Preserving Indonesian Internet Literature
The cybersastra.net Online Literacy Magazine
Mohammad Rokib*

State University of Surabaya
*Corresponding author. Email: mohammadrokib@unesa.ac.id

ABSTRACT
The increasing emergence of internet literature in Indonesia called cybersastra has been widely discussed in the last two decades. It refers to an online literary magazine published in 2000 and in 2005. Since its popularity, many scholars and writers use it to describe various literatures. However, the availability of the magazine as primary early internet literature data has lack recorded and preserved by archivist. Even though Internet Archive’s Wayback Machine (IAWM) archived the website, its important information is uncovered and may only available in short time. Concerning its significance data as literary heritage and internet literary history, this paper aims to describe cybersastra.net as literary material to be preserved as Indonesian internet literary artefacts. The archiving process involves metadata preparation, annotations, and categorization. The preservation in digital archiving methods requires computer assistance to speed up and simplify the process of metadata, categorization, and data storage. Seven methods had been applied into research, namely: 1) data determination, 2) data collection, 3) data conversion, 4) data filtering, 5) categorization, 6) data storage, and 7) representation. The article reveals three main data significantly attached in the magazine as cybersastra artefacts.

Keywords: Internet literature, Archive, CyberSastra, Preservation.

1. INTRODUCTION

The increasing emergence of Indonesian literature in Indonesia has been widely discussed in the last two decades. Most scholars and literary critics refer sastra siber (cyber literature) to describe literature published on the internet or digital-born literature. The name relates closely to a popular online literary magazine in early internet development in Indonesia namely cybersastra.net. Since the period of its publication between 2000 and 2005, cybersastra seems popular as critics have frequently used to illustrate Indonesian literature in internet or in compact disk (CD). There are at least eight studies on cyber literature, twelve publications on digital literature, and six research documents on internet literature within the field in academia. When we search through Google Scholar, there are 37,300 documents related to cyber literature, digital literature, and internet literature. These data indicate that research on this topic is interesting. Moreover, non-academic essays and popular writings show even greater data because this topic has been discussed since the beginning of the internet in Indonesia around the end of the 1990s.

In conjunction with the rapid use and creation of literary works on the internet, new literary characters have been emerging in new social media within internet such as Instagram literature, Wattpad literature, Facebook literature, and flash fiction. Still, many scholars rely on the term cybersastra to refer to social media literature. Indeed, between 2000 and 2005, the term cybersastra has enlivened Indonesian literature society. The context was recorded in many online magazines especially cybersastra.net. However, little attention to record and to preserve literary works published on the magazine is depicted.

After a simple search, most of the data on early cybersastra works (2000-2005) are inaccessible. In fact, in addition to the emergence of cybersastra as an early mark of internet literature, the debates and characteristics of cybersastra have become a milestone in the history of internet literature in Indonesia. Research topics in this area are mostly disregarded by researchers. It is important to preserve this literary heritage. Some literary works in the magazine recorded by great digital archive such as archive.org are urgently re-archived and rearranged because they do not guarantee the immutability of the data. The chances of

data being corrupted, deleted, or inaccessible are significant.

This paper investigates online literary magazine of cybersastra.net; mainly focusing on archiving pages and other digital data related to the magazine. According to data availability, this paper focuses on its period of publication from 2000 to 2005.

The research question is simplified as: 1) how are the data availability in the online magazine of cybersastra.net?

The objectives of this research include: 1) archiving the main data of literary works and criticism existing in the magazine. The archiving process will involve the preparation of metadata, annotations, and categorization, 2) restoring archive results in digital and print formats (books), and 3) presenting the main data of internet literature to other researchers in the field of internet literature and literary history.

Many studies have been conducted in regards to the characters and phenomena of Indonesian literature on the internet. The largest research community that becomes the focus of this research is the Electronic Literature Organization (ELO) that continues to research and develop the dynamics of electronic literature [1], [2], [3], [4]. Terms such as digital literature, electronic literature, internet literature, or cyber literature do not yet have a solid and complete definition [5]. Thus, various forms and characters of literature on the internet continue to be researched.

In Indonesia, research on cyber literature focuses on hybridity, its globalized phenomenon, character of interactivity, and its relationship with printed literature including its genealogy [6]. More specifically, there are studies that focus on the presence of cyber-literature in the arena of literary history studies [7] and the development of cyber-literature in Indonesia [8], [9]. Other research focuses more on cybersastra discussing natural disasters [10] and mapping on the topic of cyber literature [11], [12]. There were lack of studies that focused on the importance of archiving the main data of early internet literature particular cybersastra at the beginning of its emergence in Indonesia. In similar research, preservation of cybersastra works in the form of digital curation of libraries is more emphasized rather than the urgency of digital curation of cybersastra [13].

