

Commentary piece

Jokes optimise social norms, laughter synchronises social attitudes: an evolutionary hypothesis on the origins of humour

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Abstract

A prominent humour theory suggests that most jokes will violate a subjective moral principle. This paper explores the ramifications of Thomas Veatch's social violations theory of humour, and hypothesizes that jokes tend to produce four distinct humour emotions, in a sequential manner. The final emotional response to a humorous stimulus involves an aesthetic judgement about the inference of the joke. Humour could therefore be a cognitive-emotional mechanism used to appraise social norms while laughter serves to signal appreciation for the social inferences associated with the joke. It is further proposed that the cognitive-emotional structure of humour implies an evolutionarily adaptive function.

Keywords: humour, laughter, jokes, evolution, social norms, emotions.

1. Introduction

Humour is one of nature's most complex phenomena. The use of symbols, language, working memory and abstraction are integral to higher order cognition and all of these functions are subservient to humour processes. Humour seems to be a distinctive phenotypic trait, and, as such, could very well represent an evolutionary adaptation. This paper proposes that the primary evolutionary function of humour is to optimise social norms, while laughter serves to synchronise social attitudes around subjective social norms.

This hypothesis is based on a number of suppositions, some of which may be more or less acceptable to each individual reader. The two most fundamental assumptions are: 1) humour is an evolutionary adaptive phenotype, and 2) social violations are a key component of humour discourse, as described in Thomas Veatch's social violation theory of humour

(Veatch 1998). This paper could also be seen as an extension of Veatch's ideas, highlighting the potential evolutionary ramifications of his theory.

Before examining the inner workings of humour, it is important to remember that humour and laughter are closely related, but not synonymous. Humour is that cognitive process that frequently, but not necessarily, leads to laughter. Laughter is a partially involuntary, seizure-like, vocal expression that can be elicited by perceiving a humorous stimulus, but also other stimuli such as tickling. Therefore, it is possible to laugh without a humorous stimulus and perceive humour without laughter.

1.1. Is humour an evolved trait?

Humour possesses a number of qualities that invite evolutionary explanations. For example, humour is universally found in all societies, which suggests that it is not a cultural accident, but instead, an innate behaviour supported by specific hard-wired neural systems (Preuschoft and van Hooff 1997, Gamble 2001). It has been proposed that humour is at least 35,000 years old, based on its presence in those isolated Australian Aboriginal communities first contacted by European explorers in the 19th century (Polimeni and Reiss 2006). Humour and laughter can be accompanied by intense positive feelings, similar to other evolutionary advantageous activities like sex and eating. Humour also appears to be a form of communication, like facial expressions or body gestures. Although humour can exploit language, its themes will often emphasise a certain aspect of verbal communication. The loudness of laughter also suggests that it may be a purposeful signal to other conspecifics (i.e. laughter seems to communicate that one appreciates some component of the humour message).

There have been a number of hypotheses speculating on the ultimate evolutionary purpose of humour: 1) humour enhances social status through ostracism, which modifies social hierarchies in the service of social unity (Alexander 1986), 2) humour induces individuals to "seek out informative social stimulation and to reward others for providing such stimulation" (Weisfeld 1993), 3) A "false alarm theory" that suggests "the main purpose of laughter is for the individual to alert others in the social group that the anomaly detected by the individual is of trivial consequence" (Ramachandran 1998), 4) humour and language are surrogates to social grooming in primates (Barrett *et al.* 2002), 5) humour and laughter signal empathy and a readiness to cooperate (Jung 2003), 6) humour is a form of group-selected honest signalling that coordinates the emotions and actions of group members (Gervais & Wilson 2005), 7). Gil Greengross and Geoffrey Miller (2011) suggest that humour may have partly evolved as an indicator of intelligence for potential mates. Moreover, they have begun to generate experimental data in support of their theory.

It must be understood that many complex cognitive behaviours solve more than one problem (e.g. language, working memory, theory of mind, anger) and thus, humour may have a multi-dimensional evolutionary purpose. Adding to this ambiguity is the fact that not every expression of an evolutionarily adaptive trait is actually evolutionarily advantageous—only the sum total of all expressions are adaptive. For example, some expressions of anger can be disadvantageous, but having no ability to become angry is undoubtedly worse. Therefore, not all expressions of humour are necessarily evolutionarily advantageous.

