CHAPTER II
LITERATURE REVIEW

2.1. Conceptual Framework

2.1.1. Conceptual Framework of Copyright

2.1.1.1. Definition of Copyright Based On Indonesian Law

In the Indonesian aspect, copyright is divided into two words, "hak" and "cipta." Based on Indonesian Dictionary (KBBI), the word "hak" (translation: "right") means own, belonging; authority, sovereignty; the authority to do something (as obligated by law, rules, and many other regulations); the right administration to do or demand something,[1] while the word "cipta" (translation: create; invent) itself means the mind's ability to create something new; creative thoughts.[2] The definition of copyright based on the Indonesian Dictionary is someone's right upon his/her work protected by law.

As one of the intellectual property right, Indonesian Law Article 1 Number 1 Law Number 28 of 2014 about Copyright has also defined copyright as below:

> *"Copyright means an exclusive right of the author vested automatically on the basis of declaratory principle after Works are embodied in a tangible form without reducing by virtue of restrictions in accordance with the provisions of laws and regulations."*

Indonesian Law acknowledged someone as an Author if they meet the general provision according to Article 1 Number 2 as quoted below:

> *"Author means a person or several persons who individually or jointly produce works that are unique and personal."*

Based on this legal statement provided by the law, we can conclude that as long as the law acknowledged the person as someone who produces the unique and personal work, they are considered as an author

[1] Translated from Anonymous, "Arti kata hak", https://kbbi.web.id/hak, accessed in 5th August 2019.

[2] Translated from Anonymous, "Arti kata cipta", https://kbbi.web.id/cipta, accessed in 5th August 2019.

by Indonesian Law. The author, therefore, will receive protection according to Indonesian Copyright Law.

Not every work is considered included in the copyright protection scope. Based on Article 1 Number 3 Law Number 28 of 2014 about Copyright, the definition of "Work" in Indonesian Copyright Law is defined as below:

> *"Work means any scientific, artistic, and literary works resulted from inspiration, ability, thought, imagination, dexterity, skill, or expertise expressed in tangible form."*

From this statement, we can conclude that for a work to be considered as one of the Indonesian Copyright Law scopes, it must contain the following elements:

a. Consist in fields of scientific, artistic, or literature;
b. Resulted from inspiration, ability, thought, imagination, dexterity, skill or expertise;
c. Have been expressed in tangible form.

2.1.1.2. Definition of Copyright Based on the United Kingdom Law

Pulling from a few other pieces of literature such as the Oxford Dictionary, the definition of "copyright" can be defined as quoted:[3]

> *"Copyright (n.): The exclusive and assignable legal right, given to the originator for a fixed number of years, to print, publish, perform, film, or record literary, artistic, or musical material."*

Aside from Oxford, a definition from Black's Law Dictionary can also be added as a reference, which is quoted below:[4]

> "*Copyright, n. 1. The right to copy; specifically a property right in an original work of authorship (including literary, musical, dramatic, choreographic, pictorial, graphic, sculptural, and architectural works; motion pictures and other audiovisual works; and sound recordings) fixed in any tangible medium of expression, giving the holder the exclusive right to reproduce, adapt, distribute, perform, and display the work."*

[3] Oxford, "Definition of copyright in English", https://www.lexico.com/en/definition/copyright, accessed in 6th August 2019.

[4] Henry Campbell Black, *Black's Law Dictionary: 9th Edition*, (The United Kingdom: West, 2009), p. 386.

Based on these definitions, we can conclude that in English literacy, copyright is seen as an exclusive right given to the author who proven to have created specific copyrightable work in a specific field. The work, however, must already be fixed in tangible or fixed material form. In other words, the work created must be physically touched, seen, or heard.

In Section 1 Paragraph 1 United Kingdom Copyright, Design, and Patent Act 1988, the definition of "copyright" are defined as:

> *"Copyright is a property right which subsists in accordance with this part in the following descriptions of work –*
> *(a) Original literary, dramatic, musical or artistic works,*
> *(b) Sound recordings, films or broadcasts, and*
> *(c) The typographical arrangement of published edition."*

Copyright is the legal right that gives the owner control over their work and how it is used, protecting the work without needing permission. The owners of copyright can use, sell, or license the work to a third party. Copyright usually protects the work created by or originated by the author.

In Section 9 Paragraph 1 to 2 United Kingdom Copyright, Design, and Patent Act 1988, an author is defined as follows:

> *"(1) In this Part "author," in relation to a work, means the person who creates it."*
> *"(2) That person shall be taken to be–*
> *(aa) in the case of a sound recording, the producer;*
> *(ab) in the case of a film, the producer and the principal director;*
> *(b) in the case of a broadcast, the person making the broadcast or, in the case of a broadcast which relays another broadcast by reception and immediate re-transmission, the person making that other broadcast;*
> *(c).....*
> *(d) in the case of the typographical arrangement of a published edition, the publisher."*

Analyzing from uslegal.com, the definition of "Author" can be defined as follows:[5]

[5] USLegal, "Author (Copyright) Law and Legal Definition, https://definitions.uslegal.com/a/author-copyright/, accessed in 6th August 2019.

> *"Author is broadly defined as the person who originates or gives existence to anything. The author under copyright law is the creator of the original expression in a work. The author is also the owner of the copyright. Holding the title of the author over any literary, dramatic, musical, artistic, or certain other intellectual works give exclusive right to authorize any production or distribution of their work."*

Based on these statements, it can be assumed that to be admitted as an author in the United Kingdom Copyright, Design and Patent Act 1988, a person must fulfil the following criteria:

a. A person who originates or gives existence to anything;
b. The said anything must be original (original works of authorship);
c. The said anything is in the fields of literature, dramatic, musical, artistic, or other intellectual works which can be given exclusive rights.

The United Kingdom has broken through the barrier of industry revolution 4.0 by revising its copyright law in Section 9 Paragraph 3 the United Kingdom Copyright, Design, and Patent Act, in which are stated as follows:

> *"(3) In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken."*

The United Kingdom further defines "computer-generated" work specifically in Section 178 the United Kingdom Copyright, Design, and Patent Act 1988, as stated below:

> *"Computer-generated, in relation to a work, means that the work is generated by a computer in circumstances such that there is no human author of the work."*

Based on this regulation, we can conclude that if a computer creates said work, for instance, artificial intelligence, the computer program will not be considered as an author. The work will automatically be considered as "computer-generated work". The one who will be considered as an author is the person who operates said artificial

intelligence. For example, if an employee generates a music work using artificial intelligence, he or she can be declared as the author.

The author, based on the United Kingdom Copyright, Designs, and Patent Act 1988, is not necessarily the literal person who creates the copyrightable work. The author can be in the scope of employment. As such, the employer of the person who produces the copyrightable work can be admitted as the author as long as the work is original and fixed in material form.[6]

2.1.1.3. Principles of Copyright in Indonesian Law

2.1.1.3.1. Rights Granted by Copyright in Indonesian Law

Indonesian Copyright Law has few applicable principles determined in Law Number 28 of 2014. Based on Article 4 Law Number 28 of 2014, there are two exclusive rights granted to an author once their work is fixed in a material or tangible form, as quoted below:

> *"Copyright, as referred to in Article 3 point a, are the exclusive rights compromising moral rights and economic rights."*

a. Moral rights

In Article 5 verse (1) Law Number 28 of 2014 about Copyright, a moral right is a right that is bestowed to the author for a specific time-span period regulated in the law. In the Berne Convention, a moral right is considered as a right that attached itself to the author.[7] Many benefits can be gained from a moral right. Indonesian Copyright Law has regulated the benefits of moral right in Article 5 verse (1) Law Number 28 of 2014. The benefits are:

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[6] The United Kingdom, *Copyright, Design and Patent Act*, UK Copyright, Design, and Patent Act 1988, Section 11 Paragraph 2.

