BAR CODE HOTEL
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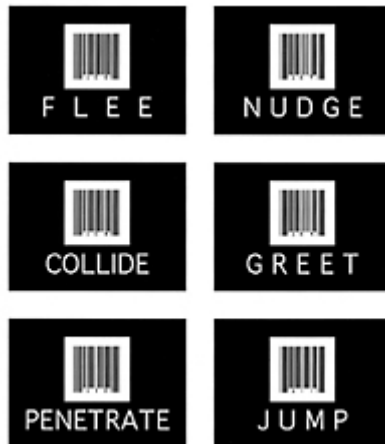|	
FLEE	NUDGE
COLLIDE	GREET
PENETRATE	JUMP

Bar Code Hotel is an interactive environment for multiple participants (or guests). By covering an entire room with printed bar code symbols, an installation is created in which every surface can become a responsive membrane, making up an immersive interface that can be used simultaneously by a number of people to control and respond to a projected real-time computer-generated three-dimensional world.

Each guest who checks into the Bar Code Hotel is given a bar code wand, a lightweight pen with the ability to scan and transmit printed bar code information instantaneously into the computer system. Because each wand can be distinguished by the system as a separate input device, each guest can have his or her own consistent identity and personality in the computer-generated world. And since the interface is the room itself, guests can interact not only with the computer-generated world, but with each other as well. Bar code technology provides a virtually unlimited series of low-maintenance sensing devices (constrained only by available physical space), mapping every square inch of the room's surface into the virtual realm of the computer.

The projected environment consists of a number of computer-generated objects, each one corresponding to a different guest. These objects are brought into being by scanning unique bar codes that are printed on white cubes that are dispersed throughout the room. Once brought into existence, objects exist as semi-autonomous agents that are only partially under the control of their human collaborators. They also respond to other objects, and to their environment. They emit a variety of sounds in the course of their actions and interactions. They have their own behavior and personality; they have their own life span (on the order of a few minutes); they age and (eventually) die.

Bar Code Hotel is designed to accomodate any number of guests, up to the available number of bar code wands (which is dependent on the particular configuration installed). Currently, the Hotel can easily handle between one and six guests at a time. Each time a guest scans a bar code, contact is re-established between that guest and their object. However, between these moments of human contact, objects are on their own. This allows for a number of possible styles of interaction. Guests can choose to stay in constant touch with their object, scanning in directives almost continuously. Or they may decide to exert a more remote influence, watching to see what happens, occasionally offering a bit of "advice". Guests can

scan any bar code within reach at any time. Each bar code is labeled (verbally or graphically), letting the user know what action will result.

The objects in Bar Code Hotel are based on a variety of familiar and inanimate things from everyday experience: eyeglasses, hats, suitcases, paperclips, boots, and so on. None of them are based on living creatures; their status as characters (and as surrogates for the user) is tentative, and, depends totally upon their movement and interaction. At times they can organize themselves into a sort of visual sentence, an unstable and incoherent rebus.

Objects can interact with each other in a variety of ways, ranging from friendly to devious to downright nasty. They can form and break alliances. Together they make up an anarchic but functioning ecosystem. Depending on their behavior, personality and interactive "style", these objects can at various times be thought of in a number of different ways. An object can become an agent, a double, a tool, a costume, a ghost, a slave, a nemesis, a politician, a pawn, a relative, an alien. Perhaps the best analogy is that of an exuberant and misbehaving pet.

Bar codes can be scanned to modify objects' behavior, movement and location. Objects can expand and contract; they can breathe, tremble, jitter or bounce. Certain bar code commands describe movement patterns, such as drift (move slowly while randomly changing direction), dodge (move quickly with sudden unpredictable changes) and wallflower (hide in the nearest corner). Other bar code commands describe relations between two objects: chase (pursue nearest object), avoid (stay as far away as possible from all other objects), punch (collide with the nearest object) and merge (occupy the same space as the nearest object). Of course, the result of scanning any particular bar code will vary, based on all objects current behavior and location. Many bar code commands cause temporary appendages to grow out of objects. These appendages amplify and define various behaviors. Particularly aggressive objects often grow spikes, for example.

Each object develops different capabilities and characteristics, depending on factors like age, size and history. For instance, younger objects tend to respond quickly to bar code scans; as they age, they become more and more sluggish. Older objects begin to malfunction, short-circuiting and flickering. Finally, each object dies, entering briefly into an ghostly afterlife. (This process can be accelerated by scanning suicide.) After each object departs, a new object can be initiated.

Besides controlling objects, certain bar codes affect and modify the environment in which the objects exist. The point of view of the computer projection can be shifted. Settings can be switched between various rooms and landscapes. Brief earthquakes can be created (leaving all objects in a state of utter disorientation).

Since any bar code can be scanned at any time, the narrative logic of Bar Code Hotel is strictly dependent on the decisions and whims of its guests. It can be played like a game without rules, or like a musical ensemble. It can seem to be a slow and graceful dance, or a slapstick comedy. And because the activities of Bar Code Hotel are affected both by its changing guests and by the autonomous behavior of its various objects, the potential exists for the manifestation of a vast number of unpredictable and dynamic scenarios.

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