How does one separate the core functions of humour from incidental ones? For example, for any close-knit ornery animal like *Homo sapiens*, using humour to gauge social differences would appear to be enormously beneficial. In contrast, the use of humour in courtship may be incidental, because sexual attraction can still be powerful without individuals being funny. A clue to the primary evolutionary purpose of humour may be found by asking what social problem does humour uniquely solve? In other words, what evolutionary problem does humour solve that older phylogenetic traits (e.g. language) do less effectively?

1.2. Thomas Veatch's social violation theory of humour

In 1998, Thomas Veatch made a conceptual leap in our understanding of the cognitive mechanics of humour (Veatch 1998). He proposed that a humorous stimulus contains two “views of a situation”: one view represents a normal “moral” perspective and the other view contains a violation of the “subjective moral order”. Veatch defined morality as the “rich cognitive and emotional system of opinions about the proper order of the social and natural world” (p.168). It appears that Veatch was referring to every culture's arbitrary social order (e.g. customs) and accompanying social expectations. In my view, Veatch's use of the term “moral” is better characterised by the concept of social norms.

Thus, for Veatch, humour requires: 1) a normal perspective, 2) a perspective containing a social violation and 3) “simultaneity” – the two views are simultaneously perceived in the mind. Furthermore, Veatch inferred that the experience of humour was contingent on an emotional commitment to at least one of the social situations. In other words, some emotion (e.g. anger, fear) would be experienced when learning of the moral violation. Puns, in contrast, are not very funny because they almost always lack an emotionally valent social violation.

Veatch clarified three important concepts related to humour: 1) he replaced the imprecise idea of “incongruity” by a more explicit description—“two views of a situation”, 2) he highlighted the requirement of an “emotional commitment” to the subject matter of a joke, and 3) he proposed that humour always contains a social violation.

Veatch's model seems to take us one solid step towards revealing the cognitive structure of humour. However, there are still significant expanses requiring exploration. First, Veatch never attempted to integrate his findings with evolutionary theory. Second, Veatch presented his theory using linguistic nomenclature rather than neurocognitive models. Third, Veatch suggested that humour contained an emotional investment in the moral order; however, he did not specify which emotional systems or the possible neural correlates of an individual's sense of “moral order”. In this paper, I shall examine critical offshoots of Veatch's humour model, with the hope of further clarifying the cognitive-emotional structure of humour, as well as humour's possible evolutionary purpose.

1.3. Humour resembles play

Some evolutionary psychologists have proposed that organisms can be either in functional mode or organizational mode (Tooby & Cosmides 2001). Functional modes are represented by tangible productive functions such as hunting, eating or having sex. In contrast, organisational modes are represented by practice activities such as play, dreaming or storytelling. Humour appears to fall into the organisational mode because no basic survival function is immediately exercised through humour. Instead, when people share humorous stories, a variety of different social perspectives are being playfully explored. It has been previously proposed that the pleasure of play was evolutionarily co-opted by humour processes (Fry 1994; Gervais & Wilson 2005); and, in fact, there appears to be some evidence suggesting that animal play may have been the original neurocognitive template behind modern hominid humour.

Animal play such as mock fighting or chasing can be observed in a number of mammalian species such as dogs, wolves, monkeys and dolphins. Teasing is a form of animal play that is most evident in primate species (Butovskaya & Kozintsev 1996; De Waal 1996; Gamble 2001). For example, young chimpanzees may throw dirt, hit with sticks or jump on their elders (i.e. mock aggression). Older chimps will typically react in a playful manner such as mock chasing or tickling the youngster. According to primatologist Franz De Waal,

aggression is about exerting authority, and primate teasing “serves to gather information about the social environment and to investigate authority” (De Waal 1996: 114).

Humour is similarly trenchant and playful—and can be used to explore social norms, as well as social authority, in an indirect non-threatening way. As will be explained more fully in the next sections, the structure and content of humour seem especially well designed to explore parameters around social norms. Humour injects a pleasurable and calming feeling while conflicting opinions about social norms (i.e. Veatch’s moral order) are being worked out. The play of animals and young children involves one pretend story line. Humour has that additional step of complexity, because it always contains two story lines about one social situation (i.e. two views of a social situation).

