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A Catalogue of Blushes

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1. Blushing is a puzzler¹

Blushing is a ubiquitous yet little understood phenomenon that presents many puzzles. It is a visible change in perhaps our most conspicuous feature – the face – yet often coincides with averting the head and avoiding eye contact, which seem to have more to do with hiding than with drawing attention to the self. We colour when we wish ‘the ground would open up and swallow us’ but also when we are praised, congratulated, thanked or presented with a prize. It is involuntary and uncontrollable - an actor might simulate tears, laughter or a smile but not a blush. Awareness that you are blushing intensifies it and being accused of blushing can induce you to do so. We are not always sure whether we are blushing, as we do not usually see our own face but rely on feeling hot or a tingling sensation. Redness of the face is not peculiar to blushing. It is a sign of anger or indignation and also has non-emotional causes such as alcohol consumption or physical exercise. If Anna Kournikova is red-faced when a ‘streaker’ interrupts her tennis match² is she blushing or is this simply the flush of exertion? Do we rely on the context to decide that a red face is a blush or is there a distinctive display?

What functions, if any, does a blush serve? When we consider emotions like fear we readily appreciate that their visible signs are evidence of bodily changes that have adaptive value. Thus we can readily understand the contributions of pallor, freezing or startle to preparing the individual for fight or flight when confronted with a potential threat. However, it is not obvious what is the significance of changes in blood flow that produces visible reddening in the face, ears, neck, and upper chest. These usually function to regulate body temperature. Why should this process be evoked when we are embarrassed or praised?

Blushing can be perceived as charming and attractive, but many people dislike it and some regard it as a serious problem, causing distress or interfering with their social life to such an extent that they may seek professional help. Some are so anxious that they are prepared to undergo irreversible surgery in order to control it (Crozier, 2002). Why is the blush viewed so negatively? Is it because we believe it reveals us to be socially incompetent, lacking composure and self-control? Or is it because it is often associated with awkward or unpleasant moments?

This paper considers some of these uncertainties through discussion of selected key issues in the psychological literature on blushing. First it identifies the problematic position of the blush in theories of embarrassment. Next it summarises and evaluates three explanations of blushing, Tomkins’s theory of shame affect, Leary’s account in terms of unwanted public attention, and Castelfranchi and Poggi’s characterisation of the blush as a signal of apology. It then offers an account of the circumstances that elicit a blush in terms of exposure and breaches of privacy before presenting the findings of a content analysis of recollections of blushing incidents made by a sample of

¹ I have adapted this expression from Darwin, whose analysis of blushing has been extremely influential, and who wrote in 1838 that ‘crying is a puzzler’. My source for this quotation is David Lodge’s humorous novel on cognitive science, *‘Thinks ...’* (p. 139).

² Photograph and accompanying text in *The Mirror*, July 4, 2000, p. 3

university students. Finally, the paper attempts to relate this conceptualisation of blushing to more general social psychological theories.

2. The problematic nature of the blush

2.1 The uncertain place of the blush in accounts of embarrassment

Blushing raises many questions at a theoretical level. From one point of view, it is unproblematic – blushing is the ‘hallmark’ of embarrassment (Buss, 1980, p. 129). Embarrassment is triggered by some event, typically a flawed public performance, that creates a predicament for the individual by putting his or her social identity at risk, either by threatening loss of public esteem or ‘face’, or by creating uncertainty about how to respond. It is accompanied by a distinctive non-verbal display involving a sequence of head and eye movements, smiling and smile control, which can function to remedy the situation and rescue the embarrassed individual from his or her predicament (Keltner & Buswell, 1997). From this perspective, a blush is simply one element of the display and thus is elicited in embarrassing situations. Miller (1996, p. 137) concludes, ‘on the whole, blushing is a reliable sign of embarrassment’. Like the other elements it can serve as an apology (Castelfranchi & Poggi, 1990) or as a gesture of appeasement (Keltner & Harker, 1998), facilitating the restoration of social relationships (Halberstadt & Green, 1993). Furthermore, the uncontrollable nature of the blush makes it a particularly effective signal since it represents an apology that cannot be feigned and hence is more likely to be regarded as sincere.

Nevertheless, the blush does not fit neatly into this ‘embarrassment account’. First, it is associated with emotions other than embarrassment – pride, guilt, modesty, shame, and shyness. Notably, Darwin’s (1872) seminal chapter on blushing regarded all of these as emotions of self-attention and subsequently they have become known as the self-conscious emotions. It is an unresolved issue whether the blush accompanies all of these emotions or is peculiar to embarrassment. Indeed, there is no consensus whether shame and embarrassment are variants of the same basic emotion or are separate emotions (see Keltner & Buswell, 1997; Miller, 1996). In particular, there is disagreement over whether blushing is characteristic of both embarrassment and shame or only of embarrassment (contrast Barbalet, 1998, Scheff, 1988 or Keltner & Harker, 1998, with Edelman, 1987 or Miller, 1996).

These controversies create difficulties for theories postulating a distinct embarrassment display. The blush is less securely located in accounts of embarrassment than are other elements of the display. For example, Keltner and Buswell (1997, p. 254) do not consider it as integral to the display, arguing that reddening of the face is not specific to embarrassment but is present in other emotions, like anger. They also point out that its onset does not coincide with the other elements in the display. There is empirical evidence that blushing is not an inevitable response to embarrassing incidents. Only 58 per cent of respondents to a survey who were asked to recall an embarrassing incident reported that the incident caused them to blush (Parrott & Smith, 1981). Edelman (1990b) presented findings from a cross-cultural survey indicating that the incidence of blushing as a reported symptom of embarrassment ranged from 21 per cent of respondents [Spanish] to 55 per cent [British]. Edelman (1987) and Leary et al. (1992)

argue that someone can be embarrassed without blushing and blush without being embarrassed, which raises the issue of the circumstances that are necessary and sufficient to elicit a blush³.

2.2 The uncertain place of the blush in physiological accounts

Blushing is also problematic from a psychophysiological perspective. Variation in blood flow through subcutaneous capillaries in the face and other areas where reddening is found is related to temperature control and is regulated by centres in the hypothalamus responsible for body temperature; when temperature rises, for example, through physical exertion, the capillaries are opened (vasodilation) and there is an increased flow of blood closer to the surface of the skin, allowing cooling of the blood and consequently a reduction in body temperature. No one is sure why this process is activated by the circumstances that typically elicit a blush.

