

Paul Ekman's Pioneering Work on Human Emotional Expressions

By Hugh McDonald

Paul Ekman's work has been called "groundbreaking," "pathfinding," even "revolutionary." Those adjectives are often misused, at least in the popular press — but in this case, they're apt: Ekman's New Guinea research established the universality of human emotional expressions and illuminated a key aspect of our evolutionary history.

In January, Ekman, APS Charter Member and Fellow and Emeritus Professor of Psychology at University of California, San Francisco, discussed his work with APS Past President Robert Levenson, Director of the University of California, Berkeley's Institute of Personality and Social Research, in a standing-room-only presentation at San Francisco's Exploratorium. In a warm conversation with longtime friend Levenson, Ekman gave the audience a glimpse of the ideas that inspired his research and the passion that drove it forward.

As a child, Ekman dreamed of exploration and discovery: "Magellan was my hero. I wanted to go where no one had been, to find what no one else had found." But at 14, his interest in emotion was sharpened by his mother's suicide. "I was very attached to her," he said, "and I wanted to do something to help people like her." When he first encountered Freud in a rhetoric class, he knew he had found his path.

However, Ekman's instincts led him to question much of the day's accepted psychological wisdom. For one thing, "I thought that the road to understanding, to helping, was not to study abnormal but *normal* behavior." And he had methodological concerns: "How could you tell whether depressed people, suicidal people, really meant what they said? I don't think most people know why they're doing what they're doing." This early quest for new windows on our emotional lives crystallized in Ekman's growing interest in nonverbal behavior — and particularly in the subtly emotive human face.

Our faces are capable of an incredible expressive range, and many of its movements are outside our conscious control. Furthermore, as social creatures, we read the expressions of others with amazing perceptual agility. But are those expressions learned, or are they part of our evolutionary legacy?

That this question now seems settled is, in part, a testament to how Ekman's work affected the field. Ekman pointed out that at the time of his training (he received his PhD in clinical psychology from Adelphi University in 1958), "Learning was everything. I learned that behavior came from learning, from family."

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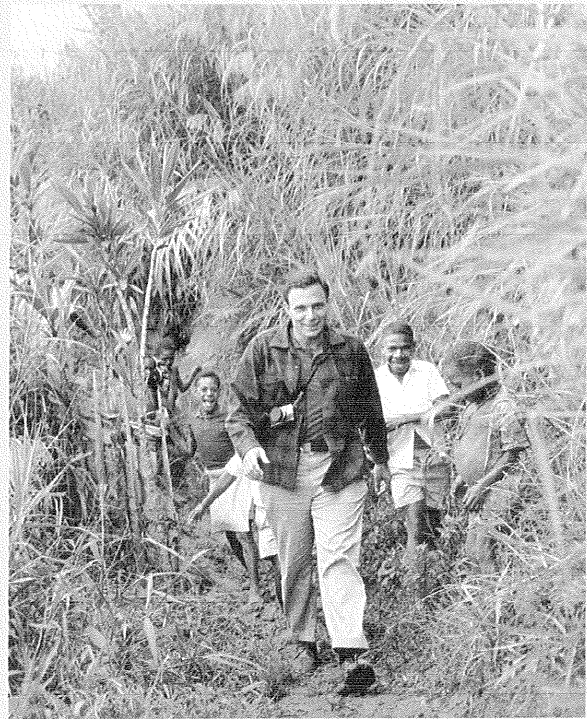


Photo Courtesy of Paul Ekman Group, LLC

Paul Ekman in New Guinea, 1967.

The behaviorist dogma extended to our faces. Most famously, anthropologist Margaret Mead argued for the idea of facial expressions as learned, culturally arbitrary symbols. This contrasted sharply with Charles Darwin's view that our facial expressions were innate and shaped by evolutionary processes.

The Darwinian position would be supported by evidence showing that widely separated peoples shared facial expressions associated with common emotional experiences. But resolving the dispute called for a methodology that ruled out explanations based on learning or cultural transmission. And *that* meant collecting data in remote places, with people isolated from Western contact.

Ekman saw this as an opportunity to explore a new frontier. Furthermore, he knew he had little time; given the pace of human expansion, there would soon be no "untouched" cultures left to study.