[7] OK Saidin, *Aspek Hukum Hak Kekayaan Intelektual (Intellectual Property Rights)*, (Jakarta: Raja Grafindo Persada, 2015), hlm. 250

1. Continue to add or to ban their name on the copy concerning the public use of their works;
2. Use an assumed name or stage name;
3. Change their works to adhere to with appropriateness in civilization;
4. Protect their rights in the act of misuse, abused, modification of works, or other acts that will be damaging to their honor or reputation.

Moral rights are the only right that cannot be given or transferred to another law subject as long as the author is still alive. Nevertheless, the application of these rights is transferrable by testimonial or other ways following the provisions of laws and regulations after their death.[8]

b. Economic rights

Economic rights, as explained in Article 8 Law Number 28 of 2014, is the exclusive right of an author or copyright holder in order to gain economic benefits from the work created. Types of economic rights action gained from copyright ownership are regulated in Article 9 verse (1) Law Number 28 of 2014 about Copyright, as quoted below:

> *"The Author or the Copyright Holder, as referred to in article 8, has the economic rights to engage in:*
> *a. Publication of the Works;*
> *b. Reproduction of the Works in all its forms;*
> *c. Translation of the Works*
> *d. Adaptation, arrangement, or transformation of the Works;*
> *e. Distribution of the Works or their copies;*
> *f. Performance of the Works;*
> *g. Publication of Works;*
> *h. Communication of Works; and*
> *i. Rental of the Works."*

[8] Indonesia, Law About Copyright, Law Number 28 of 2014, State Gazette of the Republic of Indonesia of 2014 Number 266, Supplement to the State Gazette of the Republic of Indonesia Number 5599, Article 5 verse (2).

The economic right of copyright can be transferred in a few ways, whether if it's from licensing or by inheritance. An author holds the economic right of its work for his or her whole life and continues for the next 70 years starting from the 1st January on the next year. In a situation where there are two authors or more, the protection follows the life of the last author and continues after the death of the last author for the next 70 years starting from 1st January on the next year.

2.1.1.3.2. Copyright Scope in Indonesian Law

Works that are protected by Law Number 28 of 2014 about Copyright are stated in Article 40 verse (1), which is quoted below:

> *"Protected Works which include scientific, artistic, and literary Works, comprise:*
> *a. Books, pamphlets, a typographical arrangement of published written work, and all other written works;*
> *b. Talks, lectures, speeches, and other similar works;*
> *c. Visual aids made for educational and scientific purposes;*
> *d. Songs and/or music with or without lyrics;*
> *e. Dramatic works, musical dramas, dances, choreography, puppet shows, pantomimes;*
> *f. Fine artworks in any forms such as paintings, drawings, engravings, calligraphy, carvings, sculptures, or college;*
> *g. Applied artworks;*
> *h. Architectural works;*
> *i. Maps;*
> *j. Batik artworks or other patterns art;*
> *k. Photographic works;*
> *l. Portraits;*
> *m. Cinematographic works;*
> *n. Translations, interpretations, alterations, anthologies, databases, adaptation, arrangement, modification, and other works resulting from transformation;*
> *o. Translation, adaptation, arrangement, transformation, or modification of traditional cultural expressions;*
> *p. Compilation of works or data, whether in a readable format by a computer program or by other media;*

q. Compilation of the traditional cultural expressions as long as the compilation constitutes an original work;
r. Video games; and
s. Computer programs."

2.1.1.4. Principles of Copyright in the United Kingdom Law

2.1.1.4.1. Rights Granted by Copyright in the United Kingdom

The United Kingdom Copyright, Design, and Patent Act 1988 admit the existence of exclusive rights owned by an author, which is stated in Section 2 Paragraph 1. An author based on this regulation is granted the exclusive right to do some acts that are also regulated in the act, specifically in Chapter II Section 16 Paragraph 1 the United Kingdom Copyright, Design, and Patent Act 1988, which are:

(a) To copy the work;
(b) To issue copies of the work to the public;
(c) To rent or lend the work to the public;
(d) To perform, show or play the work in public;
(e) To communicate the work to the public;
(f) To adapt the work or do any of the above concerning an adaptation.

a. Moral rights

Like the Indonesian Copyright Law, the United Kingdom Copyright, Design and Patent Act 1988 also admit the existence moral right for the author. There are few moral rights as an author of a copyrighted work in the United Kingdom, as stated in the United Kingdom Copyright, Design, and Patent Act 1988.

(1) <u>The right to attribution</u>

As stated in Chapter IV Section 77 Paragraph 1 the United Kingdom Copyright, Design, and Patent Act 1988, an author has the right to be identified as an author in his/her work. An author must state that they assert their right to be identified as the

author of their work. This right is given to the author for as long as the copyright subsists in work.[9]

However, this moral right does not follow any computer-generated work, such as a work created by artificial intelligence, as stated in Section 79 Paragraph 2 point (c) the United Kingdom Copyright, Design, and Patent Act 1988. As explained before, following this, the United Kingdom has provided a solution that the one who will be claimed as the author of a copyrighted work generated by artificial intelligence is the person who operates or owns the artificial intelligence. In the state of course of employment, then the author shall be the author's employer.

(2) The right to object a derogatory treatment of a work

If an author feels that his or her work is degraded or being given a derogatory treatment of any action by other people, the author has the right to forbid such action. As explained in Section 80 Paragraph 2 the United Kingdom Copyright, Design, and Patent Act 1988, the forbidden treatment means any addition, deletion, or alteration of the work or adaption of the work. It also includes any mutilation or distortion action towards the work. This right is given to the author as long as the copyright subsists in work.[10]

(3) The right to object false attribution

This right grants the author the action to deny being attributed as the author of work he or she did not create if they are falsely attributed. This right is regulated in Section 84 the United Kingdom Copyright, Design, and Patent Act 1988. This

[9] The United Kingdom, the United Kingdom Copyright, Design, and Patent Act 1988, Section 86 Paragraph (1).

[10] *Ibid.*

right is given to the author as long as they live and continue to apply until 20 years after the person's death.[11]

(4) The right to privacy (for specific photographs or films)

As regulated in Section 85 the United Kingdom Copyright, Design, and Patent Act 1988, this right enables the author of a particular photograph or film to be private of his or her work. By "private" means that the said work is forbidden by the author to be published publically or for commercial use. This right to privacy usually applies to wed photography. Like the other rights, this right consists as long as the copyright in work exists.[12]

b. Economic rights

The United Kingdom Copyright, Design, and Patent Act 1988 also admit the existence of economic rights granted to an author of a copyrighted work. Besides giving economic benefit or commercial gain to the author, this right also grants the author the authority to restrict people for using the copyrighted work, whether in a whole or substantial part of the work.

There are many types of economic rights that can be granted in a copyrightable work. The author can control the actions of other parties, who want to copy, issue copies of the work to the public, renting or lending, performing, showing, playing, broadcast, or adapt the work in public.

As regulated in the United Kingdom Copyright, Design, Patent Act 1988, the author of a copyrighted work has the exclusive right to authorize or prohibit the following acts:[13]

[11] The United Kingdom, the United Kingdom Copyright, Design, and Patent Act 1988, Section 86 Paragraph (2)

[12] The United Kingdom, *Op. Cit.*

[13] The Intellectual Property Office of the United Kingdom, "The rights granted by copyright", https://www.gov.uk/guidance/the-rights-granted-by-copyright#economic-rights, accessed in 6th September 2019.

(a) Reproduction

By reproduction means copying a work in any form, for example, by photocopying, reproducing a printed page of handwriting, typing, scanning into the computer, or taping recorded music. It is regulated in Section 17 the United Kingdom Copyright, Design, and Patent Act 1988.

(b) Distribution

Distribution of the work is also a must base on the author's permission or authorization. For example, a sale of music copy or published book. Although, a resale is not included in this right, such as a second-hand shop or a pawn shop. This right is regulated in Section 18 the United Kingdom Copyright, Design, and Patent Act 1988.

