

## Space restrictions in paper and electronic dictionaries and their implications for the design of production dictionaries

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One important consideration in dictionary-making has been that of space. To conserve space in paper dictionaries, a number of principles, strategies and conventions have been employed. With the gradual transition of the dictionary to the electronic medium, some of these strategies and conventions have lost, or changed, their significance (see also Corr  ard 2002).

For one thing, it is no longer sufficient to speak of *dictionary space* alone, as was customary with paper dictionaries. One must now distinguish between at least two types of space: *storage space* and *presentation space*. In fact, this distinction is also valid for paper dictionaries.

By storage space I mean the capacity to hold the total content of the dictionary. Storage space is relatively restricted in traditional paper dictionaries, where it is determined primarily by the planned format, weight, layout, font density and font size of the finished book. Non-textual content, such as pictorial illustrations, takes up more space on paper than text, while some content (e.g. sounds, animations) cannot be stored at all. The availability of modern high-capacity storage media coupled with content sharing over high-speed network connections has all but removed storage space restrictions for electronic dictionaries. They are only a concern for a minority of extremely space-consuming content, such as high-resolution videos.

Presentation space, in contrast, refers to the display of lexicographic information addressed to the dictionary user, such as can be communicated simultaneously. For paper dictionaries this typically means the two facing pages of an open book, for electronic dictionaries – some kind of visual display device. Here, even though the typical PC screen is now somewhat larger than the two pages of a desktop dictionary, the visual resolution of a standard screen is still a few times smaller than print and so capable of carrying accordingly less information (disregarding the fact that this visual channel may be enhanced by audio). However, unlike paper, which is static, the display of an electronic device is dynamic, and this can be exploited to compensate for the lower momentary information content.

The (potentially) dynamic character of lexicographic presentation in electronic dictionaries redefines many a classical metalexigraphic notion. For example, the borders between *microstructure* and *access structure* need to be redrawn, if not done away with. Given the nonlinear content storage of some modern electronic dictionaries, combined with mouse-gesture activated devices such as popups, fanouts or active menus, the call as to what counts as *entry element* and what as *cross-reference* becomes increasingly difficult, and perhaps nonessential.

The move of dictionaries to the electronic medium has also opened up new possibilities for dictionaries designed specifically to aid production in the second/foreign language (sometimes called *active dictionaries*, though some authors like to distinguish them from *production dictionaries*). Despite a number of calls to make production dictionaries, the response in paper products has been minimal, and one important reason is that the very concept of production dictionaries conflicts rather acutely with one of the most fundamental space-saving principles of paper lexicography: that of avoiding redundancy.

New proposals for electronic production dictionaries are gradually being put forward (Laufer and Levitzky-Aviad 2005; Laufer and Levitzky-Aviad 2006), but in some ways they are still hostage to the old paper principles. In the concluding part of my presentation I intend to offer suggestions on how these new proposals could be further improved to take greater advantage of the electronic medium.

### References

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