

reinterpret their work in the Third Reich, or hid behind the guise of 'apolitical scientists' who had been abused by the Nazis.

This Marburg convention booklet highlights all these continuities and mechanisms using many examples and drawing on many sources. So it is worthy in two respects. It shows the extent to which the medical profession in the new German republic was influenced by the medical profession in the Third Reich. And it suggests that this was true of most other subjects and faculties at West German universities. □

Marco Finetti is on the editorial staff of Deutsche Universitätszeitung: Das unabhängige Hochschulmagazin, Königswinterer Strasse 418, D-53227 Bonn, Germany.  
e-mail: finetti@raabe.bonn.com

## Emotional displays

### About Face

by Jonathan Cole

MIT Press. Pp. 220. \$25, £14.95

Stuart Sutherland

The case history is rapidly replacing the novel as the favourite reading of the literati. The master of the genre is, of course, Oliver Sacks, who writes with clarity and style, and moves his readers without giving way to sentimentality.

Jonathan Cole believes that facial expressions are the main way to communicate emotion, and to prove his point he has had the ingenious idea of examining the deficits of those who either cannot interpret the expressions of others (the blind and the autistic) or cannot display such expressions themselves (those with Möbius syndrome, Bell's palsy, Parkinson's disease or severe disfigurement of the face caused by burns). Their interactions with others are severely impaired and, feeling like freaks, they may become lonely and desolate.

Some of the comments of the subjects are interesting: for example, blind people who at one time had sight strive to preserve their fading visual images, particularly of those dear to them. Unfortunately, Cole records their remarks indiscriminately: it is hardly news that those blind from birth worry less about their condition than those blinded at a later age.

He goes further than this, however, by arguing speculatively that if we cannot perceive emotions in others we do not learn to express them adequately ourselves. He also thinks that inability to express emotion reduces the emotion felt, a



## Vestiges of creation

What is a monster? Is it a thing with a hairy face, extra eyes and missing limbs — or simply anything we do not understand? In *Special Cases: Natural Anomalies and Historical Monsters* (Chronicle, February 1998), Rosamond Purcell tells some macabre legends of monstrosity, ghoulish gossip of scientists and tall tales of early travellers. These plaster life casts of the faces of people from the Indonesian island of Nias (below) were "made by the nineteenth-century Dutch colonial anthropologist J. P. Kleiweg de Zwaan to support his theory of the diversity of evolutionary types within restricted geographical boundaries". The twins joined at the pelvis (right) have "two heads, two upper bodies and a (very rare) third vestigial leg".



belief that is supported by some of his subjects' responses. Further confirmation is provided by Antonio Damasio's work on the importance of bodily reactions in emotion. Indeed, William James's views, scoffed at for years, are now resurgent: "We do not run because we are afraid, we are afraid because we run."

Throughout the book, Cole is anxious to prove that the face is the key to understanding others. At least five facial expressions are universally displayed and universally recognized, and these must be innate. Moreover, although Cole does not mention it, there are single nerve cells in the temporal lobe each of which fires to a specific facial expression regardless of who is making it.

Cole suggests that those disadvantaged with respect to facial expression can be helped — "taught to cope" in psychotherapeutic slang. Indeed, he was partly instrumental in setting up an organization, Changing Faces, to provide such therapy. Certainly, bringing together people with the same affliction is likely to be helpful, if only because it makes

them realize they are not unique. But Cole is vague about other therapeutic methods except for exhortations to those afflicted not to undervalue themselves and encouragement to find something they can do well. He believes that 'denial' — refusing to accept that there is a problem — is a poor strategy, but the point is not well argued and some recent techniques in psychotherapy, admittedly of unproven value, amount to inducing systematic denial.

One of the problems with *About Face* is that, at least in the field of psychology, Cole is an innocent. He asks his subjects many leading questions to which they might accede out of politeness or even bewilderment.

Nor does he understand that people are remarkably bad at attributing causes for their actions. His belief that the face is all-important leads him to suggest that the lack of normal emotions in autism stems from an inability to interpret others' facial expressions rather than, as is usually thought, the other way round. The standard hypothesis is supported by a great deal of evidence that he does

not adequately discuss. As for his case histories, they are sometimes rather inconsequential and he inserts too many comments about himself. Few readers will be fascinated by the news that he had to break off an interview to visit the lavatory.

