By Lewis H. Lapham THE FEELY IS HERE

IT MAY RESEMBLE A HAIR DRYER, BUT A NEW MACHINE OFFERS 3-D MOVIES THAT PROVIDE SOUNDS, SMELLS AND SENSATIONS.



n his novel, Brave New World, the late Aldous Huxley imagined a world of the future in which an ultramodern theater would present an evening's divertissement advertised as follows: "Three Weeks IN A HELICOPTER. AN ALL-SUPER-SINGING, SYNTHETIC-TALKING, COLORED, STEREOSCOPIC FEELY. WITH SYNCHRONIZED SCENT-ORGAN ACCOMPANIMENT."

The spectators in Huxley's theater, confronted with gigantic, three-dimensional images of a man and woman, felt them kiss or suffer pain. The helicopter whirled in sickening circles through the sky. The scent organ supplied odors of musk, lavender and new-mown hay.

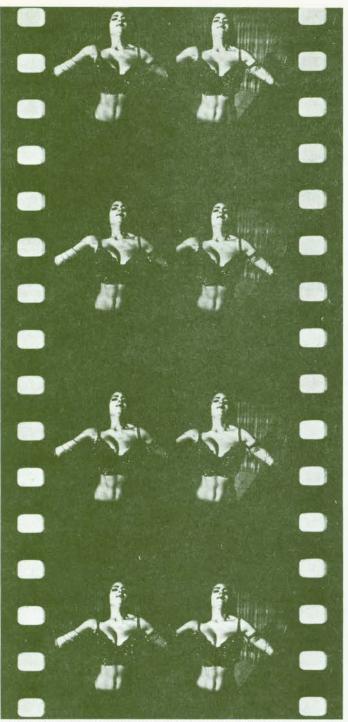
Writing in 1931 and intending his book as an ironic commentary on what he considered wretched tendencies in modern civilization, Huxley presupposed various grotesque machines as examples of 20th-centurytechnologygone berserk. Although helicopters had not yet been invented and the movies had hardly begun to talk, Huxley lived to see his most improbable fancies developed into banal facts.

His irony escaped the notice of the eager entrepreneurs who, all through the 1950's, brought out approximations of the feely movie under such trademarks as 3-D, Cinerama, AromaRama, Smell-o-Vision and Todd A-O. It remained only for Morton L. Heilig of Long Beach, Long Island, to combine the several aspects of these different techniques into a single machine: the Sensorama Simulator. Resembling a monstrous hair dryer and operating on the principle of a peep show in a penny arcade, the Simulator stands six feet high, measures 30 inches across and six feet deep, is painted cerulean blue and, of all the devices yet invented, most closely corresponds to Huxley's idea of the feely. If properly cared for, it shows a three-dimensional film, broadcasts stereophonic sound, manufactures gale winds or gentle breezes, exudes pleasant smells and shakes with dreadful vibrations.

Heilig, known to his friends as "Mortie," let loose the Sensorama Simulator on the world last month in a series of demonstrations aimed at persuading prospective buyers to install the machine in hotel lobbies, airline terminals, shopping centers, bars and bowling alleys. Mortie conducted the demonstrations in a Greenwich Village apartment bleakly furnished with low-slung chairs, abstract sculpture, books on Zen Buddhism and, gurgling ominously in the center of the room, the devilish Simulator.

Only one person at a time can look into the machine. The spectator—Mortie has a whimsical habit of calling him "the victim"—sits in a red chair, firmly grasps the controls and peers through what look like binoculars. Demonstrations last about 12 minutes. The first sequence imitates the sensation of riding on a motorcycle in

Gladys Weisenthal, the sister of inventor Heilig, peers into Sensorama Simulator.



When exotic dancer Noga Lord gyrates on film, perfume wafts from feely machine.

traffic; the second of being present in the same room with a belly dancer.

The motorcycle ride begins with a ghastly lurch. The film suddenly places the spectator in the position of a man driving at an irresponsible rate of speed across Brooklyn Bridge. Exhaust fumes blow in his face. The red chair rocks back and forth with a deafening roar.

Among all the representatives of corporate industry who attended the demonstrations, none expressed the effect of the ride more graphically than Alfred Jennings, a publicity man for a gas company. "I nearly threw up," he said.

Watching the same film, Mrs. Estelle Brill—she and her husband, Malcolm Brill, are friends of Mortie—shouted as the motorcycle seemed to slam through a sudden turn. "Be careful," she yelled. Her body stiffened and her right foot groped for an imagined brake on the floor. She arose from the machine with a dazed expression in her eyes. "I feel as though I've been away," she said, and then, as the further possibilities of the Simulator dawned upon her, she added, "Good Lord, you could experience skiing without bothering with all that nasty snow, all those boots and things."

Which remark, of course, precisely defines Heilig's fondest hopes and dreams. A pale and imaginative man of 37, born in the Bronx and educated at the University of Chicago, he once nurtured the ambition of becoming a painter or an architect. His reddish beard and his lean face give him the appearance of an elegant but

hungry poet. He began work on his machine eight years ago. "I wanted to make films that would look exactly like the world around me," he said. "I was bored with a flat image on a flat screen."

