyani[2]

[1]*Department of Criminal Law, Faculty of Law, Jenderal Soedirman University*
[2]*Department of Law and Society, Faculty of Law, Semarang State University Semarang, Indonesia*
{ agus.raharjo007, fidiyani.rini }@gmail.com

Keywords: Social Construction of Technology, Cyberspace, Freedom of Expression, Cybercrime, Anarchy

Abstract: Social construction of technology (SCOT) hold on what known as a reason for accepting or refusing technology based on social reality. When we are investigating beliefs of technology, all explanations must be symmetrical. Symmetry creates freedom of interpretation, this means there are various different interpretation of the meaning of technology among the social groups. On the other word, there is a freedom in designing towards technical solution. The problems discussed in this article are about freedom of expression in cyberspace with SCOT perspective. The research is qualitative with empiric law and technological philosophy approach. The findings obtained are: first, there has been a displacement of the philosophy from the real world (wild west) into cyberspace (wild web); second, excessive freedom of expression in the web performed by people or content in Indonesian language are dominated with cases of fraud, defamation, and crimes against decency; and third, the existing laws have not been able to solve the freedom of expression completely in cyberspace, which breaks the limit or violates the law. It takes an understanding of technological philosophy and cyberspace, ethics on using and communicating via the internet, and in the effort to establish society with good information culture.

1 INTRODUCTION

The state guarantee the freedom of expression for all citizen freely and responsible (Article 28 jo Article 28E the 1945 Constitution of the Republic Indonesia jo article 1 paragraph (1) the Law No. 9 year 1998 about the freedom of expressing opinions in public place). This regulation than confirmed through Article No. 28F, determined that every person have the rights to communicate and getting information for their individual and social community, and have rights for finding, achieving, holding, saving, processing, and delivering information by using all available media. Nevertheless, the given freedom actually is not in the truly meaning of "freedom", because the state gives their limitations. In article 28J of the 1945 Constitution of the Republic Indonesia set the limits, that is the obligation of respecting other rights in social life of nation and state orderly (paragraph (1)) and limitation are set by the law as in the meaning to guarantee the recognition and respects through other rights and freedom and for fulfilling fair demands that appropriate with moral consideration, religious value, security, and public orderly in the democratic people.

The freedom of expression finds their heaven when the internet as science product attended in society. Internet becomes media in widest expressions, cyberspace. The breadth and freedom found in cyberspace are equal with the wild west culture from American Western Frontier culture, that marked by several characteristics such as freedom, bravery, individualism, persistence, strength, abundant land, unlimited economy, minimal government role, and the absence of rules.

The freedom that exists in cyberspace is really used by netizens to express what has been forbidden in the real world, even to the extent of madness. Many countries fail to limit or censor internet content. Even said by Yen, that the government's efforts will fail because the operational nature of the decentralized internet makes it impossible for the state to become a single controller of activity in cyberspac. Difficulties in the regulation of cyberspace are also shared by Lessig and even at the extreme, Barlow said, the state has no right to regulate it.

The phenomenon of the development of anarchy in cyberspace must be analyzed in a proportional framework, must look at technical and social entities that are placed in a single analytical framework (mutual shaping). The study of the relationship between technology (technical entities) and society (social entities) or commonly referred to as social studies on technology involves the disciplines of sociology, anthropology, history and technological philosophy. The many fields of science involved in this issue indicate that technology is not a single phenomenon.

A fact that social change and technological change occur simultaneously and mutually influence (mutual shaping) to form a co-evolutionary process. This condition causes efforts to understand one requires understanding on the other. The focus of this study is the processes that lead to the diffusion of stable technology, and the social stability that supports the diffusion. Technology, from the research phase to development, diffusion in the community until technology policy is influenced by the ways in which various agents, related organizations are organized and interacted.

This paper will analyze the phenomenon of freedom of expression with law and technological analysis with a social construction of technology (SCOT) perspective. The technology that is used as a medium is not just present, it is also born through the process of social construction. In the view of SCOT, reality does not just present itself, it is built socially, constructed in such a way as to shape the reality presented before us. There are many processes to get there and the sociology of knowledge must analyze the process of occurring.

