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Replacing Keywords with Word Clouds

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Abstracts and keywords are commonly used to summarize articles. In this editorial, we introduce a third option: word clouds.¹ For understanding articles at a glance, they are far superior to keywords. Therefore, ...*Qualitative...Criminology* (*QC*) is replacing keywords with word clouds. We are the first criminology journal, at least, to take this step. Below, we explain the decision and show you how to make word clouds for your papers. They are a great way to capture people's attention and get them reading.

Keywords

While moving *QC* from [its old to new website](#), a question about keywords came up. We noticed that [PubPub](#) does not have a field for entering them, so we asked the platform's Head of Operations, Gabe Stein, about it. He replied:

We don't support keywords because, honestly, we looked around at how many aggregators actually use them and found few actually look at them in returning results. Google Scholar (and search) doesn't. Crossref doesn't. arXiv doesn't. Even PMC, believe it or not, doesn't appear to index keywords.

No complaints on our end. We asked about keywords because they are a convention,² not because they are useful. Most readers ignore them. Most authors haphazardly select them. Their validity is unknown. They are not made in a reliable way.

Word clouds

That got us thinking: Why not replace keywords with word clouds?³ Because of how they are created, they are valid and reliable representations of articles' text.

Compared to keywords, word clouds offer more information; not only because they include more words, but also because their importance is reflected in their size. Plus, they are more interesting to look at and, thus, garner more interest from readers.

QC in the clouds

Now, all *QC* articles are accompanied by a word cloud (on a particular page, described in the next subsection). So you can see the effect, let us take a look at Phillips' (2017) "Self-Motivation in Policing."⁴ This is the first article in *QC* to include keywords. They were listed as "police," "motivation," "autonomy," and "boredom." They tell you little about the article; even less if you already know its title. By contrast, consider what you learn about the article from looking at its word cloud:

Browse all articles

We debated whether to retroactively insert word clouds in articles published under prior editors. We opted not to do so because authors could not be involved. Yet, we still wanted to create and share word clouds for them. That problem led to another idea: To create a page, [Browse All Articles](#), seen in the following iFrame. It has the summary information for every *QC* article: title, author(s), abstract, and word cloud. As explained in a [tweet about the page](#), it solves a problem found at every other criminology journal: If you want to see their articles' summary information, you cannot do so on a single page. Rather, you must click through one page at a time, with each dedicated to articles in a particular issue or that are forthcoming (e.g., "OnlineFirst").

Visit the web version of this article to view interactive content.

Word clouds in articles

In articles published by the current editorial team (i.e., those after volume 9, issue 1), abstracts will be followed by word clouds. Because the latter can be reliably created, the editorial team will do so on the authors' behalf, but gain their approval prior to publication. Here is our process: The author(s) send us the final version of their paper;

Josh makes a word cloud for it, using the steps described below; he sends it to Scott, who reviews the word cloud and asks for clarification or changes, as needed; then we send it to the author(s), asking them to do the same; finally, we insert the word cloud into the article's dedicated page, between the abstract and introduction.

Making Word Clouds

To get you started on making word clouds, we walk you through what is involved. There are a few programs to choose from. You can use popular but expensive qualitative data analysis programs, like [NVivo](#) and [ATLAS.ti](#). Free options are [MonkeyLearn](#), [TagCrowd](#), and [WordItOut](#). To ensure equal access, we only experimented with the open choices. For our purposes, we concluded that MonkeyLearn is best because it, unlike the others, uses artificial intelligence (AI) to capture phrases, not only words; offers more ways to format the word cloud; and, requires less deletion of uninformative words (e.g., "and," "to").

Instructions

As a starting point, we assume you are looking at the paper for which you will create a word cloud. To prepare the paper for MonkeyLearn, you should:

1. **Remove unwanted text from your paper.** This involves deleting references, tables, charts, acknowledgements, and other text that can unduly shape the word cloud.

With the paper prepared for analysis, now you can create a word cloud for it.

2. **Go to monkeylearn.com/word-cloud/.** You will be brought to a page that looks like the following screenshot.

Free Word Cloud Generator – MonkeyLearn

WordCloud Generator
By MonkeyLearn

Source text

Upload text file

Type or paste your text here or upload a file to generate a word cloud

Generate cloud →

3. **“Upload [a plain]text file” or copy-and-paste the text into the “Source text” box.**
4. **Format the word cloud as desired.**⁵ As displayed from left to right in the page’s toolbar (see screenshot, below), you can choose:
 - Theme: select Default, Enterprise, Light Vivid, Dark Vivid, or Rounded
 - T: select the text color(s)
 - Icon for a paint bucket pouring a drop: select the background color or make transparent
 - Poppins (would better read as “Font”): select Playfair display, Open Sans, Poppins, Rubik, Montserrat, Oswald, or Quicksand
 - Words Qts.: Display 10 to 100 words/phrases in the cloud

5. **Inspect the word cloud to ensure all of the included words/phrases are desired.** Before scrutinizing, be sure to select (in the prior step) the number of words/phrases to include in the word cloud. Rather than look at the word cloud itself, inspection is best performed by scrolling through the “Relevant Words” box, on the right side of the page. Write down the words/phrases that you do not wish to appear in the word cloud (for examples, see below), then proceed to the next step.
 - The program will create phrases out of common adjective-noun pairs (e.g., “many officers” or “several offenders”).
 - The program does not perfectly analyze:
 - Hyphenated words, often treating them as separate words or not including them within phrases (e.g., “open-ended written responses” becomes “ended written responses”).
 - Acronyms, often excluding them or displaying them in a way that is vague (e.g., “US” as “us”).
 - Words ending with an “s” (not only plural words, but also author names), dropping the letter when it should remain.
6. **Based on your inspection results, edit the source text as appropriate.** This may involve deleting words/phrases (e.g., “many” or “several”), combining words (e.g., “open-ended” to “openended”), changing plural words to a sensible singular alternative (e.g., “United States” to “America”), and converting acronyms to the names or phrases they represent (e.g., “US” to “United States”). Note that the

program is good at capturing common acronyms (e.g., LGBT, SWAT), but less adept at recognizing more specialized acronyms (e.g., RAT, GST).

7. Repeat steps 3 to 6 until the word cloud is as desired.

8. Download the word cloud and its data sheet by clicking the aptly titled “Download” button in the upper right corner of the page. You can choose to save the file as .svg, .png., or .csv. We recommend downloading in all three formats; it is better to have what you do not need than vice versa.

Footnotes

1. For general information on word clouds, see [this Wikipedia article](#). ↵
2. Keywords have become a convention, but they are a relatively new phenomenon. In *Criminology*, for example, keywords first appeared in March 2006 (volume 40, issue 2); in *The British Journal of Criminology*, July 2009 (volume 49, issue 4), and, in *The Australian & New Zealand Journal of Criminology*, in December 2009 (volume 42, issue 3). For general information on keywords, see the Wikipedia article on [Index terms](#). ↵
3. For some general information on word clouds, see [this Wikipedia article](#). ↵
4. Phillips, S. W. (2017). Self-Motivation in Policing. *Journal of Qualitative Criminal Justice & Criminology* 5(1). <https://doi.org/10.21428/88de04a1.567ba2ac> ↵
5. The program turns your selections into the default options for future use. ↵