

# ON THE PRACTICE OF CULTURAL CLOTHING PRACTICES THAT CONCEAL THE EYES: AN EVOLUTIONARY PERSPECTIVE

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**Abstract.** This theoretical paper argues, firstly, that eye contact could serve as a method of signaling attraction and, secondly, could be misinterpreted and lead into sexual coercion. On the basis of these discussions, it is therefore hypothesized that eye covering practices in some cultures serve as mate guarding strategies to decrease the probability of infidelity and sexual coercion by potential mate poachers. In other words, eye concealing practices could be considered a mate retention tactic used by males to prevent rival males from misinterpreting the eye gaze of their spouses, or to prevent their spouses from sending genuine signals of sexual interest, as men cannot misinterpret what they cannot see.

**Keywords:** eye contact, mate guarding, mate poaching, cultural practices, veiling

## EYE CONTACT AS A SIGN OF ATTRACTION

*“It won't be revealed to anyone whatever is between you and me,  
While the eye mentions are our informers  
Listen, I speak with the silent lips,  
Answer me with a look, which is our language”  
Hushang Ebtehaj*

The eyes capture significantly more attention than other regions of the face (Janik, Wellens, Goldberg, & Dell'Osso, 1978) and are considered the most salient aspect of human appearance because they are related to agency and can indicate attention, emotion, and intention. Gaze plays a major role in non-verbal communication (Argyle & Cook, 1976; Kleinke, 1986), in decisions whether to engage in interaction, and as a communicative channel contains sufficient information for detecting complex mental states (Baron-Cohen & Cross, 1992; Baron-Cohen, Wheelwright, & Jolliffe, 1997; Calder et al., 2002). Therefore,

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the innate capacity to process gaze information is an ability to infer intentions from nonverbal behavior (Baron-Cohen, 1995). A direct gaze into the eyes might induce a specific subjective experience as the first immediate communication between two persons (Wicker, Michel, Henaff, & Decety, 1998). Direct gaze indicates interest and the intention to communicate (Argyle & Dean, 1969; Emery, 2000; Kleinke, 1986; Pönkänen & Hietanen, 2012).

Gazing has different functions such as synchronizing speech, inducing and avoiding intimacy, obtaining information, collecting feedback during social interactions, and affiliation (Argyle & Dean, 1969; Argyle, Ingham, Alkema, & McCallin, 1973). Eye contact may indicate whether a recipient is open to interaction (Argyle & Dean, 1969). Eye contact can also establish social relationships and, depending on facial expression, convey sexual attraction, friendship, hate, dominance, or submission (Argyle & Dean, 1969).

Gaze and emotion are fundamentally associated and both are linked to approach and avoidance motivations, with the direct gaze enhancing the perceived intensity of expressions of joy and anger (approach orientation) and averted gaze indicating fear and sadness (avoidance orientation) (Adams & Franklin, 2009; Adams & Kleck, 2005). The effect of direct eye contact as a motivational tendency for approach is also confirmed at neural levels (George & Conty, 2008; Hietanen, Leppänen, Peltola, Linna-aho, & Ruuhiala, 2008). In addition, reciprocated eye contact directly activates and increases autonomic sympathetic arousal system, irrespective of the gender of the subject (Helminen, Kaasinen, & Hietanen, 2011; Nichols & Champness, 1971; Williams & Kleinke, 1993). Therefore, the association of gaze direction with the underlying behavioral intent communicated by emotional expression may enhance the perception of that emotion (Adams & Kleck, 2005). Eye contact is more common amongst people who like each other (Exline & Winters, 1964). It should be noted that the affective-motivational response and arousal increase if eye contact is combined with a social smile (Pönkänen & Hietanen, 2012). It is also known that heterosexual men gaze longer at attractive than less attractive women (Fugita, Agle, Newman, & Walfish, 1977; Kleck & Rubenstein, 1975; van Straaten, Holland, Finkenauer, Hollenstein, & Engels, 2010).

Prolonged eye-contact can be perceived as a sign of attraction and sexual interest by the recipient (Kleinke, 1986; Thayer & Schiff, 1974, 1977), because longer and reciprocated gazes indicate greater sexual interest (Thayer & Schiff, 1977). Women smile, sustain eye contact, or touch to convey romantic or sexual interests (Farris, Viken, & Treat, 2010). Also, unlike women who tend to be motivated only by their own sexual interest, men are also motivated by their perceptions of sexual intent in the potential partner (Choi & Hur, 2013).