Shame and embarrassment are often assumed to involve heightened arousal (Keltner & Anderson, 2000) or anxiety (e.g., Buss, 1980; Leary et al., 1992) and, from this perspective, their expression would be mediated by the sympathetic nervous system. However, it is difficult to reconcile this with the contention that vasodilation is a product of parasympathetic rather than sympathetic nervous system activity (Edelmann, 1990a). Fear and anxiety are presumably more likely to be associated with pallor of the face than heightened colour, since arousal of the sympathetic system produces vasoconstriction of facial capillaries. Furthermore, blushing tends to be associated with a reduction rather than an increase in heart rate in embarrassing situations (Keltner & Buswell, 1997) implying inhibited sympathetic and increased parasympathetic nervous system activity. Stein and Bouwer (1997) also report that blushing is accompanied by lower heart rate and blood pressure.

Nevertheless, little is known about the physiological mechanisms involved in blushing and there are recent suggestions that it is produced by sympathetic activity (Edelmann, 2001). There is evidence that blushing is mediated via beta-adrenergic receptors in the facial area (Drummond, 1997). Sympathetic arousal of these receptors can produce vasodilation, and they have a high density in the facial veins (Mellander et al., 1982). Lesions to the sympathetic pathway to the face (Drummond, 1989) or surgical disruption of the sympathetic chain (e.g., Rex et al, 1998) prevent blushing. It is an oversimplification to assume that the sympathetic and parasympathetic systems are in opposition. In practice the two systems interact with each other in a number of different ways, complementary and antagonistic, to control responses; these complex processes are as yet little understood in the case of blushing. Nonetheless, it is evident that if the blush is a manifestation of arousal it represents a pattern that is distinctive from that typically found in anxiety.

³ It is of course possible that blushing always accompanies embarrassment but the increase in skin temperature is not necessarily of sufficient magnitude to be detected by the embarrassed person. Psychophysiological studies of blushing, which are beginning to be undertaken, can throw light on this issue.

3. Theories of blushing

3.1 Tomkins's theory of the affects

Uncertainties about blushing are also evident in theories of the emotions. This can be illustrated by the comprehensive theory of affects developed by Tomkins (1963). This is of particular relevance since facial expression is central to Tomkins's account – in his theory, the face is the site of the affects and hence we might expect him to pay particular attention to the blush. Tomkins writes at length on shame, which he regards as an auxiliary affect (auxiliary because it is not classified as a primary affect in his system but is produced by the incomplete reduction of one of two of the primary affects, interest or joy). Shame is expressed by lowering of the head, averting the eyes and blushing. Despite the central role that the face plays in his theory Tomkins has surprisingly little to say about the blush and he shares with other theorists uncertainty about its role. He regards it as a 'response auxiliary to the shame complex' since it increases the visibility of the face whereas the 'shame response proper' reduces facial communication (1963, pp.120-121). However, he is not explicit about the grounds for deciding that the blush is not part of the proper response. It is not obvious that this goes beyond reiteration of the paradox that blushing can draw attention to the self when this is least wanted. Although the theory does not lend itself readily to predictions (as opposed to post hoc interpretation) it implies that blushing is more likely when levels of interest and enjoyment are high but something 'shaming' interrupts positive affect. This proposition has not attracted any empirical attention.

Where specific explanations of blushing have been proffered two claims have been made: (1) blushing is a reaction to being the centre of attention; (2) the blush has a communicative function. I review each in turn before setting out an alternative position.

3.2 Unwanted social attention

Darwin (1872, p. 325) related blushing to the individual's concern with being evaluated by others, writing that it is 'the thinking of what others think of us which excites a blush'. He emphasised a process of self-attention: 'whenever we know, or suppose, that others are depreciating our personal appearance, our attention is strongly drawn toward ourselves, more specifically to our faces ... whenever we know, or imagine, that any one is blaming, though in silence, our actions, thoughts, or character; and, again, when we are highly praised.' (p. 344). Leary's self-presentational account (Leary et al, 1992; Cutlip & Leary, 1993) follows Darwin in proposing that blushing is a response to unwanted social attention. It is worthwhile to quote his position (Cutlip & Leary, 1993, p. 183) since it represents one of the most explicit expositions of the causes of blushing.

The necessary and sufficient cause of social blushing is undesired social attention. Put simply, people blush when they receive attention from others that they do not desire and cannot escape. Often, people receive undesired social attention after they have behaved improperly, thereby accounting for the link between embarrassing events and blushing. However, any undesired attention – even that directed at one's positive attributes or behavior – will result in blushing, thereby accounting for the effects of both positive attention and staring.

Several points can be made about this position. First, the blush is a *response* to attention from others (presumably contingent on the blusher's sense that he or she is the object of that attention, since you can be the object of attention without being aware of it or can mistakenly believe that you are under scrutiny). Castelfranchi and Poggi (1990) also emphasise the role of the audience in blushing. They distinguish between 'shame before the self' and 'shame before the other' and contend that blushing is associated specifically with the latter. While shame is always a matter of a discrepancy between one's behaviour and one's values, shame before the other involves an audience for this dereliction. This account also implies that the individual's responsibility for the predicament is not the fundamental issue. Castelfranchi and Poggi support this with an example of a 'good Samaritan' who comes to the aid of a woman by administering mouth-to-mouth resuscitation but who blushes when he realises how this action might be misconstrued by an onlooker. He does so even though he knows he is acting in good faith (and feels no shame before the self) and the source of his shame is awareness that he is potentially the object of censure.

Second, it addresses the question why someone might blush when he or she is the object of positive attention. As is evident in the quotation above, Darwin had observed that praise, not just depreciation of the self, could elicit a blush. Buss (1980, pp. 138-139) argued (and presented empirical evidence for) the position that it is overpraise (consciousness that it is unmerited or exaggerated) rather than praise *per se* that produces the blush.⁴ Leary suggests that the key issue is whether the attention is undesired and there are various reasons why this might be so: attention might be unwelcome because it is recognised that the praise is undeserved; the recipient of positive attention is not sure how to respond appropriately or is apprehensive about failing to cope with the attention.

Third, Leary outlines the circumstances in which blushing occurs in the absence of embarrassment - attracting undesired attention without creating a self-presentational predicament would produce blushing but not embarrassment. Conversely, a predicament unaccompanied by undesired attention would result in embarrassment but not a blush. Nevertheless, there is as yet no evidence to support this claim.

