## This Week's Citation Classic<sup>®</sup>\_\_\_

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McBride G, King M G & James J W. Social proximity effects on galvanic skin responses in adult humans. J. Psychology 61:153-7, 1965. [University of Queensland, University of Sydney, and University of New South Wales, Australia]

The study used galvanic skin response as a measure of the arousal felt by men and women when looked at or approached by others from different distances and orientations. The response diminished with distance and with nonfrontal orientation: it was greater between the sexes than within one sex. [The *SCI*<sup>®</sup> and the *SSCI*<sup>®</sup> indicate that this paper has been cited in over 115 publications.]

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Research for this study was carried out in the Veterinary School at the University of Queensland, despite the fact that it concerned human subjects. I was a geneticist in the Department of Animal Husbandry, M.G. King was a graduate student in the Department of Psychology, and J.W. James was a geneticist at the University of New South Wales. Soon after the research began, I moved into an Animal Behaviour Unit in the Department of Psychology.

The idea for the work arose from some studies James and 1 were doing on the effects of social proximity on cattle and on chickens.<sup>1</sup> We found that no chicken moved its head without taking the nearness and orientation of its neighbours into account. It seemed to me that if we could find such strong effects on behaviour among neighbouring chickens, then we should find something similar among people.

It was my first study with people, and my new department helped make it easier. We were able to use their "Deceptograph," which produced sine curves; we measured the area of each curve from the baseline using a (borrowed) planimeter, because there was no computer readout then. We recruited volunteers from the campus population.

The results were as perfect as we could have wished. People did respond as they looked at each other. The response decreased with distance and as the gazer was moved to the sides of the person at whom he or she was looking. We found that we could generate what resembled a field of social responsiveness around the faces of people. It seemed to us that people felt these fields and responded to how they felt as they moved among neighbours. Moreover, men and women responded in significantly different fashions to each other. James provided the statistical model, and when the calculations were completed, the results looked good.

I wrote the paper and sent it off to a psychology journal recommended to me, although I had never yet read a psychology journal. It was rejected. We tried another one or two iournals, with the same result. It was then suggested that we rewrite it, not in English, but in psychologese, and send it off to a "pay journal." The paper was duly translated, dispatched, and accepted. I have never learned to love the jargon and regret strongly that we translated it. Two small mistakes crept into the translation; I know that people read it because they write pointing out the errors to me. The paper was published just before the interest in personal space developed strongly.

Personal space remains an important issue in psychology and sociology, with important reviews made regularly.<sup>2,3</sup> Yet it seems to me that the construct of personal space that has emerged remains vague. The presence of neighbours has profound effects on all sorts of behaviour; we know little of these.

12 CC/S+B5

McBride G, James J W & Shoffner R N. Social forces determining spacing and head orientation in a flock of domestic hens. Nature 197:1272-3, 1963.

<sup>2.</sup> Hayduk L A, The permeability of personal space. Can. J. Behav. Sci. 13:274-87, 1981.

<sup>3. -----</sup> Personal space: where we now stand. Psychol. Bull. 94:293-335, 1983.