

How to write a good state of the art: should it be the first step of your thesis?

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Abstract

In scientific writing, the state of the art describes the current knowledge about the studied matter through the analysis of similar or related published work. It might provide a comprehensive overview of what has been done in the field and what should be further investigated, in order to help formulating the problems and hypothesis the thesis intends to address. Producing a *good* state of the art might be considered the main initial step of a PhD thesis. This is however a challenging task that involves analysing, comparing, evaluating and linking different sources (i.e., many hours of reading and content organisation). This task may be also considered an intimidating task that requires the help and guiding of the thesis supervisors. While starting a thesis by producing (good) state of the art is a nice starting point, this process is non linear and involves many iterations. It requires as well to be continuously and incrementally refreshed. The different types of state of the art (to be incorporated into a paper, a survey article or thesis), the steps of writing a (good) state of the art and some tips facilitating the process will be discussed.