(c) Rental and lending

In this act, rental and lending mean making a copy of a work to be lent or rental for direct or indirect commercial use or advantage, as regulated in Section 18A the United Kingdom Copyright, Design, and Patent Act 1988.

(d) Public performances

This right is regulated in Section 19 the United Kingdom Copyright, Design, and Patent Act 1988. By performances in this right means to deliver or act copyrighted a play in theatres, lectures, speeches, sermons, or visual or acoustic presentation by the general. The exception to this particular infringement is public display in a museum or gallery as an exhibition.

(e) Communication to the public

In this right, an author is granted a right to authorize or prohibit broadcasting about his/her work by electronic transmissions, such as putting on the internet or broadcasting. This right is regulated in Section 20 the United Kingdom Copyright, Design, and Patent Act 1988.

(f) Adaptation

With a modern era entertainment, it is not rare that there are many movie adaptations based on literary works, or translating a work into other languages. All these actions have to be authorized by the author, as regulated in Section 21 the United Kingdom Copyright, Design, and Patent Act 1988.

c. Database rights

An electronic database may be protected by copyright and database rights. The originality of within database will be covered by copyright. For the use of their work, permission must be granted or obtained by the copyright holders. Database rights are automatic and have no registration form or fee and give the owner the control total of their work. It can be used, sold or leased to a third party.

This right lasts for 15 years from creation, but if published, then the term of protection is 15 years from publication date. The 15-years period will start again if there is a substantial new investment.

d. Publication rights

The first time a work is published, the publisher has specific rights that are equivalent to copyright but with a shorter term, even if the copyright has expired.

2.1.1.4.2. Copyright Scope in the United Kingdom Law

In the United Kingdom Copyright, Design, and Patent Act 1988, the copyright-protected works are as follows:[14]

a. Original literary, dramatic, musical and artistic work, including illustration and photography;

[14] The United Kingdom, "How Copyright Protects Your Work", https://www.gov.uk/copyright, accessed in 16th October 2019.

b. Original non-literary written work, such as software, web content, and databases;
c. Sound and music recordings;
d. Film and television recordings;
e. Broadcasts;
f. The layout of published editions of written, dramatic, and musical works (typographical arrangement).

Some of the standard terms Protection for published works in the United Kingdom can last up to 70 years after the author's death, depends on the type of work. To summarize it, the protection time can be stated as follows:

a. Written, dramatic, musical and artistic work -> 70 years after the author's death
b. Sound and music recording -> 70 years from the date of first publication
c. Films -> 70 years after the death of the director, screenplay author and composer
d. Broadcasts -> 50 years from the date of first broadcasts
e. The layout of published editions of written, dramatic or musical works -> 25 years from the date of first publication

There are some exceptions in the United Kingdom copyright law, such as:[15]

a. Limited copying of books, journals, sound recordings, films and artistic works made by an individual for their own private study or non-commercial research purposes, may fall under the fair dealing exception
b. Fair dealing for criticism, review, and reporting current events
c. Making a copy for a disabled person if no accessible version is commercially available

[15] British Library, "What is Copyright?", https://www.bl.uk/business-and-ip-centre/articles/what-is-copyright, accessed in 12th December 2019

d. Time-shifting of radio or TV broadcasts for personal use
e. Text and data mining for non-commercial research
f. Teaching
g. Parody, caricature and pastiche

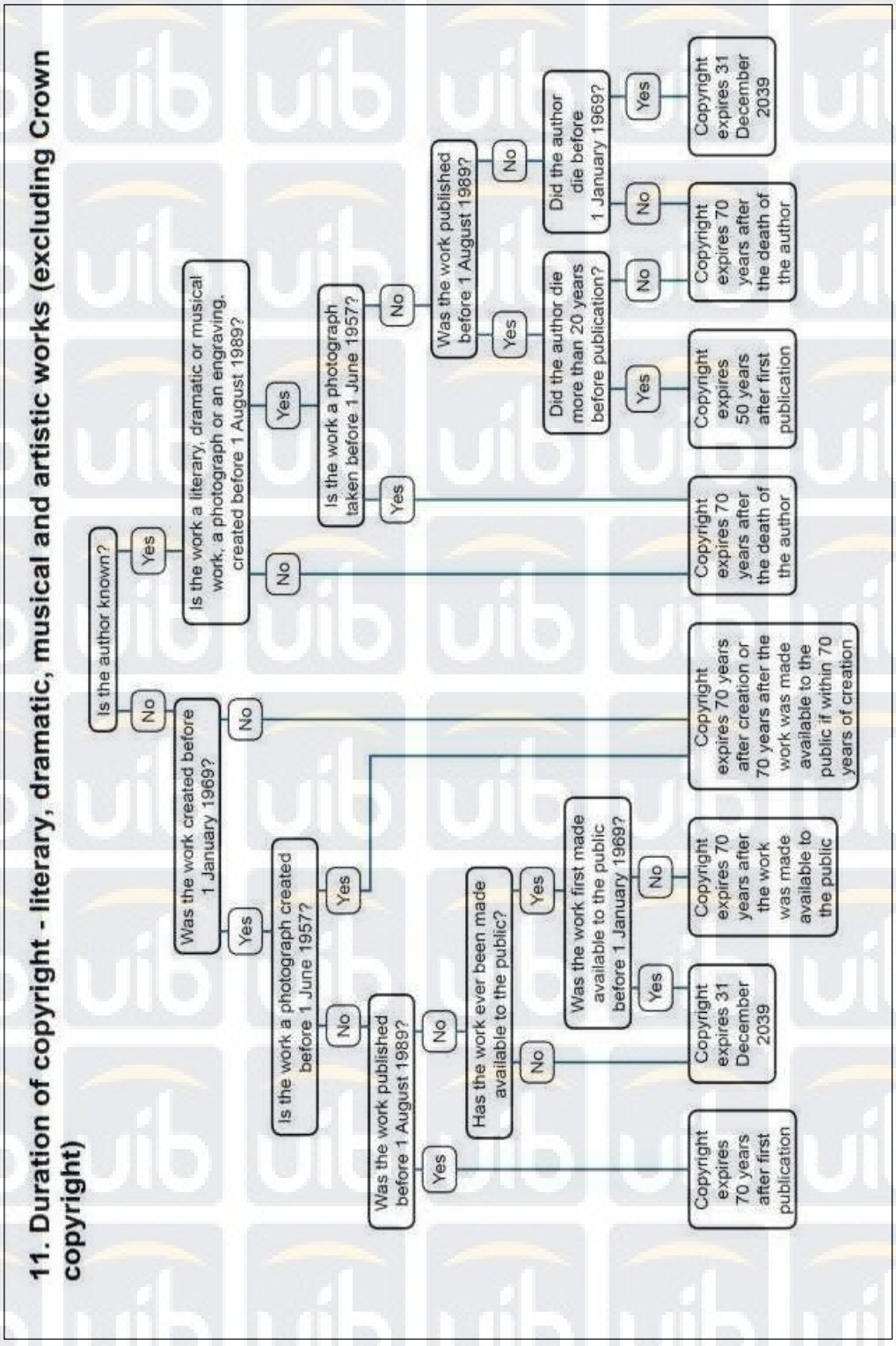

Figure 2.1 Chart of duration copyright protection in the United Kingdom, source: The National Archives, 2013, Copyright and Related Rights, p. 13

2.1.2. Conceptual Framework of Artificial Intelligence

2.1.2.1. Definition of Artificial Intelligence

According to Francis Gurry, the current WIPO Director General, artificial intelligence is a new digital frontier that will have a profound impact on the world, transforming the way we live and work.[16] A few decades ago, it was only humans who can read handwriting, write, and play chess. Today, researchers are developing artificial intelligence as a challenging technology, since its complex and wide-ranging, and such will affect many different areas of human activity.

