

# New Ways to View World Problems

**T**o understand and solve problems, policy makers and researchers often spend countless hours examining reams of reports. Similar efforts may be occurring almost simultaneously in different countries and organizations.

Is there a better way to convey essential information to people worldwide?

To explore that question, the East-West Center's Open Grants division invited five visual communicators from the USA, Japan, India, and Iran to become research fellows and work as a team.

From various disciplines, the team members were: Dr. Shyam S. Agrawal, an audiovisual specialist from the Central Electronics Engineering Research Institute, Pilani, India; Dr. Mei-Ling Hsu, professor of geography at the University of Minnesota; Coordinator Aaron Marcus, a graphic designer formerly an assistant professor at Princeton University and now in the College of Environmental Design at the University of California, Berkeley; Yukio Ota, art director of the Advanced Social Planning Institute in Tokyo, Japan; and Dr. Ebrahim Rashidpour, head of the Educational Technology Center at the University of Tehran, Iran.

For four months, they reviewed existing international symbols and visual languages, studied more than



500 pictograms and 200 composite images, revised and refined 70 of them, and, in effect, developed a new visual language.

They then organized the symbols and images into a carefully positioned and timed sequence to convey complex concepts about the interdependence of nations and peoples, with emphasis on the energy crisis. The result was a single-screen slide show, a show that depends primarily on images, not words, for communication.

To enhance impact, all images (except a color photograph of the earth) appear in black and white, with the images as white symbols against a deep, black background. Thus, in a darkened room, the viewer sees only the stark reality of facts, concepts, and significance of global interdependencies.

The show may represent a new dimension in international communication. At the very least, the team hopes the show will inspire other academic, research, professional, and governmental organizations to visualize their own concerns more effectively.

Excerpts are shown on the next seven pages. We have added narrative material to link the excerpts and describe the symbolism.

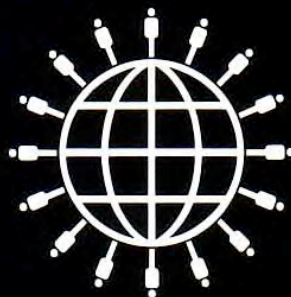
For more information about the show, write to "Open Grants, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96848."

## Visualizing Global Interdependencies

The earth, a home for more than four billion people, is a place of greatly increasing diversity and complexity.

Ideas, people, and goods are moving faster and faster and intermingling.

There are rising challenges in the changing world, caused by global situations of population, food, energy, and environmental pollution.



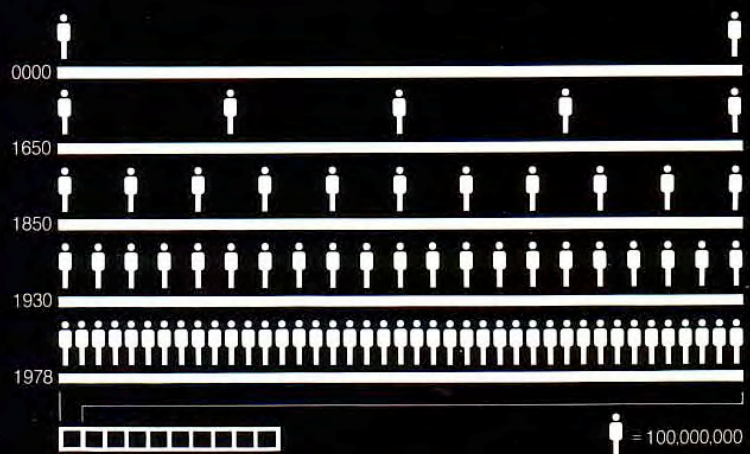
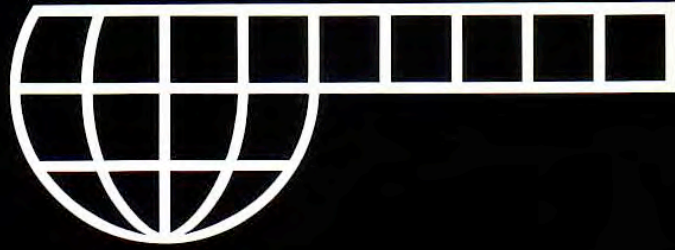


## Population

As we unfold the earth...

... we find that it has limited usable land and resources, that populated areas comprise only one-tenth of the globe's surface.

The world's population had doubled four times in the past 2000 years. Each time, the doubling has occurred at an ever-increasing rate.



