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Epistemic (In)justice as A Process to Decoding Digital Information from Law Perspective

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Abstract

In this digital era, information can be disseminated much easier due to the internet. Under openness principle of information on the internet, now we can access information relatively easily. When those condition is viewed from Epistemic Justice theory as postulated by Miranda Fricker means we are going toward information justice since now almost every people can now contribute and access information, but the reality says not all those information on social media is the right information, some information can be categorized as mis-information some as dis-information. Based on those condition this research will then questioning relevancy between Epistemic Justice in this digital era with legal consequences in Information and Electronic Transactions Act. This is due to by implementing openness principle it means we can gain almost any information but also any person now can contribute to provide information for another internet user. With such conditions we must selective when choose who is our information provider since mis and dis information in law paradigm can have negative impact toward law subject, and can have legal consequences. That's why we needs to rethink again, is from legal paradigm information justice is a good idea, or do we need to set back to epistemic injustice. The idea to use injustice practice is due to in law paradigm we must act carefully, and that's why do we need to rethink again by being selective when we read digital information.

Keywords

justice, injustice, digital information, philosophy, law

1 Introduction

Epistemic injustice is not good things, this due its characteristic which disregard certain individual as source of information. Furthermore, discriminate information sources can have impact on how we gain knowledge. By doing so then we will have no new knowledge or if knowledge is not relevant anymore than we will have obsolete knowledge since there are information that can be used to adjust or change current knowledge which is not relevant anymore. From those statement then we know that epistemic injustice in common term can bring negative impact on how we know something new or changes.

Since injustice is the opposite of justice, if we already said injustice is not good then the other one which is justice will be the good one. That is what actually we are talking right now, so now we can align those two terms like this, information justice is good, and information injustice is bad as preliminary statement. But then talking about epistemic justice and in justice particularly in this digital era is quite intriguing. While epistemic justice can create problem if not achieved, but now in this digital information era we already facing contemporary issues with how digital information can disrupt knowledge acquisition and understanding. This issues arise due to how digital information characteristics such as availability and velocity to reach internet user (Hesse, Moser, & Riley, 2015), in this case we can understand with those characteristic actually digital information is double sided, one in negative mean can disrupt while the other one in positive mean can synergy or promoting epistemic justice because almost if not all internet user as long as connected to the internet can contribute or provide information as source of knowledge to the others (Carter, 2023).

With advancements in information technology nowadays information can spread easily and multiply at short intervals (Birchall, 2011). With this condition it means that we can have so many information as source of information at blink of eye. If questioned, is it good? Of course we can answer it is good because now we can have information easily thus, we can gain new knowledge easily too, in this case we can say as an ideal condition whereas epistemic justice is occurring.

But if use law paradigm which emphasize legal certainty, then we need to rethink again about how digital information can affect knowledge needed to resolve legal issues. In this thesis we will analyse whether information justice supported by digital information characteristic such as easily available, fast to distribute is good or bad from legal paradigm. Furthermore, this thesis will discuss how from legal perspective will react to epistemic (in)justice and openness characterization of digital information.

2 Methods

This research is a qualitative research using a literature study method that conducts research on library materials that include epistemology, epistemic injustice, principle of testimony in court. Data collected for this research is obtained from journal reviews, scientific article and online resources related to theme of law and this testimony in legal cases.

Obtained data will be analysed in three step, first is organizing data by selective purpose choose most relevant data with the research theme. Second, presenting data in a narrative form. Third, verify step already taken before and then make a conclusion.

3 Discussion

3.1 Epistemic Injustice

What is epistemic justice, which is the that need to be discussed. In this thesis we will refer to epistemic justice according to Miranda Fricker and another related argument on research or paper. If according to Miranda Fricker (2009) then epistemic justice will led us to two kind of injustice, namely testimonial injustice and hermeneutical injustice.

First, testimonial injustice which occur when individual gave testimony is not valued or even ignored due to racial profile, gender or due to impairment. Second, hermeneutical injustice occurred when there is gap between tool to interpret or described what is actually experienced by the person, this means there is lack of term or definition to describe what actually happens to that person. Most prominent example such as lack vocabulary or common definition with so activity that can have negative impact (Hopster, 2024).

