

POSING AS PROFESSOR: LATERALITY IN POSING ORIENTATION FOR PORTRAITS OF SCIENTISTS

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ABSTRACT: Posing orientation on portraits generally, but not always, shows a left-cheek bias. Different posing orientations may convey different messages, due to lateralization in facial expression of emotions. Right-cheeked posing orientation is expected to dominate on portraits aimed at communicating rationality. This study examines (1) the posing orientation on portraits of university professors, and (2) the impact of orientation on how 'scientific' viewers judged these professors to be. Older portraits show a clear right-cheek bias. Later portraits show a left-cheek bias, which may be related to their less formal nature. Normal and mirror-reversed portraits by two 18th century painters were perceived as equally scientific. However, right-cheeked originals were perceived as more scientific than left-cheeked ones. The findings support the hypothesis that biases in portrait orientation are affected by facial asymmetry in communicating different emotions.

KEY WORDS: emotion; facial expression; lateralization; perception; portrait; posing orientation.

Almost 30 years ago, McManus and Humphrey (1973) examined posing orientation in a large sample of portraits. They obtained the intriguing finding that the majority of portraits showed more of the left cheek (i.e., the sitters' face turned somewhat to their right—Figure 1) than of the right one. This left-cheek bias was stronger in portraits of women than of men. Since then, several studies reported biases in portrait posing orientation. Table 1

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presents an overview of these studies. This overview confirms the left-cheek bias only partially. Studies that did not take gender of the sitter into account show a left-cheek bias. However, if studies separated the data for male and female portraits, the bias is only consistently present for female portraits. So, in contrast to the general opinion, male portraits do not show a consistent pattern, with some samples having a left-cheek and others a right-cheek bias. Such an outcome may be taken to suggest the absence of any overall, and hence meaningful, bias among the portraits of men. However, a recent study demonstrated that the way people orient themselves when asked to pose may be used to communicate different emotions (Nicholls, Clode, Wood & Wood, 1999; see below for details). This suggests that differences in posing biases between different portrait collections may be due to differences in the emotion they are aimed at communicating. The present study examines this possibility.

Starting with McManus and Humphrey (1973; Humphrey & McManus, 1973), several hypotheses have been suggested to account for posing biases in portrait collections, of which four have been studied in more detail. The first one is that handedness of the artists influences the ease with which they can make either left- or right-cheeked portraits. However, this hypothesis cannot explain the difference in orientation between male and female portraits, nor can it explain why photographic portraits show a left-cheek bias (LaBar, 1973; Uhrbrock, 1973) or why the left-cheek bias is reversed in self-portraits (Latto, 1996; Nicholls et al., 1999). Also, the bias for left-handed painters like Raphael and Holbein is comparable to that for right-handed painters (Table 1).

The second hypothesis relates posing bias to a perceptual bias in viewers. It is known that viewers give more attention to the left half of the visual field, including in their judgement of facial expressions (e.g., Mattingley, Bradshaw, Nettleton, & Bradshaw, 1994), and also to the left part of paintings (e.g., Freimuth & Wapner, 1979; Nelson & MacDonald, 1971). In a left-cheek portrait the most prominent and distinguishing facial characteristics (eyes, nose, mouth) are in the left part of the portrait (from the viewers perspective). For this reason, artists may, consciously or not, have a preference for arranging the sitter to arrive at this pose. But if so, it is not clear why this should result in a sex difference or a difference between portraits of oneself and those of others. Also, several studies (Benjafield & Segalowitz, 1993; Schirillo, 2000; Zaidel & Fitzgerald, 1993) found no differences in the way viewers judged normally oriented and mirror-reversed portraits. However, McLaughlin and Murphy (1994) demonstrated that portrait versions emphasizing the right cheek were preferred over left-cheeked ones, irrespective of original orientation. Therefore, a bias to give most