2 METHOD

This research is qualitative research with normative and empirical legal approaches to phenomena related to freedom of expression; as well as philosophical studies to examine the phenomenon in terms of technological philosophy. Research specifications are descriptive. The data used in this study primary data obtained through observation of the phenomenon of freedom of expression on the internet and secondary data on legislation and the results of previous studies. The data obtained were analyzed using qualitative analysis.

3 DISCUSSION

3.1 Freedom of Expression Guarantee in Every Regulation

Normatively, the guarantee of freedom of expression is in the constitution and various international conventions. Article 28E of the 1945 Constitution paragraph (2) determines that every person has the right to freedom of belief, expresses thoughts and attitudes, in accordance with his conscience; while paragraph (3) determines that everyone has the right to freedom of association, assembly, and issuing opinions. Then Article 28F determines that everyone has the right to communicate and obtain information to develop their personal and social environment, as well as the right to seek, obtain, possess, store, process and convey information by using available channels.

In connection with the issue of freedom of expression in cyberspace with an internet network, Article 14 of paragraph (1) and paragraph (2) of Law No. 39 of 1999 concerning Human Rights needs to be used as a back in this matter. Paragraph (1) of the article determines that every person has the right to communicate and obtain the information needed to develop their personal and social environment; whereas paragraph (2) determines that everyone has the right to seek, obtain, possess, store, process and convey information by using all types of facilities available.

Other legislation that should be mentioned in this issue is Law No. 40 of 1999 concerning the Press (Press Law), Law No. 14 of 2008 concerning Public Information Openness (KIP Law), and Law No. 11 of 2008 concerning Information and Electronic Transactions (ITE Law) jo Law No. 19 of 2016 concerning Amendments to the ITE Law. In the Press Law, it is determined that the state guarantees journalistic activities and also determines that the independence of the press as a human right of citizens and the national press is not subject to censorship, banning or prohibition of broadcasting. The UU KIP regulates the right to freedom of information that covers public information and limits the type of public information that can be accessed on the basis of "propriety and public interest". In the ITE Law and its amendments, more regulates the technical aspects of the use of electronic information and transactions using computer networks (internet), while those relating to freedom of expression are more likely to threaten the use of electronic channels for improper purposes.

The constitution and other laws also impose restrictions on the right to freedom of expression. At the level of constitutional law, this limitation is permissible, although within the framework of human rights this limitation causes actually no freedom which is absolute (non derogable rights), let alone just freedom of expression. Although freedom of expression is one of human rights that cannot be reduced in any circumstances and cannot be prosecuted on the basis of retroactive law (Article 28I paragraph (1) of the 1945 Constitution joins Law Article 4 of Law No. 39 of 1999), but this right do not escape the restrictions also stipulated in Article 28J of the Constitution (2) 1945 in conjunction with Law Article 70 and Article 73 of Law No. 39 of 1999, which means the derogable rights category. The restrictions in question are carried out in a framework to guarantee recognition and respect for the rights and freedoms of others and to fulfill fair demands in accordance with the considerations of morality, religious values, security and public order in a democratic society. Similar restrictions can be found in the Press Law, KIP Law, ITE Law, and other legislation with emphasis on material information submitted, in addition to violations of decency, insult or defamation.

When referring to international provisions, freedom of expression also receives regulatory guarantees. Article 19 of the Universal Declaration of Human Rights stipulates that every person has the right to freedom of opinion and expression which includes freedom of holding opinions without intervention and to seek, receive and convey information and ideas through any media, regardless of territorial boundaries. Similar provisions can be found in Article 19 paragraph (2) of the ICCPR, Article 10 of the European Convention for the Protection of Human Rights and Basic Freedoms, Article 13 paragraph (1) of the Convention on American Human Rights, Article 9 of the calm African Charter of Human Rights and Population Rights, and Article 23 of the ASEAN Human Rights Declaration .