Fourth, it can be asked whether this characterisation of the blush is sufficiently detailed to generate a classification scheme that captures the range of social situations that elicit a blush (whether or not these are viewed as giving rise to embarrassment). Leary et al (1992) propose that four classes of situation elicit blushing: Threats to public identity; praise and positive attention; conspicuousness; accusations of blushing. Threats to public identity include violation of norms; inept performances, loss of control and behaving out-of-role, circumstances that typically give rise to embarrassment. People blush when they are the focus of positive attention, when they are singled out for praise, compliments or thanks. Conspicuousness is a cause of blushing such that people will colour simply because they are the centre of attention, for example, being asked a question in class or entering the hall after the

⁴ Kemper (1978) adopts a similar approach, arguing that shame arises when the individual is assigned higher status than he or she is entitled to. This discrepancy can arise when the he or she appears incompetent but also when publicly praised if the praise seems unwarranted or over-generous.

lecture has started. Finally, being told that you are blushing can induce it, and awareness of your blushing can intensify it. It is an empirical matter whether this set of classes of situations is necessary and sufficient to account for, say, all reports of occasions for blushing.

3.3 The blush as signal

Castelfranchi and Poggi (1990) argue that the blush serves as an act of appeasement or submission, intended to inhibit the aggression of another. They write (p. 240) that those who blush,

are somehow saying that they know, care about, and fear others' evaluations and that they share those values deeply. They also communicate their sorrow over any possible faults or inadequacies on their part, thus performing an acknowledgement, a confession, and an apology aimed at inhibiting others' aggression or avoiding social ostracism.

According to their account a blush serves a positive function for the embarrassed person and for everyone involved in the predicament that has given rise to it (Halberstadt & Green, 1993). As we have seen, this is a common theme in accounts of the display of embarrassment.

There is empirical support for the hypothesis that a blush can deflect negative evaluation. Semin and Manstead (1982) devised vignettes describing incidents such as knocking over a stack of cans in a supermarket and manipulated the description of the actor who was responsible for this. De Jong (1999) adapted these vignettes to describe the actor either as blushing, looking around in a shamefaced way, or simply leaving without a reaction. When the actor was described as having blushed, the incident was judged as less serious and he or she was judged to be less responsible for the transgression and was rated as more reliable, sympathetic and likeable.

This account is most convincing in those cases where the actor is responsible, directly or indirectly, for creating the social predicament and hence an apology or act of appeasement is called for. It is less plausible in those cases where the actor is simply conspicuous or is the recipient of praise or a compliment. In addition, there are cases of 'shame before the other' where the actor has nothing to apologise for and knows that he or she has acted in good faith.

There is also the problem of the involuntary nature of the signal since it cannot be 'sent' deliberately even though its appearance would be timely (Castelfranchi and Poggi, 1990, p. 240, acknowledge that it can be non-intentional or even 'counter-voluntary'). Finally, there are cases where a blush is akin to a 'leakage' rather than a signal. Crozier (2000) provides an example of a pregnant woman who is keeping this private but who gives herself away when she blushes when someone else innocently raises the question of motherhood. A second example is provided by incidents in Elizabeth Gaskell's novel, *Ruth*, where the eponymous heroine has given birth to an illegitimate child and has been encouraged by friends to keep the circumstances of the birth a secret and to claim to be a widow. Thereafter, allusions, however oblique, to her marital status or to the age of her child cause her to blush. In cases like these a blush can create a predicament where one would not otherwise exist. It is possible that these triggers (e.g., the casual reference to

motherhood) create anxiety that a predicament will ensue and thus the blush is a kind of apology in anticipation - it is simply unfortunate that the involuntary reaction actually brings about the predicament. However, it is not certain that this version is compatible with what is known about the temporal sequence of the embarrassment display, nor does it seem parsimonious.

4. Blushing, self-consciousness, and exposure

4.1 The blush and exposure

Given these theoretical uncertainties and also how little is known, as opposed to assumed, about the circumstances that elicit a blush it is valuable to try to set aside preconceptions of blushing as expressions of embarrassment or shame and to scrutinise instances in order to identify recurrent themes or patterns. Exploration of various descriptions of episodes led me to propose that many such occasions have a common thread (Crozier, 2000, 2001). If some event X brings into the open (or threatens to do so) a topic Y, and Y is something that the individual wishes to keep hidden or believes ought to be kept hidden, X will elicit a blush. The two examples provided above - the young mother and Ruth, the character in Gaskell's novel - clearly fit this pattern. Often where blushing is reported, personal information is disclosed, a secret is alluded to, or someone is teased about a personal or intimate matter. A blush can be elicited by a reference to private feelings, by being reminded of a past incident that only the blusher is aware of, or by the implications of a remark that would only be recognised by the blusher. A blush can also be a reaction to exposure of topics that are culturally sensitive for all members of a particular cultural group, not just to an individual, for example references to many bodily functions or sexual matters. In a recent newspaper interview with a woman journalist who writes on men's sport⁵, she was asked if any of the sportsmen had ever made sexual advances to her. She denied this, but her cheeks were described as 'colouring slightly' as she did so. The point is that we cannot tell from her colouring whether or not any advances had been made; the blush may be elicited simply by the allusion to sexual relationships.

The connection between the blush and the exposure of something that should not be revealed has implications for people's estimation of the blusher. For example, a woman who colours to hear a lewd remark or a salacious joke reveals herself to be one type of person; if she fails to blush she may show herself to be another. A blush can show modesty, propriety, chastity and innocence; failure to blush can indicate the absence of these qualities - unblushing and shameless are synonyms. Someone may blush when they are falsely accused of doing something wrong and this may be interpreted as evidence of guilt (see Frayn, 2002, p.132, for a fictional example of this, where an accused child goes red even though he has no idea what it is he is being accused of).

4.2 Breaches of privacy

This element of exposure has been identified in other accounts of blushing and embarrassment. Simon and Shields (1996, p. 177) write that,

⁵ Amy Raphael, 'Angelic host', *Observer Sports Monthly*, May 2002, p. 56

'blushing, though a fleeting episode, is experienced as an unwelcome public revelation of one's most private thoughts'. Lewis (2001, pp. 105-106) argues that an 'example of embarrassment at being exposed or uncovered made me realize that the exposure does not have to be about the physical presence but can extend to the secret part of the self'. Buss (1980) regarded breaches of privacy by casual acquaintances or strangers as a cause of embarrassment. He identified three types of intrusions: exposure of parts of the body that should not be seen; being touched in parts of the body that ought not to be touched or an invasion of the intimate zone of personal space; the revelation of private cognitions and feelings that we would not want others to know. Cupach and Metts (1990) also identify privacy violations as a cause of embarrassment, relating these specifically to those predicaments brought about by someone other than the embarrassed person. They describe this as occurring

when a person learns through indirect means that personal information has been revealed to other persons without his or her knowledge or presence. This type of embarrassment is unique in that it may be felt initially when the violation is revealed and also on subsequent occasions when interacting with parties who have acquired the private information (p. 347).