There are discrete regions of cortex involved in the perception of gaze direction and perception of eyes (Puce, Allison, Bentin, Gore, & McCarthy,

1998; Wicker et al., 1998) yielding an automatic and reflexive gaze process (Xu, Zhang, & Geng, 2011). This highlights the importance of eye-contact and gaze processing in the course of evolution. Therefore, a direct, face-to-face position, along with eye contact, is an effective way to capture the attention of another person, so much so that this behavior is thought to be a fundamental principle for effective communication (Anolli & Lambiase, 1990; Argyle, Henderson, Bond & Iizuka, 1986; Sherrard, 1993). Therefore, eye contact is the universal sign for being approachable and for permitting the breaking down of social barriers and inviting intimate relationships. In addition, it is known that evaluation of female physical attractiveness by men increases when women display gaze shifts that are indicative of attentional engagement rather than disengagement (Mason, Tatkov, & Macrae, 2005).

### **FEMALE INTERESTS ARE MISPERCEIVED BY MEN (GENDER DIFFERENCES IN PERCEPTION OF WOMEN'S SEXUAL INTENT)**

Men are more likely than women to perceive other persons and situations as sexual, and to misperceive friendly behavior as sexual intent (Abbey, 1982; Abbey, 1987; Shortland & Carig, 1988). In other words, in comparison to women, men more likely frame their opposite-sex interactions using a social-sexual relational schema and women interpret relational schemas as friendship (Farris, Treat, Viken, & McFall, 2008b; LaFrance, Henningsen, Oates, & Shaw, 2009; Lindgren, Parkhill, George, & Hendershot, 2008). Men presented with ambiguous cues such as touching and prolonged eye contact are more likely than are women to assume sexual intent and to rate female targets as sexy, promiscuous, and seductive (Abbey & Melby, 1986). Also, when dates are verbally initiated by women, men's expectations regarding sexual activity are greater (Kowalski, 1993; Mongeau, Carey, & Williams, 1998). Men exaggerate their partners' romantic interest while women, being more cautious and choosy, underestimate it (Fletcher, Kerr, Li, & Valentine, 2014). Conversely, women underestimate men's sexual interest (Perilloux, Easton, & Buss, 2012) and commitment (Haselton & Buss, 2000).

Investigations of the etiology of gender differences in decoding women's positive-affect suggest that men have more difficulty discriminating sexual interest from friendliness (Farris, Treat, Viken, & McFall, 2008a), meaning that men are less able than women to interpret women's cues of sexual interest and disinterest. It should be noted that men's level of testosterone is positively correlated with the degree to which they misperceive women's interest (Perilloux, 2011). The criteria for defining and communicating consent

differ in men and women. Men rely more on nonverbal indicators of consent than do women, while women rely more on verbal indicators (Jozkowski, Peterson, Sanders, Dennis, & Reece, 2013). This gender difference likely causes misunderstanding and might explain some instances of sexual assault (Jozkowski et al., 2013). It is shown that sexually coercive men are more likely than non-coercive men to report incidents of sexual misperception (Abbey & McAuslan, 2004; Abbey, McAuslan, & Ross, 1998).

## **HUMAN MATE GUARDING**

Schmitt and Buss (2001) defined mate poaching as "behavior intended to attract someone who is already in a romantic relationship", either temporarily for a brief sexual encounter or more permanently for a long-term mateship (because intrasexual competition does not always center around available mates, but around many desirable mates that are already mated and unavailable). Mate poaching is common and a distinct form of romantic attraction (Schmitt et al., 2004; Schmitt & Buss, 2001). Infidelity and mate poaching pose serious adaptive problems for those who are cheated on and partners who are poached. The counter-strategies to mate poaching are jealousy (Buss, 2000; Buss, 2013; Buss, Larsen, Westen, & Semmelroth, 1992) and mate guarding behaviors. Mate guarding aims to monopolize access to a mate, by preventing intrasexual rivals gaining access or mates from defecting (Buss, 1988). In addition to contending with mate poachers, adaptations for mate guarding may have evolved in humans to prevent the mate from signaling sexual interest to rivals (Buss, 2002). Although men and women both are distressed by physical and emotional infidelities, men tend to be more upset than women over signals of sexual infidelity, while women are more distressed by evidence of emotional infidelity (Buss & Haselton, 2005; Buss et al., 1999). Men aim to counter the threat and control their partners' behavior (using tactics ranging from vigilance to violence). When they discover evidence of infidelity and cuckoldry, men sometimes apply negative forms of mate guarding, e.g. physical violence that may result in homicide (Wilson & Daly, 1993; Wilson & Daly, 1996). Despite the variability in negative forms of mate guarding, violence against female spouses is consistent across cultures (Wilson & Daly, 1998).

