The fifth bibliometric finding on waste management and cultural studies

Minh-Hoang Nguyen ^{1,2}

Quan-Hoang Vuong ^{1,3,4}

¹ The Centre for Interdisciplinary Social Research, Phenikaa University, Hanoi 100803, Vietnam

² Ritsumeikan Asia Pacific University, Beppu, Oita, Japan

³ Centre Emile Bernheim de Recherche Interdisciplinaire en Gestion, Université Libre de Bruxelles, Brussels 1050, Belgium

⁴ AISDL, Vuong & Associates, Hanoi 100000, Vietnam

Working Draft v1
Date: November 10, 2020

No. AISDL-ENV-BIB05

(Un-peer-reviewed draft)

*

* *

Purpose

This short piece of communication has the sole purpose of identifying some evidence, supporting our view regarding a possible missing environment-nurturing cultural value [1]. Here, we attempt to examine the presence of cultural studies within the boundary of waste management research.

Method

In what follows, we employ the bibliometric approach that has been presented in Nguyen & Vuong (2020) [2]. In previous studies, we often referred to search queries of a single study; nevertheless, waste management has multiple classifications, so we need to employ keywords derived from several bibliometric studies to ensure sufficient coverage of the research target. In particular, keywords regarding solid waste [3], wastewater [4], e-waste [5], food waste [6], and waste management [7] are all included in our search queries.

After completing the search, the number of publications is narrowed down according to the Research Areas structured by the Web of Science (WoS). The second collection consists of the following research areas: Public Administration, Development Studies, Urban Studies, Social Sciences other topics, Psychology, Public Environmental Occupational Health, Sociology, Health Care Sciences Services, Anthropology, Literature, Area Studies, Business Economics, Government Law, History, Arts Humanities other topics, International Relations, Pediatrics, Social Issues. Eventually, we select papers appointed to the Cultural Studies research area from the second collection. The whole procedure is displayed in Figure 1. The search is conducted on November 9, 2020. It should be noted that we do not limit the search results by language, document type, or publication time when seeking the first collection in the WoS database.

Figure 1: Searching procedure

Findings

The preliminary result shows that there are 383,328 documents related to water pollution research, including studies regarding estuary, marine, and river pollution. When the scope is narrowed down to Social Sciences and Humanities research areas, we obtain 13,920 records equivalent to 3.63% of

the total documents. There remain 27 documents (0.007% of the total publications) when we select solely 'Cultural Studies' research area (see Figure 2).

Figure 2: Percentage of Cultural Studies in water pollution research

Among 27 documents, 22 documents are research articles, three documents are book reviews, and two documents are proceeding papers. A majority of the documents (77.78%) were published after 2009. Several prominent theories and concepts within the boundary of waste management research require socio-cultural involvement for more seamless waste control, management, and treatment [8]. One of those is the moral economy, which requires daily ethical works by consumers in food waste practices. Another worth noting concept is 'living waste' proposed by Bell (2019). The notion is a more literal and material version of Bauman's well-known concept 'wasted lives,' explaining the relationship between waste and Global South people's living [9].

Remarks

We have found the existence of cultural studies within the boundary of waste management research. The proportion of cultural studies in this research context is greater than that in climate change, air pollution, and water pollution research contexts [10-12]. Still, the contribution of cultural studies to scientific research regarding waste management is relatively insignificant compared with the crucial position of culture in driving human civilization.

Unlike prior findings [10-13], we find several interesting theories and concepts that aim to change human perceptions, attitudes, and behaviors for facilitating waste control and reduction practices. However, for gauging whether those theories and concepts are adequate for comprehending and explaining the roles of culture in waste management - or further - in environment-healing practices, additional studies are required. By now, it can be said that several core cultural values are existing in waste management research, but their voices, for some reason, have barely acquired little resonance within the field.

