

## THE *MASORAH* AS AN ERROR CORRECTING CODE

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Error Correcting Code (=ECC) is a mathematical technique for reliable transmission of information over a 'noisy' communications channel which is liable to introduce errors. The theory of error correcting codes is a subfield of information theory. Employing sophisticated and efficient methods, it ensures a high probability that the messages will be read correctly even if some errors occur during transmission.

The *Masorah* seems to carry out exactly the same function in relation to the biblical text: it appends additional data to the original text, in different forms (*Masorah* Magna and *Masorah* Parva), facilitating 'transmission' of the original text from generation to generation along with a mechanism for correcting errors that occur in the process of copying manuscripts. In this article we consider the *Masorah* from the point of view of modern information theory, trying to get some insights into its successes and failures by considering it as an ECC. There are clear differences between the two: while ECC usually applies to channels in which the errors occur randomly and content-blind, scribal errors are content-dependent, and the *Masorah* particularly focuses on protection against errors of this sort.

Our study offers insights into the mechanism of the *Masorah*, highlighting its advantages and disadvantages. A comparison is presented between a protective mechanism which achieved great success Maimonides' codification of the tradition concerning 'open' and 'closed' portions in the Pentateuch and less successful mechanisms, such as the ancient traditions about the total number of verses in the Bible and Maimonides' codification of the graphic form in which two songs of the Pentateuch appear. The article also discusses structural aspects of the *Masorah* which aided the mass dissemination of the biblical text set down by the Masoretes, overcoming the problem of scribal errors, and prevailing over other textual traditions which competed with the Masoretic text.