From those two kinds of epistemic injustice, this thesis will only focus on testimonial injustice, the reason due to relevancy between testimony as source of knowledge during litigation process or to gain new insight about the legal problems itself. In legal settlement itself testimony can the suspect, eyewitness, expert witness, or even related information from the internet in digital form. That's why when we use legal paradigm then testimony injustice have strong correlation with how legal problem will be processed, in this case we can say testimony have focal point to resolve legal case.

In legal dispute or case settlement testimony become as source of knowledge for the judge to make decisions, this due to judge role in court is to "aim of arriving at a decision based upon the facts as elicited through legal argument and examination of witnesses and other evidence by either side" (Harris, 2007). Furthermore the decision done by the judge will affect the verdict whether the defendant guilty or not. Thus, we can see how important testimony. For testimonial injustice, it might happen on every dispute or case settlement, whenever this happen it means the source of knowledge which can be eyewitness, expert witness etc. may ignored or not conserved as knowledge.

The individual position as source of knowledge if being treated with injustice mean is not credible or *bona fide* from legal term this condition can occur whenever individual as source of knowledge receiving less credibility this can be define as what we called credibility deficit. On the other hand, if the individual receive more credibility than we called it credibility excess (Fricker, 2009).

Both of those condition regardless positive value in receiving more credibility or negative value due to receiving less credibility can said as injustice, the reason because there some deviation from normal condition, in this case the people who assess the source of knowledge make judgmental problem. The problem in this context arises when knowledge assessor adding a subjective valuation toward the source of knowledge.

3.2 Digital Information as Source Knowledge for Legal Settlement

Digital information can come from digital data, in order for the digital information can defined as information the digital data must be well formed and meaningful. According to Floridi (2009) meaning full and well formed data also known as semantic content. Information that is semantic content can come into two mode, first information to do something or instructional information, second, information about fact or factual information.

Both mode of information is common in legal dispute and case settlement. By using instructional information judge can procedurally taking action what needs to be done, and by using factual information judge can have picture of what actually happened. Based on those statement we can clearly see information as source of knowledge tied closely with legal dispute and case settlement.

And now what about digital information, the digital information itself actually is still an information di digital form or electronic form, according to positive law in Indonesia, digital information and non digital or traditional form information can be treated equally on other word there is no differentiation regarding information form whether it is digital or not (UU ITE). Digital information or information since it is information in its digital form depends on information and communication technology to spread like an internet connection is the most prominent how digital information can spread among its users, with the advancement of information technology digital information "may distribute in any corner which network can reach in the world" (Xiong & Wang, 2008).

If so, then what is the problem with digital information? With digital information in this digital age people have freedom to disseminate information (Schlagwein, Conboy, Feller, Leimeister, & Morgan, 2017) and even create information based on subjective opinions. Also, with new communication methods such as email or instant messaging people now can forward or function as relay to re-disseminate already received information. By receiving information forwarded by another people it means that we may not have information from the original source, it may come from the second third fourth etc.

Another problem in this digital age with information is how we can create information or synthesis an information in negative attitude. This is like we create information not based on the actual fact either fabricating or modifying information (van der Sloot & Wagenveld, 2022).

Those all are challenges in digital information era since those challenges can bring negative impact we need to treat digital information wisely. Clearly by abilities to create or fabricate information not based on fact is problem and can be more problem if another people treat that information as factual information (Meskys, Liaudanskas, Kalpokiene, & Jurcys, 2020). When dealing with digital information as a source of knowledge to resolve legal case, then we must be aware of and prudence about the content of the information.

3.3 Testimony Under Legal Paradigm

In legal case settlement testimony is considered as evidence, hence by using testimony the judge can make verdict. Legal case settlement involving fact finding both scientifically or using social approach through gathering information from witness thins include eyewitness or expert witness. Testimony in Indonesia legal system is required and ruled by procedural law ("*Undang-Undang Republik Indonesia Nomor 8 Tahun 1981 tentang Hukum Acara Pidana*," 1981, Article 183). According to penal code, in order to make decisions (to impose sentence), judge must at least have two evidence otherwise the case cannot be processed this is a legal principle and also known as *unus testis nullus testis*.