## **RELIGION, EYE COVERING AND MATE GUARDING**

Religion encourages marriage and sexual fidelity. All religious traditions condemn extramarital sexual relations though their rules vary in intensity

(Burdette, Ellison, Sherkat, & Gore, 2007). Frequency of attendance at places of worship is inversely correlated with the incidence of sexual infidelity, regardless of gender, ethnicity, and socioeconomic status (Atkins & Kessel, 2008; Trinitapoli & Regnerus, 2006; Weeden, Cohen, & Kenrick, 2008). Using genetic data, Strassmann and colleagues (2012) showed that religiosity regulate female sexuality in favor of males' paternity and decrease the incidence of cuckoldry. In some cultures women wear articles of clothing that cover not only body shape (Pazhoohi & Hosseinchari, 2014) but also the face and eyes. Religious veiling may, by eliminating the estrogen-induced body curves of women of reproductive age, function as a tool for mate guarding against mate poachers and reinforce marital bond (Pazhoohi & Burriss, in press ; Pazhoohi & Hosseinchari, 2014), as women with gendered mismatch body forms are considered sexually less attractive and interesting (Pazhoohi & Liddle, 2012). Two examples of eye concealing practices are burqa and ghunghat which are intertwined with religious and cultural practices. The burqa, which is an enveloping outer garment worn by women in some Islamic traditions to cover their bodies in public, could be considered as a special form of mate guarding as it conceals the eyes. The face-veiling part of the burqa has a rectangular piece of semi-transparent cloth or a net, which may be turned back if the woman wishes to reveal her eyes and face. Through this eye-covering net, women can see while their face and eyes are concealed. A ghunghat is another form of veiling covering head, face, and eyes that is worn in some parts of India. This garment is used to conceal women's identity from males, while permitting the women to view their environment. It has been suggested that living under harsh environmental conditions will (due to the higher mortality rate, lower health conditions, and higher cost of parental investment) favor stricter mate guarding practices and will tend to enforce it with religious rules and practices (Pazhoohi, Xygalatas, & Grammer, under review). It seems more effort is directed towards controlling and guarding the mate against infidelity due to the high cost of parental investment in harsher environments than in other environments. This could explain cross cultural differences in intensity of female veiling practices.

From cultural evolution perspective, it could be argued that veiling has been culturally adaptive, as one can also track the patterns of cumulative improvement, modification and maintenance of veiling in the historical records of the practicing regions (Gheibi, 2005; Keddie, 1991). Veiling can decrease the potential odds of interactions between women and stranger men and incidence of mate poaching. Therefore, practice of veiling would regulate female sexuality in favor of males' paternity, elicit paternal investment and support low-promiscuity and marriage-centered reproductive strategies (Pazhoohi, under review). Consequently, guarding efficiently the mate from the mate poachers

and rivals, the practice of veiling has been culturally adaptive (Boyd & Richerson, 1983, 1985).

Given that eye contact may be the first and non-lingual part of seduction and have a role in signaling sexual intent, it is reasonable to attribute eye covering practices as a mate guarding strategy intended to decrease the probability of infidelity and sexual coercion by potential mate poachers. In other words, eye concealing practices could be considered a mate retention tactic used by males to prevent rival males from misinterpreting the eye gaze of their wives or to prevent their wives from sending genuine signals. Eye contact can convey sexual intent and men are more inclined to interpret eye contact as a sexual invitation. In addition, it is plausible that women conceal their eyes as a method to prevent unwanted approaches by men, as men cannot misinterpret what they cannot see.

Finally, to test this hypothesis, the current paper suggests using a net-like pattern with different degrees of visibility, covering eye to be compared with control condition. Eyes are the most salient feature of the face, having important role in face perception and recognition (Haxby, Hoffman, & Gobbini, 2000). Therefore, creating stimuli covering the whole eye part of the face would be certainly rated as less attractive. Additionally, depending on the amount of eye exposure and the direction of gaze, it would be interesting to test whether men vary in their judgments of women's openness to social, romantic, or sexual contact.

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