The English Oxford Living Dictionary stated that the definition of "artificial intelligence" is as below:[17]

> *"The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages."*

The word "intelligence" itself comes from the Latin word "intelligo", which means "I understand." From this, we can elaborate that "intelligence" means the ability to understand and do an action. While the word "artificial" can be defined as something unreal, we can conclude that the meaning of "artificial intelligence" based on its etymology is the ability of something unreal (in this case, a computer program that cannot be seen physically like hardware), to understand and do independent actions.

Based on Prof. Dr Widodo Budiharto, a Lecturer in Bina Nusantara Indonesia, artificial intelligence is a technique and science to create a smart machine, especially for a computer program. The said intelligence is a human-like intelligence, so a computer can take action to solve a complex problem and think like a human.[18]

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[16] World Intellectual Property Organization, *Op. cit.*, p. 18.

[17] Bernard Marr, "The Key Definitions of Artificial Intelligence (AI) That Explains Its Importance", https://www.forbes.com/sites/bernardmarr/2018/02/14/the-key-definitions-of-artificial-intelligence-ai-that-explain-its-importance/#6ca33b994f5d, accessed in 12th December 2019.

[18] *Ibid.*, p. 3

In 1956, John McCarthy from Massachusetts Institute of Technology suggested using the term "artificial intelligence" in a conference held by John McCarthy himself. This conference is held with the topic "The Dartmouth Summer Research Project on Artificial Intelligence" which was held at Massachusetts Institute of Technology. As such, John McCarthy is considered the founding father of artificial intelligence.

Together, at the time, researchers clarity and develop the concept around "thinking machines" which up to this point have been quite divergent.[19] There are few expert opinions regarding the definition of artificial intelligence. Such as:

> *"The goal of AI is to develop machines that behave as though they were intelligent. It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to biologically observable methods."*[20] *– John McCarthy, 1956*

> *"A computer program that can understand its surroundings and can take actions that maximize its success rate in its surroundings for few purposes."*[21] *– Stuart J. Russet & Peter Norvig, 2012*

> *"A research, application, and instruction regarding computer programming to do something that is intellect in human opinion."*[22] *– H. A. Simon, 1987*

2.1.2.2. The Characteristics of Artificial Intelligence

For a machine to be a smart machine (to act like and as good as a human), it must be equipped with knowledge. To create an artificial intelligence program in a machine, the machine must be equipped with two types of knowledge, which are:[23]

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[19] Bernard Marr, *Op. cit.*

[20] *What is AI? / Basic Questions - Stanford University. http://jmc.stanford.edu/artificial-intelligence/what-is-ai/index.html*

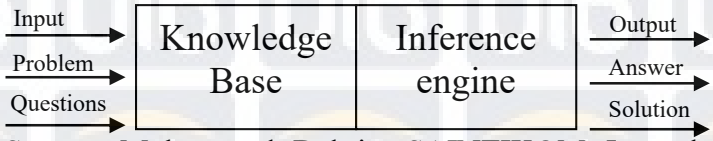
[21] *Ibid.*

[22] *Ibid.*

[23] Muhammad Dahria, "Kecerdasan Buatan (Artificial Intelligence)", SAINTIKOM Journal, Vol. 5, No. 2, August 2008, p. 185

a. Knowledgebase, filled with facts, theories, thoughts, and a correlation between things;
b. Inference engine, the ability to pull a conclusion based on knowledge and experience.

Illustrated, the process of artificial intelligence looks like below graphic:



Source: Muhammad Dahria, SAINTIKOM Journal, Vol. 5, No. 2, August 2008, p. 186.

The recognition process in artificial intelligence includes the identification and classification of data inputted in the program, such as people, objects, situation and events. The program has the capability to identify or automatically classifies the data in a way similar to human perception and pattern recognition.

The stages of the artificial intelligence recognizing and identifying the data following human perception are summarized below:[24]

1. First, the algorithms in the artificial intelligence are presented with multiple examples and their correct classification (pictures of faces of people, dogs, body language, or any other data that can be subjected to pattern of similarities).
2. Second, the algorithm breaks the data down into "tiny" electronic signals, undetectable by humans, and tries to identify hidden insights, similarities, patterns, and the connections – without being explicitly programmed or "trained" on where to look. Sometimes in this process, the artificial intelligence will recognize new data not inputted in the program.
3. Third, performance improves with experience and evolves with new data to which the system is exposed. In other words, the system is

[24] Shlomit Yanisky-Ravid, "Generating Rembrandt: Artificial Intelligence, Copyright, and Accountability in the 3A Area – The Human-Like Authors Are Already Here – A New Model", Michigan State Law Review, 2017 Mich. St. L. Rev. 659, p. 676.

constantly evolving as the result of new data it has either autonomously found or been inputted with by the data providers or the artificial intelligence programmer. Afterwards it will generates like how it commanded, starting from music (with or without lyrics), literacy, pictures, and arts. The artificial intelligence will evolve each time it is exposed to new data.

The advantages of using artificial intelligence compared to natural intelligence are:

a. Artificial intelligence has a more permanent memory trait than natural intelligence. Natural intelligence could change since humans have a forgetful trait. Artificial intelligence's database memory will not change as long as the computer and system unchanged.
b. Easier to duplicate and distribute. To transfer a piece of knowledge between one person to another takes time and a lengthy process. Skills cannot be entirely duplicated between the natural people.
c. Cheaper. Providing a computer service is cheaper and more efficient compared to invite a person to come and complete work for the long-term. Artificial intelligence, as a part of computer technology development, also has a consistent trait while natural intelligence continually changes.
d. Easier to be documented. A decision made in a computer can be documented by tracking every action the system has made, while natural intelligence is hard to be reproduced.
e. Faster and better results.

Artificial intelligence software combines machine learning and the ability of autonomy learning without rule-based programming. It provides varies of facilities, including data amount, performance, and trade-offs between computational complexity. In detail, artificial intelligence includes machine learning, natural language processing, system expert, vision, speeches, planning, and robots.

Artificial intelligence nowadays can be defined as a system that has the capability to perform tasks that normally requires human intelligence,

and in an even more advanced way of thinking and decision-making. Nowadays, it has been identified the reasons why artificial intelligence program can create works creatively. In such, the reasons can be characterized as follows:[25]

a. Creative

   Artificial intelligence are more than capable than just copying other works from data input and accessible sources. It operates as creative program that is capable of original and new works. This feature is crucial in the intellectual property realm and in particular when discussing copyrightable works.

b. Autonomous and independent

   The program is independent or autonomous if it can accomplish a high-level task on its own without intervention from external party. Such program may work independently with minimum to no human intervention and is able to replace authors and other creators to autonomously generate new artworks.

c. Unpredictable and new results

   Artificial intelligence program is based on complicated algorithms with capability of random input, resulting in unpredictable routes to obtain the optimal solution, hence generating unpredictable works. After being exposed to data samples, the program will break the data into digital components, recompose them, and create new unexpected works.

d. Capability of data collection and communication with outside data

   The program can actively search data from outside of its data input. Communication is a necessary feature of an artificial intelligence program

e. Learning capability by receiving feedback and improving the results

f. Evolving

[25] *Ibid*., p. 679.

The result of learning capability and input completed with continuous processing, the program will constantly find new patterns and similarities, hence the constant evolution. This feature is at the core of artificial intelligence and data science.

g. Rational-intelligent system

A rational mechanism made the program capable of perceiving data and deciding which action would maximize the probability of success in achieving certain goal.

h. Efficiency

Artificial intelligence is capable of accurately process vast volumes of data beyond the human brain capability, giving it maximum efficiency in time and energy.

i. Goal-oriented

Artificial intelligence works when given a goal, example to create a song or a painting.

j. The ability to exercise free choice among alternatives to reach the best output.

Generally, investments from people and bodies of law flowing for artificial intelligence development for one of these objectives:

1) Build systems that think precisely as humans do (categorized as the "strong AI");
2) Getting the systems to work without figuring out how human reasoning works (categorized as the "weak AI");
3) Use human reasoning as a model but not necessarily the end goal.

