# **UC Merced**

**Proceedings of the Annual Meeting of the Cognitive Science Society** 

## Title

Fluency modulates ordering of visual narrative layouts

#### Permalink

https://escholarship.org/uc/item/7fk966br

#### Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 44(44)

#### Authors

Cohn, Neil Hacımusaoğlu, Irmak Klomberg, Bien

### **Publication Date**

2022

#### **Copyright Information**

This work is made available under the terms of a Creative Commons Attribution License, available at <u>https://creativecommons.org/licenses/by/4.0/</u>

Peer reviewed

#### Fluency modulates ordering of visual narrative layouts

Neil Cohn Tilburg University, Tilburg, Netherlands

Irmak Hacımusaoğlu Tilburg University, Tilburg, Netherlands

Bien Klomberg Tilburg University, Tilburg, Netherlands

#### Abstract

Visual narratives are often used as stimuli in cognitive research under the assumption of their universal transparency, and the arrangement of visual sequencing has been taken as a proxy for spatial metaphors about time. However, this discounts the conventional properties of visual narratives themselves. First, we examined layouts in a cross-cultural corpus of 105 comics (U.S.A, Europe, Asia). Though horizontal arrangements were predominant in layouts of all types of comics, vertical panel arrangements were more common in Japanese manga than European or US comics. Second, reanalysis of data from a prior experiment (reference anonymized) revealed that manga readership predicted preferences for downward arrangements of ordering panels in all comic page layouts. Thus, visual narratives use unique patterns and their comprehension is modulated by fluency in those patterns, undermining assumptions of their transparency and their adequacy as proxies for spatial metaphors.

In J. Culbertson, A. Perfors, H. Rabagliati & V. Ramenzoni (Eds.), *Proceedings of the 44th Annual Conference of the Cognitive Science Society*. ©2022 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).