For the evidence itself regulated under Article 184 Code of Criminal Procedure mentioned what is legal evidence material ("*Undang-Undang Republik Indonesia Nomor 8 Tahun 1981 tentang Hukum Acara Pidana*," 1981). The legal evidence material include: testimony from the witness, testimony or information given by an expert witness, letter or document which contains relevant information to the case, indication

such as information that have meaning to give an insight or another point of view about the case and last is the statement from the defendant.

From law perspective testimony is an information that come from witness, expert witness. The testimony itself can be given in an oral form or written within under oath or affirmation. From the later definitions then we can also include letter or document is also part of testimony in an broader sense because same as statement or information given by witnesses, documents or letters also fundamentally contain information about the case or it might give an indication to do further investigation (Ho, 2008).

Here in this thesis I defined testimony is an basically is an information, either given orally by witness which is actually a person or in written form as in document or letter. For the later we also can inferring if testimony is an information, then on the traditional model it can be in document including letter form, thus in digital era a digital information since it has same principle which is information so the digital information can be said also is a testimony.

Based on prior statements we can see now in this digital age testimony is not just information orally given by the witness but also include information that is given in electronic information form by person considered as potential witness due to relation with the legal case.

3.4 Testimony in Form of Digital Information

Main purpose gathering information from witness is to gather information then with those information we can gain a knowledge. This concept to gain knowledge base from information is the same and applicable with information come from internet, social media in an electronic form.

Information finding to gain a new or adjust change state of knowledge in conventional is by using information come from witness or any source of information such as documents or letters (Ho, 2008), but nowadays with new model of communication such as using email, or posting an information via social media then we have new model. In this new model the authority can get information to gain knowledge not only eyewitness who sees or hears directly about the fact but also can be done by using digital information posted or disseminated by the potential witness.

Whenever come about information then at first sight we can assume that if we have so many information it means the judge will have rich knowledge about the case. But if we look again at the characterization of digital information then more information is now always better than less information even sometimes people tend to prefer less information (Sunstein, 2020).

During information gathering process sometimes we will encounter this kind of situation: An example is when people post an information but the information itself is fabricated so it is not based on fact, this kind of information can led decision maker to create mistake, and the impact innocent people punished even he do not commit crime or vice versa whereas guilty defendant can escape punishment due to misinformation or disinformation. Based from these examples it at some point, which is during decision-making, by using false information it can led to disaster.

To avoid those circumstance judge or the authority involved in information finding must be aware and assessing information carefully whether the information is valid or invalid. Here I use term valid or invalid to differentiate the truth of information.

Epistemology said knowledge must be believed, true and justified, in this thesis those proposition off course can said as classic JTB for knowledge (Barnett, 2022), but for the information itself true or not does not matter especially digital information at this moment. Information itself is neutral (Sommaruga, 2009), whether it is false or true is the matter of the aftermath. Here I want to say that information is information, it can be used to gain a knowledge or change already known knowledge, so for fact finding process in a legal case we may try to gather as many as possible information related to the case.

For digital information truth of an information is not first goal, instead it is the final goal. This goal order during fact finding process mainly due to digital information specific trait. Such as a digital information may received partially thus cannot be read or processed, this is can be exemplified when we received message then suddenly during transfer process stopped, this will resulting in corrupt data or data with error rate above threshold (Breur, 2009). The consequences is the data cannot be processed, that's why it is important to put integrity as first goal when doing fact finding process this can also impact the legal process itself, whenever data corruption occur it means there overhead (Zhou, Yan, Fu, & Yao, 2018) in time and cost to resolve legal case.

