Information Technology both makes our current way of life easier and opens up new ways of living. The advances of the past decades have been amazing but soon the overall technology has become so much a part of the infrastructure of our society and lives that it will become a barely conscious part of our environment. The effects of this ecological shift will be far-reaching and will have a deep effect on future lives.

Part of this ecological change will come as we are able to communicate with the machine environment in as natural a manner as possible. Ranjit Bose reviews the current state and future technologies of the natural language methods that will allow the machines to adapt to us rather than the other way around, making the human-machine interface as transparent as possible. L. A Mohammed, Abdul Rahman Ramli, V. Prakash, and Mohamed B. Daud also provide a broad review of a technology, Smart Cards, that promises to further integrate humans and machines within the new ecology. By embedding information onto personal cards their uses will expand in areas such as security and allow people to move through and make transactions within the environment in a similarly unobtrusive way.

Security is, unfortunately, a very serious issue in the modern world and two additional articles in this issue are concerned with making the environment safer by allowing the system to monitor the identity and movements of those within it. A. Teoh, S. A. Samad, and A. Hussain report on research that uses the nearest neighbor technique to make identifications based on both face and speech information. Md. Mahbubur Rahman and Susumu Horiguchi describe a new method that allows remote surveillance over a wide area through the use of a moving rather than a static camera.

Connectivity is at the heart of the new ecology and two further articles deal with aspects of the systems that connect individuals and organizations to the Internet and thus to the wider information world. As in the non-digital world resources are not infinite and efficiency is very important. Settapong Malisuwan and Apiruck Preechayasomboon examine the ADSL lines that are used by many residential subscribers and develop a practical model that would help systems achieve such efficiency. To be cut off from the Internet is to be cut off from the world in the new ecology and thus it is critical to come to an understanding of misfunctions of connectivity. Chin Wen Cheong and Amy Lim Hui Lan have developed a method that allows us to study the reasons why people fail to gain access to the web and in doing so help us improve that access and thus our integration into the electronic environment.
Although the means may be different the most essential function of the development of the new technology is essentially the same as it was for our early ancestors: the development of communities. These may now be geographically far-flung but in many ways their basic character remains the same. We are developing global villages in ways that Marshall McLuhan would not have been able to conceive in the 1960s.

The new environment is an amazing one but as the paper distribution of these articles about the new ecology demonstrates, it does exist in some degree of continuity with the old one.

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