Jewish cantillation is a ritual chanting of readings from the Hebrew bible in the synagogue services. The chants are written using special signs or marks printed in the Hebrew Bible. The purpose of the cantillation signs is to guide the chanting of the sacred texts during public worship, and to clarify the syntactical structure of the text while the specifics of the performance serve in addition as a rhetorical device and as a commentary to the text itself, highlighting important or affective points in the text. Musical analysis of the cantillation requires a detailed estimation of the distributions of each of the cantillation signs. This can be achieved by manual annotation of the audio, but such a method is subjective and labor-intensive. Using high-precision computational methods we developed a framework for automatic extraction of cantillation signs performance from recordings and we show an objective, automatic analysis of one of the cantillation signs, Sof-Pasuq (end of verse). We show that using variations on the finalis pitch, the reader divides the text into sections of coherent meaning, and by doing so he provides some subjective interpretation to the text. This finding is quite interesting because it demands an exceptional memory for pitch on the part of the reader, as well as presumably by the audience. We analyzed automatically two different readers of the bible, and give quantitative comparison between their chantings.