First Impressions. Making Up your mind after a 100-ms exposure to a face

* We investigated the minimal conditions under which people make trait inferences. In five experiments, each focusing on a specific trait judgement, we manipulated the exposure time of unfamiliar faces. Judgements were made after a 100ms exposure correlated highly with judgements made in the absence of time constrains, suggesting that this exposure time was sufficient for participants to form an impression. In fact, for all judgements – attractiveness, likeability, trustworthiness, competence, and aggressiveness – increased exposure time did not significantly increase the correlations. When exposure time increased from 100 to 500 ms, participants’ judgements became more negative, response times for judgements decreased, and confidence in judgements increased. When exposure time increased from 500 to 1000 ms, trait judgements and response times did not change significantly (with one exception), but confidence increased for some of the judgements; this result suggests that additional time may simply boost confidence in judgements. However, increased exposure time led to more differentiated person impressions.
* From the structure of the face, people form not only global impressions, but also specific trait impressions (Hassin & Trope, 2000). Eg we showed that inferences of competence based solely on facial appearance, predicted the outcomes of US congressional elections in 2000, 2002, and 2004 (Todorov, Mandisodza, Goren & Hall, 2005)
* To the extent that these inferences occur rapidly and effortlessly, their effects on decisions may be subtle and not subjectively recognized
* Dual-process theories (Chaiken & Trope, 1999; Kahneman, 2003)
* In all the experiments, faces unfamiliar to the participants were presented for 100ms, 500ms, or 1000ms. For each face, participants were asked to make a trait judgement and then to express their confidence in that judgement. We tested three hypotheses:
  + That a 100ms exposure to a face is sufficient for making a trait judgement
  + That additional exposure time increases confidence in trait judgements without necessarily changing the judgements
  + That additional exposure time allows for more differentiated trait impressions
* We were also interested in how additional exposure time affects trait judgements and confidence in these judgements. If people commit to a judgement early in time, additional time can serve only as a justification of this judgement. If this is the case, confidence should increase as a function of exposure time, but there should be no corresponding change in judgement.
* To obtain reliable measures of trait inferences from facial appearance, we presented participants in the preliminary study with the photographs and asked them to judge the degree to which the person in each picture was attractive, likeable, competent, honest or trustworthy, aggressive, extraverted or enthusiastic, sympathetic or warm, dependable or self-disciplined, calm or emotionally stable, open to new experiences or complex, and ambitious.
* All Cronbach’s alphas except for one were .85 or above
* We expected that the highest correlation between judgements made after 100ms exposure and judgements made in the absence of time constraints would be for judgements of attractiveness. However, trustworthiness judgements showed the highest correlation. In hindsight, this finding is not surprising. Evolutionary psychologists have argued that detection of trustworthiness is essential for human survival (Cosmides & Tooby, 1992)
* Work with patients with bilateral amygdala damage shows impaired ability to discriminate between trustworthy and untrustworthy faces (Adolphs, Tranel & Damasio, 1998)
* One implication of the current findings is that different trait judgements can have different time thresholds. Eg trustworthiness in a face may be inferred earlier than competence in a face.
* With increased exposure time, trait judgements became less correlated, suggesting a more fine-grained discrimination.