These accounts seem to exclude those infringements of privacy brought about by the self, occasions when one 'gives oneself away'. In this respect they contrast with Miller's (1992) classification scheme for embarrassment, where *failures of privacy regulation* are classified as a type of normative public deficiency, where actors are responsible since they have 'insufficiently protected private thoughts and actions from public view' (p. 193). Miller's example is of a man who enters a room in his underwear unaware that women visitors are present. For Miller, it is the man's ineptitude that places this incident in this category. If someone else had engineered these circumstances, the scheme would classify it as an instance of *audience provocation*. If no one were at fault, the man's predicament would be classified as an instance of yet another category, *conspicuousness*. Thus, in Miller's scheme breaches of privacy are not restricted to a single category. Audience provocations also include occasions where other people fail to keep a secret or they reveal information about the embarrassed person; this can be done intentionally, by teasing, for example, or by accident.

Miller distinguishes categories on the basis of whether or not the event involves an actual transgression by the embarrassed person. However, the source of responsibility for a breach of privacy might not be the key issue. You may be embarrassed whoever accidentally discloses personal information about you or whoever has brought about the invasion of your personal space.

4.3 Empirical evidence

The proposal that blushing is elicited by exposure or breaches of privacy would be strengthened if the types of social situations implied by this analysis were identified in empirical investigations of accounts of blushing. However, there have been scarcely any systematic attempts to classify situations that elicit blushing. This is in contrast with research into embarrassment where there exist several schemes for categorising

embarrassing incidents (for a review, see Miller, 1996). The dearth of taxonomies of blushing presumably reflects the widespread assumption that blushing is simply an expression of embarrassment.

Three studies have undertaken factor analysis of the Leary and Meadows (1991) Blushing Propensity Scale. This scale asks respondents to rate how likely it is that they would blush in a prescribed set of circumstances. It does not invite nominations of situations that elicit a blush, and hence it is unlike classification schemes for embarrassment, which involve responses to open ended questions. Studies by Leary and Meadows (1991), Edelman and Skov (1993) and Bögels et al (1996) have consistently identified two factors underlying responses to the scale items and these are similar from study to study. The first (and larger) factor includes items where the individual is the centre of others' attention, whether this is in positive, neutral or negative ways (being praised, simply conspicuous, or criticised).

Items loading on the second factor refer to interactions between individuals rather than to behaviour in the public eye, which characterises the first factor. Items with high loadings on this factor across all three studies refer to talking on a personal topic, interacting with a member of the other sex, and looking someone in the eye. Bögels et al had added five items to the original scale and two of these load on this factor: interacting with someone you find attractive; when there is a sexual topic of conversation. This factor has proved more difficult to interpret than the first. Leary and Meadows consider the items to refer to 'non-induced blushing' (1991, p. 260) and to 'relatively mundane situations in which people blush in the absence of a specific identity-threatening or embarrassing event' (pp. 258-9). They suggest that the items are characterised by 'anticipatory social anxiety or acute public self-awareness' (p. 259) rather than embarrassment. Bögels et al (1996) interpret this factor in self-presentation terms: the actor wishes to make a good impression on someone who is important to him or her but doubts his or her ability to do so. Nevertheless, this interpretation does not readily apply to all of the items. Edelman and Skov (1993, p. 496) suggest the second factor reflects situations where just one other is present and label it a 'personal exposure' factor.

The consistent identification of two factors shows that being the centre of public attention is not the only reason to blush and that there are other eliciting circumstances that are more personal and less dependent upon the presence of an audience. Several items in the second factor represent examples of exposure as discussed above. Nevertheless the participants in these studies are responding to a set of items provided by the researchers and these might not be representative of blushing incidents typically experienced. The following section provides findings from a study where individuals were asked to recall occasions when they had blushed, and a coding scheme derived from the factor analytical studies is applied to the responses. Asking individuals to nominate situations is a strategy that has been widely used in the study of embarrassment although, as Miller (1996) has argued, it suffers the disadvantage of perhaps eliciting more vivid examples than those routinely encountered and it may over-represent situations that were problematic or that the individual was unable to resolve. Event nomination is the approach adopted here, with the modification that participants are asked to report on blushing incidents that took place because

of something that was *said*. This approach was chosen for two reasons. First, it might elicit more routine examples, with less emphasis on the major faux pas or loss of physical control that are highly memorable but, mercifully, rare. Second, a survey of literary examples of blushing by Crozier (2001) found that many blushing incidents were described as taking place during conversation, and it was thought useful to compare findings from the two studies.

5. Cataloguing blushes

A brief questionnaire was constructed specifically for this study. It was introduced as follows:

Everybody must blush at some time or another. Often, one blushes because of something one has done or something that happens, but one can also blush because of something that is said. The latter is the focus of this brief questionnaire, and it would be very helpful if you would recall and briefly describe an occasion when you blushed at something somebody said.

The first two items were ‘What was said to cause you to blush?’ and ‘Why do you think this made you blush?’ Each was followed by a space for respondents to write their answers in their own words. Subsequent items involved rating scales applied to the nominated situations.

A sample of 101 students of courses in education, social studies and occupational therapy completed the questionnaires in classroom settings. The sample was predominantly female, reflecting the gender distribution on the courses. Inspection of questionnaires suggested no gender differences in pattern of responses and this issue is not discussed further. The responses of two participants were omitted from analysis. Each stated that they could not recall an incident, one adding that she rarely blushed.

Responses to the first two items were transcribed and the transcriptions were coded in terms of three categories of causes of the blush: Being the centre of attention; the characteristics or role of the person you were interacting with; the topic of conversation, particularly intimate topics of revelations of private information. Coders were provided with the descriptions of representative instances of the three categories presented in Table 1. They were also allowed to respond that the cause did not fit into any of the three categories. Two judges working independently coded the 99 protocols. Cases of disagreement were referred to a third judge, who attempted to code them and then discussed the coding with the author.

