Status and the left cheek

Why should artists have special preferences about which profile they paint? A close study of Rembrandt's work shows that social relationship with the sitter is an important determining factor

Dr Nick Humphrey
is assistant director of the sub-department of animal behaviour, Cambridge, and

Chris McManus
was formerly a psychology student at Cambridge

Van Gogh's picture, the Potato Eaters, is shown in Figure 1 in its original form and as a mirror-image. While no one would claim that the two versions look the same, it might be argued that, as pictures, there is nothing to choose between them. We know, however, that this was not Van Gogh's opinion. Having made a preliminary sketch for his picture, he made a lithograph. To do so he copied the sketch straight on to the block and the print he made turned out therefore to be a mirror-image. His dissatisfaction with the print is recorded in a letter he wrote to his brother Theo: "If I make a picture of the sketch, I shall make at the same time a new lithograph of it, and in such a way that the figures which,

I'm sorry to say are now turned the wrong way, come right again."

What is it about the mirror-image of a picture that could lead to it's being described as "wrong"? On the part of the artist it might be simply that he is less familiar with the new version and thus likes it less. Yet it has been shown that people (artists in particular) can generally pick out the mirror-image of a picture from the original when the picture is wholly unfamiliar, provided both versions are presented together. Left-right asymmetry is not, it seems, a neutral, "accidental" feature of the composition.

We decided to examine asymmetry in painted portraits. Portraits are particularly

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Figure 1 The Potato Eaters by Van Gogh. The original is on the top

We examined 1474 painted portraits, each showing a single person only, produced in western Europe from the 14th to the 20th century. The sources were the National Portrait Gallery in London, the Fitzwilliam Museum in Cambridge, Roy Strong's definitive textbook on Elizabethan and Jacobean portraiture and a miscellaneous collection of other books on art. Of this large sample of portraits, we found that 891 showed more of the left cheek and 583 more of the right. Such a ratio-60 per cent to 40 per cent-would be expected to occur by chance less than once in 10 000 times.

Mechanics discounted

The most immediate explanation of this bias (and the one that was favoured by every art historian to whom we talked) is that it is due to some mechanical factor related to right-handedness. Thus, it might be that a right-handed artist simply finds it somewhat easier to draw a profile to the left of the canvas. But we discounted this explanation when we analysed further the results of our survey.

We divided the portraits according to the sex of the subject and found that although 68 per cent of the women showed more of the left cheek, only 56 per cent of the men did so: both results are significantly different from chance-but, more importantly, the difference between the men and women is significant at the 0-001 level. It is difficult to conceive of any purely mechanical explanation which can convincingly account for this sex difference.

Further grounds for discounting the importance of handedness are the finding that the bias is much less marked in portraits showing the face in full profile than in those showing it in three-quarter profile; a handedness explanation would probably predict the reverse. Also, the bias is less marked in portraits showing only the head and shoulders than in those which show the rest of the subject's body (Nature, vol 243, p 271).

Some other explanation is called for. Yet the results, as they stood at that stage, did not-we were bound to admit-give solid support to any alternative explanation we could think of. There was one possibility, however, which seemed at least to hold some promise: an explanation in terms of left - right symbolism.

The gist of the idea was that the portrait painter uses "left" and "right" as signs to convey information about the sitter's character or status (perhaps without being consciously aware of doing so). Such sign systems are known to operate in several types of primitive art. In the magical drawings called "ongons" of the Mongolian Buryat people, for instance, the social and spiritual status of the figures in the drawing is indicated by the figures' coordinates referred to the horizontal and vertical axes. We thought that the professional portrait artist, constrained by his client to produce an accurate (and flattering) representation, might perhaps use the turn of the head to make a more personal statement about the sitter's status.

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Figure 2 Two of Rembrandt's portraits. (a) Self-portrait (1653); (b) Margaretha van Bilderbeecq (1633)

suitable material for such a study: first, because there are plenty of them (produced to a rather standard pattern for rather standard ends); and, second, because the asymmetry in portraits is of a relatively simple kind which is obvious to the eye and easily classified. Portrait painters rarely paint their subjects full-face, but rather turn the head slightly to one side so that a more recognisable "three-dimensional" image is produced. In so far as the painter's goal is merely to portray the physical likeness of the sitter, there would seem to be no reason for any consistent bias to turn the head to left or right. Thus we might expect that, in a sufficiently large sample, 50 per cent of the portraits would show more of the left cheek and 50 per cent more of the right. That was the "null hypothesis" with which we started. We soon found good cause to reject it.

We have recently obtained further evidence which supports this theory.

We considered the work of one artist alone rather than pooling the data from many artists, hoping thereby to bring out the particular factors which influenced the individual artist making a decision as to how his subject should face. We chose the work of Rembrandt van Rijn.

Rembrandt is known to have painted well over 300 portraits, including 57 self-portraits (roughly two a year for the whole of his working life). Taking first the self-portraits, we found that nine showed more of the left cheek and 48 more of the right (that is only 16 per cent showing the left cheek). However, the rest of the portraits revealed a very different pattern. We categorised the portraits according to the sex of the subject and the kinship relation to Rembrandt himself-kin being his mother, father, sister, brother, wife (Saskia), mistress (Hendrijke Stoffels) and son (Titus). The results of this analysis are shown in Figure 3. The single most important result to emerge, apart from the sex difference, is that portraits of non-kin are much more likely to show the left cheek than portraits of kin, the difference being significant at the 0·02 level.

