## **Cyclical Changes in Literacy through History**

## Oren Soffer and Yoram Eshet-Alkakay Open University, Raanana, Israel

orenso@openu.ac.il yorames@openu.ac.il

## **Abstract**

Recent readers and writers tend to consider the modern alphabet and the printed page as the stateof-the-art and the natural and optimal way of writing and reading text. In this paper, we argue this misleading approach reflects a lack of historical perspective on the short history of the modern alphabet and the printed text on pages, compared to the long history (thousands of years) of the pictures alphabet and the use of scrolls for reading. This article focuses on the pendulum-like change in the way people read and use text, which was triggered by the introduction of new reading and writing technologies in human history. The paper argues that textual features, which characterized the ancient pre-print writing culture, disappeared with the establishment of the modern-day print culture and has been "revived" in the digital post-modern era. This claim is supported by the analysis of four cases which demonstrate pendulum-like cyclical changes through history in textual features: (1) The swing from concrete iconic-graphic representation of letters and words in the ancient alphabet to abstract phonetic representation of text in modern eras, and from written abstract computer commands "back" to the concrete iconic representation in graphic user interfaces of the digital era; (2) The swing from scroll reading in the pre-print era to page or book reading in the print era and "back" to scroll reading in the digital era; (3) The swing from a low level of authorship in the pre-print era to a strong authorship perception in the print era, and "back" to a low degree of authorship in the digital era; (4) The swing from synchronic representation of text in both visual and audio formats during the pre-print era to a visual representation only in print, and "back" to a synchronic representation in many environments of the digital era. The "revival" of ancient textual characteristics in the modern digital format, as revealed by the historical analysis of these cases, suggests that the print culture, which is usually considered the natural and preferred textual environment, should be regarded as the exception.

**Keywords**: literacy, digital literacy, changes through time, cyclical changes

Material published as part of this publication, either on-line or in print, is copyrighted by the Informing Science Institute. Permission to make digital or paper copy of part or all of these works for personal or classroom use is granted without fee provided that the copies are not made or distributed for profit or commercial advantage AND that copies 1) bear this notice in full and 2) give the full citation on the first page. It is permissible to abstract these works so long as credit is given. To copy in all other cases or to republish or to post on a server or to redistribute to lists requires specific permission and payment of a fee. Contact <a href="Publisher@InformingScience.org">Publisher@InformingScience.org</a> to request redistribution permission.