ANTHROPOLOGY

Art Reflects Society

➤ AN ARTIST who shows a preoccupation for rounded female shapes in his art reflects an interest of his society in women.

Dr. J. L. Fischer of Tulane University, New Orleans, found that art may serve as a map to understanding the society in which the artist lives.

Designs that repeat a number of simple patterns indicate the society is equalitarian, with the same right for all individuals, he reported in the American Anthropologist, 63:79, 1961. Designs using a number of unlike patterns or shapes indicate the artist lived in a society with a type of hierarchy, or class differences.

These conclusions are based on the assumption that the artist is expressing a "social fantasy." The artist fantasies and expresses social situations that will give him security or pleasure.

Dr. Fischer used two tests, one on pictorial arts and one on social variables, to arrive at his conclusions. He said that the successful artist has a greater ability to express the personality common to his society than his own private personality since most societies have fairly strict social and traditional controls on art production.

He added that personal isolation of the artist and encouragement of individual expression to the degree known in modern Western society were not found in the societies studied.

Dr. Fischer found that design with large amount of empty or irrelevant space characterized equalitarian societies whereas designs with little empty space were found in hierarchical societies. Symmetrical designs were found mostly in equalitarian societies and asymmetrical design in hierarchical societies.

Another theory that there is a relationship between form of marriage and art styles was supported by the studies made. Societies where one man may marry two or more women had more curved, or female, designs than societies where a man may only marry one woman, in which straight-line designs were more prevalent.

One of the most promising possibilities of the study of art styles as related to social conditions is its application to extinct cultures of which art works have survived but no knowledge of the people who produced them.

• Science News Letter: 79:100 February 18, 1961

INVENTION

Patents of the Week

An anti-smog device, reducing air pollution and making the car more efficient, a system for dispelling fog on airstrips and a cleansing solution for surgeons have been patented.

➤ THE IRRITATING BLANKET of smog formed over large cities may soon be a thing of the past. A new anti-smog device not only reduces air pollution caused by automobile exhaust gases, but it also increases the car's efficiency.

According to the inventor, Joseph S. Falzone of Old Bethpage, N. Y., virtually 50% of the gasoline hydrocarbons, which eventually pollute the atmosphere, are not used in the engine. By rerouting the unburned gases back to the engine, the smog-forming chemicals are considerably reduced.

A filter, inserted in the exhaust pipe, stops the exhaust gases, and the gases are recirculated back to the carburetor by a whirling device. An air tank, attached to recirculating system, can add alcohol to the fuel mixture, preventing icing of the fuel line. For the last 18 months the inventor has been testing the device, patent No. 2,969,782, with good results on his own car.

Although the filter was not removed during the entire trial, Mr. Falzone recommended it be cleaned once every three months in normal car use.

Dangerous soupy fog rolling in across airport runways causes hazardous conditions and prevents airplanes from landing or taking off. Robert Giannoni of Florence, Italy, has invented a system for dispelling the thick fog that interrupts plane schedules.

His system clears the air by freezing the tiny droplets.

A network of pipes underneath the runway connects to a refrigerating unit. The foggy air is drawn in through pipe openings, spaced a few yards apart, and compressed.

It is then sent through boxes immersed in a freezing alcohol solution, where the foggy droplets freeze to the box walls. The compressed air is re-routed to another pipe system and sent back to mix with the outer air. The invention received patent No. 2,969,920.

Surgeons may soon be performing delicate operations without restricting rubber gloves. All a surgeon will have to do is dip his hands in a solution subjected to ultrasonic vibrations, and in a few minutes his hands will be clean enough for operations.

Charles H. Prange of New York City claims that the ultrasonic vibrations stimulate a soapy cleansing solution to dislodge dirt and other foreign particles from the hands. The surgical cleaning is much better than the time-honored scrubbing technique, the inventor said.

Much valuable time, which is very important to a surgeon, is saved by using the ultrasonic cleaning method.

The patent rights of the invention, No. 2,970,073, were assigned to Howe Sound Company.

A guard rail installed at school intersections will provide more safety for schoolchildren crossing the street. The spring-operated gate, patent No. 2,969,604, prevents impulsive children from spilling out onto the street despite moving traffic.

Inventor Mutual Burton Sr. of Columbus, Ohio, believes the possibility of human error when employing patrol boys or adults at school intersections is eliminated by the mechanical safeguard.

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