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A visual analysis of trends in the titles and keywords of top-ranked tourism journals

Carter A. Hunt[*], Jie Gao and Lan Xue

Department of Recreation, Park and Tourism Management, Penn State University, University Park, PA, USA

We generated a visual trend analysis of the titles and keywords of highly ranked tourism journals in the years 1982, 1992, 2002, and 2012 by using word clouds. This approach provides a fascinating snapshot into shifts in the priorities of tourism researchers over the last four decades, thus tracing the history of theoretical development in the field of tourism. Comparisons were made between (1) the titles of articles in all journals in different years; (2) titles in each journal in a recent year; and (3) titles and keywords of articles in the same journal in the same years. Not only do themes and concepts visibly shift in prominence over time and between journals, but also variance between keywords and titles of articles in the same journal for a particular year is observable. The practical applications for article titling, placement, and keyword designation are discussed.

Keywords: tourism journals; visual analysis; word clouds; meta-analysis; reflexive practice

Scholarly attention to the topic of tourism has grown dramatically since the first dedicated journal *Annals of Tourism Research* was launched in 1973. A recent informal survey of the Tourism Research Information Network listserv community revealed over 240 tourism journals across all languages now disseminate tourism research. Beyond these 240 journals are the many journals in the fields of anthropology, geography, marketing, and others that showcase tourism research and contribute to tourism knowledge. It is therefore not surprising that the growing body of tourism scholarship has itself become a topic of study.

The 'scholarship on the scholarship' of tourism largely falls into five categories. The first category – and most prolific in terms of publications – focuses predominantly on the mechanisms, outcomes, and relationships related to journal ratings, rankings, and citation analyses (Hall, 2006, 2011; Howey, Savage, Verbeeten, & Van Hoof, 1999; Jamal, Smith, & Watson, 2008; McKercher, 2005, 2008; McKercher, Law, & Lam, 2006; Ryan, 2005; Xiao & Smith, 2008). Another category explores the source knowledge and seminal writings in tourism (Xiao & Smith, 2005, 2006, 2007; Hall, 2006). A third category delves into collaborations and social networks among tourism scholars evidenced in their publication output (Benckendorff & Zehrer, 2013; Jogaratnam, Chon, McCleary, Mena, & Yoo, 2005; Racherla & Hu, 2010).
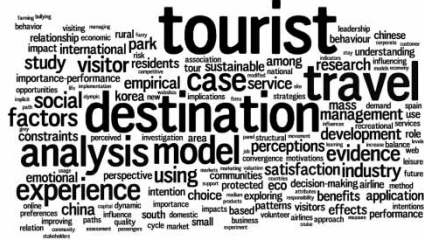
A fourth category of introspective scholarship on tourism consists of writings by journal editors reflecting on content and trends in the scholarship housed in a particular journal,

*Corresponding author. Email: cahunt@psu.edu

often during an anniversary year: *Annals of Tourism Research* (Tribe, Xiao, & Chambers, 2012; Xiao, Jafari, Cloke, & Tribe, 2013; Xiao & Smith, 2005, 2006); *Tourism Management* (Ryan, 2005); *Journal of Travel Research* (Burnett, Ysal, & Jamrozy, 1991; Goeldner, 2011; Perdue, Meng, & Courtney, 2009); and the *Journal of Sustainable Tourism* (Lu & Nepal, 2009). Finally, scholars have assessed the broad scope of tourism research (Ballantyne, Packer, & Axelsen, 2009; Burnett et al., 1991; Wickham, Dunn, & Sweeney, 2012; Xiao & Smith, 2006), including the profound influence of Google Scholar on the content, visibility, naming, and indexing of journals (Hall, 2006; Murphy & Law, 2008).

Collectively these writings underscore the growing diversity of research across the various disciplines that collaborate with – and contribute to – the body of scholarly knowledge centred on tourism. Although this body of research has provided an insight into issues of impact factor, journal rankings, and citation frequency, this scholarship on the scholarship of tourism provides little *practical application* for where to place articles according to journal content, how to designate the most effective keywords, or how to meaningfully compose the titles for manuscripts. Highlighting such a practical and simple tool is the purpose of this paper.