2.1.2.3. History of Artificial Intelligence

In the 1950s, Alan Turing, a pioneer of artificial intelligence and a Britain mathematician, made an experiment called the Turing Test. This test is done by putting a computer terminal with artificial intelligence software at one point in a far distance then put another terminal on the other end with an operator.

This operator did not know that at the other of the distance is a computer with no operator. Surprisingly, communication was established between the operator and the artificial intelligence. The operator did not even know that he was talking to a computer program.

From this experiment, Turing concluded that if a computer program can make a real human believed that they are communicating with another person, it can be said that the machine has human-like intelligence. However, at this point, the term "Artificial Intelligence" was not yet used. The term used is the "thinking machine", as per the Dartmouth Summer Research Project on Artificial Intelligence in the Massachusetts Institute of Technology (MIT).

As mentioned before, the term "artificial intelligence" was first used in the Dartmouth Conference in 1956 by John McCarthy. This event kick-started the artificial intelligence as an academic discipline and the beginning of artificial intelligence golden years, with artificial intelligence were enjoying government-funding for logic-based problem-solving. Aside from it, it is also hoped for artificial intelligence to significantly upgrade human life in the future. Since this point, artificial intelligence has its ups and downs in the research field, even so-called "AI Winter" and "AI Summer" by WIPO.[26]

The first "AI Winter" happened during 1974-1980, due to the limited capacity an artificial intelligence can handle at the time, causing the reduced funding and research in artificial intelligence research. An "AI Summer" sparked in 1980-1987, as the knowledge-based expert system risen and brought new chances in researches. Funds started flowing in to support researches. However, this soon also died down quickly into the second "AI Winter" in 1987 due to artificial intelligence limitations at the time, and its maintenance is expensive and laborious.

However, as soon as industrial technologies improved rapidly, an "AI Summer" jumped in 1993-2011, when IBM's DeepBlue beat world

[26] World Intellectual Property Organization, *Op. cit.*, p. 19.

champion Kasparov at chess. In 2002, Amazon used automated systems to provide recommendations. The most booming technology at the time, when Apple released Siri in 2011, and IBM Watson beats two human champions at the TV quiz Jeopardy.

This second "AI Summer" lasts long until recent time. Funds are flowing hard for developments of artificial intelligence. The increase in data availability allows breakthroughs in machine learning, hence a new era for artificial intelligence. In 2012, Google driverless cars navigated autonomously, and in 2016, Google's AlphaGo beats a world champion in a complicated board game Go.

Artificial intelligence becomes the new challenging technology to be invested. It is a creative and independent system, autonomous and unpredictable, evolving and communicative, and efficiently accurate. As such, it is now used a lot in generating copyrightable works such as songs, paintings, pictures, literacy, and many more.

2.2. Judicial Framework

2.2.1. Legal System of Indonesia

Indonesia is a law-based country (*rechstaat*), not just authority-based (*machtsstaat*). Unlike other states, Indonesia has a different legal system applied in its law and government daily life. Indonesian legal system is the combination of Islamic law, customary law, and European legal system, especially Civil Law. Indonesia is an archipelago state, in which most islands or province has a different legal system. Indonesia adopted civil law since the Netherland Colonial era, which cause much Indonesian Law adapted from Netherland's Law.

Indonesia is a vast archipelago state, resulting in a decentralized government system. Each island and province is possible to have different legal systems. For example, the Nangroe Aceh Darussalam Province, located at the north of Sumatera Island, has a robust Islamic law system applied. Most of the provinces in Borneo (Kalimantan) Island and Papua Island apply a strong customary law. Nevertheless, most of the regions in Indonesia, mainly the more

advanced provinces apply civil law as their primary legal system. The existence of Islamic law and customary law in Indonesia does not necessarily erase the existence of civil law in Indonesia. In the practical field, if a problem occurs, the first thing investigated is what kind of legal system that is habitually stronger in the area.

Indonesia has adopted civil law as the primary legal system in the state. This legal system's main principle is to do positive law in written form or poured in codification as a constitution (legalism principle). Unwritten law is not admitted as the law but as social morality. However, civil law has some weaknesses, such as inflexible, stiff, and static.[27] Writing is the limit of something abstract in dynamic material content and time, in which the people's value consciousness in law is left behind in the law substance.

There are lots of western laws or constitutions adopted and applied by Indonesia, such as Kitab Undang-Undang Hukum Pidana (KUHP, translated: Public Law Bible), Kitab Undang-Undang Hukum Perdata (KUHPer, translated: Private Law Bible), Kitab Undang-Undang Hukum Dagang (KUHD, translated: Commercial Law Bible) and many more. As such, there is a legal gap between Indonesian public value and constitution value, that there is no more close relationship between the law and the state it regulates.[28]

Customary regulations in Indonesia lived to this day as long as it does not violate the positive regulation in Indonesia. Customary law values are one of the legal system sources in Indonesia. In Asia, customary law lives in a lot of states, such as Japan, India, and China. The source of this legal system is the unwritten law that grows, evolves, and maintained with public legal consciousness.[29]

In Indonesia, the customary law is a *non-statuoir* law, meaning it is an unwritten and non-coded law. The definition of customary law itself is a law that lives because it embodies the legal feelings of living among people in

[27] H. Mustaghfirin, "Sistem Hukum Barat, Sistem Hukum Adat, dan Sistem Hukum Islam Menuju Sebagai Sistem Hukum Nasional Sebuah Ide Yang Harmoni", Dinamika Hukum Journal, Vol. 11, February 2011, p. 90

[28] *Ibid.,* p. 91

[29] *Ibid.*

accordance with its own nature.[30] The customary law continuously grows and lives in itself. This law system can easily be tracked from the principles, which are:

a. The principle of mutual cooperation (Asas gotong-royong)
b. The principle of social property rights (Asas hak milik sosial)
c. The principle of the agreement as a fundamental for authority (Asas persetujuan sebagai kekuasaan umum)
d. The principle of representation and deliberation in the government system (Asas perwakilan dan permusyawaratan dalam sistem pemerintahan)
e. Traits of customary law

Islamic values combined with human traits and caused spiritual evolution and morality.[31] Muslim Sharia in the historical journey has not lost its function in the society that develops with the appearance of Mazhab priests that, by itself, can fulfil the needs of the Islamic community. In Indonesia, Islamic Law is practiced fully by the Islamic community.

2.2.2. Legal System of the United Kingdom

The United Kingdom has adopted the constitutional monarchy system for its government with a written constitution and a common law legal system. Common law system has jurisprudence as the primary legal source and the adoption of the Stare Decicis Doctrine/Precedent System. This system uses the adversary system in the courting process. There are lots of states using this system as their legal system, mostly in the America continent.

The common law system puts the constitution as the primary reference because the rules of the law are the work of the theorists who are not impossible to be different from reality and out of sync with needs. One of the unique traits of the common law is the judicial court system shared in its states. The

[30] Soepomo, *Hukum Adat*, (Jakarta: PT Pradnya Paramita, 1993), p. 3

[31] Ahmad Masrur, "Pluralisme dan Chauvinistik (telaah Filosofis dan Akidah)", Addin, Vol. 2 No. 1, January-June 2008, p. 78; see also Muhammad Mustaqim, "Konsep Maslahat Dalam Qowaid Fiqih Syafi'iyah (Studi Analisis Kitab Faraid al Babiyyah)", Addin, Vol 2 No. 1 January-June 2008, p. 117; Hani Astika, "Hubungan Agama dan Negara Dalam Islam", Al Manahij, Vol 2 No. 1, January-June 2008, p. 66, as quoted in *Ibid*., p. 92

constitution and the monarch run together with trust as the efficient and the dignified. Judicial court system means the court decisions are decided not by the judge like in civil law, but by the juries. These juries are chosen from many layers of society. Most of them are chosen from well-known and influential people in society.