INSERT TABLE 1 ABOUT HERE

5.1 Coding procedure

The two judges agreed on 92 of the 99 protocols. This represents a satisfactory level of inter-rater agreement but because our interest is in the applicability of the scheme it is valuable to examine the seven cases where there were discrepancies. In all seven cases the judges were uncertain as to which category an incident belonged, that is, there were no cases where they believed the categories failed to apply. One protocol yielded three different

categorisations. The respondent had reported that ‘a woman came up to me and accused me of talking about her, she was quite threatening’, and the judges disagreed as to whether this represented being the *centre of attention* (being accused), the *topic* (talking about the other person) or characteristics of the other *person* (threatening). My own interpretation of this is that represents the category *centre of attention* since I believe that the respondent’s blush is produced by the accusation, which puts the respondent ‘on the spot’.

In the other cases the judges disagreed over whether the example represented being the categories of being the *centre of attention* or the *topic*, and in three of these cases what was said referred to feelings of sexual attraction. Discussion with the judges after the coding exercise raised the issue of compliments, particularly of a sexual nature, as they believed these could be classified as either a compliment or a sexual topic. Our scheme is perhaps arbitrary in assigning all compliments to the *centre of attention* category on the basis that they represent occasions where the individual is singled out for attention. This raises the issue of whether it is possible, or even appropriate, to devise mutually exclusive categories. For example, if someone to whom you were sexually attracted makes a remark that implies that he or she is aware of your feelings, and this takes place in front of other people, this could be assigned to any of the categories in the coding scheme. Any one of these features of the situation might be reason to blush.

In general, the categories encompassed all the instances that were generated by the sample of respondents and, for the most part, judges found the coding a straightforward process. The outcomes of the coding process are that 67 incidents were classified as *centre of attention*, 21 as *topic*, and four as *person*. I now consider these three categories in turn.

5.2 The *centre of attention* category

Instances of this category were coded according to the types of examples provided to the judges. The distribution of these codings is presented in Table 2.

Table 2: Coding of instances in *centre of attention* category

Code	Frequency	Per cent of category
Speak up in front of others	3	5
Being conspicuous	10	15
Appearing foolish	13	19
Being complimented	24	36
Being criticised	7	10
Being accused	5	7.5
A comment made	5	7.5
TOTAL	67	100

It is evident that being complimented or praised is the largest single class of instances within this category, and indeed is the most frequent of all the classes of responses to the questionnaire. Inspection of responses to the item about numbers of people present at the time shows that there was a

range of numbers present from 2 to 30 people, with a median number of four present. Compliments could be paid in front of a large group, for example in a meeting or in front of a class

School work praised by tutor. [Why blush?] Being complimented in front of others.

However, it could also take place when only a few were present, including the dyad of blusher and the person praising -

My boss told me he valued my work. [Why blush?] Embarrassed, didn't know how to respond.

Unwanted attention, making a faux pas or having attention drawn to a mistake also elicited a blush. Again, these could take place in front of a substantial audience.

In a lecture, I asked a question that the lecturer had only just covered and everybody laughed.

I said something stupid in class. [Why blush?] Because there was an audience.

So too could being the target of negative remarks – being criticised, challenged or accused – and these could take place in front of a large group or when only a small number are present.

In five cases the nature of the comments was unspecified, for example,

A comment was made about me. [Why blush?] I was embarrassed as I was surrounded by people and friends.

Being conspicuous without explicit reference to the attention being unwanted was also cited as a reason to blush, for example when it is the person's birthday and the others sing 'Happy Birthday' or when the person is nominated for a place on a committee.

5.3 The *topic* category

Twenty-one responses were assigned to this category. There seem to be recurrent themes in this category. One is where the person blushes when she realises that something that she assumes was not known to others, or does not want divulged, is indeed known. Examples are:

Something personal was told to a lecturer by a friend. [Why blush] I was embarrassed that he knew about my personal life.

That I fancied a particular bloke. [Why blush?] Because I didn't know anybody else had realized this!

A second theme involves reference to a previous embarrassing incident, for example,

Friends were talking about events of a night out that we had all gone on. [Why blush?] Embarrassment.

A reminder of a previous embarrassing incident. [Why blush?] Because I remembered the incident and I was with strangers.

A further theme is a sexual allusion or reference; there are six protocols with a sexual content, either referring to the blusher's sexual activity or to their feelings for someone:

A comment about how much my boyfriend and I were kissing. [Why blush?] Because I felt it was true.

When someone said the name of a bloke that I fancied. [Why blush?] Because I liked him.

5.4 The *person* category

There were only four coded instances of this category, where it seemed that the blush was elicited by the role or qualities of the person involved rather than by the topic aired or being the centre of attention. In one instance it was a student's tutor, in the other three it was because of the feelings that the blusher had for the person with whom he or she was interacting.

When I had to speak to my tutor on the phone to explain something. Generally the fact that I had to speak to him, regardless of what he said. [Why blush?] Because he is a professor, and I didn't expect to speak to him. Speaking to a boy that I fancied [Why blush?] Because I liked him.

5.5 Comparison of categories

Responses to the questionnaire items can be compared for the *centre of attention* and *topic* categories since these encompass sufficient examples for statistical analysis. One point of difference between the categories is the source of the remark that elicited the blush. Overall, in 82 per cent of incidents a person other than the blusher had made the remark, while the blusher him or herself made the remark in 18 per cent of cases. The distribution was different for the two categories. There were no cases where the person who blushed raised the topic that elicited the blush; the topic was always raised by someone else. In the case of the *centre of attention* category, 21 per cent of the remarks had been made by the blusher.

There was also a difference in the numbers of person reported to be present during the incident, with fewer people present when the *topic* was the cause of the blush (median number present, 5) than being the *centre of attention* (median 7 present)⁶. There was a wide range of numbers present in each case, for *topic* the range was from 3 to 25, whereas for being the *centre of attention* the range was from 2 to 100. In the latter case, 14 incidents involved 25 or more people, reflecting the greater incidence of classroom audiences and large groups. Nevertheless, a substantial proportion of cases where the blusher was categorised as being the centre of attention involved small numbers, 32 per cent involved from two to four people. There was little support for the proposition that what distinguishes the factors identified in the factor-analytic studies is that topic based incidents involve only the blusher and one other person (Edelmann & Skov, 1993).

⁶ Mann-Whitney test, $z = 1.998$, $P < 0.05$.