How do we interpret this remarkable finding? We suggest quite simply that Rembrandt structured his social world along the dimension "socially like myself/socially unlike myself" and his portraits along the dimension "showing the right cheek/showing the left cheek". In Rembrandt's mind these two constructs were, in George Kelly's terminology, parallel and equivalent.

Thus whenever Rembrandt painted a portrait he gave some indication of the social distance between himself and the subject. He felt that the group of subjects most like himself were his male kin, and after them the male non-kin. He considered women in general to be much less close to him, even to the extent that his female kin were more remote than the non-kin males. This appears to be true even of his wife, of whom 60 per cent of the 15 portraits show the left cheek.

Such attitudes are perhaps to be expected of a man of Rembrandt's position in the Holland of the 17th century. We might thus reconstruct for Rembrandt a kind of palaeo-psychology; and maybe, indeed, we could extend it further. It is tempting, for instance, to extrapolate to some of the group portraits which Rembrandt painted, and to suggest that in a picture such as The Anatomy Lesson of Dr Tulp (see cover) Rembrandt painted Dr Tulp showing his left cheek and the students showing their right because he regarded himself as more akin to the students than to the teacher-that is, more willing to learn of the world than to teach others.

If this kind of theorising is acceptable for Rembrandt, how far can it be taken with other portrait painters? Is there perhaps a general tendency to equate the two constructs self/non-self and right/left, and moreover (among male artists) to regard women as more distant from the self than men? Professor Walter Landauer of University of London found in a survey of 302 self-portraits by different artists that 39 per cent showed the left cheek. When these data are put together with those from our earlier survey we get the pattern of results shown in Figure 4. The general similarity between the data for Rembrandt alone (Figure 3) and for many artists collectively (Figure 4) is so striking that we cannot help feeling that the analysis given for Rembrandt may have more universal validity.

Men/women and kin/non-kin are but two of the dimensions which could, in principle, be correlated with the dimension self/non-self. We should expect each individual artist to have his own notions of what kind of people were close and what remote from him. There is suggestive evidence that Van Gogh, for example, differentiated his portraits in a way such that male peasants tended to show the right cheek more often than the male bourgeoisie that he painted. What we know of Van Gogh makes it plausible to suppose that he felt closer, more at home, with peasants than the bourgeoisie. Perhaps here we have at least one reason for his discontent with the reversed Potato Eaters. He felt that by portraying them thus he was distancing himself from the men in the picture and at the same time imposing upon them bourgeois values.
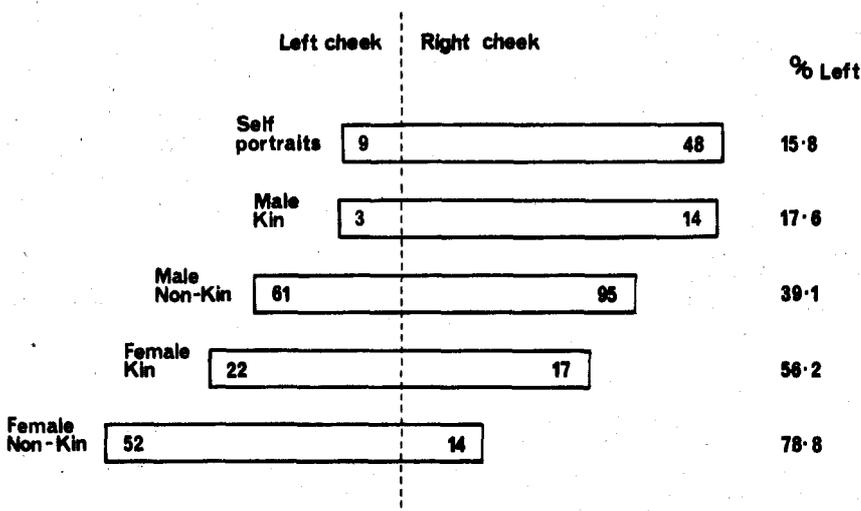

	Left cheek	Right cheek	% Left
Self portraits	9	48	15·8
Male Kin	3	14	17·6
Male Non-Kin	61	95	39·1
Female Kin	22	17	56·2
Female Non-Kin	52	14	78·8

Figure 3 Analysis of 335 portraits by Rembrandt

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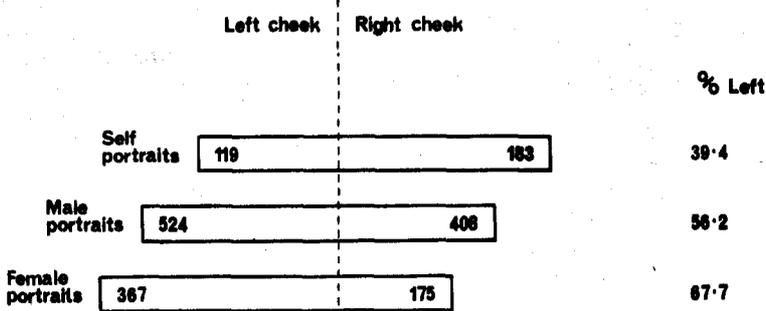|	Left cheek	Right cheek	% Left
Self portraits	119	183	39·4
Male portraits	524	406	56·2
Female portraits	367	175	67·7

Figure 4 Analysis of 1776 portraits by many painters

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