If the information integrity is not compromised then the information can be processed further (IEEE/Acis International Conference on Big Data, Engineering, & Lee, 2023), this time we will move validation. Already received integral information must be check for its validity. Information validity can be related to source or information origin or any properties of the information including substance of the information itself. Validity can be seen as concept where conclusion must be true if its premises are all true (Goldman, 1999), and in digital information validity are can related to condition between information source and information receiver. Information is valid if let say send by John Doe then it will using john.doe@mail.com since John Doe mail address is john.doe@mai.com. And whenever John Doe give us an information via his mailing address then we can say it is valid come from John Doe when we check the mail address in our received mail is john.doe@mail.com. On the contrary if we received email introduce himself as John Doe but send using not.john.doe@mail.com then this is invalid due to mismatch between two related variables, in this case person with name John Doe is using john.doe@mail.com.

From those example valid or invalid is about corelation between person name and mail address used by the person. Another common and simple example variables used to check validity of digital information is file hash or file fingerprint. Let say John Doe sent file with CRC32: BE4FD6F8, and we received files from man in the middle that say the file is from John Doe. To check the validity its mean we must analyse the hash of the file and if the file we already received hash is BE4FD6F8 then the file is valid from John, so the man in the middle said if the file is from John Doe now is valis. But, if we check the file and then the result is not BE4FD6F8 we can conclude that file is not valid or invalid from John Doe. So validity in this case we check again two variables, this time is the corelation between sender name and file hash.

Processing digital information for legal case until this stage we already have doing integrity check and validity check, and there is no doubt the information is valid or issued by intended person and not fabricated by someone else. Now since we already have the information, now it is time to check the value of the information itself, information value is about content of the information, now the truth of the information become important, because by looking at the information content it will give us semantic information like factual information (Floridi, 2009). Semantic content is the substance of the information or can be said also as payload of the information that can give us knowledge. In this part then we need to crosscheck or information substance whether it is contain truth or fabricated to be seems as truth (which is actually false) (Sommaruga, 2009).

Analysing already integral and valid information mean to seek truth about the content of the information, in legal paradigm especially during legal case settlement is to check whether the information have corelation with fact or not. In majority legal case like in criminal law fact itself is the actual fact when and where did the case happen. And since evidence must count more than one evidence or at least two, its always better if we have more evidence because each evidence contain information and we can cross checking each other, more evidence is more information and less margin error.

Regardless number of the evidence as source of the information, all of those information must be analysed carefully, by analysing information actually we also filtering information or deduct from general to specific and relevant with the legal case. The purpose of filtering information is to reduce information quantity especially information with low quality substance, source. By filtering information we also implementing certainty about the information substance.

For digital information itself nowadays can be seen as source of knowledge to the legal sector, particularly as factual information needed to solve legal problems. As mentioned before if we have more evidence we will have more information, but with massive quantities of information we can receive from the internet, we may overwhelmed by the information, in this state we have information overload (Revett & Benyon, 1996). Also for legal case digital information substance or its content quality is very important, this due to how nowadays so many false information or hoax that carried away on the internet, this can shown from investigation done by Ministry of Information and Communication that between 2018 until 2023 in Indonesia already detected there are 12547 false information cases (Informasi, 2024).

For legal case in digital information era, can advantages or disadvantage. As advantages we can see before if we want to resolve legal case then we an information, and in this digital era the internet itself provide abundance of information which can be used to solved the case. But the information can also be a disadvantage, the reason is, processing such large quantities of information needs resource, beside not all of those information have direct relationship with the legal case, some information are not factual, which is needs to analysed critically to find what is the relationship with the legal case or some information may contain hint thus we need to find another source of information.

About information overload it may bring negative impact on the legal process, the prominent impact such as reducing efficiency in the process and also create additional burden due to resources needed to process such huge amount of information, also facing too many information can distract and make a legal case process deviate from its track due to confusion (Lee & Lee, 2004). To mitigate this problem we can use information filtering, by filtering information we discard information which is not relevant thus, only leave information which related to the legal case.

Filtering information also give us certainty because during filtering process we may discard an information if the source is not credible and only leave credible to be processed. By only processing information from credible source mean we can have right decision since now we are doing systematic approach to remove unwanted or information (Lee & Lee, 2004) that is not relevant, or later we found if the information is classified as mis-information or disinformation.

