

## A Taxonomy of Non-verbal Responses to Gossip

**Bronagh Allison**

School of Psychology  
Queen's University Belfast  
Northern Ireland  
ballison01@qub.ac.uk

**Gary McKeown**

School of Psychology  
Queen's University Belfast  
Northern Ireland  
g.mckeown@qub.ac.uk

### Abstract

Gossip is the exchange of socially relevant information. Sending and receiving gossip is a communicative process that involves evaluation of the information by the sender and receiver, with the receiver signalling their response by facial expressions or acoustic social signals. Responses to gossip may be positive or negative. Positive responses may be visual or acoustic, and negative responses may be indifferent or neutral. Here we will present a preliminary development of a taxonomy of the types of facial and acoustic responses displayed when an individual receives gossip information. This research will be developed to encompass a wider variety of social interaction and conversation events.

### 1 Introduction

Gossip is an exchange of socially relevant information between people in social interactions. People spend a high proportion of conversation time gossiping with those in their wider social group. Estimates for the amount of time that humans engage in social information exchange range from 66% of conversation time (Dunbar et al., 1997; Dunbar, 2004) to a more conservative 14% (Robbins and Karan, 2019) of conversation time spent gossiping. The differences in these estimates are largely due to the precise definition given for the behaviour of gossip, with the broader definitions including any social information exchange and tighter definitions constraining gossip to social information concerning an absent third party. Nonetheless, gossip in its various forms makes up a large proportion of social interaction, and, given the extent of its role in human life, it is a human behaviour that is highly understudied. In our research we view gossip in an interactional frame. It is not something that a single person does; it is an interpersonal dynamic process,

involving both a sender and receiver of the social information. Therefore, we refer to a gossip episode and do not view gossip as simply the information that the sender of the communication transmits; it is a communicative process involving the information, judgement and the concomitant response with evaluative signalling provided by the receiver. Typically, there is a protracted interactive dynamic where both interlocutors swap roles.

### 2 Social functions of facial expressions and non-verbal communication

There has been a long-standing debate among emotion theorists concerning the nature of emotion-related expressions and signals (Parkinson, 2005). Typically, this takes place in the world of facial expressions due to the influential work of Paul Ekman. Early challenges to the dominance of this view were propounded by Fridlund (1994) and Russell (1994), and recently Crivelli and Fridlund (2018) have asserted that established research into facial expressions in response to stimuli has become outdated and in need of revision. Citing Ekman's basic emotion theory (BET), (1972; 2017), they suggest that the classical view that a felt emotion can be directly transposed onto a facial expression does not take into account the wider social context an individual is experiencing. Crivelli and Fridlund (2018) suggest that an alternative view is more apt in examinations of facial expressions and felt emotion. They posit the behavioural ecology view of facial displays (BECV) to move understanding of the interplay of facial expression and emotion forward to include social context and external factors. For Crivelli and Fridlund (2018), facial expressions in response to stimuli in the social world are not displays of the felt emotions. Rather, expressions are social tools people use to navigate their way

in a social interaction. According to this view, an individual may display a facial expression that in classical terms could be described as disgust or surprise, but the expression has a function in the interaction as a social signal for a conversation counterpart. The individual making that expression may be feeling neither disgust nor surprise but may be sending a message of interest or disinterest to their partner.

### 3 Motivated Gossip

In considering gossip as communication, we draw on theoretical work suggesting that much of animal and human communication is self-interested and oriented towards the goals of the sender (Dawkins and Krebs, 1978), although such communication in animals must remain honest as information that is unreliable and uninformative at some level will soon be ignored by a receiver and become extinguished (Searcy and Nowicki, 2005). Human communication can be more complex with no necessity for veracity—for example, flattering a narcissist—but remains motivated to the sender's goals. Human gossip communication is often thought to be motivated by a desire to manipulate the sender's social environment, seeking to influence others and undermine rivals or the subject of the information and is often thought to be salacious in nature. Here we follow the Dunbar's view that gossip is a process more akin to social grooming than an attempt to manipulate the social world (Dunbar, 2004). Similarly, we view the goal of human communication seeks to display an understanding of the receiver's mind such that the sender provides information that they think the receiver will wish to hear (McKeown, 2013).