In addition to guaranteeing freedom, some of these international conventions also provide limitations that need to be considered for the countries that ratify them. Article 19 paragraph (3) of the ICCPR determines that the implementation of paragraph (2) creates special obligations and responsibilities, so that they are subject to certain restrictions in accordance with the law and to the extent necessary to: a) respect the rights or good name of others; b) protect national security or public order or public morals. Similar provisions can also be found in Article 29 paragraph (2) of the Universal Declaration of Human Rights, Article 4 paragraph (1) ICCPR (specifically for countries in an emergency), Article 20 paragraph (1) ICCPR (prohibition of propaganda), Article 20 paragraph (2) (specifically for prohibition related to ethnicity, religion, race, and groups), Article 10 paragraph (2) European Convention on Protection of Human Rights and Basic Freedom, Article 13 paragraph (2) American Convention on Human Rights, and other articles at similar conventions.

Actually, these various rules are enough to uphold the rights of citizens to express or express what they want to convey. The presence of the internet that causes residents to find the right place to express what is taboo in the real world. Cyberspace with its characteristic characteristics is the right place to realize the freedom guaranteed by the constitution, even tends to be wild. This is inseparable from the weakness of law enforcement in cyberspace, and of course the structure and infrastructure of cyberspace that is built supports this.

3.2 Social Construction of Technology Understanding

Multidisciplinary studies on technology and society or that are often associated with disciplines of science and technology and communication studies produce three theories or models of technological and community co-evolution. All three theories are according to W.E. Bijker is a technology network theory, social construction of technology and actor network theory. There are two major categories in this sociotechnology theory review, namely descriptive theory and critical theory. Descriptive theory seeks to place the definition and substance of technology - how technology appears, changes and of course its relationship with humans or the social environment. More specifically, this theory seeks more broadly to see the autonomy of technology and how the power of technology determines social structure and human behavior. SCOT is in this theory category. Critical theory often takes descriptive theory as a foundation and articulates attention and questioning in what ways can change the relationship between humans and technology.

SCOT was pioneered by W.E. Bijker and Trevor Pinch in the mid-1980s whose development was inspired by constructivism in sociology of science knowledge. For Berger and Luckmann, social reality is built socially and the sociology of knowledge must analyze the process of doing so. Reality is

defined as a quality contained in the phenomena we recognize as having a being that is independent of our own will (we cannot exclude it with wishful thinking), while knowledge is defined as the certainty that the phenomenon the phenomenon is real and has specific characteristics. In short, Berger and Luckmann said that there has been a dialectic between individuals who create society and society that creates individuals. This dialectical process occurs through externalization, objectivation and internalization.

Regarding the issue of social construction in technology, Philip Brey said that "Social constructivist approaches are currently influential in both science studies. The label "social constructivism" is a sociological approach in science and technology studies". In the view of SCOT, scientific knowledge and technology are the results of the construction process and social negotiations that are driven by the interests of the participants involved. The adherents of this theory argue that technology does not determine human behavior, but human behavior shapes technology. They also argue that the way in which technology is used cannot be understood without understanding how technology is embedded in its social context.

This understanding showed that SCOT is a theory that showed how social strength in designing and developing technology. Their social world directs actors in interpreting expected technological goals and their use when requests for technological design and development are placed differently. The deterministic argument of technological economists says that technology develops following certain lanes and this lane can be predicted or at least identifiable. For Bijker and Pinch, this thesis is too far-fetched because the development of technology moves uncertainly and depends on complex social factors. If technology changes, then there are external factors that encourage it to change.

SCOT laid on four key component of SCOT'S conceptual framework, are : first, interpretative flexibility: "Technological artifacts are culturally constructed and inter-preted…, by this we mean not only that there is flexibility in how people think of or interpret artifacts but also that there is flexibility in how artifacts are designed;" second, relevant social groups are the embodiments of particular interpreta-tions: "all members of a certain social group share the same set of meanings, attached to a specific artifact; third, closure and stabilization: when the relevant social group has reached a consensus; and fourth, wider context: "the sociocultural and political situation of a social group

shapes its norms and va-lues, which in turn influence the meaning given to an artifact"

SCOT first adheres to what is understood as an excuse to accept or reject technology based on social reality. According to SCOT it is not enough to explain the success of technology by saying the best, but a researcher must see how the best is defined and who defines it. Every argument (social, cultural, political, economic, like engineering) is treated equally. When investigating trust in technology, a researcher must be in the same position between truth and justice, and all explanations must be symmetrical, unbiased.