3.5 Injustice for Justice

This epistemic injustice not without purpose, because when we filtering of course we will consider carefully which information source is credible and which is less credible. So in this process we do decision making process to decide which information that will be discarded (Lee & Lee, 2004). And in filtering process we will judge which source information have credibility deficit, this is the source of information that will be discarded.

Filtering can also be done by comparing and make valuation about the source of information (Koltay, 2018). Using epistemic injustice concept, sometime when we filtering information we are being injustice to the source of information. From statement before where we use credibility as criteria is just one of many criteria that can be used to filtering information, the reason to use credibility is due to its relation with information content quality, the premises: if the source credible the information will also credible (Diaz-Garcia, Ruiz, & Martin-Bautista, 2022). By using credibility as criteria it means that if the source of information is less credible then we will ignored information given by that person in other word information form credibility deficit is less preferred than information given by person with credibility excess.

Now with challenges from digital information and specific norm under law regarding testimony as evidence or source knowledge to make decisions for the judge, than we need to rethink again whether testimony injustice is good or bad. Using legal approaches, we can see information come from witness or another source of knowledge is important to resolve legal dispute or case (Lebensfeld & Smalarz, 2024). But since digital information has its own challenges such as information availability and credibility then from legal perspective can be said it wouldn't good idea to receiving any information from any source.

If we want to act diligently then we must filtering those information, main reasons are:

1. Too many information can lead to information overload and this can affect the efficiency of information processing, the result are decision is taking longer time.
2. Not all information is based on fact, since we can create or fabricated information, we must be aware about truthfulness of an information. False information either misinformation or disinformation if used as knowledge by the judge may can create unwanted decisions such as innocent people falsely accused of doing criminal activity, this can bring negative impact to the individual itself.
3. Uncertain information, or in legal term *non constat*, by using uncertain information it might have negative impact like in the statement above, but also create additional effort for the judge to check and recheck again in order to inferring if the information can be used or not.

3.6 Conclusion

In order to achieve justice and legal certainty then we will being injustice by discarding an information whenever credibility the source of the information is questioned. This can happen if the source of the information is not *bonafide* or credible due to lack of information integrity or mismatch with majority of another source of information.

Also sometimes legal enforcement institutions prefer credible such the source of information never commit crime, in this case we can compare information from let say A who has never done a crime with B then off course we can say if B is less credible than A and the consequences we will prefer information from

A. Or the next scenario A is 1st timer criminal while B already has commit more than once, in this case testimony from B will be discarded due to stereotypes if recidivism is not credible as source of information.

In order to process testimony as information which can affect knowledge for the legal enforcement then first we must take assure the integrity of the information. Second, we must check the information validity. Third we must check the information content, does the information contain information relevant to the legal case. And the last one, we must check the truth of the information, does it based on the real fact about or maybe it just fabricated.

Is it permissible to ignored or being injustice? In legal perspective to achieve legal certainty yes we can discard information given by certain person, but also must noted that we should discard information source as long as we do not discriminate based on: race, gender, social class, or disability.

