

Does expertise and full-page view when reading comics improve understanding?

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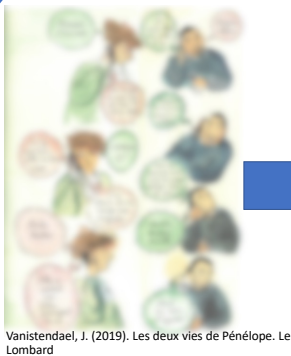
INTRODUCTION

- Cohn (2013) found that readers generally follow a Z-path while reading comics.
- Mikkonen & Lautenbacher (2019) discovered that readers use both global and local attention scales when reading comics.
- Expertise was found to modulate the ability to understand comics.
- Zhao & Mahrt (2018) demonstrated that advanced readers have shorter eye fixations while reading comics.
- The study aimed to investigate the influence of expertise and different reading scales on comprehension and reading time in comics.

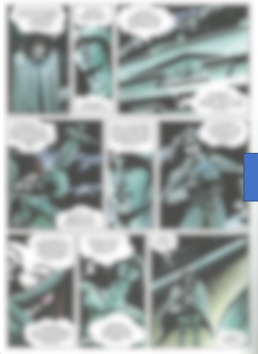
METHODE

- 2 digitalized comics excerpts
- 60 participants
- 3 reading scales:
 - One panel at a time
 - Two sequential full-page read
 - Two full-page available at once
- Measurements:
 - Visual Language Fluency Index (VLFI; Cohn, 2014)
 - Score of understanding
 - Reading time

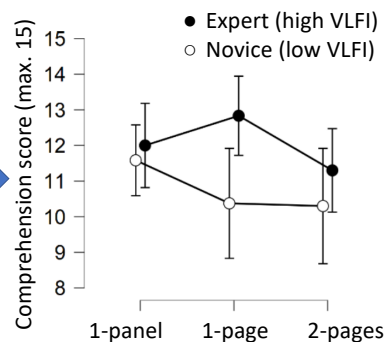
RESULTS



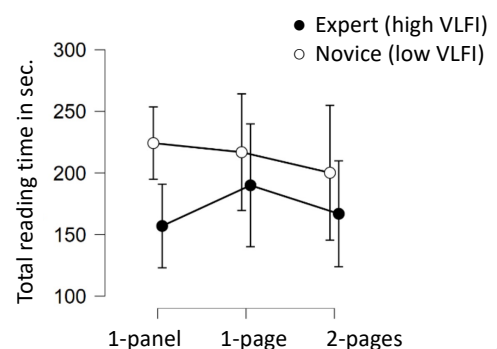
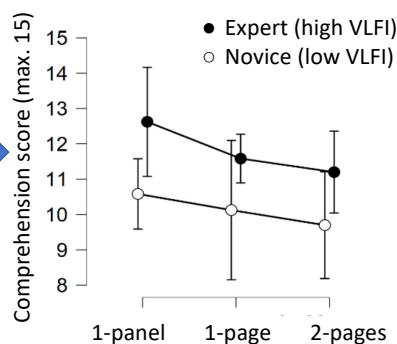
Vanistendael, J. (2019). Les deux vies de P n lope. Le Lombard



Moore, A. & Lloyd, D. (2012). V pour Vendetta. Urban Comics



- Higher level of expertise is associated with a faster reading time ($F(1,54) = 6.76$; $p < 0.05$) and a better comprehension ($F(1,54) = 13.17$; $p < 0.05$) for "V for Vendetta" and with a better comprehension for "The Two Lives of Penelope" ($F(1,54)=7.80$; $p < 0.05$).
- However, we found no effect of the three reading scales regardless of the comics book excerpt and the performance metric.



DISCUSSION

- Standardizing VLFI as a tool for assessing expertise in comics would aid researchers in quantifying expertise more easily.
- Further research is needed with a wider range of comics and improved control of aesthetic and narrative styles to draw broader conclusions on the impact of visual design on comic reading experience.
- The study's findings offer valuable insights for creators, editors, teachers, and researchers seeking to enhance the reading experience of comics.

REFERENCES

- Cohn, N. (2013). Navigating comics: an empirical and theoretical approach to strategies of reading comic page layouts. *Frontiers in psychology*, 4, 186.
- Cohn, N. (2014). The visual language fluency index: A measure of "comic reading expertise". *Visual Language Lab: Resources*.
- Mikkonen, K., & Lautenbacher, O. P. (2019). Global Attention in Reading Comics: Eye movement indications of interplay between narrative content and layout. *ImageText*, 10(2).
- Zhao, F., & Mahrt, N. (2018). Influences of comics expertise and comics types in comics reading. *International Journal of Innovation and Research in Educational Sciences*, 5(2), 218-224.