## Energy

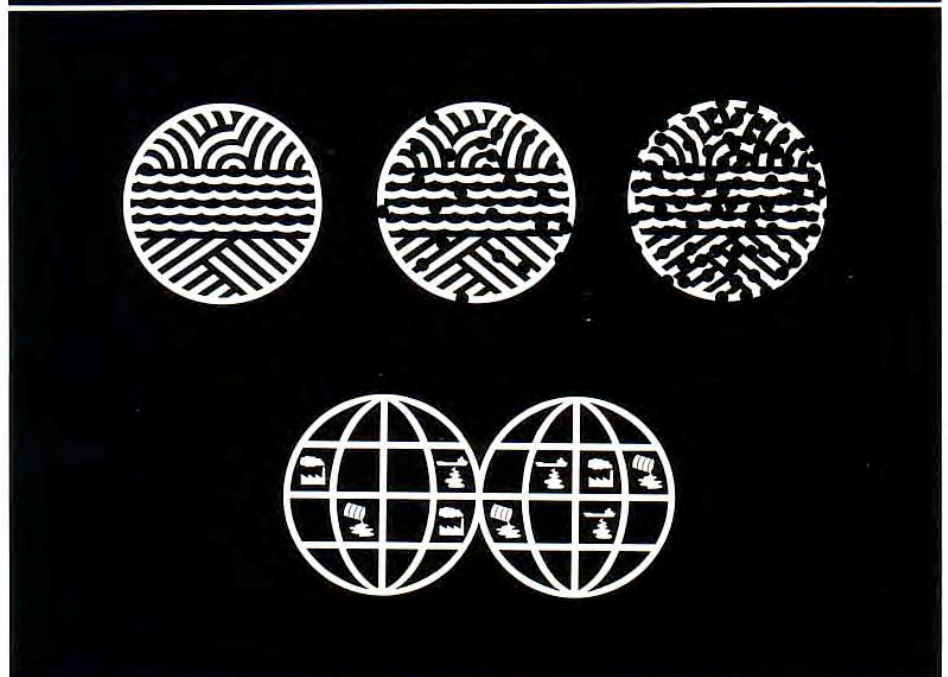
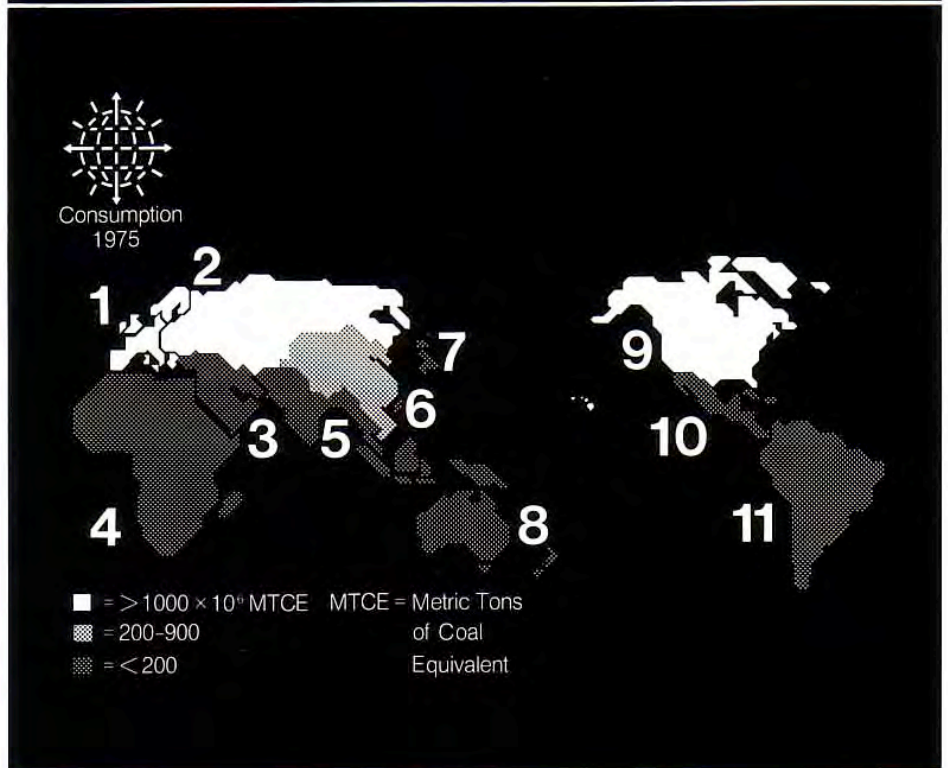
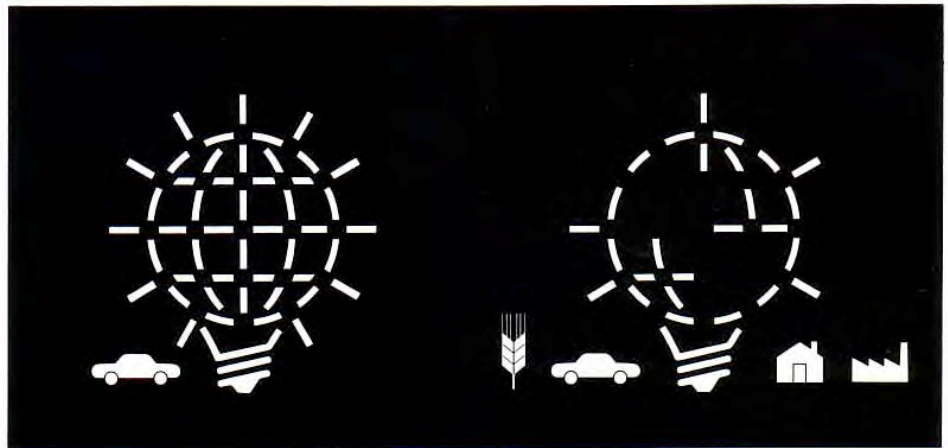
Population growth raises several concerns and challenges. One is the increasing use of energy for agriculture, housing, transportation, and industry.

