

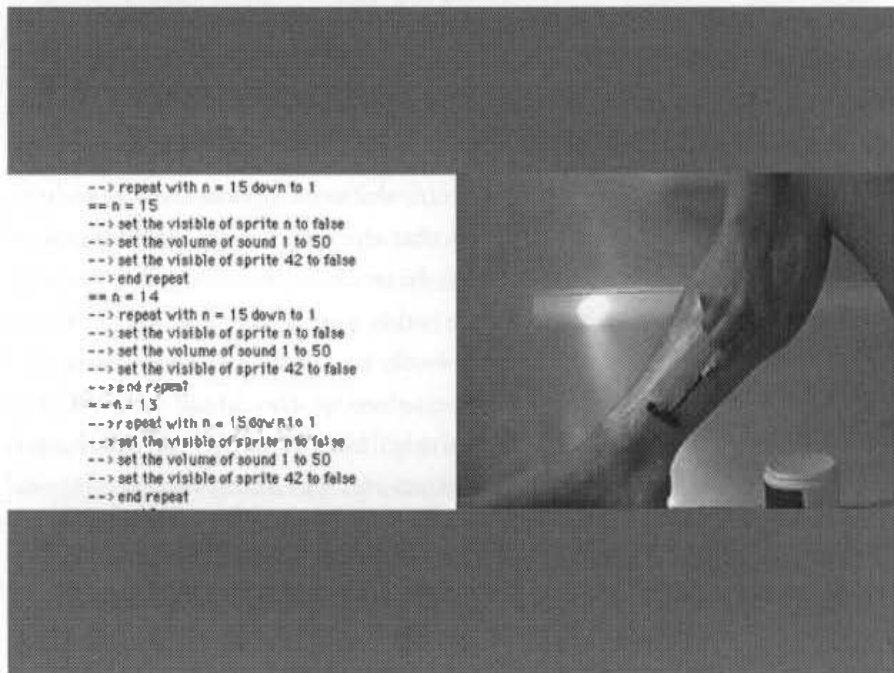
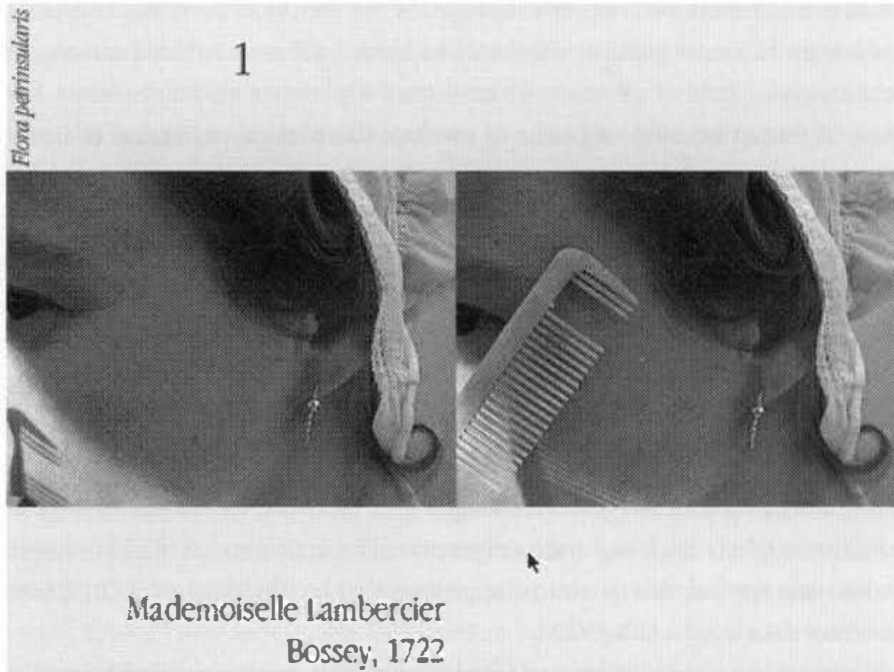
read as a comment on cinematic realism. What are the minimum conditions necessary to create the impression of reality? As Boissier demonstrates, in the case of a field of grass, or a close-up of a plant or a stream, just a few looped frames become sufficient to produce the illusion of life and of linear time.