The present analysis

In a recent 40th anniversary volume of *American Ethnologist*, the editor and a contributing author assessed the impact and trends in the journal scholarship by using a word cloud analysis of the titles and keywords of articles published in the journal over the last four decades (Ahearn, 2012; Haugerud, 2012). A word cloud is a tool for visualising how frequently words exist in a body of text. This technique results in an assemblage of words that are represented in font sizes relative to how frequently they appear in the source text (Figures 1–3). This simple yet effective approach provides an instant insight into the evolution and disappearance of major research themes, especially when word clouds of different years are presented alongside one another. In the present paper we replicate this approach with the four top-ranked tourism journals according to the 2013 Journal Citation Reports of

Figure 1.   Word clouds of article titles in all journals, by year.

Figure 2. Word clouds of article titles in 2012, by journal.

the Social Science Citation Index. These journals are the *Annals of Tourism Research*, *Journal of Sustainable Tourism*, *Tourism Management*, and the *Journal of Travel Research*.

To conduct this visual trend analysis, we generated word clouds based on the titles of articles appearing in four tourism journals in the years 1982, 1992, 2002, and 2012 using features of *wordle.net*. One of these journals – *Annals of Tourism Research* – also offers keywords in all four timeframes. We also apply a keyword-based analysis to that journal in the same four timeframes. These approaches provide a fascinating snapshot of the trends in the priorities of tourism researchers and the corresponding theoretical development over the last four decades. Due to the space restrictions of the Letters format, we here provide a representative sample of visual comparisons between: (1) the titles of articles from the top four journals in each time period; (2) the titles of articles in each journal in a single year – 2012; and (3) titles and keywords of articles in the *Annals of Tourism Research* in each time period. Not only do themes and concepts visibly shift in prominence over time and between journals, but also clearly observable is the variance between keywords and titles of articles in the same journal for a particular year.

To prepare word cloud figures, we extracted the full text of the titles and keywords of all published articles from the selected years of the four journals, each a decade apart (Table 1). To simplify the visual analysis, a few minor adjustments were made to the text data. All the words were changed to their lower cases. Due to its frequency the word 'tourism' was deleted. Plural instances of 'tourists', 'destinations', 'attractions', 'experiences', 'vacations', and 'economics' were converted to their corresponding singular versions. The resulting text was used to create the word clouds in Figures 1–3.
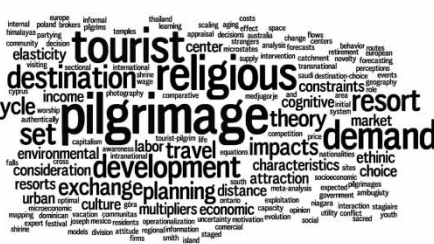
Brief discussion of the visual analysis

The present approach touches upon many themes in the 'scholarship on tourism scholarship' we review above. First, the sample word clouds presented here (Figures 1 and 2)

Figure 3.   Word clouds of article titles and keywords in *Annals of Tourism Research*, by year.

Table 1.   Source of text data for word clouds.

		1982	1992[a]	2002	2012
Annals of Tourism Research	Titles	X	X	X	X
	Keywords	X	X	X	X
Tourism Management	Titles	X	X	X	X
Journal of Travel Research	Titles	X	X	X	X
Journal of Sustainable Tourism[b]	Titles	–	X	X	X
All titles		X	X	X	X

[a]The data of *Journal of Sustainable Tourism* for 1992 are from the year it launched, 1993. [b]This journal was launched in 1993 and therefore there were no data for the year '1982'.

plainly reveal the collective foci of tourism researchers over the years as well as the differential focus of journals in a particular year (Ballantyne et al., 2009; Burnett et al., 1991). An example of the changing emphases over time in the research on tourism can be seen in the words *international*, *development*, *destination*, and *sustainable* in Figure 1. Meanwhile the distinct foci of different journals are readily visible among the prominent words in Figure 2. Furthermore, exploring word clouds from different decades provides an insight into seminal themes in tourism research and their evolution through time (Wickham et al., 2012). Word clouds of specific journal content may also offer useful visual accompaniment to anniversary publications or other reflexive volumes (Goeldner, 2011; Xiao et al., 2013; Lu & Nepal, 2009; Ryan, 2005).