One of the unique traits of the United Kingdom law is the strong relationship it has with the past. These historical relationships come from law continuity. The United Kingdom is a unitary state, divided into England, Wales, and North Ireland. Its government is in monarchy form and with the decentralized state system. The common law system in this state based on society custom that is developed based on the court ruling. It has a compelling standing position since the principle of *stare decisis* and or the binding force of precedents principle. This principle obligates the judge to follow the previous judge's decision.

The United Kingdom has a parliamentary system for its government, where the government's authority lies with the prime minister and the minister. The Queen serves as the head of state and as the symbol of sovereignty and unity of a state. It applies a two-party system, which are the conservative party and labor party.

2.2.3. Indonesia's Copyright Law: Law Number 28 of 2014

From time to time, copyright law development in Indonesia has its tides and turns. Starting from the principle of concordance in the Netherland colonial era, continued by "legal transplants," a term used by O.K. Saidin. Regulation regarding copyright in Indonesia has undergone few changes throughout the period intellectual property rights' existence is admitted.

Historically, copyright regulation has existed since the 1840s. Netherland colonial-era introduced the first copyright law ever existed in Indonesia, which is the Copyright Law of 1912. At the time. Indonesia was still named as Netherlands East-Indies. It had become a member of the Paris Convention for the Protection of Industrial Property since 1888, and a member of the Berne

Convention for the Protection of Literary and Artistic Works since 1914. Even in Japan colonial era, these laws still valid and existed in Indonesia.[32]

This law serves as an act to push and protect creation, a publication of a work in fields of science, art, literary and to improve the state's intellectual growth.[33] Even though these revisions have adjusted itself with TRIPs, few international agreements on copyright, and rights related to copyright ownership, there are still many terms that need to be perfected. This action is necessary in order to provide more protection for works in the copyright field. Aside from the lack of protection, it must be admitted that the application of this law is still weak and have few obstacles. The obstacles are not just from the government and administration but also the authors, practitioner, and many other parties.

The first regulation of copyright in Indonesia is the *Auteurswet 1912 Staatsblad* No. 600 of 1912. The *Auterswet 1912* is the regulation from the Netherland Colonial era and is enforced based on Chapter II Transitional Rules 1945 Constitution. *Auteurswet 1912* regulates copyrighted work in fields of science, art, and literature.[34] However, the essence of *Auteurswet* does not have an impact on copyright

Then in 1982, the government published Law Number 6 of 1982 about Copyright, which in principle adopted the content of *Auteurswet* and adjusted with Indonesia's current situation at the time. With Law Number 6 of 1982 applied, the *Auteurswet 1912* no longer applicable. However, as time goes by, there are more cases of copyright violation happening. This violation consists mainly piracy crimes, and flaws in Law Number 6 of 1982 in protecting copyright, the Law Number 6 of 1982 is amended to Law Number 7 of 1987 about The Amendment Of Law Number 6 of 1982 about Copyright.

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[32] Direktorat Jenderal Kekayaan Intelektual, "Sejarah Perkembangan Perlindungan Kekayaan Intelektual (KI)", http://www.dgip.go.id/sejarah-perkembangan-perlindungan-kekayaan-intelektual-ki, accessed at 25th September 2019

[33] *Ibid.*

[34] Gatot Supramono, *Hak Cipta dan Aspek-Aspek Hukumnya*, (Jakarta: PT Rineka Cipta, 2010), p. 5

The flaw in Law Number 6 of 1982 in protecting copyright is because criminal regulation uses complaint offence. The investigator can only make any action towards the offender if there is any complaint from the victim. Progressed from that checkpoint, the Law Number 7 of 1987 amends its offence from complaint offence to ordinary offence. Other changes are the scope of copyright and timespan for copyright protection and the relation between the State and the Copyright Holder.[35]

New amendments then are continued in Law Number 12 of 1997 as ratification from Agreement on Establishing World Trade Organization. There are at least three political considerations in it. The first consideration is to give more effective law protection towards intellectual property rights, especially in copyright. The second consideration is to adjust the national regulation with intellectual property rights principles as regulated in Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). The third consideration is to change and perfect few terms in Law Number 6 of 1982 that are considered no longer relevant.[36]

In 2002 other changes had been made through Law Number 19 of 2002 that is still being focused on the TRIPs agreement. Few differences between this law and the law before it is the scope of protection, protection timespan, dispute resolution, and adjustment with international law. This law also adds the copyright work scope, which is a database, remembering that Indonesia had signed the WIPO *Copyright Treaty* (WCT). Aside from these additions mentioned, there are more adjustments made in this law, such as alternative dispute resolution and many more.[37]

The next law adjustment was made in 2014 by Law Number 28 of 2014 about Copyright in which is valid till now. This law is more focused on adjustment with current technology development. However, as revolution industry 4.0 and technology is developing faster than predicted, this law does

[35] Laina Rafianti, "Resensi Buku: Sejarah dan Politik Hukum Hak Cipta", Bina Hukum Journal, Vol. 2, No. 2, March 2018, p. 269.

[36] *Ibid.*

[37] *Ibid.*

not cover the most current issue, which the copyright work invention is created by artificial intelligence.

In regards to copyright protection internationally, it is known as the Berne Convention for the Protection of Artistic and Literary Works which started in the year 1886 wherein 1931 under the name of Netherlands East-Indies, Indonesia had joined, becoming one of the members that reserve those conventions through the Rome Act.

2.2.4. The United Kingdom's Copyright Law: The United Kingdom Copyright, Design, and Patent Act 1988

The development of the United Kingdom Copyright, Design, and Patent Act 1988 can be traced back to where it first developed in the early period before the 1700s. At first, it only gave authors the exclusive right to print and distribute books. This law then developed after the Anglo-Scottish Union of 1707. An author gains an exclusive right and liberty of printing books through the first copyright Act of Parliament dates back as far as the 18th century to the Statute of Anne in 1709, giving protection to authors for 14 years and renewable once.[38]

During the nineteenth century, copyright was extended as a subject matter, adding art, drama, music, and literature. It also developed an international character as per Berne Convention for the Protection of the Literary and Artistic Works 1886 that provided a minimum framework of principles. A further result from this convention is that copyright can be enjoyed worldwide. This convention result is a breakthrough that applies to the current era.

The late nineteenth and twentieth centuries foresee future expansion in the copyright field. Some additional copyright-protected works are photographs, films, sound recordings, broadcasts, computer programs, and databases. Compared to Indonesia's Copyright Law, the United Kingdom Copyright Act, with the most recent development with the internet and technology to

[38] The British Academy, "Guidelines On Copyright and Academic Research", (London: The British Academy, 2006), p.3

correspond with revolution industry 4.0, copyright law has some issues to deal with, such as digitally-based media and many more.

2.2.5. World Intellectual Property Organization (WIPO)

The World Intellectual Property Organization (WIPO) is one of the United Nation's organization. WIPO administers a world panel where states, intergovernmental institutions, industry society, and civil group come in sync to discuss the growing intellectual property subject. WIPO has the calling to margin the state to be a well-coordinated and adequate global intellectual property system that empowers innovation and creativity for the welfare of all.[39]

To give global legal certainty, Indonesia must communicate with The Copyright Law Division in WIPO that does:[40]

- Acting as the secretariat to the Standing Committee on Copyright and Related Rights (SCCR),
- Administering copyright-related treaties,
- Assisting member states preparing to adopt new copyright treaty obligations,
- Providing legislative assistance to member states on copyright issues,
- Provide training and preparing studies on a wide variety of copyright topics.

WIPO was established in 1970 with the purpose to push creativity and to introduce intellectual property protection to the whole world. It was first realized on the Stockholm Conference[41] and then established based on the Berne Convention.

In doing its activities, WIPO has three governing bodies. There are the Conference, the General Assembly, and the Coordination Committee. The members of the Conference are all the states that are members of WIPO. The

[39] World Intellectual Property Organization, *Op. Cit*.