Some regions consume much more energy than others.

## Pollution

Heavy consumption of certain kinds of energy depletes limited resources and increases pollution of air, water, and land.

Pollution in one part of the world can affect the other parts.

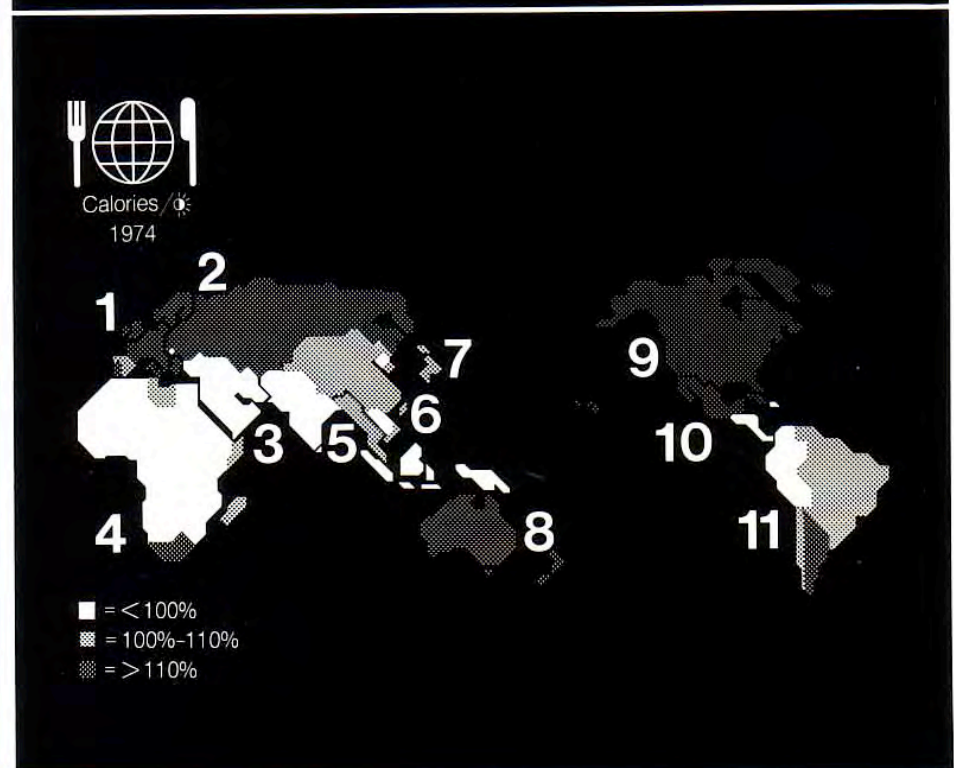
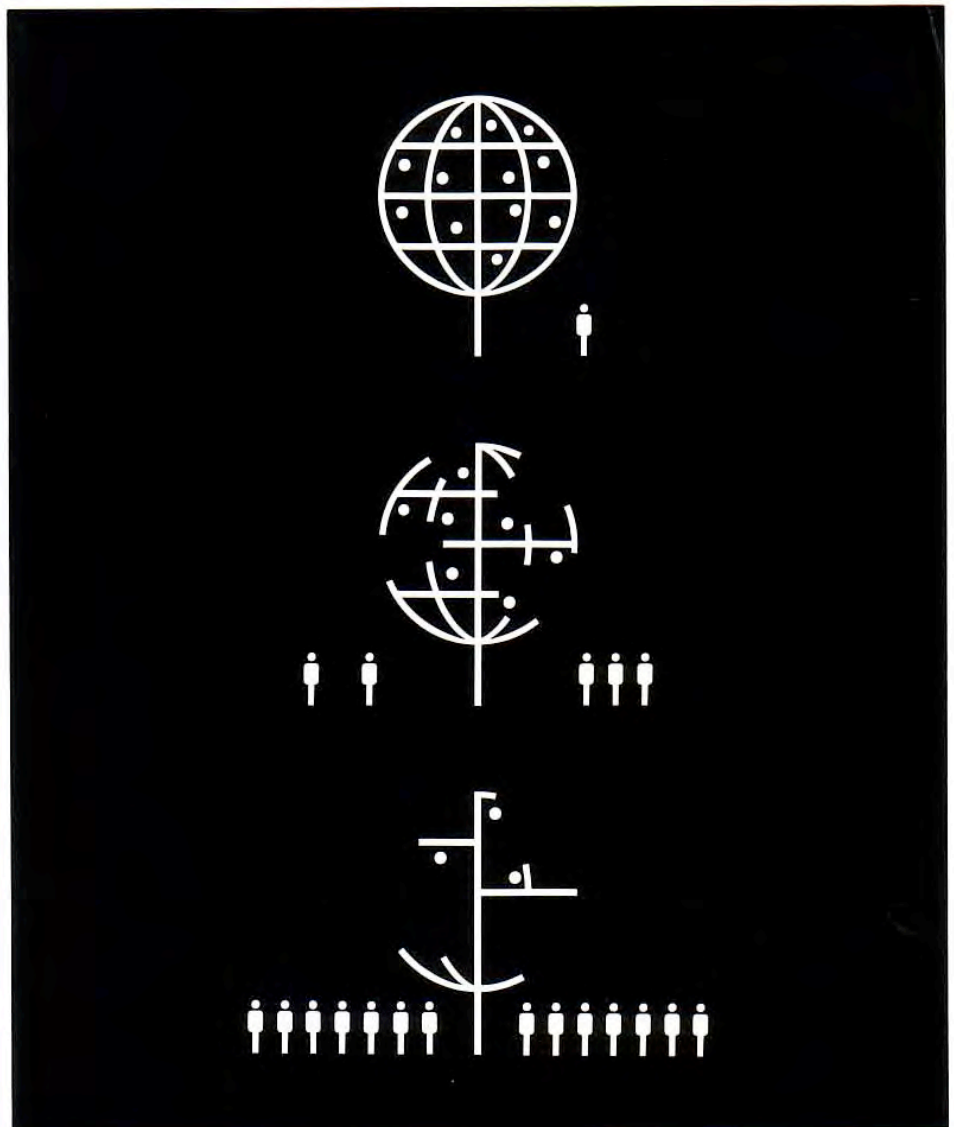




