Tapewalk II (1981) is a two-channel electroacoustic work composed at the Institute of Sonology, Utrecht, The Netherlands. A computer, using stochastic procedures, was involved on every level of the composing process, from sound-synthesis algorithms to higher-level compositional decision-making. The software used to create the piece was written by the composer in an assembly language and a higher-level computer language in an interactive real-time environment. The work is based on an elaboration of *Brownian motion*, which can be simply demonstrated as a *random walk*. A global tendency controlling pitch and duration of sound events delineates overall formal characteristics of the piece. Duration and pitch are tied parameters during a first section. At a certain point in the development of the tendency, the two parameters, pitch and duration, become independent of one another. Short phrases sporadically interrupt and interact with this main tendency. These short phrases are generated by an algorithm in which the number of events in a phrase determines a repetition factor and a probability range for its development. In time, the duration/pitch tendency becomes clearly directional in nature and reaches a conclusion signaling the end of the piece. Duration: 6'30"