This research emphasizes suggestion on the urgency and importance of cybersastra preservation. In fact, the availability of data on cybersastra is a vital part of internet literature study. Therefore, this research could make a valuable contribution in the field of internet literature and its history, especially in Indonesia and generally in global academic debates.

Cybersastra works in the early period (2000-2005) are difficult to track and almost extinct. For this reason, its preservation is urgent. Research on the topic of cybersastra is still centred on the debate over its emergence, content analysis, and development. Documenting cybersasta works is not yet carried out by previous researchers. Therefore, archiving for its preservation is important because this data is the main point to describe the internet literature development in Indonesia. In addition, literary works, including literary criticism, are part of the intangible cultural heritage that future generations must know. For this reason, preservation through archives must be carried out to convey the dynamics of contemporary literature for future sustainability.

2. METHODS

This research employs the digital archive method. It requires computer assistance to speed up and simplify the process of metadata, categorization, and data storage. In general, this research will conduct data collection, categorization or analysis, verification, and reporting.

In the context of archiving cybersastra, this study considers insights from the work of an Indonesian literary pope HB Jassin, who has succeeded in documenting literary works. Within this view, it is important to archive the works of cyber literature. Because the medium for early (2000-2005) cybersastra works is digital and most of them are available on a limited basis on archive.org, it is important to conceptualize a different archiving method from printed documentation. Weber's method [14] is the main consideration in this research. It focuses on digital data archives, particularly from the internet. However, considering the pressure point of the field being worked on is communication science, this research tries to modify the method.

Seven methods had been applied into research, namely: 1) data determination, 2) data collection, 3) data conversion, 4) data filtering, 5) categorization, 6) data storage, and 7) representation. The method and stages of the research are the key guides. Method number six will produce a printed (book) and digital archive that will be stored in Surabaya State University’s central library. The method number seven is the result of research for academic purposes, namely publication.

3. RESULTS AND DISCUSSION

After applying the methods, the data shows its availability. The three types of data availability are: 1) amount of data, 2) forms of data, and 3) sections. Those types are defined after data categorisation on cybersastra.net between 2000 and 2005.
Generally, as it has archived by archive.org. Figure 1 is yearly graphic of cybersastra.net between 2000 and 2005 showing the fluctuation of its archive collection. It shows that the most archived data was in 2004 and 2000 is the least. There are twenty main screenshots in 2004, and each screenshot has several website links. Main screenshots is the front appearance of archived page which has several linked pages. Each page has also other linked pages.

![Figure 1](source: web.archive.org https://bit.ly/3tuDl2c).

### 3.1. Amount of Screenshots

After collecting, converting, filtering, and categorizing archived screenshots, even though there are 77 main screenshots appeared in the calendar mode of archive, every single screenshot has many linked screenshots. The amounts calculated for the period between 2000 and 2005 are around 11550 screenshots either accessible or inaccessible screenshots. The calculation is based on: a main screenshot has average 15 linked screenshot and 77 times. So it has 1155 screenshots. Then each screenshot has 10 branches, and then it is 11550 screenshots. Those screenshots are not complete real pages of cybersastra.net, because many pages could not be archived by automatic crawling as in the IAWM system of archiving. It is difficult to know exact pages produced or published by cybersastra.net during the period.

### 3.2. Forms of Data

There are many differences between website which are live and not. The interactivity, audio, movable images and animation are common differences between them. In case of cybersastra.net which is not live anymore, some movable images, interactivity, and animation only remain its marks such as rectangular picture without colour. The audios are completely erased. Among those fragile remaining data, texts are the most perceivable form.

During five years of publication, the online literary magazine of cybersastra.net published forms of internet literary works. After archiving, four different data forms are easily accessible: 1) text or HTML, 2) image or JPEG, 3) image or GIF, and 4) text or CSS. Among those data, text or HTML is the highest in number, while text or CSS is the lowest.

![Figure 2](source: https://web.archive.org/details/cybersastra.net). In Figure 2, there are 15.178 captures of text-based HTML as the highest number of data form. It contains 10.179 URLs and 7,892 new URLs. The form of HTML-based text becomes main data archived. Those texts are closely related to the internet literary genre such as poetries, short stories, literary critics, playwrights, novels, editorials, and other texts of comments and discussions. While HTML-based texts are significant in number, CSS-based texts remain insignificant. This form has only 11 captures.

The rest data forms are JPEG-based and GIF-based images which have 145 and 129 captures respectively.

The forms of data availability are mainly dominated by HTML-based text showing in red colour in Figure 2. Future internet literature researchers and archivist could benefit those texts for primary data of cybersastra research topics.

