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Effects of Incongruity between Prior Knowledge and New Information on the Acquisition of Knowledge

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Abstract: Learning can be understood as interplay between an individuals prior knowledge and the information available from an external source (e.g. other people). In order to examine this interplay in more detail three experimental studies were conducted. In the experimental scenario of these studies, participants worked with a wiki in order to provide a situation of inter-personal knowledge transfer and to allow people not only to develop their own knowledge, but also to manipulate the external source of information. We manipulated the incongruity between peoples prior knowledge and external information in a wiki. We found that both the acquisition of factual and of conceptual knowledge is supported by a medium level of incongruity between knowledge and information (Study 1). Peoples factual knowledge, however, depends very much on their prior knowledge ex ante (Study 2). The degree of redundancy (Study 3) does not have an impact on the acquisition of knowledge.