IS1404 E-READ: Evolution of Reading in the Age of Digitization

Position paper

Name: **Gal Ben-Yehudah**

WG(s): **WG1 Skilled Reading**
       WG2 Developmental Aspects of Reading

1. **Potential research contribution** in light of, or linked to

A. WG interest and Scientific programme:

My research focuses on cognitive and perceptual factors in skilled reading and in cases of less skilled reading, such as developmental dyslexia. I am interested both in the development of reading skills and in the mechanisms that underpin skilled reading. In recent years my research program has expanded to the cognitive implications of screen reading and its impact on learning. I am particularly intrigued by changes in reading comprehension skills as a result of the shift from reading on paper to reading from digital displays. One line of research that I am pursuing is the use of learning strategies to mediate the negative impact of screen reading on deep comprehension. Another line of research involves the development of early literacy skills through informal interactions with commercial electronic books.

Given my scientific interests and research experience, I would like to participate in two WGs:

1. **Skilled reading** – To WG 1, I can contribute from my extensive experience in studying individual differences in print reading and the cognitive processes that underlie reading comprehension. Recent findings on the inferiority of digital reading comprehension, as compared to print reading, are indeed worrisome. I propose to investigate the usefulness of different learning strategies and metacognitive skills for diminishing the print-digital comprehension gap. Populations of interest are middle school and high school students, as well as adults in higher education settings.

2. **Developmental aspects of reading** – To WG 2, I can contribute from my extensive knowledge on early literacy skills that promote successful acquisition of reading in print. In a current study, I am investigating young children's' interaction with electronic books that display interactive animation together with narration of the story. The question is whether these features support story comprehension and promote acquisition of early literacy skills or do they hinder understanding because of their potential for distraction. Another interesting question is how learning from digital textbooks influences deep reading and consequently knowledge acquisition. In Israel, the Education Ministry is promoting a transition to digital textbooks. There are many questions related to this transition such as what is the best device for digital learning, how to best design digital textbooks, and what is a good pedagogy for teaching in the digital era. I am interested in following this transition using a longitudinal design, which will examine students' interactions with digital textbooks, learning strategies, teacher's pedagogy and the impact of these factors on academic success.

B. Action objectives (pages 7-10 in the MoU):

My research interests coincide with the objectives of this COST Action. Research on reading comprehension from digital devices that spans cultures and languages can provide evidence-based recommendations to educational practitioners and policy makers. It is important to investigate optimal design features that promote learning and improve deep reading, while minimizing the cognitive load and the potential for distractions. In addition, the shift to digital reading necessitates re-examination of classical models of skilled reading and of reading development, and their relevance to current reading practices.

2. Interest in

A. organizing and/or participating in a **short-term scientific mission (STSM).**

Optional: pursuing what research questions/projects; where to/with whom; linked to what objective(s) of the Action:

I am <u>interested in participating or organizing a STSM</u>. As a relatively new researcher in this area, I look forward to organizing meetings with researchers across Europe to explore shared research interests and lay the groundwork for a cross-linguistic STSM.

B. organizing and/or participating in a **Training School** (please indicate what kind of training [theoretical; methodological; technical]).

Optional: linked to what objective(s) of the Action: <u>Not Interested.</u>