2. The four basic humour emotions

Thomas Veatch suggested that some sort of emotional investment is required for humour, but did not further expand on the issue. Almost every other humour theorist, except Freud (1905), seems to have missed how vitally important social emotions are to humour. Simply, without the activation of socially pertinent emotional systems, humour cannot exist. I propose that there are four basic emotional systems functioning during a joke. It is the fourth and last humour emotion that may dictate the ultimate function of humour:

1. Identification with the social emotions inside the subject matter of the joke, which I have named *Social Transaction Emotions*.
2. Identification with those negative feelings (e.g. guilt, shame, indignation, moral outrage) in response to social transgressions (i.e. violations of social norms) revealed in the joke, which will be referred to as *Violating Emotions*.
3. The positive emotions associated with the inherent joy of laughter, which may be described as *Mirth Emotions*.
4. An inevitable social judgment about the relative merits of the “two views of a social situation”, which is partially based on a cognitive assessment of the situation, but also coloured by our constitutional emotions. In other words, an aesthetic judgment about the quality of a social rule, which I will refer to as *Social Aesthetic Emotions*.

The four basic humour emotions (Social Transaction, Violating, Mirth and Social Aesthetic) typically progress in temporal sequence, although they can sometimes overlap. The first social perspective (i.e. the set-up of a joke) will invariably invoke feelings about the social situation (and characters) represented in the story. Notice that jokes about animals will anthropomorphise their intentions and jokes about objects will deal with the feelings engendered by them. The second social perspective represents the punch line, and will usually contain the social violation (and all its associated social emotions). There are, however, instances when the social violation is presented in the setup of the joke. Also, notice that complex jokes may trigger multiple emotions and generate more than two social perspectives. The third basic humour emotion is the joy felt while laughing, which typically occurs at the point of discovering the second social perspective. The fourth emotional system represents a person's ultimate feelings about the gist of the joke. It represents that natural aesthetic judgment about the two disparate perspectives of a single social situation. It is this last emotional experience that may represent the ultimate evolutionary purpose of humour.

2.1. What is meant by an emotion?

An emotion represents a potentially self-conscious experience, typically triggered by a particular environmental cue. The stimulus of an emotional experience is usually a specific social situation, but it can also spring from internal thoughts. The resulting emotional state makes a constellation of behaviours more probable. For example, sexual arousal can lead to sexual activity, while anger makes violence more probable.¹

Since emotions are initially reflexive, it must also mean that they are entirely irrational. In other words, emotional responses are not rationally deduced. Therefore, complex emotions such as anger, pride or sadness are fundamentally no different than simple stimulus-response reflexes, like the corneal reflex. The corneal reflex suits us fine in the great majority of situations, except when the administration of eye drops is required and then the reflex becomes a nuisance. In that case, logical processes (from the frontal cortex) attempt to override the “irrational” reflex. In a similar vein, the application of wisdom can modify emotions or feelings, such as incorporating certain attitudes (i.e. philosophies) in order to mitigate anger.

Here is a partial list of human emotions: joy, fascination, anger, shame, sadness, fear, jealousy, guilt, envy, schadenfreude, grief, anxiety, admiration and love (Frijda 1988). Basic emotions such as anger or fear seem to reflect distinct neural pathways (Duval, Javanbakht & Liberzon 2015; Denson, Pederson, Ronquillo & Nandy 2008), but subtler emotions are less well understood and may reflect several overlapping subordinate emotions. For example, it is not precisely known how fascination is related to joy or grief to sadness.

2.2. Social Transaction Emotions: the first sentiments of a joke

Every joke contains at least two views of a social situation, which will inevitably generate contrasting emotions. For a joke to be funny, the storyline must contain at least one reference to a human emotion. The simple presence of an emotionally charged word, such as “mother”, may be all that is sometimes required. The listener must identify with at least one presiding emotion in the premise of the joke—presumably by recollecting certain associated emotions or perhaps reactivating those emotions through mirror neurons. Let’s look at an example joke:

An old woman is upset at her husband’s funeral. “You have him in a brown suit and I wanted him in a blue suit”. The mortician says, “We’ll take care of it ma’am” and yells to the back, “Ed, switch the heads on two and four”.