The opportunity came in 1967, when Ekman and his colleagues made their first journey to New Guinea to photograph the Fore (pronounced for-ay), an isolated society living in the island's rugged southeastern highlands. Trudging through a remote jungle, collecting data to resolve a fundamental psychological question — this was the realization of the young scientist's dream. But as in many research projects, the process evolved as the project continued.

Initially, Ekman's team used a *Thematic Apperception Test*-like method: He showed a photograph of a smiling or frowning person and asked the participant to tell a story about the pictured person's feelings. But although the data were



intriguing, the method made participants uncomfortable. Ekman began to feel as if his journey might end in failure. “I was listening to the Beatles,” he said, “and I felt like ‘The Fool on The Hill.’”

That’s when he hit his methodological stride. He switched to a production-oriented process, describing a situation and asking participants to make the corresponding facial expression. The team also studied judgment by giving participants a story and asking which of three faces showed the appropriate emotional response.

Ekman found that the Fore’s facial expressions for happiness, sadness, fear, surprise, anger, and disgust were strikingly similar to those found in other cultures. For example, when asked to make expressions associated with meeting an old friend or stumbling upon a decaying animal, they showed the same movements of eye and mouth muscles seen in Westerners under similar circumstances.

The fact that the Fore showed these “universals” despite little contact with other cultures — and that both Fore and Western viewers of facial expressions were quick to identify the underlying situations — strongly suggested that Darwin’s view of innate expressions was correct.

But in addition to resolving the controversy, the work also generated new inquiry and experimentation. Since his time with the Fore, Ekman’s continuing study of the face has revealed our fleeting “microexpressions,” explored display rules governing our attempts to control our faces, and deepened our understanding of links between facial expressions and deception.

With prodding from Levenson, however, Ekman conceded something more profound about his life’s work — that its ultimate aim is the reduction of human suffering. That goal is highlighted by an upcoming book co-authored with the Dalai Lama. As Ekman notes, the Nobel laureate became interested in the field because the universality of emotional expressions illustrates the unity of all humankind.

Ekman’s thoughtful reflections coincided with an exhibition of his New Guinea photographs as part of the Exploratorium’s new MIND collection. Even after forty years, these images of the Fore are striking; Although they are key data from a particularly influential social science research program, they are also richly human documents, evocative statements of both our shared emotional experience and of our passion to understand ourselves. ♦

The Search for Universals in Human Emotion: Images from the New Guinea Expedition will be on display at the Exploratorium through May 11, 2008. To learn more about the museum’s National Science Foundation-funded MIND collection, please visit www.exploratorium.edu/mind. Learn more about Paul Ekman’s work at www.paulekman.com.

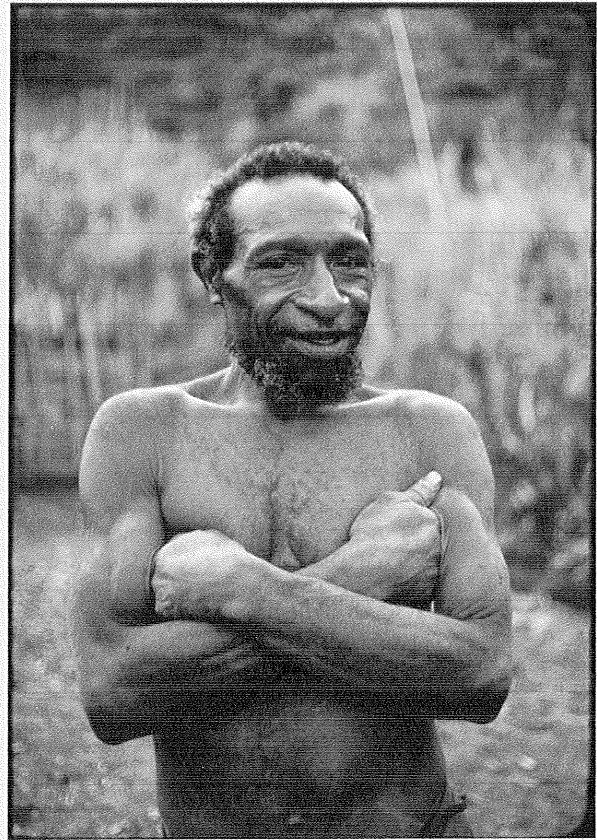


Photo Courtesy of Paul Ekman Group, LLC

A Fore man greets Ekman’s lens.

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