As an alternative to a blind focus on journal's rating or ranking, a word cloud assessment provides a clear insight for authors debating the appropriate publication outlet for a given manuscript based on its content (e.g. when word clouds of the existing journal titles in a recent year are compared side-by-side with a word cloud of a given manuscript). With the proliferation of tourism journals, this rapid assessment tool could result in greater efficiencies not just for authors but also for editors (Ryan, 2005). Additionally a visual word cloud assessment is useful when targeting journals outside one's primary discipline where familiarity with the full content of particular journals may be less (Ahearn, 2013). A word cloud comparison between a journal's content and that of a given manuscript's content can expedite the recognition of an appropriate journal for a given writing effort.

Despite the limitation of being a representational tool rather than a mechanism of inferential analysis, word clouds nevertheless provide numerous insights. As Figure 3 demonstrates, the content of a journal's titles can vary considerably from that of its keywords. This infers a differential strategy for titling manuscripts and for designating the associated keywords since keywords are likely to have a greater influence on search results such as those provided by Google Scholar (Crandall, Bosarge, & Hernandez, 2001; Hall, 2006; Murphy & Law, 2008). This suggests keywords should not be chosen as an afterthought upon manuscript submission as is often the case (Ahearn, 2013). As researchers come to rely increasingly upon algorithm-based Internet searches, search engine optimisation of manuscripts will become an increasingly important consideration. A simple word cloud can be helpful in this regard.

As Ahearn (2013) also notes, keywords are often chosen for one of two purposes: (1) to connect to or avoid buzzwords in order to influence future interactions with others *within* a discipline and (2) to connect with and promote article uptake among present and future scholars working *across* disciplines. It is thus *not* advisable for scholars to choose terms that are specific to *only* their work when selecting keyword but rather terms that are more reflective of their content, methods, or other issues as these will provide better links to other writings (Ahearn, 2013; Whitaker, 1989). In contrast, unique identifiers would be more appropriately placed in the titles of manuscripts since titles are less relevant for indexing and search engine optimisation. As the word clouds presented here reveal, there is greater diversity in title words than in keywords. One explanation for this – made clear by the word clouds – is that titles often reflect research locations (e.g. USA, Mexico, China, and Thailand).

Conclusions

Looking forward, there are several obvious paths for expanding upon the approach taken here. This study focused on the four top-ranked tourism journals in four time steps. Including additional years and journals into the word clouds would expand the insight into trends

in tourism scholarship. Incorporating journals from outside of tourism may identify areas most ripe for collaboration and facilitate greater social networking across disciplines (Benckendorff & Zehrer, 2013; Jogaratnam et al., 2005; Racherla & Hu, 2010). A well-developed content analysis of journal content could complement word clouds with more detailed trends in tourism research. Furthermore, applying inferential statistics to the frequencies of words, or assessing the last words in and out between select timeframes, would make trends in the research even more explicit. In the interim, given the ease with which they can be produced, word clouds provide authors with immediate and practical guidance for article titling, journals selections, and keyword designations.

References

Ahearn, L. M. (2013). Commentary: Keywords as a literacy practice in the history of anthropological theory. *American Ethnologist*, *40*(1), 6–12.

Ballantyne, R., Packer, J., & Axelsen, M. (2009). Trends in tourism research. *Annals of Tourism Research*, *36*(1), 149–152.

Benckendorff, P., & Zehrer, A. (2013). A network analysis of tourism Research. *Annals of Tourism Research*, *43*, 121–149.

Burnett, G. W., Ysal, M. U., & Jamrozy, U. (1991). Articles on international themes in the journal of travel research. *Journal of Travel Research*, *29*(3), 47–49.