One perspective of this social situation reflects pure occupational efficiency, which is to simply switch heads rather than undress and clothe two cadavers. Since we are dealing with corpses, severing their heads does not cause any tangible harm (i.e. the perspective from an indifferent mortician). The alternate social view (i.e. grieving widow’s perspective) is that the mortician is desecrating the dead. This second perspective is based on those universal emotions of attachment that irrationally persist to the bodies of the dead. The residual feeling of attachment to a deceased body represents the first emotion activated in the storyline of the joke. The violation of the social norm is contained in the mortician’s indifferent behaviour, which elicits feelings of moral outrage (i.e. anger in response to a perceived social transgression) and brings us to the second basic emotion associated with jokes.

2.3. Violating Emotions: feelings of moral outrage upon realising the violation of a social norm

Veatch's theory proposes that one required component of humour hinges on a violation of the "subjective moral order"—an expression that is perhaps better characterised by the concept of social norms. Following this thread, a natural question would be what exactly is meant by the idea of a social norm? In other words, how have social norms been shaped by evolution and how are social expectations neurologically represented in the brain? It would also be important to consider whether social norms have a phylogenetic history and if there are any sociobiological principles guiding their design.

A social norm represents a set of expected behaviours during social interactions. Social norms can be traced back to a number of prototypical primate behaviours. The expression of social norms appears to be a function of the hierarchical social structure of group living. It has even been argued that the necessity of primates to negotiate dominance hierarchies was the main driving force behind hominid social intelligence (Cummins 1998, 1999).

A dominance hierarchy is an evolutionary based social structure that allows aggressive species to aggregate in groups, yet maintain cooperation. In a dominance hierarchy, possessing higher rank is associated with easier access to resources, including reproductive mates. This "pecking order" system accrues advantages to the higher ranked individual (i.e. individual selection) by not having to fiercely compete with every other conspecific, as well as evolutionary advantages for the group (i.e. multi-level selection) by diminishing internal conflict. In primates, social norms determine, for example, priority access to food, availability of mates and the balance of time spent being groomed versus grooming others. "In order to stay out of trouble, subordinate individuals must recognise what is *permitted* and *forbidden* given their place in the hierarchy. To maintain the status quo, high-ranking individuals must *recognise instances of cheating* and punish the transgressor forthwith. In other words, they must defend their privileged access to resources" (Cummins 1998: 35). Therefore, a number of self-conscious emotions, such as pride, shame, guilt and moral outrage (i.e. anger in response to a perceived transgression) may have never existed if it weren't for the evolutionary advantages of a dominance hierarchy system (Weisfeld & Dillon 2012).

Social norms and their conforming behaviours can be maintained by emotions that either change behaviours in oneself (e.g. guilt, shame, pride) or change behaviours in others (e.g. anger, adulation). Thus, a social stimulus has the ability to reflexively trigger self-directed emotions such as shame or pride (that make pro-social behaviours more probable in oneself) or policing emotions like anger, disdain or adulation, which signal potential negative or positive consequences towards others.

It therefore appears that many self-conscious social emotions (e.g. pride, happiness, sadness, social anxiety, guilt, embarrassment, shame and anger) largely exist to help negotiate an individual's social status inside the group. Moreover, all of these emotions heavily contribute to self-identity (i.e. sense-of-self, self-esteem). The existence of both policing (e.g. anger) and self-monitoring emotions (e.g. guilt) creates the pretence of expectation—and such expectations interacting with local cultural values leads to distinct social norms.

It is a fascinating characteristic of humour that every joke contains a reference to a violation to a social norm. I would argue that to fully appreciate a joke (and laugh), one must identify with those emotions of moral outrage (i.e. anger in response to a perceived transgression) typically felt after witnessing a social violation. Let's examine a typical joke:

An elderly man is driving on the highway. His wife calls him on his cell phone and in a worried voice says, "George, be careful! I just heard on the radio that a madman is

driving the wrong way on the Dan Ryan Expressway”. George says, “I know, but there isn’t just one, there are hundreds!”