Symmetry creates interpretative flexibility. This means that there are various and different interpretations of the meaning of technology among social groups. Because each social group has a different meaning about technology, they also have differences in constructing technology. In other words, there is freedom in designing towards technical solutions.

The results of the controversy process and mapping strategy around technological change are stabilization of a technology. Technology stabilization implies that the contents of technology can be revealed and thus can be determined how the technology can function in society. Some social constructors including SCOT adherents show that this stabilization is achieved by the agreement or settlement between different social groups that produce the same interpretation of technology.

3.3 Freedom of Expression in the Perspective of SCOT

Freedom of expression that goes beyond that limit can occur because the perpetrators exploit the weaknesses that exist in both and certainly the right way to treat it also through these two pathways, by strengthening one of them or a combination of both. As an example of one form of freedom of expression called hate speech, whether intended or religious, racial, ethnic or class background. The competitive atmosphere of various religions in increasing the number of people as well as the affairs of the choice of regional heads seems to be the background that dominates social media today.

The word "hate speech" is often translated as "ujaran kebencian." There are two terms that are often used in international human rights law, namely "incitement" (incitement of hatred) and "hate speech". The UN Human Rights Committee often uses the term incitement. In practice, there is indeed a difference between experts and the legal system of

the country, some prefer the words themselves, some see their impact on humanity and human existence, and some see the impact on others who are called out to hate speech.

The point of mention of hate speech in the human rights framework lies in three rights discourses, namely: a) freedom of religion or belief; and b) freedom of expression and opinion, c) racial and ethnic protection. Through the International Covenant on Civil-Political Rights and a number of other international documents, the global community has agreed on the limits of the two rights, so that restrictions on a right (expression and opinion) to protect certain rights (religious freedom) should not be seen in a dichotomous framework.

The right to religion and belief is a basic right that is protected, even including one of the rights that cannot be restricted in any situation (non derogable rights) as stipulated in Article 28I paragraph (1) of the 1945 Constitution and Article 4 of the ICCPR. This is different from the right to expression and opinion which are not absolute and can be limited. Restrictions on the right to expression and opinion based on the opinion of the UN Human Rights Committee can be done to respect and maintain the reputation of others, namely someone who is individually or part of a community, such as religion or ethnicity.

In connection with this hate speech, the criminal law generally regulates it in Article 310 paragraph (1), paragraph (2), Article 311 paragraph (1) of the Criminal Code. However, the articles are more related to attacks on individuals, individual nature, whereas in hate speech, especially religion offences, attacks are aimed at all people from one religion, so that the number of victims is mass. Moreover, these articles are not related to the use of internet media for the purpose of their crimes, although they can be forced by interpretation, but it will feel awkward. Arrangements related to hate speech using the internet are in Article 28 paragraph (2) of Law No. 11 year 2008 concerning Information and Electronic Transactions. Even so, the perpetrators of disseminating hate speech on the internet still freely express their hatred by using fake accounts so that it is difficult to detect and be arrested for processing in the court.

Interaction and reaction on the internet in cultural studies is called cyberculture. Researcher of cyberculture - Sherry Turkle - conducts studies relating to the relationship between humans, computers, and personality. Computers, said to be modern meta-narration, the story of how work was made to be more concise and dancing, and in the postmodern period, computers were able to create a simulation culture. In this simulation culture, the construction of the modernist ideology of computers began to shift, even giving a way to think more concretely. According to him, in the world of simulation, identity can melt and become multi-identity. The internet is the most explicit example of multi-personality. Cyberspace allows users to use the identity they want, and people can celebrate freedom in the world of anonymity. Cyberspace is a self-laboratory that characterizes postmodern life, self becomes self-fashion and self-create.

Regarding the behavior of netizens, studies from Erik Qualman seem to fit them. According to him, there were two impacts on netizens as a result of the use of social media, namely preventive behavior and braggadocian behavior. Preventive behavior is described as live your live as if your mother is watching. People who are in this category are individuals who are always careful in posting status, uploading pictures or writing or sending news. They always think about what is sent through social media because they realize the whole world is understanding them. Braggadocian behavior, derived from the word "Braggart" which means a liar or a liar. People who fall into this category are very often status updates, by telling them that they are doing something cool, with a narcissistic style in places that they think are worth knowing.