[40] World Intellectual Property Organization, "Copyright Law Division", https://www.wipo.int/about-wipo/en/activities_by_unit/index.jsp?id=36, accessed at 9th December 2019

[41] Arpad Bogsch, *Brief History of the First 25 Years of the World Intellectual Property Organization*, (Geneva: WIPO Publication, 1992), p. 11

members of the General Assembly are all the states that are not only the members of WIPO but also members of the Paris Convention and/or Berne Unions. The General Assembly is a body in which the members of at least one of the two main Unions (Paris and Berne) make the decisions. The Coordination Committee members are automatically the members of the Executive Committee of the Paris Union and Berne Unions, with some *ad hoc* members who belong to neither of the two Unions but are members of WIPO.

WIPO now has more than 180 state members and has held 23 international treaties, with Geneva, Swiss as their home base. To be a member, a state must deposit an instrument of ratification or accession with the Director-General (currently Francis Gurry). The WIPO Convention provides that membership is open to any state that is:[42]

a. A member of Paris Union for the Protection of Industrial Property, or member of the Berne Union for the Protection of Literary and Artistic Works,
b. A member of the United Nations or any of the United Nations' Specialized Agencies, or of the International Atomic Energy Agency, or that is a party to the Statute of the International Court of Justice,
c. Invited by the WIPO General Assembly to become a member state of the Organization.

WIPO was predecessor by Bureaux Internationaux Reunis Pour La Protection de la Propriete Intellectuelle (BIRPI), which translated to English as United International Bureaux for the Protection of Intellectual Property. BIRPI was established in 1883, continued by WIPO in 1967. WIPO was established by Intellectual Property Organisation Establishment Convention signed at Stockholm on July 14th, 1967, and revised on September 28th, 1979. Based on Article 3 of this convention, WIPO commits to promoting protection toward intellectual property to the whole world. In 1974, WIPO became the United Nations' self-funded special representative for intellectual property right matter.

[42] World Intellectual Property Organization, "Member States", https://www.wipo.int/members/en/, accessed at 9th December 2019

WIPO uses the Berne Convention as its legal basis of protection. In Article 2 the Berne Convention, protected copyright works in the form of literary and artistic works are as follows:

a. Books, pamphlets and other writings;
b. Lecturers, addresses, sermons, and other works of the same nature;
c. Dramatic or drama-musical works;
d. Choreographic works and entertainments in dumb show;
e. Musical compositions with or without words;
f. Cinematic works to which are assimilated works expressed by a processed analogue to cinematography;
g. Works of drawing, painting, architecture, sculpture, engraving, and lithography;
h. Photographic works to which are assimilated works represented by a process similar to photography;
i. Works of applied art;
j. Illustrations, maps, plans, sketches, and three-dimensional works relative to geography, topography, architecture, or science.

The length of the protection also follows the Berne Convention regulation. In Article 7, the minimum protection length is stated, which is the life of the author and 50 years after his or her death. This is the standard minimum of copyright protection by WIPO for copyrightable work. There are however, certain exceptions for this regulation.

Cinematographic protection term based on Berne Convention is 50 years after the work is accessible to the society (showed), or if not being showed, 50 years after the work has done its process of making. The minimum protection term for photographic works and works of applied art is 25 years from the date of the work is finished. In order to balance between moral rights and economic rights, the duration of moral rights protection must be for at least as long as the duration of protection for economic rights.

2.3. Theoretical Framework

2.3.1. The Progressive Law Theory by Satjipto Rahardjo

The Progressive Law Theory stated by Satjipto Rahardjo is the correction for the flaws in modern law system that loaded with bureaucracy and wants to free them from the domination of liberal law. The progressive law sees, observes, and wants to find a law that gives way and guidance. Observation and experience towards the road map and law life, which resulted in faith that law must be left alone to flow naturally. Not being able to flow means that life and humanity can no longer receive excellent services from the law because the law exists not for itself, but humanity.

The Progressive Law is the way of law to build itself and for it to follow and adjust to the dynamic context in life. In doing so, it will have sure of quality to serve and bring people to prosperity and happiness. The ideal is done with continuous activities of knocking down blocking and hinder law to build better law.[43]

Based on Satjipto Rahardjo, the progressive law implementation is to run the law not just by according to the letter, but to a deeper meaning of the constitution or law.[44] The existence of progressive law is not a coincidence. It can be seen as a search for identity, depart from the empiric reality about how the law runs in the community, in the form of dissatisfaction, and performance and concerns regarding the equality of law enforcement in Indonesia at the end of 20th century. This phenomenon then transforms as a part of the unstoppable search for the truth. The implementation itself needs to have both intellectual intelligence and spiritual intelligence.

a. The law as a dynamic institution

The progressive law rejects all statements that stated the law institution is final and absolute, but rather is determined by its ability to serve humanity.[45] As humanity keeps renewing itself and changes from

[43] Satjipto Rahardjo, *Penegakan Hukum Progresif*, (Jakarta: Kompas, 2010), p. 69.

[44] Satjipto Rahardjo, *Penegakan Hukum Suatu Tinjauan Sosiologis*, (Yogyakarta: Genta Publishing, 2009), p. xiii.

[45] Mahfud MD, *Politik Hukum di Indonesia*, (Jakarta: Rajawali Pers, 2009), p. 368.

time to time, it is relevant for the law to follow the dynamical life of humanity and the legal culture. From this statement, we can conclude that the law is continuously being in a process and making, continually flows itself towards a better perfection. The said perfection quality could be verified to the following factors; justice, prosperity, concern for the people, and many more.[46]

The law as a process and the law in the making that continuously updates with humanity will affect our law implementation way. The law will not be caught in a "legal certainty" rhythm, status quo, and law as a final scheme. When we accept the law as a final scheme, the law does not exist as a solution for problems in humanity anymore. However, instead, humanity will be forced to fulfil legal certainty needs.[47]

b. The law as the teachings of humanity and justice

The base philosophy of progressive law is an institution in which purpose is to deliver humanity towards a fair, prosper, and happy life.[48] This base is why when there is a problem in the law, it must be analyzed and fixed, not by forcing humanity to adjust in the law scheme.

Progressive law moves from a base assumption the law is for humanity, and not vice versa. The statement that the law is for humanity means the law is merely a "tool" to achieve a fair, prosper, and happy life. Moreover, for that, based on the progressive law, the law is not the purpose of humanity, but rather the law is merely a tool to reach a substantial justice, not procedural justice.

c. The law as a rules and behavior aspect

The progressive law orientation rests on the rules and behavior aspect. The rules will build a logical and rational positive law system, while the behavior aspect will move the already built rule and system. By putting behavior aspect above the ruling aspect, humanity and people factor that

[46] *Ibid.*

[47] Mukhidin, "Hukum Progresif Sebagai Solusi Hukum Yang Mengsejahterakan Rakyat", Pembaharuan Hukum Journal, Vol. 1, No. 3, December 2014, p. 279.

[48] Mahmud Kusuma, *Menyelami Semangat Hukum Progresif; Terapi Paradigmatik Atas Lemahnya Penegakan Hukum di Indonesia*, (Yogyakarta: LSHP, 2009), p. 31.

has compassion, empathy, sincerity, education, commitment, dare, and determination will bring us to understand better the law as a process and humanity project.

d. The law as a liberation teaching

The progressive law acts as a force of "liberation," which is to free itself from any type, a way of thinking, law principle, and the theory of legalistic-positivistic. With "liberation" characteristics, the progressive law prioritizes purpose rather than procedure. Liberation, in this context, does not refer to anarchist action. Because, every action needs to be based on social propriety logic and justice logic, not just rules logic.

Thinking progressively, based on Sajipto Rahardjo, means that it must break out of mainstream absolute law mindset then puts the law in a relative position.[49] In this, the law must be included in all human problems. Working based on progressive law mindset (progressive law paradigm), surely it is different from positivism-practical law usually taught in the university.