The two disparate social views are: 1) society’s perspective of a single car going the wrong way, and 2) the elderly man’s egocentric perspective. Although there are a number of emotions generated in the story like anxiety and fear, the most critical Social Emotion seems to be related to narcissism—the common feeling that our opinion is the correct one despite having no special expertise above others. The feeling of confidence can be so powerful that it sometimes flies in the face of overwhelming evidence to the contrary. It is that egocentric feeling that ultimately contributes to the Social Violation, which causes natural feelings of disapproval (Violating Emotion) in the knowing observer. Here is another joke:

Two old actors are sitting on a bench. One says, “How long has it been since you had a job?” The other actor says, “thirty-two years—how about you?” The first actor says, “That’s nothing. I haven’t had a job in forty years!” The other says, “One of these days we’ve got to get out of this business!”

The first perspective reveals two old men who see themselves as actors. Due to the length of time without a job, the premise that the two are still actors is tenuous but the listener does not overtly challenge it in their mind—until the punch line, (“One of these days we’ve got to get out of this business!”) which directs the listener to a thought like, “Come to think of it, these two guys *are* actually out of this business”. The punch line also reveals the social violation: two old men are inflating their egos by calling themselves actors, a high-status profession, when, in reality, they are no longer actors. The primary Social Transaction Emotion is pride, while the Violating Emotion is the observer’s natural annoyance to false pride. The annoyance may be barely perceptible since the listener is not likely to feel overtly threatened by the hubris of two old men. Notice that the social violation is relatively benign to the listener, which allows for laughter (McGraw & Warren 2010).

2.4. Mirth Emotions: the joy of laughter

The neurocognitive processing of a joke leads to laughter, which is accompanied by a sensation of pleasure. The joy that accompanies laughter is an entirely separate emotion from the specific emotions inside the narrative of a joke. Arousal theories of humour (Berlyne 1972) have typically failed to separate the joy derived from a humorous stimulus from the emotions inside the subject matter of the joke. This is important because it seems there are two separate emotional systems—1) the specific emotions that accompany the subject matter of the narrative and 2) the joy of laughter. These two emotional systems are however connected because the intensity of the Violating Emotions seems to significantly influence the passion of the Mirth Emotions.

There appears to be an optimum emotional state (U-shaped response curve) for those emotions attached to the Violating Emotions: too little moral outrage (e.g. a sexual joke that is too innocent) and the joke is not funny, while too much moral outrage (9-11 jokes that were considered “too soon”, or dead baby jokes when told to pregnant mothers) will also diminish the mirth of the subject. McGraw and Warren (2010) use the term “benign violation”, while also acknowledging the existence of weak emotional commitments to those violated social norms. Therefore, it would seem that they mean *relatively* benign violations, which would be consistent with a U-shaped arousal curve. In fact, this is often the primary task for a comedian—to touch upon subjects with just the right amount of social tension. It should also be noted that although the social violation may be immediately benign to the

listener, the subject matter usually involves important social dilemmas that could someday be meaningful.

There are other factors that affect the emotional arousal preceding a joke and can therefore optimise the joy of laughter (Mirth Emotion). For example, 1) the contagion of other people laughing, 2) positive mood states 3) coincidence, cleverness, surprise, or unusual stimuli and 4) the proper timing of the delivered punch line.

2.5. Social Aesthetic Emotions: making judgments about social rules

The first three emotions of humour (Social Transaction, Violating, and Mirth) serve to establish a fourth and final emotion, which is an inevitable aesthetic judgment about the relative merits of those two perspectives of a social situation. It is this last emotion that may be most evolutionarily important, because it can ultimately change a person's opinion (and associated behaviours) towards a social norm. The delivery of a certain incisive joke, as well as the accompanying laughter, can be viewed as a public pronouncement of one's relative sympathies to various social perspectives, which can then modify social norms. For example, in order to laugh at the Widow and her Deceased Husband in the Wrong Suit joke, an individual must recognise that desecrating the dead may not be a strictly abhorrent act (e.g. many individuals have excused cannibalism in situations of possible starvation). If a group of citizens laughs raucously at this joke, it could serve to soften the taboo, which may, in turn, provide evolutionary advantages by lifting the burden of strict adherence to a certain tribal ritual. Such social signals, through humour and laughter, could conceivably modify, ever so slightly, the behavioural repertoire associated with social norms.

