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Academic Incoherence: The State of Sustainability Literature Today

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The State of Social Sustainability Literature Today

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Abstract: The traditional tools associated with researching and presenting findings in contemporary sustainability literature include very little representation on moral forms of discourse. In the context of social sustainability this is problematic due to the inherently normative nature of the discourse. A citation analysis reveals very little representation of Christian moral environmental claims in the sustainability literature today despite growing concern amongst Christians for the state of the environment today.

Citation Analysis: Christian Environmental Ethics

The purpose of this project will be to test the veracity of citation analysis as a research method by conducting a short citation analysis of the literature of Christian Environmental ethics. I will begin by first defining the term then finding what expressions of this approach to understanding the topic can be found using the Social Science Citation Index, available through the university library website, as well as other relevant search engines. The goal is to provide a snapshot of the research that has been done on the topic of Christian Environmental ethics in order to empirically determine the state of the research in sustainability in political theory. Top search results from the SSCI will be cross referenced in order to better understand the complexities of this method of research. The goal will be to understand the reliability of the search engines used in order to better understand the pitfalls of conducting this kind of research as I move forward into the dissertation phase of my education.

Christian Environmental Ethics

This form of environmental ethics can be defined as application of Christian principles and morality to the issue of the environment and the relationship human beings have with the created world. This approach is a particular interpretation of the ethics of stewardship. Sometimes called 'Good Shepherd ethics,' De Jardins defines this approach as including the understanding that the natural world was bestowed upon humans by a benevolent creator; any harm brought to the environment is an affront to generosity and beneficence of God. In the Christian tradition, the Good Shepherd sustains and nurtures his flock of sheep while still harvesting them for wool and food. Humans may have dominion over the Earth but this is understood in a pastoral sense, rather than a dominating slave-master sense (Des Jardins 2012). Pope Francis described the relationship man has with the created world as being like that of a family farmer to his land; his concern will be to keep the land in such a condition that his descendents will be able to work the land in the same way he and his

family did.

Method and Problems with the Method

The SSCI presents each topic source with a helpful count of the times the article was cited. Each source will be cross referenced through Google Scholar in an attempt to test the veracity of the SSCI and to expand upon the search. The first and principle search tool used will be the traditional tool, the SSCI. There are concerns with the SSCI that are commonly listed by critics: the SSCI lists citations in a manner that introduces some error into the analysis that can undermine validity and reliability. For example, last names and initials of authors are used, creating confusion when two authors in a field have nearly the same name. The SSCI has not traditionally listed books, only journal articles; consequently, if one were to search find the influence of authors like John Kenneth Galbraith or John Rawls, whose groundbreaking works were presented in book form rather than in journals. I tested this by running a simple search for 'John Rawls' in the SSCI, which returned no hits for his seminal works *A Theory of Justice* or *Justice as Fairness,* though hits were returned by other theorists remarking in journal form on those works.

How to count citations is an additional issue. Do you include untrustworthy/bad articles? For example, the issue of vaccination is a serious public health issue. Do articles by Andrew Wakefield, the infamous author of the anti-vaccine 'research' from the late 1990s count for scholarly articles on the subject? Do articles by global warming deniers who are funded by the ideologically driven think tanks?How about self citation? This is a real concern, especially when projects are designed to illustrate the growth of an area of study that explicitly includes examinations of influence. Google Scholar is especially prone to this issue, as the SSCI (and for the physical sciences, databases like SCOPUS) are focused more on peer reviewed sources as well as other academic sources.

Aside from problems with the use of the SSCI and specific questions about the counting

process, there are general concerns about the effects on citations of variations in research practices. Two studies have shown citation counts to be stable over time (Cole & Cole, 1973; Myers, 1970). Questions have arisen, however, about the effect of shifts in research interest within a field (Endler, 1978) and the lag between publication and recognition (Cole & Cole, 1973; Garfield, 1979). Some research shows that theoretical and methodological papers are cited most frequently(Garfield,1 979) and applied research is least cited (Lindsey, 1978), which would affect citation rates across program areas. This suggests a need to include theoretical approaches to conducting citation analysis, including the underlying ideas behind theories such as punctuated equilibrium and paradigm shifts, as presented by Kuhn and others. Additionally, little, if any research has been done on the citation of purely or predominantly theoretical articles.