Crandall, A. C., Bosarge, J. W., & Hernandez, L. (2001). *Internet search system for retrieving selected results from a previous search. U.S. Patent No. 6,321,228*. Washington, DC: U.S. Patent and Trademark Office.

Goeldner, C. R. (2011). Reflecting on 50 years of the journal of travel research. *Journal of Travel Research*, *50*(6), 583–586.

Hall, C. M. (2006). The impact of tourism knowledge: Google scholar, citations and the opening up of academic space. *e-Review of Tourism Research*, *4*(5), 119–136.

Hall, C. M. (2011). Publish and perish? Bibliometric analysis, journal ranking and the assessment of research quality in tourism. *Tourism Management*, *32*(1), 16–27.

Haugerud, A. (2012). Editor's foreword: AE's keywords by decade. *American Ethnologist*, *40*(1), 1–5.

Howey, R. M., Savage, K. S., Verbeeten, M. J., & Van Hoof, H. B. (1999). Tourism and hospitality research journals: Cross-citations among research communities. *Tourism Management*, *20*(1), 133–139.

Jamal, T., Smith, B., & Watson, E. (2008). Ranking, rating and scoring of tourism journals: Interdisciplinary challenges and innovations. *Tourism Management*, *29*(1), 66–78.

Jogaratnam, G., Chon, K., McCleary, K., Mena, M., & Yoo, J. (2005). An analysis of institutional contributors to three major academic tourism journals: 1992–2001. *Tourism Management*, *26*(5), 641–648.

Lu, J., & Nepal, S. K. (2009). Sustainable tourism research: An analysis of papers published in the journal of sustainable tourism. *Journal of Sustainable Tourism*, *17*(1), 5–16.

McKercher, B. (2005). A case for ranking tourism journals. *Tourism Management*, *26*(5), 649–651.

McKercher, B. (2008). A citation analysis of tourism scholars. *Tourism Management*, *29*(6), 1226–1232.

McKercher, B., Law, R., & Lam, T. (2006). Rating tourism and hospitality journals. *Tourism Management*, *27*(6), 1235–1252.

Murphy, J., & Law, R. (2008). Google scholar visibility and tourism journals. *Annals of Tourism Research*, *35*(4), 1078–1082.

Perdue, R. R., Meng, F., & Courtney, J. (2009). Publishing in the journal of travel research: An assessment of manuscript acceptance and rejection. *Journal of Travel Research*, *47*(3), 267–274.

Racherla, P., & Hu, C. (2010). A social network perspective of tourism research collaborations. *Annals of Tourism Research*, *37*(4), 1012–1034.

Ryan, C. (2005). The ranking and rating of academics and journals in tourism research. *Tourism Management*, *26*(6), 657–662.

Tribe, J., Xiao, H., & Chambers, D. (2012). The reflexive journal: Inside the black box. *Annals of Tourism Research*, *39*(1), 7–35.

Whitaker, J. (1989). Creativity and conformity in science: Titles, keywords, and co-word analysis. *Social Studies of Science*, *19*(1989), 473–496.

Wickham, M., Dunn, A., & Sweeney, S. (2012). Analysis of the leading tourism journals 1999–2008. *Annals of Tourism Research*, *39*(3), 1714–1718.

Xiao, H., Jafari, J., Cloke, P., & Tribe, J. (2013). Annals: 40–40 vision. *Annals of Tourism Research*, *40*, 352–385.

Xiao, H., & Smith, S. L. J. (2005). Source knowledge for tourism research. *Annals of Tourism Research*, *32*(1), 272–275.

Xiao, H., & Smith, S. L. J. (2006). The making of tourism research: Insights from a social sciences journal. *Annals of Tourism Research*, *33*(2), 490–507.

Xiao, H., & Smith, S. L. J. (2007). The use of tourism knowledge: Research propositions. *Annals of Tourism Research*, *34*(2), 310–331.

Xiao, H., & Smith, S. L. J. (2008). Knowledge impact: An appraisal of tourism scholarship. *Annals of Tourism Research*, *35*(1), 62–83.