### 3.3. Sections

Other important data availability of cybersastra.net is magazine sections. Published around every two months, there are some sections in the archive include editorial, literary genre, commentary, forum (discussion), literary announcements, polling, book review, writers’ biography, and networks.

Editorial section appears in the home page of the website. An editorial review of literary works published in particular edition is the contents of this section. Besides, editor wrote such a edition theme. During June to July 2001 edition, for example, editor wrote “Catatan dari Negeri Luka” as a theme. Here, editor explained reason on the chosen theme as written in the edition:

“Tidak seperti biasanya, di bulan Juni ini kami menayangkan 2 topik utama sekaligus: Hari-hari di Aceh” dan proses kreatif dari salah satu pengarang wanita terdepan saat ini: Helvi Tiuna Rosa. Yang kedua kami
menarunkan kilas balik almarhum Ray Rizal, cerpenis Indonesia yang sosoknya seperti terlupakan…”

The section provides general introduction before the readers continue to click and read other sections and literary genres such as poetries, short stories, literary critics, playwrights, and novels. Each genre located in different page providing column of comments. Within this section, readers could leave their comments as critics or other forms of appreciation toward literary works. If readers curious about the writers, they could easily open and read writers’ biography in its section. Links for writers’ biography are provided in the same page of their works.

Other than main sections, there are polling, book reviews, and networks section. Those three sections seem separated from each bi-monthly edition. Polling, for example, was published irregularly and probably only one time. Meanwhile, book reviews appeared in the home page of editorial section as a link.

4. CONCLUSION

Preserving cybersasta.net as main source of early internet literature in Indonesia is important. By archiving and re-archiving it from IAWM or archive.org, the data could be stored safely in more repositories. Re-archiving online magazine literature is one of the essential ways to understand the history of early Indonesian internet literature.

Observing the availability of data on the cybersasta.net as provided by archive.org leads to the conclusion in which there are three types of data availability which have their own characteristics. There are approximately 11.550 captures of web page containing HTML-based texts as the highest number of capture. The popular capture of web page is editorial section because it was located in the home page and main menu of websites.

ACKNOWLEDGMENTS

Researcher would like to convey his gratitude to Universitas Negeri Surabaya for providing research support and to M. Arif Firmansyah for his invaluable assistance. The researcher is also grateful for parts of supplementary references that are accessed under the PROGRAM PROM in Central Library at UPK for two weeks.

REFERENCES

[1] S. Rettberg, "Electronic literature as digital humanities," in A New Companion to Digital Humanities. MA: Blackwell Companions to Literature and Culture, 2016, pp. 127-136.

[2] J. O'Sullivan, Toward a Digital Poetics: Electronic Literature & Literary Games. Cham: Springer International Publishing; Imprint: Palgrave Macmillan., 2019.

[3] S. Rettberg, Electronic Literature. Cambridge UK: Polity Press., 2019.

[4] J. Tabbi, The Bloomsbury Handbook of Electronic Literature. London: Bloomsbury Academic, 2020.

[5] S. Bouchardon, "Towards a tension-based definition of Digital Literature," Journal of Creative Writing Studies, p. 1–13, 2017.

[6] F. Merawati, "Genealogi Sastra Cyber di Indonesia," MA Thesis. Pasca Sarjana, Fak. Ilmu Budaya, Univ. Gadjah Mada, Yogyakarta, 2014.

[7] I. Putra, A literary mirror: Balinese reflections on modernity and identity in the twentieth century. Leiden: KITLV Press, 2011.

[8] I. Campbell, "Some developments in Indonesian literature since 1998," RIMA: Review of Indonesian and Malaysian Affairs, p. 35–80, 2002.

[9] H. Maier, We are playing relatives: A survey of Malay writing. Leiden: KITLV Press, 2004.

[10] E. Wieringa, "God Speaks through Natural Disasters, but What Does He Say? Islamic Interpretations in Indonesian Tsunami Poetry," in Aceh: History, politics, and culture, Singapore: Institute of South, 2010.

[11] D. Nugroho, "Bagian yang Hilang dalam Pembaraan Akademik," Komposisi: Jurnal Pendidikan Bahasa, Sastra, dan Seni, p. 17–30, 2020.

[12] M. Rokib, "The Polemics of Digital Literature in Indonesia: Trends, Patterns, and Approaches within Academic Discussion," in Proceedings of the Social Sciences, Humanities and Education Conference, 2019.

[13] M. Wanti, "Digital Curation for Cyber Literary: Conventional Literary Perspective," Jurnal Kearsipan, p. 45–62, 2020.

[14] M. Weber, "Methods and Approaches to Using Web Archives in Computational Communication Research," Communication Methods and Measures, p. 200–215, 2018.