## The Interrelationship Background Knowledge/Input:

## A Case Study.

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**Keywords:** Background knowledge, Bransford and Johnson 1972 washing clothes paragraph, knowledge retrieval, main schema, mother tongue, script.

The current study is experimental, cognitive, and descriptive. It aims to investigate the ability of twentytwo participants to retrieve background knowledge and use it in the right moment to activate appropriate scripts to understand the Tamazight translated version of Bransford and Johnson 1972 Washing Clothes Paragraph. It is necessary to mention that these participants are first exposed to the original paragraph of Bransford and Johnson (1972), followed by its Arabic translated version, and then its French translated version. However, they were not able to understand any of them or recall any information given in the paragraphs. They were, then, exposed to the Tamazight version (Tamazight is the participants' mother tongue). The degree of their understanding is examined by a small test. The main theory used is schema theory. Terminologies advanced by Schank and Abelson (1977), and Schank's Dynamic Memory (1982), are used in the analysis. The selection of participants was based on their scientific background (third year high school students: experimental sciences branch). The study's significance lies in the fact that it added the perspective of recreating the main schema "scene" i.e. title of the text, in a new way. It also puts forth the fact that even if the language of the input is the L1 of the participants, it does not mean that deciphering it would happen for all participants. These individuals are asked to undertake three tasks within the test. The first one is to give a title to the paragraph, and by doing so, they are referring to the main scene. The second task is to extract the words or expressions that led them into choosing the title i.e. they are going to indicate the scripts which were activated and helped them to deduce the main scene. The last task is to summarize the paragraph which would answer the second research question of the current study. With that said, the investigation aims to answer the following questions: do participants need to activate all scripts to generate the main schema "scene"? Can participants write a summary of the paragraph even if they did not generate the main schema? Results show that not all scripts need to be activated to generate the main scene. In fact, only ten participants have been able to deduce the overall schema "scene" projected by the text. Moreover, the number of activated scripts differ from one participant to another. Furthermore, activating many scripts does not necessarily mean that the participant will generate the overall schema, but connecting them with each other, and relating them to the background knowledge properly and in the right time, will. Participants that had no idea about what the main schema was; were able to use the scripts to write down a summary of the paragraph. Nevertheless, the summaries were not complete and did not contain all the information needed. This highlights the fact that the partial activation of scripts may lead to lack of comprehension, which means that the instantiation of some scripts is more important than others. This study can be beneficial to teaching in first place, as it would provide teachers and students with a direct way of comprehending a text. Teachers need to direct student by giving them appropriate hints at the appropriate time and students need to learn to use their background knowledge and connect it to the input in an efficient way. Within a wider scope, the same terminologies used in this study may be used as tools in cognitive literary analyses.

## References

Baars, Bernard J. 1993. A cognitive theory of consciousness. Cambridge University Press.

- Baddeley, Alan D. 1999. Essentials of human memory. Psychology Press.
- Eysenck, Michael W, & Mark T. Keane. 2005. Cognitive psychology: A student's handbook. Taylor & Francis.
- Herne, Steve. John Jessel & Jenny Griffiths. 2012. *Study some guiding principles. In Study to Teach.* Routledge.
- Koda, Keiko. 2005. Insights into second language reading: A cross-linguistic approach. Cambridge University Press.

Lieberman, David A. 2012. Human learning and memory. Cambridge University Press.

- Marshall, Sandra P. 1995. Schemas in problem solving. Cambridge University Press.
- Pearson P. David, Michael L. Kamil, Peter B. Mosenthal & Rebecca Barr. 2016. Handbook of reading research. Routledge.
- Rumelhart, David E. 2017. Schemata: *The building blocks of cognition*. In Theoretical issues in reading comprehension. Routledge.
- Semino, Elena. 2014. Language and world creation in poems and other texts. Routledge.
- Schank, Roger C, & Abelson, Robert P. 1977. *Scripts, plans, goals, and understanding*. Hillsdale, New Jersey: Lawrence erlbaum associates.
- Van den Brul, Caroline. 2013. Crackle and fizz: Essential communication and pitching skills for scientists. World Scientific.
- Hoover, Wesley A, & Welliam E. Tunmer. 2020. *The cognitive foundations of reading and its acquisition*. Springer International Publishing.