In 1958, having become possessed with the notion of a feely movie, he wrote to universities, to motion-picture companies and to the U.S. Government, trying to raise financial backing for his "film of the future." In the interim he directed and photographed documentary films for NBC television. One producer for that network remembered him as "brilliant but wild-eyed... a creative genius but not an easy guy to work with." On one occasion when Mortie was presented with the technical problem of filming a fall from a building, he suggested heaving the camera out the window.

Receiving no encouragement and no money for his bizarre idea for a feely movie, Heilig had just about given up hope of realizing it when, in the spring of 1963, his sister introduced him to John B. Miller of White Plains, N.Y. A serious young man of 32, Miller is the grandson of a founder of a chain of department stores. Impressed with Heilig's idea, Miller raised \$150,000 for the construction of the first and, as yet, the only Sensorama Simulator in the world. "I believe in the machine," Miller said. "My family believes in the machine, and we are sophisticated people; we do not trifle with gimmicks."

He sees two commercial uses for the machine, either as a sales-promotion device for large corporations or as a coinoperated amusement. To the executives sent to look at the machine on behalf of banks, airlines, soap manufacturers, gas companies, railroads and other industrial or financial concerns, Miller and Heilig talked up the Simulator as a means of displaying the product. "You can show brochures to people forever," Mortie said to the enthusiastic Mr. Jennings, "but with the Simulator... ah, my friend, with the Simulator, anything is possible."

He conjured up visions of employing the Simulator at trade fairs or conventions, of automobile manufacturers taking people on cross-country road races in their latest cars, of travel agents showing travelers the differences between the beach at Cannes and the beach at Acapulco, complete with local smells and bird noises. "The only problem with it," he said, "is that having seen Paris in the machine, some cheap skate may just go home to his wife and not buy a ticket."

With dealers in jukeboxes Mortie took a different approach. To Al Denver, president of the New York City chapter of Music Operators of America, Inc., he said, "Think what it could mean to old ladies and cripples, people that never go anywhere. We could film a bobsled run or water-skiing, sky-diving or an underwater scene with sharks."

Although everybody who saw the machine applauded the alarming reality of the notorcycle ride, opinion with regard to the belly dancer remained ambiguous. The sequence opens with the hero of the demonstration film, a character named Caspar Inglefinger, staring wistfully at his secretary. The narrator then says, "With Sensorama you can also travel into the region of your wildest fantasy."

Whereupon, to the sound of flutes and tambourines, the secretary is abruptly transformed into a slave girl, and Caspar Inglefinger into a Turkish sultan. As she dances, beckoning toward the camera and jingling her pagan bracelets, the machine exudes the thick scents of jasmine and hibiscus. A hot wind, suggestive of a sirocco blowing off the desert, troubles her skirts. The camera then places the onlooker in the position of the fortunate Inglefinger, striding confidently toward the gratification of his desire.

Mrs. Brill, who saw the film before her husband, tapped him on the shoulder as he sat entranced at the machine, fiddling with the controls to bring the picture into clearer focus. "That's enough, Malcolm," she said. "I think we can go home now."

Several men, noticing that they seemed to be "a part of the picture," admitted their embarrassment. "I had to avert my eyes," said a florid man wearing a handpainted tie. "I kept saying to myself, "Maxie, this isn't real."

Others, however, complained because they expected more than the Simulator could offer. A man in a baggy suit disengaged himself from the machine with a look of keen disappointment on his small and narrow face. "No flesh?" he inquired. "No tactile sensations?"

"It's only a prototype," Heilig explained, apologetically. "We have a long way to go,"

Heilig's machine achieves the illusion of reality with an arrangement of lenses through which the spectator looks directly at the film, thus eliminating the need for a screen. The breezes, vibrations and chemical smells—manufactured by the Fragrance Process Co. of New York—are governed by electronic circuits that cause them to increase or subside in exact synchronization with the visual image.

Although he concedes that certain improvements remain to be made—clearer definition of the image, less noise from the vibrators, a more subtle modulation of the scents—Heilig believes that all the defects can be corrected. Toward the end of the first week of demonstrations, he permitted himself to speculate on what he called "the really interesting" applications of his machine.

"Think of astronauts enduring long flights in space," he said, "day after day and nothing to look at but the black void. They could sit in the machine and see wheat fields in Kansas, smell the hay, walk down the main street of their hometown, see and hear their wives talking to them. I think it would be meaningful."

He paused briefly, toying with a heavy chunk of sculpture that vaguely resembled a cow.

"Think of it as a psychotherapeutic device. Suppose somebody has been in an automobile accident and is afraid to travel in a fast car. Well, we put him in the machine and simulate rides in cars, first slowly and then faster and faster until he has regained his confidence."

After a long silence he got up from the sofa and walked across to the window overlooking Washington Square. He gestured fondly in the direction of his machine, which was making a little humming sound, and then, in an affectionate tone of voice, he expressed the very thought that frightened Huxley into writing Brave New World 33 years ago.

"Do you know what this machine really is?" Mortie said dreamily. "It's an empathy machine, and if we can develop it right, maybe we can get it to inject feelings of warmth and love." THE END