There was also a significant difference between the two categories when the nature of the topic is considered. Cases were coded as to whether they contained a sexual implication, and there were a greater number of such references for the *topic* category (48 per cent) relative to being the *centre of attention* (18 per cent)⁷. In part, this finding is a function of the coding scheme itself, since reference to sexual matters is one of the bases of assignment of a cause of blushing to the *topic* category. Nevertheless, sexual referents were also found in the *centre of attention* category, for example where compliments of a sexual nature were received.

Protocols were also coded as to whether they explicitly mentioned embarrassment. This was found in 32 per cent of protocols, but there was no difference in the frequencies of mentions in the two categories.⁸ Finally, one item invited respondents to rate the intensity of their blush on a five-point scale, from 'very slight, scarcely noticeable' to 'extreme colouring'. These ratings were recoded into two categories - less intense versus marked colouring - and there was no statistically significant difference in rated intensity between the *centre of attention* and *topic* categories.⁹

5.6 Blushing, embarrassment, and self-consciousness

It has already been noted that a substantial minority of protocols (32 per cent) made explicit reference to embarrassment. Protocols included references to other aspects of embarrassment. For example, humour is often associated with embarrassment, and this is explicitly mentioned in 28 per cent of protocols. One of the questionnaire items asked respondents 'what, if anything, happened next'. Twenty-five of the 99 protocols mentioned laughter as a sequel to the embarrassing remark; of these, 13 mentioned the blusher laughing ('laughing it off'), four mentioned the other people present laughing, and eight the blusher and the others laughing. Responses to this item referred to other physiological reactions, including 'felt hot and sweaty', 'felt aware of the blush - felt anxious', 'speech affected, feel uncomfortable, hot, breathless', and 'slight palpitation'. Reactions also included typical embarrassment displays - 'I hid my face behind my hand and pulled my hair across my face.' There was mention of the blush producing further blushing or aggravating the predicament.

The blushing was pointed out giving more attention to me making me blush more and longer.

Someone said 'you're going red!' which obviously made it worse.

There were references to attempts to cope with the predicament. These included trying to ignore the remark and escaping or withdrawing from the situation.

I just ignored their teasing

I walked away.

I didn't say anything for the rest of the tutorial.

⁷ Chi-square = 7.31, d.f. = 1, P < 0.01.

⁸ Chi-square < 1.0, P = 0.69.

⁹ Chi-square < 1.0, P = 0.53.

One coping response was to attempt to change the subject or to combine this with laughter.

Tried to laugh it off. Topic of conversation was quickly changed by myself.
Tried to redirect conversation away from the subject as I was embarrassed.

This was not necessarily effective:

I tried to change the subject (unsuccessfully) and made it more obvious that I was embarrassed.

Another theme is the sudden or unexpected nature of the incident. This was mentioned in seven protocols, four of which involved a compliment.

Finally, a common theme throughout the responses was self-consciousness, being the focus of attention, and being aware of being observed. Responses were coded for explicit reference to these expressions, and they were identified in 47 per cent of protocols. In some cases there is simply reference to the presence of an audience:

Because there was an audience.
Embarrassment. Being in the presence of others while it [compliment] was being said.

In other cases there is explicit reference to being observed or the centre of attention:

Everybody then looks at you at the same time.
Drew attention to me.
It put me on the spot a bit.
Became very aware that I was being watched.
Recognising the fact that I was being closely observed.

This could include being listened to rather than being looked at:

People were looking at me and listening to what I was saying. I don't usually mind people looking at me it was more listening to what I was saying.

There are also references to the role of the audience's behaviour in producing a blush. In one example, the respondent has made a faux pas when speaking to a young man and she explains her own blush as follows:

Everyone went silent, and the guy concerned was extremely embarrassed and started to blush. This response from everyone resulted in me feeling a complete fool.
Everybody was looking and laughing.

It is possible to compare the pattern of responses in this study with the distribution of categories of recalled episodes of blushing reported by Miller (1996). The comparison is presented in Table 3. The distribution of types of incidents differs markedly from the distribution of embarrassing events reported by Miller (1996, p. 52). In his study, making errors of various kinds

accounted for 32 per cent of incidents, and loss of control accounted for another 16 per cent. Errors are present in our study – saying the wrong thing or an inability to say the right thing – but these occur in only 13 per cent of protocols. Being complimented and receiving comments of different kinds account for 41 per cent of responses in our study in contrast to only 3 per cent in Miller’s study of embarrassment. Finally, being conspicuous is much more common as a reason to blush (10 per cent versus 2 per cent).

However, Miller’s study did not restrict participants to nominating occasions where something was said, so that the two samples are not strictly comparable. Therefore the blushing questionnaire was administered to a fresh sample of 45 students with one modification, where they were asked to recall an occasion where they felt embarrassed rather than blushed because of something somebody said.

Frequencies of selected coded responses to this questionnaire are presented in Table 3 along with similar codes from the blushing study and Miller’s (1996) findings. Restricting embarrassing events in this way has the effect of increasing the number of comments, accusations and teases, and substantially reducing the number of instances of errors and loss of control. However, the proportion of compliments is very much higher in the blushing condition than in the embarrassment condition. References coded into the *topic* category are found in 13 per cent of the protocols in the embarrassment condition in comparison with 23 per cent of the protocols in the blush condition. Of course, it is possible that a number of these events might have induced a blush as well as embarrassment. In summary, while references to errors and to conspicuousness are similar in the two conditions, blushes are more likely to be elicited by compliments and embarrassment by comments other than compliments.

Table 3: Comparison of distributions of eliciting events: percentages of protocols

	Blushing condition	Embarrassment condition	Miller (1996) embarrassment study
Errors/loss of control	13	11	48
Conspicuousness	10	7	2
Compliments	24	7	1
Other remarks/accusations	12	31	2

6. Discussion

6.1 Study findings

The coding scheme developed for this study on the basis of the factors identified in factor-analytic studies of situations that elicit blushing seems to provide an effective means of classifying the incidents generated by the participants in this survey. There was a satisfactory level of agreement

between judges applying the scheme. Any difficulties were due to uncertainties about compliments as they could be considered to be examples of either the *topic* category, particularly when they are of a sexual nature, or the *centre of attention* category. Compliments feature significantly in this set of protocols and are the most common source of those blushes that are a response to something that is said.