Qualman also explained that with the existence of social media, the death of social schizophrenia will soon arrive. Social Skizophrenia is someone who behaves differently according to the place where he is. For example, he will look diligent, diligent, and considerate in the office, but when he is at home he becomes lazy. Qualman argues that thanks to social media, one can no longer pretend to be someone else and has a different personality in a different place. The status written through being sent to social media shows who he really is.

There is a paradox in the opinion of both. If Tukle emphasizes on anyone can be anything, including stating himself that is different from what is actually with the identity that exists cyberspace, while Qualman actually argues someone can be seen who is actually his behavior from the status made on social media. Turkle emphasizes lies according to the identity built in cyberspace. Qualman sees social media as a way of seeing someone's honesty through a written status, even though his identity can be different from the real one.

At this point, the problem is with the identity of someone who has access, interacts with others through involvement in a particular community.

Identity in the old sense (in real life) is understood as essentialism, as what is inherent in us from birth, is something that is stable. In a new concept, identity is understood as something that is not fixed, does not integrate completely, has no origin, and so on. In particular, the shift in theory is the impact of postmodernism and poststructuralism which questions and continues to sharpen our way of thinking about who we are. Hall acknowledged this and proposed a change of 'identity', which was seen as full of the old paradigm, to be 'identification'. The new term implies the existence of a process, diversity, and construction that someone's identification is made, mobile and diverse. This understanding is more clearly seen when associated with technology, in this case cyberculture that has become so integrated in our lives. Thus, self or fluid and fragmented individuals have the capacity to form themselves, shape and reorganize elements of identity.

This issue of identity becomes important, because by hiding this identity one can become and do anything. Identity in cyberspace is ambiguous, and because of that he can do anything in ambiguity. Because these netizens maintain their cyber identity, any restrictions imposed by the state are always opposed. One of the principles of the seven principles of cyberspace is the principle of personal visibility. In this principle, cyberspace users should be seen, at some level, by other users (but we should also be able to choose who is visible or invisible to us). This principle correlates with a figure called an avatar, a form of self-representation in a virtual world. This is made possible by the principle that applies in cyberspace that our identity does not have a body. The body of cyber or cyber body discusses things about the existence of entities that are represented, among others, by avatars. There are four important things in the cyber body:

- Cyberspace frees the body from its biological basis and allows new freedom, including the freedom to experiment with aspects of personal identity, especially gender;

- The body in cyberculture centers on the combination of bio body and technology. Examples are cyborg and post human, which are not only considered productive but can also be a source of problems;

- Cyborg is a cybernetic organism which is a combination of machines and organisms, the creation of society as the creation of fiction. The cyborg is also said to be the creation of a world of "post-gender" that is not related to the sex category;

- The post-human body (the symbiosis between humans and technology) is said to overcome physical limitations through the use of artificial organs, so that it is also called the first step in the post-evolution era

Seeing and considering some of the above, it can be seen that the reasons for the emergence of expressions of freedom that exceed the limits can be seen. Identity that cannot be precisely identified in cyber allows one to be anyone and say whatever they want without being constrained by culture or ethics in the real world. Against the phenomenon of freedom of expression that goes beyond that limit, in fact the victims are not only the intended person, but all those who feel or involve themselves in the issues mentioned by the avatar. Victims in this terminology are widespread and may even be abstract. Such victims if there is no channel to restore it, can become fire in the husk and lead to social unrest, not only in cyberspace, but can also spread to the real world.

In the context of SCOT, the birth of the internet cannot be separated from the conditions of the cold war between the United States and the Soviet Union at that time. Concerns about saving important data as a result of war are more prominent than making them a means of expression and democracy. In other words, actually the birth of the internet has been constructed in such a way for a particular purpose and this shows that technology is not neutral. Along with the development of the situation, where the cold war was over, technology (the internet) collaborated with capitalism and made the internet a means for various things, from public affairs to private. This is what SCOT says is the result of social negotiations between the actors involved, namely the technologists and capitalists.