## Food

Global food supplies are progressively weakened by increased population.

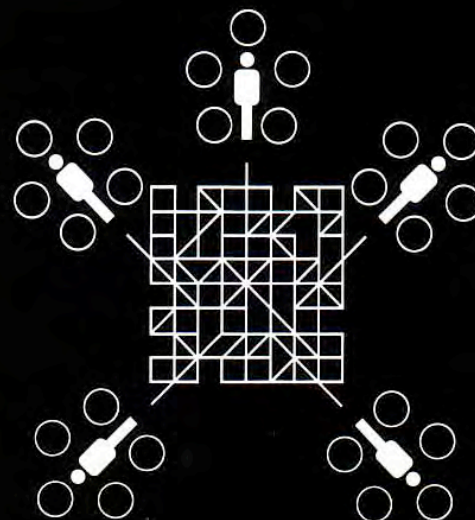
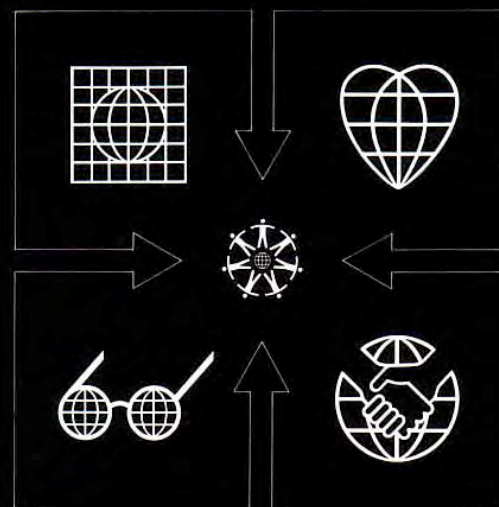
People in some regions of the world consume more than adequate supplies of calories; people in other regions don't get enough calories.