Several themes recur in this sample of recalled blushes. There were many spontaneous mentions of self-consciousness, of being aware of the presence of other people – blushing is a profoundly social experience, and this must figure in any explanation of it. Many of the accounts of incidents involved embarrassment, either this was mentioned explicitly, the trigger events involved faux pas or social predicaments of various kinds, or there was reference to other elements of the characteristic embarrassment display. Nevertheless, the distribution of types of incidents differs from the distribution found when participants recalled episodes that caused them to be embarrassed rather than to blush, and to the distribution of embarrassing events reported by Miller (1996). The differences relate to the greater frequency of compliments in blushing episodes, and the greater frequency of other forms of comments in the embarrassment conditions, and the predominance of errors of various kinds in Miller's study. Restricting attention to what is said considerably reduces the incidence of errors.

The majority of reported incidents were coded into the category *centre of attention*, providing support for the theories of Darwin and Leary that emphasise social attention, and replicating factor analytic studies of the Leary and Meadows (1991) Blushing Propensity Scale. Nevertheless, it seems to be the case that unwanted attention is not the sole cause of blushing. The next largest category related to the blush being elicited by the content of what was said, and this included disclosure of private or personal information, references to past events that were embarrassing, and topics of a sexual nature. These are examples of the process of exposure discussed by Crozier (2000, 2001) and are similar to several of the items loading on the second factor in factor analytic studies of the Blushing Propensity Scale.

6.2 Limitations of coding schemes

The method of inviting and subsequently classifying nominations of experiences has its precedent in the literature on embarrassment, particularly in the development of taxonomies of eliciting circumstances. Nevertheless it has limitations. First, as suggested above, the recalled instances may be particularly vivid and unrepresentative of situations that typically elicit the reaction.

Second, responses may be guided by respondents' 'lay theories' of blushing. The method relies upon what participants understand by blushing, for example they might take the word to be a synonym of embarrassment and provide instances of the latter, whether or not they blushed on those occasions. The method also assumes that people are aware of their blushing, which is not always the case. For example, people who report themselves as prone to blushing might not blush more than others in potentially embarrassing situations (Mulkens et al, 1999; Drummond, 2001).

Identifying the appropriate level of analysis can be problematic. One goal of taxonomies is to reduce the large number of social situations where

blushing occurs to a smaller number of categories. Should one have a large number of categories, each of which encompasses situations that are similar to one another (in principle, every situation is a unique event and one might have as many categories as responses) or should one aim for a small number of broad categories? There is also the issue of whether to have mutually exclusive categories or to allow incidents to be classed into more than one category. There are aesthetic and statistical reasons for choosing the former type of scheme, yet the latter may represent reality better. Any one social incident may provide more than one reason to blush.

Finally, the procedure is inductive and is not derived from theoretical principles. Even if it is effective in classifying types of conditions when blushing occurs it does not say why it occurs in those situations. In this study the categories were not based on inspection of the responses but on prior theorising, particularly the accounts by Leary and Crozier, and from previous empirical studies of blush-eliciting situations that themselves draw on Leary's theory of blushing.

The identification of patterns that are common to instances of blushing is an important first step towards understanding this puzzling phenomenon. Yet it is only an initial step and further progress requires analysing the range of situations that elicit a blush in terms of these patterns and, more importantly, explaining the significance of what we have labelled as exposure in terms of some more general theory of social interaction processes. This is discussed in the next section.

6.3 A theoretical basis for exposure

This section aims to relate patterns of blush-eliciting events to two broader theoretical approaches. The first considers the blush in terms of processes of privacy and boundary regulation, specifically Altman's theory of privacy (Altman, 1975) and Petronio's communication boundary management theory (Petronio, 1990; 2000). The second approach revisits Darwin's conception of self-attention but considers this in terms of the mental state of self-consciousness.

Altman offered a theory of privacy that construes it not as a static state or condition but as a dynamic and dialectic process, whereby an individual is constantly attempting to control levels of openness or accessibility to others. This is achieved by privacy-regulation mechanisms that include verbal and non-verbal behaviours. For example, in a crowded bar one would avoid eye contact or close proximity with others in order to avoid unwanted social interaction; alternatively if one were seeking company one might try to catch someone's eye or smile at them to signal openness to further interaction. Altman argues that privacy regulation is essential for the effective management of social encounters and also for maintaining social identity, self-esteem and social competence: 'self-identity and a sense of self-worth involve the ability to control one's boundaries in relation to others' (Altman & Chemers, 1980, p. 82).

Petronio has developed this approach arguing, first, that boundary regulation is important in the management of self-presentation and the maintenance of 'face' and second, that privacy boundaries are subject to a system of rules that serves to regulate the flow of information between social actors. These boundary rules are influenced by a range of factors, from broad

cultural influences to personality and individual preferences. Petronio (1990; Petronio et al, 1989) has applied this model to embarrassment, interpreting the claim (which, like the concept of 'face', can be traced to Goffman, 1956) that embarrassment ensues from a failure to fulfil expectations related to rules for boundary management:

The boundary-controlling communicative interaction is regulated by assumptions for appropriate actions in public between individuals. The categories [of social predicaments] ... represent examples of how the boundaries are compromised, but they do not show why. The "why" has to do with expectations that have been breached; the 'how' is through a breakdown in the regulatory system marked by malfunctions such as faux pas and verbal blunders (Petronio, 1990, p. 369).

This conceptualisation of social interaction processes offers the potential for providing a theoretical framework for understanding the relationship between blushing and exposure: specifically, it can be argued, a blush occurs whenever there is a breach - or the threat of a breach - of the boundary between the private self and the public self. Such a breach can take different forms.

If we consider the category *centre of attention* in our coding scheme, in many instances the private self is suddenly thrust into the public gaze, into the 'spotlight'. This can be an aversive experience if the person has revealed him or herself to be foolish or to lack poise. Nevertheless, as we have seen, this aversive quality is not essential, and a blush can ensue simply because in a given situation the preferred goal of remaining anonymous or inconspicuous is no longer sustainable. Examples in our study include, 'asked to read out something in front of others' and 'standing up in class and speaking out'. Lewis (2001, p. 105) presents a striking example of this. He explains to the students in his lecture hall that he will point at one person in the audience. That individual will be selected in an arbitrary fashion and will not be called upon to do anything. Invariably, he reports, the person who is pointed at will blush and show other signs of psychological discomfort.

Conversely, if the person seeks a conspicuous role then becoming the centre of attention would produce no breach unless that role is threatened in some way or the person loses confidence in the ability to sustain the role, and the individual will be 'exposed'.