Case histories can undoubtedly be a source of hypotheses, but to have validity the hypotheses need to be refined and tested by experiment. After all, Freud, relying on case histories, produced the most spectacularly wrong theory of the century; but then, although dealing with emotion, he never looked a patient in the face.

Cole is undoubtedly well-intentioned and has revealed an important and neglected problem. His book is worth reading for that, for the occasional insights his subjects provide and for the interesting but unproved theoretical haes that he raises, even if his prose does not match that of the master, who, incidentally, gives *About Face* his imprimatur. □  
Stuart Sutherland is at the Laboratory of Experimental Psychology, University of Sussex, Falmer, Brighton BN1 9QG, UK.

**Also of interest**

*The Psychology of Facial Expression* edited by J. A. Russell and J. M. Fernández-Dols. Sixteen chapters offering broad and up-to-date coverage — ethological, neurobehavioural, developmental, dynamic systems and computational — of the role and function of human facial behaviour. Cambridge University Press, £55, \$74.95 (hbk), £19.95, \$29.95 (pbk).

The steeple people

**Creating the Cold War University: The Transformation of Stanford**

by Rebecca S. Lowen  
*University of California Press: 1997. Pp. 316. \$45, £35*

**David Ritson**

The cover to this book shows a dramatic and glacial view of the Stanford University campus in California. Stanford has been a leader in changes that, over the past 50 years, have turned the old tranquil ivory towers of academia into the research powerhouses of today. For this reason, Rebecca S. Lowen, a graduate of the Stanford history department, chose Stanford as both a model and a case history to examine the mechanisms that drove this transformation. Today, of course, at the pinnacle of its dazzling rise, Stanford is home to the first daughter, Chelsea Clinton.

Lowen has done a heroic job of wading through old archives, minutes of university committees, papers amassed by former presidents of the university, records of trustee meetings and so on. In surgical detail she has exhumed old policies and exercises of power sometimes benevolent and amazingly far-

sighted and at other times vicious and destructive. Her objective is to understand, in so far as it is possible, today's universities. These are the universities with which we, faculty, students and general public, enjoy a love-hate relationship.

Change has resulted in unparalleled facilities, the brightest students, handsome salaries, light teaching loads and beautiful campuses. These changes have not come without a price. Faculty, even tenured members, are implicitly (or explicitly, as is made clear in the book) driven to publish or perish, and judged by how much money or prestige they add to the university, whereas the old humanistic disciplines are treated as poor cousins of engineering, computer science, law, medicine and the physical sciences.

The simplistic explanation is that the new patrons, the military-industrial complex, and a new breed of entrepreneurial academic scholars combined to produce this out-come. Lowen's underlying and well-documented thesis is to detail the extraordinary, and perhaps dominant, role of university administrations in this process.

The book starts in the 1930s and follows through to the late 1960s. Major change came in the wake of the Second World War. The university president in those days was the jovial and friendly J. Wallace Sterling. For most of these years he was teamed with the tough, far-sighted and sometimes abrasive provost Frederick Terman.

Together, Sterling and Terman successfully played 'fat man/thin man' roles. During the Second World War, Terman had directed the Harvard Radio Research Laboratory. After his return to Stanford he became dean of the school of engineering. From 1956 to the mid-1960s he was provost. He developed and labelled the strategy "steeples of excellence".

This was aimed at steering the university away from trying to be good at everything. Instead the goal was to exploit government and industrial sources for funding and to channel faculty and university resources into a few areas where the university could become a leader. Terman's policies also produced the strong synergy between industry and Stanford that spawned the rise of today's Silicon Valley. The methods used to accomplish these aims are detailed by Lowen in a chapter entitled, not unexpectedly, "Building steeples of excellence".

Lowen has clearly tried hard to keep the book objective, and she generally succeeds. As a 'modern' historian she primarily relies on the written contemporaneous records. These have their limitations. Nobody, even in private letters and memos, is going to admit to anything but the loftiest motives in pursuing their aims. She, as do we all, obviously has a nostalgic hankering for a Camelot when scholars really lived in ivory towers and thought great thoughts. In this sense she has

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