

For nearly fifty years composers have explored the possibility of combining traditional musical instruments with electronically produced sounds prepared in advance and played back on magnetic tape during performance. A major difficulty of this approach is the problem faced by the performer in coordinating his part with the pre-recorded tape. If it is the composer's goal to create a piece with intricate rhythmic interplay between performer and tape, the performer becomes a slave to the tape's rhythmic inflexibility, and is denied the possibility of interpreting *time*. Thus many of the most expressive elements of performance - *rubato*, *ritardando*, *accelerando*, etc. - must be sacrificed. The not very satisfactory alternative is to create a kind of music in which tape and performer do not require close coordination in time. Modest means now exist, via computer control, to turn the tables, letting the performer's *expressive* interpretation *control* the synchronization of electronically produced sounds. In *Head Over Heels* the pianist plays a keyboard which generates control information using the MIDI (Musical Instrument Digital Interface) protocol. This control information is processed and manipulated by a computer program, and used to generate electronic sounds on a digital synthesizer. The synthesized portion is conceived not as an accompaniment, nor as second, independent part, but rather as an extension of the sonic capabilities of the piano and the technical capabilities of the pianist.