The *topic* category is perhaps most obviously related to the theme of the breach of the boundary. Something that is kept hidden is brought into the open, or there is a threat that it will be revealed, and this represents a clear invasion into private aspects of the self. There are several instances of this in responses to our questionnaire survey. Examples from other sources are readily available. In his novel, *The Aspern Papers*, Henry James provides a succinct example, 'Miss Tina ... blushed at hearing her history revealed to a stranger' (1888/1984, p. 28). I recently read in Malmesbury Abbey a memorial to one Reverend John Andros, who died in 1842 and whose eulogy includes the lines:

He did good by stealth
And blushed to have it known.

In a more contemporary example, a television programme interviewed a young actress in a children's series and showed her reactions to a film that had been made previously, without her knowledge, displaying what was under her bed at home. She visibly blushed and covered her face with her hands¹⁰. In this instance, it is not so much being the centre of attention that is the issue, since she is already aware that she is the focus of public attention, it is surely her apprehension that aspects of her private self will be revealed.

The notion that a blush as a reaction to a breach of the self-other boundary is plausible, particularly if it is understood, in line with the position espoused by Altman and Petronio, that there is no implication that the boundary is fixed. Where it will be drawn in any particular social encounter will depend on a range of cultural, situational, interpersonal and individual factors. Thus I may blush at a sexually explicit scene when watching television in the presence of my parents or children but not when in the company of friends.

Nevertheless, there are problems with this position: Blushing and embarrassment are not the only responses to an intrusion of privacy. This can also give rise to anger or indignation and evoke an aggressive response, although it is interesting that these can also result in facial flushing or reddening, reactions not usually labelled as a blush. Someone who sits too close to us, or who asks us intrusive questions, may make us angry rather than cause us to blush. Under what circumstances would a breach of the boundary result in a blush? One answer might be that it is the combination of the breach and embarrassment that evokes a blush. However, as we have noted, many theorists make the assumption that the blush is separate from embarrassment. Another answer to the question is that a blush ensues when the individual sees herself at fault or is otherwise vulnerable but this raises again the problematic cases of blushes evoked by praise, thanks and compliments or simple conspicuousness.

An alternative position is to relate these processes to self-consciousness. This term has been interpreted in various ways by social psychologists (Buss, 1980; Snyder, 87) but one theme that recurs in philosophical, sociological and social psychological discussions is that self-consciousness entails taking another perspective on the self: The individual views the self as if from outside. For example, Taylor (1985) relates shame and embarrassment to the individual's awareness of a discrepancy between his or her current state or action and a *possible detached observer description* of this state or action. This position acknowledges that the individual is not necessarily taking the actual perspective of any particular other. Self-consciousness is taken to be a key element in the experience of shyness, shame and embarrassment, and all these emotions have been suggested by at least some theorists to involve blushing. It may be that blushing is the 'hallmark' of self-consciousness, and that the mechanism involved might be the breach of boundary of the self that this state entails. That is to say, awareness that

¹⁰ BBC Children's Television programme, Saturday 17th August 2002

the self is vulnerable to being observed could produce a distinctive state of sympathetic arousal, not one of 'fight or flight' but one of elevated attention or wariness.

Consider the case in our study of the woman who blushes when she speaks to someone to whom she is attracted. This is not a reaction to attention, unwanted or otherwise; if anything, it risks drawing attention to herself. Nor is she taking the perspective of the other person since she does not have to believe that he is aware of her feelings for him in order to blush. Yet it is surely relevant that she blushes *in his presence*; there is no reason to believe that she blushes when she is on her own and simply thinking about him. Nor is this idiosyncratic, there are other examples in the survey and in other sources of evidence¹¹. My interpretation is that her feelings are in a sense 'out in the open' or 'exposed' when she speaks to him because she is self-conscious about them. They are not exposed *to* him or indeed to anyone else, but her consciousness of them in his presence takes them out of the private and makes them potentially accessible.

7. Conclusions

Blushing is as yet little understood and presents many problems for psychological theories of the emotions, including embarrassment. It is assumed by several theorists that the blush is an expression of embarrassment, that it follows unwanted social attention, and that it functions as a signal of apology or appeasement. Yet each of these assumptions can be challenged. There can be embarrassment without a blush and blushing without embarrassment. A blush can bring about undesired attention from others rather than ensue from it. The involuntary nature of the blush together with the range of situations where it can occur raise problems for the view that its primary function is to influence others.

Understanding the nature of blushing requires theoretical developments and further empirical evidence about the causes of the blush. It is argued here that many instances of blushing represent an exposure of private aspects of the self. There is limited empirical evidence about the situations that elicit a blush. Factor analytic studies suggest that it occurs in two kinds of situations. One factor is related to social attention, the other is more difficult to interpret, but the items seem to overlap with what we have labelled as 'exposure'. No research has attempted to classify the kinds of situations that elicit a blush. In an approach to this, a sample of students was asked to recall and describe episodes of blushing. Content analysis of their responses showed that the exposure of private information or reference to sensitive or intimate topics frequently elicited a blush. The most commonly mentioned reason to blush was receiving praise or compliments and it is argued here that this too can be understood in terms of exposure of private aspects of the self. The pattern of responses differed from the pattern that was found when a similar content analysis was applied to recalled situations that elicited

¹¹ In a mundane incident in Stan Barstow's novel, *A Kind of Loving*, a young woman blushes when a young man whom she hardly knows speaks to her on a bus.

embarrassment or when it was compared with an existing taxonomy of embarrassing situations. It is argued that blushing is a reaction to self-consciousness and to a breach of the boundary between private and public aspects of the self. Nevertheless, further research is needed to analyse this claim more closely and to establish its limits.

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Table 1: Blushing scheme

Code	Cause of blushing	Examples
C - Centre	Being centre of attention; singled out; in the spotlight	<ul style="list-style-type: none"> • Speak up in front of others • Thanked/applauded/praised/complimented • Teased/ribbed/mocked/made fun of/laughed at/criticised/ corrected/reprimanded • Accused/challenged • Comment is made about you • Say/do something foolish in front of others • Say/ do something that makes you conspicuous
P - Person	Something about the person you are interacting with	<ul style="list-style-type: none"> • Boss, teacher, authority figure • Person of opposite sex • Sexual attraction
T - Topic	The topic of conversation	<ul style="list-style-type: none"> • Personal or sensitive topic • Recognise sexual allusion/reference/implication/connotation in what is said/done • Expose more of private affairs than you would want known; • Divulge secret/ alludes/refer to something you think is personal/want to keep hidden; past embarrassing event; • Refer to topic that is culturally sanctioned/ taboo/ought to be kept hidden for a given audience • Say something that would cause offence to/embarass another if recognised
O - Other	None of the above	