Steven Neale describes how early film demonstrated its authenticity by representing moving nature: "What was lacking [in photographs] was the wind, the very index of real, natural movement. Hence the obsessive contemporary fascination, not just with movement, not just with scale, but also with waves and sea spray, with smoke and spray."³¹ What for early cinema was its biggest pride and achievement—a faithful documentation of nature's movement—becomes for Boissier a subject of ironic and melancholic simulation. As the few frames are looped over and over, we see blades of grass shifting slightly back and forth, rhythmically responding to the blowing of nonexistent wind that is almost approximated by the noise of a computer reading data from a CD-ROM.

Something else is being simulated here as well, perhaps unintentionally. As you watch the CD-ROM, the computer periodically staggers, unable to maintain a consistent data rate. As a result, the images on the screen move in uneven bursts, slowing and speeding up with humanlike irregularity. It is as though they are brought to life not by a digital machine but by a human operator cranking the handle of the Zootrope a century and a half ago. . . .

If *Flora petrinsularis* uses the loop to comment on cinema's visual realism, *The Databank of the Everyday* suggests that the loop can be a new narrative form appropriate for the computer age. In an ironic manifesto that parodies their avant-garde precursors from the earlier part of the century, Bookchin reminds us that the loop gave birth not only to cinema but also to computer programming. Programming involves altering the linear flow of data through control structures, such as "if/then" and "repeat/while"; the loop is the most elementary of these control structures. Bookchin writes:

As digital media replaces [*sic*] film and photography, it is only logical that the computer program's loop should replace photography's frozen moment and cinema's linear narrative. The Databank champions the loop as a new form of digital storytelling; there is no true beginning or end, only a series of the loops with their endless repetitions, halted by a user's selection or a power shortage.³²



Flora petrinsularis: the repetitive image.
Jean-Louis Boissier and the ZKM.

The Database of the Everyday: the loop as action and as code.
Courtesy of Natalie Bookchin.

The computer program's loop makes its first "screen debut" in one particularly effective image from *The Databank of the Everyday*. The screen is divided into two frames, one showing a video loop of a woman shaving her leg, the other a loop of a computer program in execution. Program statements repeating over and over mirror the woman's arm methodically moving back and forth. This image represents one of the first attempts in computer art to apply a Brechtian strategy; that is, to show the mechanisms by which the computer produces its illusions as a part of the artwork. Stripped of its usual interface, the computer turns out to be another version of Ford's factory, with a loop as its conveyer belt.

Like Boissier, Bookchin explores alternatives to cinematic montage, in her case replacing its traditional sequential mode with a spatial one. Ford's assembly line relied on the separation of the production process into a set of repetitive, sequential, and simple activities. The same principle made computer programming possible: a computer program breaks a task into a series of elemental operations to be executed one at a time. Cinema followed this principle as well: it replaced all other modes of narration with a sequential narrative, an assembly line of shots that appear on the screen one at a time. A sequential narrative turned out to be particularly incompatible with a spatialized narrative that played a prominent role in European visual culture for centuries. From Giotto's fresco cycle at the Scrovegni Chapel (1305–1306) in Padua to Gustave Courbet's *Burial at Ornans* (1850), artists presented a multitude of separate events (which sometimes were even separated by time) within a single composition. In contrast to cinema's narrative, here all the "shots" were accessible to a viewer at once.

Cinema has elaborated complex techniques of montage between different images replacing each other in time, but the possibility of what can be called "spatial montage" between simultaneously coexisting images was not explored. *The Databank of the Everyday* begins to explore this direction, thus opening up again the tradition of spatialized narrative suppressed by cinema. In one section we are presented with a sequence of pairs of short clips of everyday actions that function as antonyms—for instance, opening and closing a door, or pressing Up and Down buttons in an elevator. In another section the user can choreograph a number of miniature actions appearing in small windows positioned throughout the screen.