Women's blushes can't be spared

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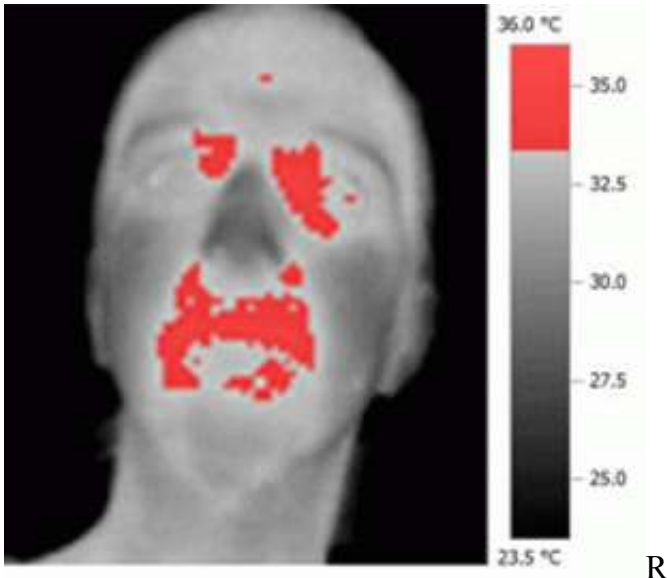

Researchers at the University of St Andrews' Perception Lab have discovered that women do not need to be brides to blush in front of men, but can instead become flustered at the slightest bit of interaction.

Following the experiment results, scientists discovered that non-sexual contact with men can on occasion make a woman's facial temperature increase by a whole degree. This thermal change was usually unbeknown to the women, who did not notice becoming warmer or sexually aroused.

Professors Marion Albrecht, Amanda Hahn, Carmen Lefevre and David Perrett conducted experiments to assess whether there was a change, with the aim of unravelling the extent to which thermal bodily changes affect interactions between people.

Professor Perrett explained the experiment process to *The Saint*: "Very simply we took a film with a thermal camera, and had one male and one female experimenter make a skin measurement at various places on the woman.

"If the experimenter was male and if he made skin measurements on the woman's forehead/cheek/chest (sternum) she showed a thermal response, increasing temperature," he said.

The different reactions between having a male and female experimenter was very noticeable, with Professor Hahn reportedly saying: "We observed some women whose facial temperature increased by an entire degree (Celsius) during interaction with the male experimenter."

There was also a big difference between 'personal' and 'non-personal' interaction, as Professor Hahn clarified: "…we measured participants' skin colour at 'non-personal' (i.e. the arm and palm of the hand) and 'personal' (i.e. the face and chest) locations on the body. The thermal response was dramatic when the male experimenter made contact at 'personal' locations."

Environmental factors were ruled out by the researchers taking extra precautions, as Professor Perrett further clarified to *The Saint*: "We monitored room temperature closely and kept the environment as constant as possible.

"The changes in temperature were so rapid that this rules out an environmental influence. The women were seated and did not move, so the temperature changes due to exercise are ruled out."

Professor Perrett went on to state that thermal bodily changes needed to be researched more to ascertain exactly how these affect social interactions: "I am not sure people can detect the temperature changes unless they are very close.

"But contact may allow this. It will be interesting to find out if the person getting hotter can feel the temperature change themselves. Most of our women did not notice any change, for example becoming uncomfortable or aroused.

"The main way we think observers might notice the change is not through temperature but through skin colour. Blood flow changes which alter temperature may make the skin visibly redder," he said.

This research could prove to be useful both for medicine and national security, for instance being used in improving the performance of lie detectors, as Professor Perrett clarified: "Lie detection is a bit of an art, one has to recognise thermal signs of lying (as with other changes in skin sweatiness or breathing) and discriminate them from changes that occur with other forms of stress or arousal.

"Knowing that there are temperature changes simply from the close proximity of a person and knowing where they occur in the face can isolate these changes as false positives irrelevant to truth/lie."

The findings are significant, as they provide scientific proof that there is never completely neutral interaction between men and women, even though women may not be consciously flustered at the time of contact.

When asked what these findings meant for interactions between men and women generally, Professor Perrett answered: "It is surprising that the simplest of social contact made during a formal experimental situation produces such a large physiological change.

"What we find is that there is never a neutral interaction, our bodies and minds find it impossible to ignore the proximity of another, particularly someone of the opposite sex," he added.