The process of social construction of the internet continues to evolve along with the interaction between technologists and social forces in developing technology. The results of this interaction ultimately shift the goal of the creation and development of the internet, becoming a channel for advancing democracy and the means to realize freedom of expression. It cannot be denied that social groups that have that power have freedom of interpretation, so that there will be various differences in interpretation of technology. However, there are technical solutions to overcome these differences in interpretation through

technological stabilization, so that it can be determined how the technology functions in society.

When considering this thought, the question is whether the use of the internet to show freedom of expression (which transcends boundaries) becomes the goal of technology creation and development or just the effects that always exist and emerge every technology product. By considering all possible interpretations in SCOT, the realization of freedom of expression that goes beyond that limit has actually been anticipated by the creator of the technology, especially if other factors are considered, namely the birth and development of the internet in developed countries that have a democratic life climate. It can also be said that this internet presence is an attack on a closed system of government with limited or restricted citizens' freedom. There have been many examples of how a regime collapsed due to - one of them - the power of the internet, like the fall of the New Order regime in Indonesia.

Through this kind of interpretation, it is understandable that cyberians at first want the absence of rules in cyberspace. The rules will only limit freedom, and with the limited freedom, then what's the difference with the real world, even though they are busy migrating to cyberspace hoping to get freedom that is not found in the real world. This is the basis of the argumentation from cyberian and cyberpunk or cyber culture activists. The internet seems to be an amulet to enter the world that they believe can provide convenience, pleasure and happiness.

Such interpretation in SCOT, it is possible to remember in simmetry, technological change is explained by reference to social practices, especially in the process of interpretation, negotiation and closure by actors and different social groups. Therefore, the change from the purpose of creation, development and utilization is inseparable from the negotiation process between actors or social groups or forces who are ultimately able to construct the minds of internet users to use according to their desires fulfillment.

4 CONCLUSIONS

Freedom of expression in Indonesia is a basic right guaranteed by law. In the past, expressions of freedom were limited, but with the internet, this freedom even exceeded the limits. In the SCOT perspective, the existence of technology is not neutral, and the use of the internet to realize freedom

of expression has been constructed in such a way by social forces that have interests, be they political, economic, socio-cultural, or economic. Freedom of thinking in SCOT causes the process of creating, developing and utilizing the internet to be known and criticized in more depth, because what happens is not only how the socio-technology process creates the internet, but also how the internet can construct the human mind.

REFERENCES

A. Raharjo, Anarki di Cyberspace, Buku Pertama: Filosofi dan Pengaturan Cyberspace, Yogyakarta: Genta Publishing, 2016.

A. Raharjo, Hukum dan Teknologi – Suatu Tinjauan Filosofis dan Kritik terhadap Positivisme Hukum, Semarang: BP Universitas Diponegoro, 2007.

A. Raharjo, Legal Protection for Victims of Religious of Offences on the Internet, Proceedings of International Conference on Victimology and Victims Assistance in Indonesia, Faculty of Law, Universitas Jenderal Soedirman, Purwokerto, 20-22 September 2016, pp. .34-41

A. Rip, Managing Technology in Society, London: Pinter Publisher, 1995.

A.C. Yen, "Western Frontier or Feudal Society?: Metaphors and Perceptions of Cyberspace," Berkeley Tech. L.J. 17:4 (2002)

C. Calvert, "Comment, Regulating Cyberspace: Metaphor, Rhetoric, Reality, and the Framing of Legal Options," 20 HASTING COMM. & ENT. L.J. (1998).

C.L. Prell, "Studying IT and Community, Methodological, Ontological and Epistemological Approaches", Graduate Journal of Social Sciences, Vol. 1 Issue 2, 2004, p. 230

D Bell, Cyberculture Theorist – Manuel Castell and Donna Harraway, New York: Routledge, 2007.

D. Bell, An Introduction to Cyberculture. London: Routledge, 2001.

D.G. Post, "The "Unsettled Paradox": The Internet, the State, and the Consent of the Governed," 5 IND. J. GLOBAL LEGAL STUD. 521, 539 (1998).

D.R. Johnson & D.G. Post, The New 'Civic Virtue' of the Internet, in The Emerging Internet: The 1998 Report of the Institute for Information Studies.

E. Qualman, Socialnomics, How Social Media Transforms The Way We Live and Do Business, Burlington: Awareness, 2010.

General Comment, UN Committee No. CCPR/C/CG/34, Jenewa, September 12, 2011.