Why use the term *aesthetic judgment* to describe humour's fourth emotion? According to aesthetics research (Tooby & Cosmides 2001; Leder *et al.* 2004), aesthetics involves a cognitive assessment, as well as an emotional component (i.e. "affective state satisfaction"). For example, positive feelings about a piece of music will involve both an emotional response to the various minor (sadness) or major chords (joy), but also a cognitive assessment of the structure and originality of each song. Similarly, opinions about social interactions and their associated social norms will involve both cognitive and emotional components. The cognitive assessment of a social situation may involve learned behaviours, cultural values and applied logic. The emotional response to a social situation may involve innate feelings that vary from person to person (i.e. genetic variation) and influence opinions about social norms. For example, our innate propensity towards feeling anger about social injustice could influence our opinion about a related social norm. Other possible emotions that could conceivably colour social norms may be social competitiveness, conformity, jealousy, libido, empathy and vanity, to name a few. Any of these emotions could be affected by constitution (i.e. genetic) personality traits.

Laughing at a joke turns out to be an honest aesthetic judgment, pronouncing that one understands the challenge to the social norm (a hearty laugh may even signal sympathy to such a challenge). Therefore, laughter is a form of honest signalling between hominids, an idea previously developed by Matthew Gervais and David Sloan-Wilson (2005). Although jokes can sometimes be inscrutable, more often than not, the gist of a joke is clear. The potential ambiguity of a joke lies in how emotionally invested the joke-teller (and laughter) is to the subject at hand. For example, teasing the boss could be as innocuous as a gentle reminder of some minor displeasure or alternatively, it could be hiding seething anger.

2.6. The cleavage points of humour

During a funny story, laughter is triggered the moment one discovers that second social perspective—a process that happens unconsciously and reflexively. Although some cognitive

constituents behind humour may be unique, the evolutionary principle of homology suggests that it is likely that certain cognitive aspects of humour may have derived from an already established neuroperceptual apparatus. In thinking about this problem, I propose that the perceptual experience of witnessing a Rubin's vase (those drawings of a vase that also outline a face) is perhaps the best metaphor for what is happening during a humorous neuroperceptual experience. There appears to be an exciting moment when one discovers the second separate perceptual experience derived from only one stimulus. Similarly, witnessing an alternate social perspective from one social situation may generate that increased arousal that triggers laughter. The clearest example may be with Henny Youngman's old joke, "Take my wife...please", where initially Mr. Youngman seems to be using his wife as an example for some incidental idea and then says "please", implying he wishes to get rid of her (i.e. the social violation).

It is a wonder how an entire audience can listen to a long convoluted joke yet reliably home in on the same two views of a social situation. Determining the cleavage points in a joke can be difficult, especially in jokes containing rich narratives. In contrast, impromptu social humour tends to be simpler. Many popular jokes seem to reveal additional social perspectives (three or more); however, it is not entirely clear whether such examples represent two jokes inside one story or, alternatively, each additional social perspective serves to enhance the funniness of the punch line. Moreover, the premise of a joke is often obscure, yet it can markedly influence each social perspective. For example, self-deprecating jokes always contain the implied premise that the joke-teller is not completely incompetent (i.e. still retains something to be proud about); otherwise, such stories would be sad, rather than funny.

3. Counterexamples

Complex human behaviours are not typically guided by firm universal laws; and accordingly, there are potential counterexamples to Veatch's social violations theory. In addition, not all jokes are necessarily suffused with a series of emotions. A pun, for example, is a subtype of joke that relies more on word-play than social violations or emotional properties.

There are certainly other jokes, difficult to categorise, that do not possess obvious social violations or emotional valence. Take, for example, the old joke, "Why did the chicken cross the road? - To get to the other side". There may be a faint echo of a social violation, because the response is glib and not very informative, but otherwise, there is no discernible social violation and little emotional valence.

There are other jokes, previously analysed by humour theorists that seem to lack an obvious social violation or palpable emotional content. For example,

1) "How far can the dog run in a forest? Only half way. After that it will be running out of it" (Rothbart and Pien 1977) or 2) "What is the difference between the sparrow? No difference whatsoever. Both halves of the sparrow are perfectly identical. Especially the left half" (Raskin & Triezenberg 2003). Although most risible jokes seem to contain social violations and emotional qualities, the ability to retain a semblance of a joke without such features is thought-provoking, and could eventually assist in deconstructing the complex cognitive-emotional structure of humour.