References

- Barnett, B. C. (2022). *Pengantar Filsafat Epistemologi* (Taufiqurrahman, Trans.). Yogyakarta: Antinomi.
- Birchall, C. (2011). Introduction to 'Secrecy and Transparency': The Politics of Opacity and Openness. *Theory, Culture & Society*, 28(7-8), 7-25. doi:10.1177/0263276411427744
- Breuer, T. (2009). Data quality is everyone's business -- Managing information quality -- Part 2. *Journal of Direct, Data and Digital Marketing Practice*, 11(2), 114-123. doi:https://doi.org/10.1057/dddmp.2009.21
- Carter, J. A. (2023). *Digital Knowledge A Philosophical Investigation* [1 online resource (207 p.)]. Retrieved from <https://public.ebookcentral.proquest.com/choice/PublicFullRecord.aspx?p=31024366>
- Diaz-Garcia, J. A., Ruiz, M. D., & Martin-Bautista, M. J. (2022). NOFACE: A new framework for irrelevant content filtering in social media according to credibility and expertise. *Expert Systems with Applications*, 208. doi:10.1016/j.eswa.2022.118063
- Floridi, L. (2009). Philosophical Conceptions of Information. In *Formal Theories of Information* (pp. 13-53).
- Fricker, M. (2009). *Epistemic injustice : power and the ethics of knowing*. Oxford: Oxford University Press.
- Goldman, A. I. (1999). *Knowledge in a social world*. Oxford: Oxford University Press.
- Harris, P. (2007). *An introduction to law*. Cambridge; New York: Cambridge University Press.
- Hesse, B. W., Moser, R. P., & Riley, W. T. (2015). From Big Data to Knowledge in the Social Sciences. *The ANNALS of the American Academy of Political and Social Science*, 659(1), 16-32. doi:10.1177/0002716215570007
- Ho, H. L. (2008). *A philosophy of evidence law : justice in the search for truth*. Oxford ; New York: Oxford University Press.
- Hopster, J. K. G. (2024). Socially disruptive technologies and epistemic injustice. *Ethics and Information Technology*, 26(1). doi:10.1007/s10676-024-09747-9
- IEEE/Acis International Conference on Big Data, C. C. D. S., Engineering, & Lee, R. Y. (2023). *Big data, cloud computing, and data science engineering* [1 online resource (xii, 185 p.)]. doi:10.1007/978-3-031-19608-9
- Informasi, K. K. d. (2024). Siaran Pers No. 02/HM/KOMINFO/01/2024 tentang Hingga Akhir Tahun 2023, Kominfo Tangani 12.547 Isu Hoaks [Press release]
- Koltay, T. (2018). Information overload in a data-intensive world. In (pp. 197-217.).

- Lebensfeld, T. C., & Smalarz, L. (2024). Witnessing-condition information differentially affects evaluations of high- and moderate-confidence eyewitness identifications. *Cognition*, 250, 105841. doi:10.1016/j.cognition.2024.105841
- Lee, B. K., & Lee, W. N. (2004). The effect of information overload on consumer choice quality in an on-line environment. *Psychology & Marketing*, 21(3), 159-183. doi:10.1002/mar.20000
- Meskys, E., Liaudanskas, A., Kalpokiene, J., & Jurcys, P. (2020). Regulating deep fakes: legal and ethical considerations. *Journal of Intellectual Property Law & Practice*, 15, 24-31. doi:10.1093/jiplp/jpz167
- Revett, M. C., & Benyon, P. R. (1996). Information Access for Decision Makers. In P. G. Flavin & K. A. E. Totton (Eds.), *Computer Aided Decision Support in Telecommunications* (pp. 94-114). Dordrecht: Springer Netherlands.
- Schlagwein, D., Conboy, K., Feller, J., Leimeister, J. M., & Morgan, L. (2017). "Openness" with and without Information Technology: a framework and a brief history. *Journal of Information Technology*, 32(4), 297-305. doi:10.1057/s41265-017-0049-3
- Sommaruga, G. (2009). *Formal theories of information : from Shannon to semantic information theory and general concepts of information*. Berlin ; New York: Springer.
- Sunstein, C. R. (2020). *Too Much Information : Understanding What You Don't Want To Know*. Cambridge, Massachusetts: The MIT Press.
- Undang-Undang Republik Indonesia Nomor 8 Tahun 1981 tentang Hukum Acara Pidana, (1981).
- van der Sloot, B., & Wagenveld, Y. (2022). Deepfakes: regulatory challenges for the synthetic society. *Computer Law & Security Review*, 46, 105716. doi:https://doi.org/10.1016/j.clsr.2022.105716
- Xiong, H., & Wang, X. (2008). *The Information Filtering under the Web 2.0 Environment*. Paper presented at the 2008 International Conference on Information Management, Innovation Management and Industrial Engineering.
- Zhou, D., Yan, Z., Fu, Y., & Yao, Z. (2018). A survey on network data collection. *Journal of Network and Computer Applications*, 116, 9-23. doi:https://doi.org/10.1016/j.jnca.2018.05.004