From the sender's perspective, a gossip episode involves a communicative display—the new social information provided in a gossip episode serves as a signal by the sender to display to another individual that the sender understands the receiver's desire to hear this news. Given that gossip is commonly about highly socially relevant information concerning an absent third party, this is a scenario that can involve considerable social risk. A poorly judged provision of information can lead to social sanction.

From the receiver's perspective a gossip episode contains a strong evaluative component. There must be a fast decision concerning the value of the social information and a judgement of

the social decision-making of the sender on the assumption that the receiver will value the provided information. The risk of getting that wrong would be the issuing of a rebuke by the receiver. The evaluative signal of a gossip receiver often contains strong non-verbal elements; facial expressions and acoustic social signals are tools the receiver of gossip information uses to signal their enjoyment or otherwise of the gossip. These verbal, non-verbal and facial responses accompanying gossip signal the receivers evaluative judgement about the decision-making of the sender.

### 4 Current Study

The current study seeks to examine the non-verbal signals that make up the evaluative component of any given gossip episode. Taking audio-visual recordings of real human conversations between friends as the study material, annotations of moments of gossip have been created and then categorised according to a coding scheme. These form the basis of the gossip episodes, and the sender is the person established to be providing the socially relevant information. The acoustic and visual non-verbal signals given in response to the provision of this information are the material of interest.

### 5 Stimuli

The stimuli are taken from conversations gathered as part of the ILHAIRE laughter database (McKeown et al., 2012) in which a series of pairs of friends were recorded as conversational dyads. The task participants were instructed to complete was to have a natural conversation with one another. They could ask the experimenter for a topic of conversation if they found the initial conversation dried up. The topics were taken from a random topic generator found on the internet and included topics such as personal finances, Star Wars, heavy metal, or political parties. Conversations lasted for more than an hour and naturally drifted into many topics, often no topic was asked for and the most topics asked for was 10. There were three female-female, three female-male and two male-male dyads in the database. The presence of gossip-style social information exchange was high in these dyadic interactions, with many individual cases of social information being passed and a corresponding response.

## 6 Gossip Coding Scheme

A number of categorisation schemes have been suggested, and a recent useful version is provided by [Robbins and Karan \(2019\)](#). The scheme used in the current study involved a categorisation in two major categories: personal gossip and parasocial gossip. Personal gossip concerns people who are directly known to the person providing the social information and typically also known to the receiver. Parasocial gossip concerns people known to both interlocutors but not directly, these are celebrities, politicians, and people from popular culture. Personal gossip was then subdivided into four further divisions: talk about people known to both interlocutors; talk about oneself in relation to an individual the conversation partner knows; talk about oneself in relation to an individual the conversation partner does not know; and conversation about oneself. The current study concerns the responses to this gossip.

## 7 A Preliminary Taxonomy

Here we will present an initial taxonomy of the variety of responses that we have catalogued in response to the delivery of gossip-style social information. These come in a variety of contexts. The context in which a receiver evaluates the information and its provision in a positive manner, evaluations that are neutral, and those that are negative providing signals of displeasure or indifference to the provision of the information. [Table 1](#) shows the categories of the preliminary taxonomy.

Positive reactions to gossip present in visual and acoustic ways. Perhaps the most stereotypical positive display combines the facial expression often associated with surprise, that is, raising of the eyebrows, widening of the eyes and a jaw drop, and that is combined with the acoustic sound associated with a sharp intake of breath or a gasp. [Figure 1](#) shows the most positive reaction to a piece of gossip information: a surprise face with a gasp.