Findings

An initial analysis of the concept of Christian Environmental ethics provides very few hits on the SSCI. Only a single source was found, a book by Borlik. The use of Google Scholar found the Des Jardins piece in a separate search. Finally, a Jstor search was conducted in an attempt to expand the parameters of the search. This search revealed 157 pages of hits, but the vast majority were not about Christian environmental ethics but rather contained words such as 'stewardship' and 'Christian' in them; to get this search result the terms 'Christian stewardship' were used. This constitutes an expansion of the search parameters, which was then broadly applied to searches with both the SSCI and Google Scholar.

The initial search was duplicated, using the SSCI and new terms, specifically the terms 'Christian Environmental Ethics.' This search resulted in 54 results. When the results are analyzed, only 23 of the 54 results had any evidence of having been cited by others. Only 4 of these search results had 10 or more searches; one result had to be omitted due to it returning an article on Islamic

environmental ethics. Problematically, of the 4 most cited articles, only 1 was published in the last 10 years, with the rest having been published in the 1990s. Using the SSCI, it appears that this area of environmental thought has suffered in recent years. Over 30 search results have not been cited in the years since being initially published.

This search was then duplicated using Google Scholar. This search illustrates the problem with Google Scholar in a dramatic manner: 216,000 search results were found. Unlike the SSCI, Google Scholar will return book titles and citations in searches, making side by side comparisons difficult if not invalid. Google does not provide a means for filtering out book results. In this way, Google Scholar is more useful in that academic books can be found easily on this or any other subject, but for the purpose of doing a side by side comparison Google Scholar is nearly useless unless each article from the SSCI is cross-referenced through Google Scholar to enable a source by source side by side comparison.

The top search result on the SSCI using these terms is an article by Wolkomir, Futreal, Woodrum, and Hoban with the title "Substantive Religious Belief and Environmentalism," which appeared in *Social Science Quarterly* in 1997. The SSCI returned 30 citations for this article. When using Google Scholar to search for this article 69 citations are returned. This analysis seems troubling in that Google Scholar returns substantially more results than the SSCI does.

When the analysis is taken to the next level, of the 30 searches found on the SSCI, 20 are relevant to the topic in a substantial manner. This is a relevance score of 66%, which is promising for enabling research. When the 69 results are analyzed from Google Scholar we see something else: virtually all of the same search results are present, as well as several books and foreign language articles. The source relevance score is about 72%, with 50 results being relevant to the question at hand. From this search, it appears that Google Scholar and the SSCI are two tools that work well

together despite the problems Google Scholar has become known for.

This research can be taken even further using Google Scholar and the SSCI. Each returned source permits the continued examination of each source. At this time I will refrain from doing so, mostly due to the initial question being answered, specifically are both search methods useful for finding reliable citations sources? The answer is yes, both are satisfactory . The question that emerges is a relatively simple one: when does a researcher need to stop delving into citations? The project that comes to mind on this topic would be one that illustrates the evolution of this form of environmental thought from its emergence, which appears to be in the late 1970s. Citation Analysis enables this mode of analysis, which in turn permits researchers to accurately assess the state of the literature on this topic.

Conclusion

From this, it becomes obvious that citation analysis is a time consuming research method for analyzing literature. Moving forward, to ensure validity and reliability it would be prudent to find a third applicable article database to cross-reference search results against. The drawback that both the SSCI and Google Scholar have is that not all of the search results are available as article downloads. This does not permit in-depth analysis or use of citation analysis as a method to assist in developing strong literature reviews. Knowing this, it behooves the researcher to run these kinds of searches and analyzes using as many search engines as possible.

Sources

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