J.J. Rusch, "Cyberspace and the "Devil's Hatband," 24 SEATTLE U. L. REV. 577, 578-81 (2000).

John Perry Barlow, A Declaration of the Independence of Cyberspace, http://www.eff.org/barlow/Declaration-Final.html, access on Desember 19, 2000

K. Anggoro, "Revolusi Teknologi, Perang Informasi dan Kebijakan Pertahanan," Analisis CSIS, Vol. 34, No. 1, 2005.

Khanisa, "Dilema Kebebasan Dunia Maya: Kajian dari Sudut Pandang Negara," Widyariset, Vol. 16 No. 1, April 2013, pp. 23-30.

Lawrence Lessig, Code Version 2.0. New York: Basic Book 2006.

M. Froomkin, "The Metaphor is the Key: Cryptography, the Clipper Chip, and the Constitution," 143 U. PA. L. REV. 709, 718 (1995).

M. Nowak, Permisible Restriction on Freedom of Religion or Belief, in T. Lindholm, et.al., (eds.), Facilitating Freedom of Religion or Belief: A Deskbook, USA: Martinus Nijhoff Pubslisher, 2004.

M.C. Anam and M. Hafiz, "Surat Edaran kapolri tentang Penanganan Ujarn Kebencian (Hate Speech) dalam Kerangka Hak Asasi Manusia", Jurnal Keamanan Nasional, Vol. 1 No. 3, 2015 p. 345.

M.N. Damayanti and E.C. Yuwono, "Avatar, Identitas dalam Cyberspace," Jurnal Desain Komunikasi Visual Nirmana, Vol. 15, No. 1, Januari 2013, p. 15

P. Brey, "Philosophy of Technology Meets Social Constructivism," Society for Philosophy and Technology Journal, Vol. 2 No. 3-4 Spring-Summer 1997,
http://scholar.lib.vt.edu/ejournal/SPT/v2_n3n4html/brey. html, access on April 15, 2005.

P.L. Berger and T. Luckmann, Tafsir Sosial Atas Kenyataan, Risalah Tentang Sosiologi Pengetahuan, Jakarta: LP3ES, 1990.

P.L. Berger, Langit Suci, Agama Sebagai Realitas Sosial, Jakarta: LP3ES, 1994.

R. Fidiyani, "State Responsibility In Religious Conflict Setllement (A Case Study In Central Java)," Jurnal Dinamika Hukum, Vol. 16 No. 3 2016, pp. 249-257.

S. Yuliar and M.A. Anggorowati, "Governance Teknologi di Masyarakat: Sebuah Pendekatan Jejaring-Aktor,", Jurnal Sosioteknologi Vol. 7, No. 5, 2006, pp. 1-7.

S. Yuliar, M.A. Anggorowati, A.R. Nasution and T. Yunianto, "Difusi Teknologi di Masyarakat Sebagai Proses Ko-Evolusi: Sebuah Analisis Jejaring-Aktor", Jurnal Dinamika Masyarakat, Vol. IV, No. 1, 2005, pp. 673-676.

Sherry Turkle, Life on the Screen: Identity in the Age of the Internet, Touchstone Books, 1997.

Sulfikar Amir,"Membuka Kotak Hitam Teknologi", Kompas, 3 Maret 2004.

W. Cole Durham and B. G. Scharffs, Law and Religion: National, International, and Comparative Perspective, New York: Aspen Publisher, 2010.

W.E. Bijker & John Law (eds), Shaping Technology/ Building Society: Studies in Sociotechnical Change (Cambridge: The MIT Press, 1992.

W.E. Bijker, T.P. Hughes and T.J. Pinch (eds). The Social Construction of Technology System: New Direction in the Sociology and History of Technology, Cambridge, MA: MIT Press, 1987.

Wahju Prijo Djatmiko, Legal Policy and Its Position in The Taxonomy of Science, Jurnal Dinamika Hukum, Vol. 18 No. 1 2018, pp. 123-130

Wikipedia, Free Encyclopedia, dapat dibaca pada http://en.wikipedia. org/wiki/ Theories_of_technology, access on oktober 10, 2005.