Other positive reactions include laughter of varying degrees of intensity dependent on the level of positive evaluation, either explosive, sniggers or silent laughter; shaking of the shoulders; or using hands to cover the mouth or eyes. [Figure 2](#) shows another positive reaction to a piece of gossip information, this time an intense laughter response

Figure 1: Example of a classic gossip response: surprise-style expression accompanied by a gasp



Figure 2: Example of an intense laughter gossip response



Negative evaluations of the social information associated with gossip are signalled by indifference to what has been said, moving the conversation forward without acknowledging the social information, or scornful or contemptuous response indicating displeasure and the likelihood of diminished social standing as a consequence of the provision of the information. [Figure 3](#) shows a negative reaction to a piece of gossip information: an indifferent expression accompanied by a quick change of conversation. [Figure 4](#) shows a negative reaction to a piece of gossip information: an expression of contempt accompanied by silence.

## 8 Discussion

The work presented here is an ongoing project, and we intend to increase the granularity of the taxonomy and develop quantitative evidence for the frequencies with which each of these responses appear in the conversations that we have. Elements such as mimicry and broader conversational context are missing from this account. Future work

Valence	Visual Signal	Acoustic Signal
Positive	Surprise-style expression	Intake of breath/Gasp
Positive	Intense Laughter	Intense Laughter
Positive	Low-intensity Laughter	Low-intensity Laughter
Positive	Silent Laughter	No sound
Neutral	changing topic	Speech
Negative	Indifference	Speech
Negative	Contempt	No sound

Table 1: Preliminary Taxonomy of Response to Gossip.

Figure 3: Example of a negative gossip response: indifference



Figure 4: Example of a negative gossip response: contempt



will extend the taxonomy to include a broader range of conversational features.

We suggest that positive responses to gossip signal to the sender of the information that they have understood the social interests of the receiver, that such information may be welcome, and that the conversation may continue. Negative responses suggest that the social value of the gossip is determined by the responses of the receiver to the information. The use of these facial expressions, while similar in nature to some of the Ekman-style faces, present a much more socio-communicative and context-dependent motivation more in line with the behavioural ecology view than a read-out of felt emotion account.

## References

- Carlos Crivelli and Alan J Fridlund. 2018. Facial displays are tools for social influence. *Trends in Cognitive Sciences*, 22(5):388–399.
- Richard Dawkins and John R Krebs. 1978. Animal signals: information or manipulation. *Behavioural ecology: An evolutionary approach*, 2:282–309.
- Robin IM Dunbar. 2004. Gossip in evolutionary perspective. *Review of general psychology*, 8(2):100–110.
- Robin IM Dunbar, Anna Marriott, and Neil DC Duncan. 1997. Human conversational behavior. *Human nature*, 8(3):231–246.
- Alan J Fridlund. 1994. *Human facial expression: An evolutionary view*. Academic Press.
- Gary McKeown, Roddy Cowie, Will Curran, Willibald Ruch, and Ellen Douglas-Cowie. 2012. Ilhaire laughter database. In *Proceedings of 4th International Workshop on Corpora for Research on Emotion, Sentiment & Social Signals, LREC*, pages 32–35. Citeseer.
- Gary J McKeown. 2013. The analogical peacock hypothesis: The sexual selection of mind-reading and relational cognition in human communication. *Review of General Psychology*, 17(3):267–287.
- Brian Parkinson. 2005. Do facial movements express emotions or communicate motives? *Personality and Social Psychology Review*, 9(4):278–311.
- Megan L Robbins and Alexander Karan. 2019. Who gossips and how in everyday life? *Social Psychological and Personality Science*, page 1948550619837000.
- James A Russell. 1994. Is there universal recognition of emotion from facial expression? a review of the cross-cultural studies. *Psychological bulletin*, 115(1):102.
- William A Searcy and Stephen Nowicki. 2005. *The evolution of animal communication: reliability and deception in signaling systems*. Princeton University Press.