4. Conclusion

Humour is a complex cognitive process conspicuously present in the social life of modern hominids. Although the subject matter of humour typically involves contentious social situations, laughter yields pleasurable feelings. This reinforceable quality suggests that humour and laughter could be evolutionarily adaptive.

Another clue to the potential adaptiveness of humour is its cognitive structure. Thomas Veatch seems to have had a penetrating insight when he noticed that humour universally includes two views of a social situation, and that one of those views typically contains a violation of social norms. When one stops to reflect, it is incredible how hominids, through humour, can effortlessly create perpetual fantasies of breaking social norms, reflexively producing two perspectives of one social situation. In my view, such an activity does not seem to be an accidental by-product of evolution, but instead, a cognitive-behavioural activity especially tailored to produce social benefits.

Veatch also noticed that an emotional investment was critical in the formation of humour but did not further explore the details of the possible emotions. In examining the possible emotions affiliated with humour and laughter, I propose that jokes universally involve a minimum of four basic emotions: 1) a social emotion revealed in the storyline (Social Transaction Emotions), 2) feelings of moral outrage toward a social violation (Violating Emotions), 3) the joy of laughter when two viewpoints are simultaneously revealed (Mirth Emotions) and 4) an aesthetic judgment about the relative merits of each perspective of the one social incident (Social Aesthetic Emotions). It is this last feeling that perhaps most modifies our attitude and adherence towards social norms and therefore has the potential to be an important evolutionary function.

In his theory, Veatch stated that humour violates the “subjective moral order”; however, the concept of social norms is probably a better characterisation. Social norms have a long phylogenetic history and represent a broad set of social restrictions imposed by conspecifics. These social parameters allow aggressive species, like primates, to effectually live in relatively large groups. It appears that there are a lot of common emotions whose partial function is to negotiate social norms—emotions such as guilt, pride and shame, anger, adulation, and disdain. These self-conscious emotions ultimately serve to 1) stabilise hierarchies by reducing intra-tribal conflict and 2) foster altruistic behaviours and promote allegiance to the group.

Following Veatch’s theory, every joke contains a veiled challenge to a social norm. In practice, there appears to be only three general ways to challenge a social norm: 1) introduce a logical argument against the arbitrary social norm, 2) put forward your own selfish interests or 3) introduce another faction’s social norms. An argument of cold hard logic would be represented, for example, in the *Widow and her Deceased Husband in the Wrong Suit* joke. The selfish perspective is seen in many jokes, such as the *Two Old Actors* joke, who are, in essence, acting inappropriately boastful. The alternate faction perspective can be seen in ethnic humour, sexist jokes and other opposing groups (e.g. teenagers versus parents, old versus the young, or management versus employees). It has been my informal observation that all jokes fit into one of these three general categories.

Humour seems to be, above all, a form of communication—one that exclusively deals with the examination of social norms. Although laughter can be suppressed, it is typically expressed as a partially involuntary response, implying that humour is an honest form of communication. The associated laughter implies some degree of sympathy to the social point of the joke. This allows individuals to broach contestable social actions in a playful state of mind. Accordingly, humour is both honest and playful.

Humorous discourse seems to playfully explore that delicate balance between the needs of the individual and the benefits of the group. Humorous themes can either support or challenge a social norm. Humour is sometimes directed towards that excessively selfish individual who flouts communal responsibilities and at other times humour questions outdated social norms. The resulting laughter is a genuine expression of sympathy that supports a certain attitude about a social norm.

The contagiousness of laughter resembles other synchronous behaviours in nature, which implies a potential evolutionary benefit associated with the coordination of humour emotions. The ultimate evolutionary purpose of humour may have been to turn hominid tribes into better decision-making units through the constant recalibration of social norms. The psychology of group-level decision-making is an understudied area of psychology, but may have profound implications upon human evolution. Promoting group level consensus behind the most ideal social norms would seem to be an enormously important matter—one deserved of a trait as common and potent as humour.

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Note

¹ Some authors have attempted to differentiate emotions from feelings (Damasio & Carvalho 2013); however, I will follow broader definitions and use these two terms interchangeably.

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