



Peruvian children with computers from the One Laptop Per Child Project.

DIGITAL DEVELOPMENT

Wired cultures

John Gilbey discovers how Peru has leapfrogged standard models of technological roll-out to ignite social change.

Many see the development of Internet access in a country as a series of modest, incremental, linear changes in interactions with the technology. But in nations where people have leapfrogged landline Web access by adopting Internet-connected mobile devices, the changes can be transformative, both culturally and intellectually. Peru is a case in point. Among the fastest-growing economies in the world over the past decade, the country has seen rural mobile-phone use jump from 1.3% to 46.2% between 2004 and 2010. In 2011, three-quarters of Peruvian households had access to a mobile phone. Not all of this flux is technology-driven, but information technology and access to information are key factors in how the story is evolving.

In her unusual and fascinating *Networking Peripheries*, communications researcher Anita Say Chan uses two disparate but connected themes from Peru's recent history to shed light on the interplay

between technology and social change at a development crossroads. One is the creation of a legal framework supporting open software. The other is the government's push to codify artisanal traditions — a process that has awakened Peruvians' interest in how intellectual property is managed in the Internet age.

As Chan reveals, the path that Peru has taken to develop information technology has significantly altered the aspirations of its rural population — perhaps even more than those of its urban elite — through an appreciation of “local realities”. Focusing on the movement known as Free/Libre/Open Source Software (FLOSS), Chan shows us how, in 2005, Peru became one of the first countries to pass a law requiring public institutions to exercise technological neutrality — that is, to consider FLOSS options — when they decide which software to use. This was, Chan suggests, largely the result of populist campaigns by collectives of free-software advocates

seeking to challenge the dominance of closed proprietary standards.

Chan also discusses the local rollout of the One Laptop Per Child project. This global initiative to provide every child with access to a low-cost, Internet-connected computer demonstrates the need for careful introduction of large-scale technology projects. In

some instances, Chan shows, the delivery of technology seems to have been regarded by civic authorities as a complete outcome in itself, rather than a single step in a chain enabling development or reform through active engagement and learning. But as Chan explains, the efforts of teachers, trainers and fellow learners using specific local skills and contacts to carry the programme forward provide interesting, potentially replicable models for processes such as the development and sharing of locally relevant training materials.

These instances show Peruvians adapting new technologies in harmony with their own culture. By contrast, Chan reveals, government-backed artisanal projects may threaten local, traditional technologies with new but alien ones. The codification initiative aimed to standardize designs and techniques in ceramics production at 400 workshops in the town of Chulucanas, using larger-scale, non-traditional production methods. The result was a range of intellectual-property issues, such as the alleged exploitation of craftspeople and the loss of local cultural integrity through attempts at homogenization for a global market. The rise of a broad-ranging “information class” of growing ubiquity across the social landscape provides a real mechanism for resolving those issues.

Networking Peripheries reveals a Peru moving towards a dynamic and diverse future, in terms of both technology and culture. Chan clearly has a high regard, and legitimate concern, for the people and organizations she has engaged with — artisans, teachers, government officials, activists. Anyone who feels that they already understand the full impact of Internet technology on human culture and community may be surprised and intrigued by the first-hand material presented in this important text. ■

John Gilbey teaches in the department of computer science at Aberystwyth University, UK.
e-mail: gilbey@bcs.org.uk



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