The progressive law reminds us that the dynamic of law is nonstop. Therefore, the law is continuously on the status of building itself. This act then causes social changes, supported by planned social engineering by law. From it, it is hoped that the changes will fulfil the purpose of progressive law, which is prosperity and happiness for humans. In this, a predisposition is needed, such as:[50]

1. Establish the rule of law

   In order to establish the rule of law, four elements are obligated to be fulfilled, which are:

   a. The government is under the law;
   b. The existence of jurisdiction independence;
   c. Access to the court of law;
   d. General actual in the specific application and the same meaning.

2. Democracy

[49] Sajipto Rahardjo, *Hukum Progresif Sebagai Dasar Pembangunan Ilmu Hukum Indonesia, Menggagas Hukum Progresif Indonesia*, (Semarang: Pustaka Pelajar, 2006), p. 9.

[50] Mukhidin, *Op. cit.,* p. 282

The basic principles of democracy are:

a. Constitutional;
b. Check and balance;
c. Freedom of media;
d. Judicial independence of predicament;
e. Control to civil to the military;
f. Protection to the minority.

Both of these statements have become a part of trait for progressive law principle. The law is not the king, but rather a tool to announce to humanity and the world that the law is not a heartless technology. It is merely an institute with human morality. Humanity problems will keep accompanying and flow into the law. Therefore the law exists not for itself, but to serve and conserve humanity and all the discussion regarding righteous and justice in it.

To obtain a better understanding of the implementation of progressive law in practical law, to be put, the principles of progressive law can be concluded as follows:

a. To breakthrough and build continuously (not depending on status quo);
b. To prioritize factors and roles of human above the law;
c. Reading regulations is reading the meaning, not just the words. Which is why the regulation languages should not imprison it;
d. To free humanity from prevalence that comes from the regulation or practical habit;
e. To prioritize moral conscience, which is: empathy, compassion, dedication, determination, sincerity, and daring;
f. The law is not a machine but rather the hard work of humanity with moral conscience.

2.3.2. The Concept of Law Theory by Gustav Radbrucht

According to Gustav Radbrucht, there are three principles in the idea of fair value, which are:

a. Legal Justice

Aristoteles stated that the purpose of the law is the content of the law determined by ethical consciousness regarding what is fair and what is not fair, to make men good and righteous, and above all to serve the common interest[51]. In this theory, the law has the holy purpose of justice by giving people their rights and needed specific rules for each case. In the justice theory, the word "justice" also means an action positioned between giving too much and/or less. It defines as giving something to a person by giving them what their right is.

The justice principle is the benchmark of what is right, well, and precise in life and therefore binds everyone, either the people or the rulers. The value of justice can be seen as a social value, and wherein some aspect concerns various human associations, from families, culture, nation, or international association.

Justice in the eye of the law is one of the values longed by a law nation. However, justice becomes very expensive since it involves the rights and obligation of in-state relationships. The government in broad definition will run the state's policy to start from the act writing, to execute, and supervise the said law product.

In Indonesia, the second and fifth precept of Pancasila contains the value of justice, in which are written:

> *"Sila kedua: Kemanusiaan yang adil dan beradab (translate: Second precepts: A just and civilised humanity)"*
>
> *"Sila kelima: Keadilan sosial bagi seluruh rakyat Indonesia (translate: Social justice for all of the people of Indonesia)"*

From this, we can conclude that every citizen of the state is treated fairly, with just, and with appreciation towards humanity. The justice aspect is crucial to a legal state's daily life. It is assumed that by fulfilling justice in every field, then the prosperity as a state's purpose can be fulfilled.

[51] W. Von Leyden. *Aristoteles and the Concept of Law*. (Cambridge: Cambridge University Press, 1967), p. 19

b. Legal Certainty

Legal certainty is crucial to ensure order and discipline in the society because legal certainty has these certain traits:

- The existence from outer coercion (sanction) from authorities to maintain and cultivate society order with the tools;
- Nature of the act in which applies to everybody.

Utrecht once stated that legal certainty comprises from two definitions. First is a public rule that allows an individual to know which actions are allowed and prohibited. The second definition is legal security for the individual from the government's tyranny. Because, from the said public rules, an individual can know everything that can be charged or done by the state towards an individual.[52]

Legal certainty will be obtained if the acts that serve as the legal certainty do not conflict with other acts. The law is made based on legal facts, and in these acts are no legal ambiguity terms. Aside from it, the legal certainty has the meaning that in terms of the argument, both sides can determine their place or their position. Gustav Radbrucht stated that:

> *"The law in a developing country has two definitions which are the legal certainty because of the law, and the legal certainty in or from the law. To guarantee the legal certainty that comes from the law becomes the obligation of the law. A law that is successful in guaranteeing many certainties in social relationships is benefited."*

Law also must ensure the legal certainty in relationships that exist in society. Without the existence of legal certainty, society will purge and be uncontrollable towards each other since there is no order to contain them. The legal certainty also becomes a form of the legality principle.

Legal certainty can also become the form of law terms or law statements in a state that can guarantee the rights and obligations for every citizen of the state. Normatively a legal certainty is when rules are made and regulated for sure because it is regulated clearly and logically. By clear and logical it refers to the law not causing doubts, being logic, does not

[52] Riduan Syahrani, *Rangkuman Intisari Ilmu Hukum*, (Bandung: Citra Aditya Bakti, 1999), p. 23.

clash between one norm to other norms. The blurred line of the norm is caused by the uncertainty of the law itself, which then causes multi-interpretation of a regulation.

The legal certainty has also become an inseparable trait of the law, especially for written law norm. A law without the legal certainty value will lose its meaning since it cannot be used as a trait by people anymore. This certainty is also set as the purpose of the law. Gustav Radbrucht also stated there are four basic things connected with legal certainty, which are:[53]

1. The law is positive, which means the positive law is the legislation;
2. The law is based on facts, which means it must be based on reality;
3. The facts must be formulated with a clear way to avoid miscommunication in meaning and to encourage the practical;
4. The positive law must not be quickly revised.

The legal certainty poured in the verdict is the result of trial facts that relevant juridical and considered with a conscience. A judge is always demanded to be able to interpret what the law and other regulations mean that is being used as the basis of verdict. A verdict that contains legal certainty will help future verdicts to be written and gives a contribution to law science in the future. This legal certainty is because a judge's verdict is final and binding. It is no longer opinion of the judge, but a court's verdict in which can be used for future verdicts and daily life.

Humanity has moved fast in its community and living state. The revolution of the current age influences it. This progress is why the need for legal certainty must be balanced with the current culture. This balance is required in order for the law to be relevant. Without this adjustment and balancing, the law will be static in which will cause chaos to society.

c. Legal Expediency

Expediency is usually understood as speaking to the suitability of meaning for implementation of a purpose. In this theory, expediency does

[53] Robert Alexy, *Gustav Radbruch's Concept of Law*, (Slovak Republic: Pavol Jozef Safarik University in Kosice, 2004), p. 8

not refer to purposes only, but also the capability of absolute value. Society expects expediency in the practice of the law. The law exists for the society, and therefore the practice of the law must have expediency and benefit for human society, not causing chaos or panic.

The existence of the law realizes as a purpose for humanity to provide security, order, and to ensure prosperity obtained by people from the state as the umbrella of social relationships. Identification for every problem is the duty of the law to ensure legal certainty and expediency. In order to do this, a contextual law is needed to accommodate social practices in society by regulating the law norm.

The law practices that are applied are to create a correlation between the law and society, which is a stronger and better social law than private law.[54] Expediency is the purpose of the law that has a legal role in putting aside justice and legal certainty. A law is considered the supreme law if the application of the law norm gives functional expediency and prosperity for society. Therefore, all members of the state can implement the law by prioritizing the people and other components in legal life as pleasant as possible.

[54] Alvin S. Johnson, *Sosiologi Hukum*, (Jakarta: Asdi Mahastya, 2006), p. 204.