We are aware that this finding is preliminary, and our statement in [1] can potentially be somewhat subversive by nature. Therefore, this communication has no intention of making any conclusion. It rather keeps the finding clean and clear for later use. The effort represents our approach of enabling the mindsponge process to work better and more efficiently in discovering a new paradigm that supports the nurturing of nature and a sustainable environment [14]. The future research directions will consider possible limitations (data, methods, or analytical framework), in line with [15].

References

- [1] Vuong, Q. H. (2020). The semiconducting principle of monetary and environmental values exchange. *OSF Preprints*. doi:10.31219/osf.io/nv3yz.
- [2] Nguyen, M. H., & Vuong, Q. H. (2020). Evaluation of the Aichi Biodiversity Targets: The international collaboration trilemma in interdisciplinary research. *OSF Preprints*. doi:10.31219/osf.io/84j76.
- [3] Fu, H. Z., Ho, Y. S., Sui, Y. M., & Li, Z. S. (2010). A bibliometric analysis of solid waste research during the period 1993–2008. *Waste Management* 30: 2410-2417. doi: 10.1016/j.wasman.2010.06.008
- [4] Patyal, V., Jaspal, D., & Khare, K. (2020). Wastewater Treatment Technologies: A Bibliometric Analysis. *Science & Technology Libraries*. doi: 10.1080/0194262X.2020.1775164
- [5] Gao, Y., Ge, L., Shi, S., Sun, Y., Liu, M., Wang, B., Shang, Y., Wu, J., & Tian, J. (2019). Global trends and future prospects of e-waste research: a bibliometric analysis. *Environmental Science and Pollution Research* 26: 17809-17820. doi: 10.1007/s11356-019-05071-8
- [6] Chen, H., Wei, J., Yang, Y., Yang, Y., & Man, X. (2019). State of the art on food waste research: a bibliometrics study from 1997 to 2014. *Journal of Cleaner Production* 140(2): 840-846. doi: 10.1016/j.jclepro.2015.11.085
- [7] Chen, H., Wei, J., Yang, Y., Man, X., & Tang, M. (2015). A bibliometric analysis of waste management research during the period 1997–2014. *Scientometrics* 105: 1005-1018. doi: 10.1007/s11192-015-1714-3
- [8] Lehtokunnas, T., Mattila, M., Narvanen, E., & Mesiranta, N. (2020). Towards a circular economy in food consumption: Food waste reduction practices as ethical work. *Journal of Consumer Culture*. doi: 10.1177/1469540520926252

- [9] Bell, L (2019). Place, people and processes in waste theory: a global South critique. *Cultural Studies* 33(1): 98-121. doi: 10.1080/09502386.2017.1420810
- [10] Nguyen, M. H., & Vuong, Q. H. (2020). The first finding from a bibliometric analysis concerning a missing environment-nurturing cultural value. *OSF Preprints*. doi:10.31219/osf.io/bhju8
- [11] Nguyen, M. H., & Vuong, Q. H. (2020). The fourth finding concerning a missing cultural value: a bibliometric analysis on water pollution. *OSF Preprints*. doi: 10.31219/osf.io/6fzsd
- [12] Nguyen, M. H., & Vuong, Q. H. (2020). The third finding concerning a missing cultural value: a bibliometric analysis using the Web of Science. *OSF Preprints*. doi:10.31219/osf.io/jbcx3
- [13] Nguyen, M. H., & Vuong, Q. H. (2020). In search of a new cultural value: The second finding from a bibliometric analysis on biodiversity. *OSF Preprints*. doi:10.31219/osf.io/gzkfj
- [14] Vuong, Q. H. (2016). Global mindset as the integration of emerging socio-cultural values through mindsponge processes: A transition economy perspective. In J. Kuada (ed.) *Global Mindsets: Exploration and Perspectives* (pp. 109-126). London: Routledge.
- [15] Vuong, Q. H. (2020). Reform retractions to make them more transparent. *Nature* 582(7811):149.