Anger Makes One Strong

Anger is not only an emotion, it is an instrument of power. Angry-looking people are perceived as especially strong, researchers have now shown.

The next time you get angry, take a look in the mirror. The facial expression is quite complex. The eyebrows are drawn down, the lips are pressed together, and the eyes are narrowed slightly. Altogether, seven different facial muscle groups are involved.

"The expression is cross-culturally universal," says Aaron Sell from Griffith University in Australia. "Even congenitally blind children make a classic Angry Face – with furrowed brow and tightened lips – when they are mad, despite never having seen another person." Working with researchers from the University of California at Santa Barbara, Sell has now investigated why just these seven familiar muscle groups are used to express anger.

The researchers started from the hypothesis that a person use anger in disputes with other people to assert his own position. It is effectively an instrument of power that is intended to intimidate the other person. If you do not do what I want, you will get anger.

To investigate what effect angry facial features have, the researchers used pictures of faces they easily modified on the computer. Sometimes the eyebrows were drawn down, and sometimes the lips were pressed together. The seven muscle groups that distinguish the angry face were activated one by one by the researchers, and the subjects were asked to assess them one at a time. None of the artificially altered faces were then characterized as angry – only the interaction of the muscle groups revealed the emotion.

"We knew from previous experiments that, based solely on the facial expression, people are able to accurately assess how powerful the person facing them is," says Sell. The experiments showed that subjects associated the modified expressions with power. The researchers have reported their findings in the journal Evolution and Human Behavior.

"The evolutionary explanation of human anger is astonishingly simple," the researcher says. "It is a gesture indicating threat." The muscle groups involved in the expression were selected in evolution because they increased the person's power. "It was a matter of intimidating the other person, analogous to a frog puffing himself up."