

# Navigating Comics: An empirical and theoretical approach to strategies of reading comic page layouts

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## Supplementary Appendix: The Steranko Page

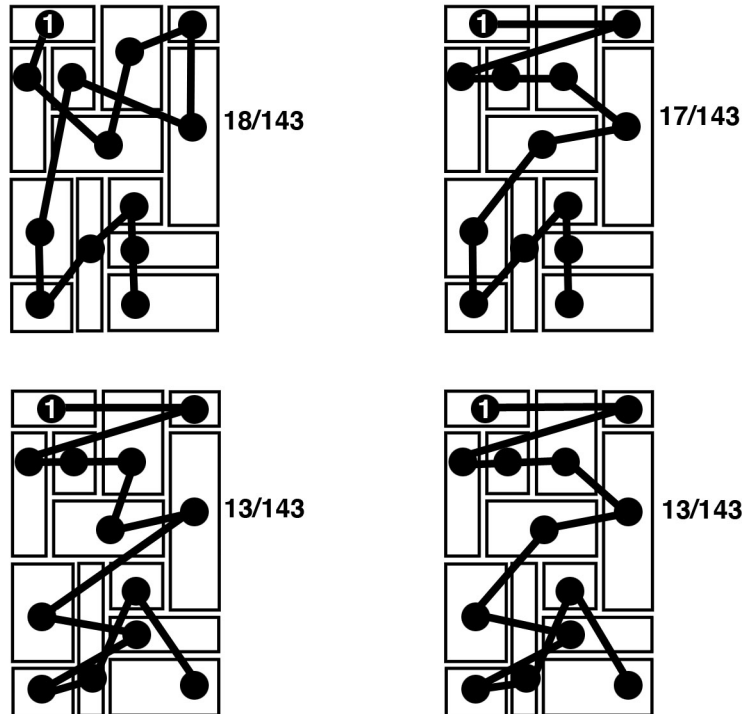
The page by Steranko cited by Barber was the prime example for his claim that people take in pages as a whole, and thus it was included with the other layouts in the experimental stimuli. It is therefore worth reporting the findings from the strategies used to navigate it. Clearly, this page posed difficulties to people, and two participants even declined to complete it.



### Full page navigation

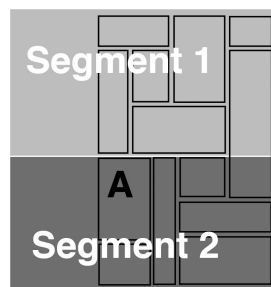
On the whole, no single path completed the whole page more than 18 times out of 143, a mean of .126 (SD= .333), and this most-frequent path was clearly significant when compared with the Grid,  $t(142)=26.378$ ,  $p<.001$ . A chi-squared of all page paths above a frequency of 4 (which was 11 different types of paths) showed that these strategies were used at significantly different rates from each other,  $\chi^2(10, 143)=63.538$ ,  $p<.001$ . It is notable that paths below a frequency of 4 constituted the largest group, with 37 out of 143. The top four full-page paths are depicted below, with their frequencies.

## Navigating Comics



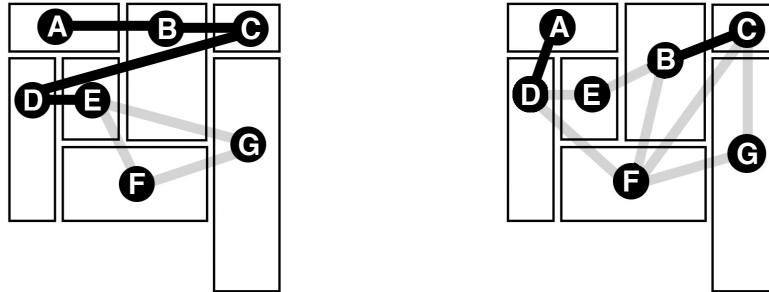
### Page segmentation

As expected, this page did not maintain an obvious consistent path on the whole. However, despite the inconsistency of the overall navigation of the page, certain segments of the page were ordered in consistent patterns with relatively high frequency. These patterns reflected both z-path and blockage paths. Participants tended to break the page up into two major segments of the upper and lower halves of the page. This break was most apparent because the first panel of the lower section (marked panel “A” below) was chosen as following the upper section 91% of the time (130 of 143).



Each of these segments used very apparent z-path or blockage strategies. For the first segment, both blockage and z-path routes were significantly high. In the opening panels, a z-path route was used 60 times compared to 53 times for blockage type navigation (31 used alternate strategies), a significant difference,  $\chi^2(2, 143)=10.336, p<.01$ , depicted below. Solid lines represent high frequency paths, with lighter lines less frequent.

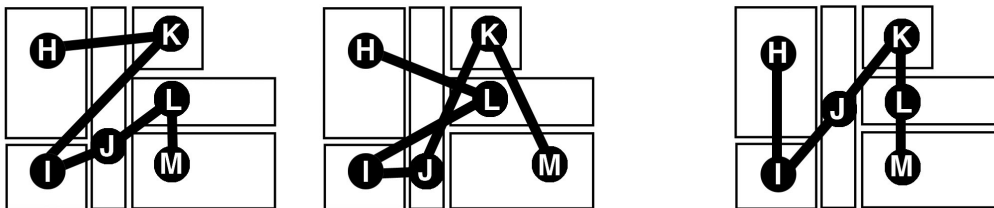
## Navigating Comics



Z-path	Frequency /143	Blockage	Frequency /143
ABCDEFGG	19	ADEBCFG	12
ABCDEGF	41	ADEBCGF	21
<i>Other</i>	30	ADFBCGE	20

Interestingly, only in z-path routes was panel E chosen immediately before panel F. Only one person read the order ADEFB and only one read ADEBF, despite the fact that they would create a fairly cohesive block to the left of panels C and G. That the order EF was only chosen in the z-path means that panel B was already completed as the preferred option. Indeed, 56 out of the 57 times that featured the order EB, they were preceded by a blockage route of AD.

The bottom segment was also divided up into consistent patterns of blockage and z-path. A single blockage path was chosen 67 times, compared to 53 for various types of z-paths with 23 alternative routes,  $\chi^2(2, 143)=21.203, p<.001$ . The z-path route divided into two separate paths, described below, and the three paths overall were also significant,  $\chi^2(3, 143)=42.818, p<.001$ .



Z-path	Frequency /143	Blockage	Frequency /143
HKIJLM	16	HIJKLM	67
HLIJKM	37	<i>Other</i>	23

The final four panels, here labeled as J-K-L-M, were also ordered with one particular path at a fairly high frequency. These panels were ordered “JKLM” slightly over half of all times, a mean of ( $M=.54, SD=.5$ ). When excluding the absolute right corner panel (“M”), the segment block of “JKL” increases to over three quarters of all responses, ( $M=.76 (SD=.43)$ ).

### Conclusion

As should be obvious, this page created great difficulty for participants. However, it does not support that the page as a whole is assimilated holistically, since various navigational paths do clearly appear throughout the page. The strategies of blockage versus the z-path are fairly apparent, no doubt reflecting the competition between the various ECS preference rules.

Additionally, since Barber’s thesis involves meaning, it should be mentioned that the actual content of this page facilitates that no particular reading order is preferred. Other than the

## Navigating Comics

need to read panel J before panel M, the rest of the panels of this page have no temporal order to them. Rather, they show various environmental aspects of a carnival, but have no narrative arc. Indeed, the frantic layout facilitates a feeling of overwhelming sights and sounds of a carnival scene, with information coming in no organized manner. Thus, even if the layout does not direct a reader linearly through the page, the content of this page does not require such a reading anyhow.