Because of problems related to population, food, energy, and pollution, there are scarcities and imbalances in the world.

Solutions to these problems will require more and more global interrelationships. We need to view the world as one system. We need a new global ethic and global cooperation. Only then can we fulfill the basic needs of all people.

The needs of one person and one nation are related to the needs of other persons and nations. The problems of global planning become immeasurably more complicated when the needs of all people are integrated into global solutions to global problems. The solution of one problem is related to the solution of other problems.





## Global Interdependence From the Energy Perspective

Conventional sources of commercial energy include oil, coal, natural gas, hydroelectricity, and nuclear power.

The energy each person consumes is different in each region of the world.

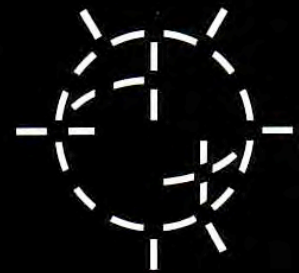
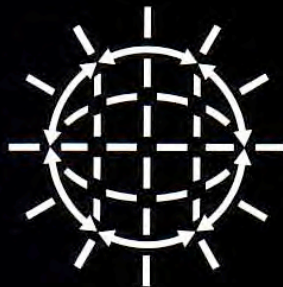
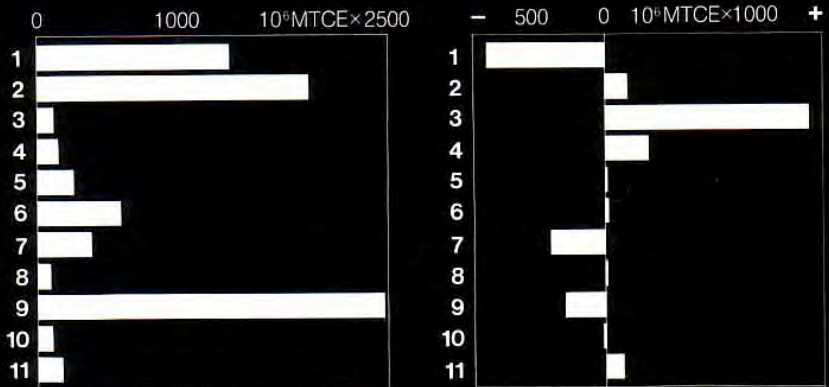
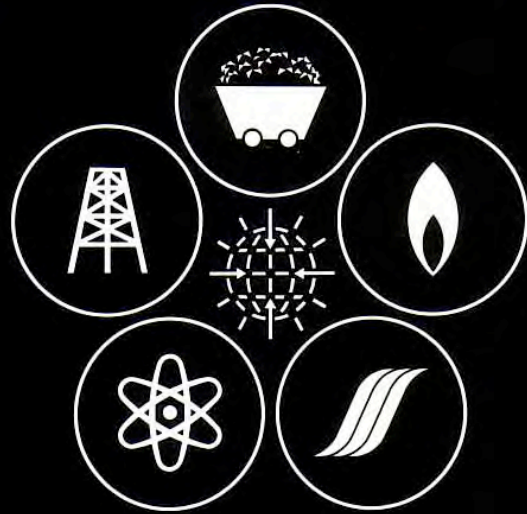
(See chart at near right.)

Some regions consume more than they produce.

Other regions export their excess production. (See chart at far right.)

With uneven consumption and production, energy cannot flow without global cooperation.

In the recent past, world energy consumption has been increasing rapidly. This is leading to the depletion of energy resources.



The movement of oil from Iran to other regions (1975) is an example of the interdependence of regions.

Energy shortages cause increases in prices not only of energy but also of other commodities whose production requires the use of substantial energy. The impact of energy on the environment is another global concern. But energy is very important for economic development. We seem to be caught in an endless spiral.

The global energy situation requires us to share the earth's resources rationally and equitably. The energy problem is linked to other interdependency situations such as food, pollution, and population. Solutions to these interrelated global problems can be achieved only in the spirit of interdependency, mutual concern, and cooperation among people across national boundaries.

