

Emotions, Deception And Culture: An Ethno Pragmatic Perspective To Sensitize Deception Detection Methods

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Abstract

Research in deception detection has witnessed a lot of correspondence between deception and emotions. The increase in emotion words is attest ably one of the most reported deception cues which are believed to enjoy pan-cultural vitality. One interesting corollary of this assumption is the development of the Linguistic Inquiry and Word Count (LIWC), an automated textual analysis scheme that involves studying the emotional component present in someone's speech or written response to detect deception. Set within this backdrop, this study problematizes the basic premise of this line of inquiry by invoking the intersection between language, culture and emotions. By citing evidence from cross-cultural and cross-linguistic studies of emotions, the paper enumerates various grounds that challenge across the board correspondence between emotions and deceptive speech. Since different cultures code emotions differently and set different expectations about up/down-regulation of emotions in their baseline speech, any analytical scheme based on Anglo culture and English language fails to attend to cultural variance concerning emotion and deception. As an alternate approach, the paper proposes to explicate culture-specific 'emotion scripts' by building culture-specific affect lexicons. Though obliquely related to empirical deception studies, such an approach is an efficient and reliable way to generate different baseline models of emotion which may systematically reflect in deceptive speech.

Keywords: Emotions, Ethno pragmatics, Affect Lexicon, Deception Detection.

تلخیص

دھوکا دہی کی تشخیص کی تحقیق میں دھوکا دہی اور انسانی جذبات کے مابین کافی ربط دیکھنے میں آیا ہے جذباتی الفاظ میں اضافہ یقینی طور پر دھوکہ دہی کے سب سے زیادہ رپورٹ کیے جانے والے اشاروں میں سے ایک ہے

جن کے بارے میں یہ خیال کیا جاتا ہے کہ یہ ثقافتی تغیر سے میرا ہیں۔ اس مفروضے کی ایک دل چسپ شکل لینگویسٹک انکوائری اینڈورڈ کاؤنٹنا می خودکار عبارتی تجزیاتی اسکیم کی صورت میں ملتی ہے جو کسی بیان یا تحریر میں موجود جذباتی اجزاء کا مطالعہ کر کے دھوکا دہی کا پتہ لگانے کی کوشش کرتا ہے۔ اس تحقیقی پس منظر میں کیے جانے والے اس مطالعے کا مقصد اس مفروضے کی سائنسی نوعیت کو اس ربط کی بنیاد پر چیلنج کرنا ہے جو زبان، ثقافت اور جذبات کے مابین پایا جاتا ہے یہ مطالعہ ان ثقافتی بنیادوں کو بیان کرتا ہے جن کی بنیاد پر جذبات اور دھوکا دہی کے درمیان سائنسی تعلق کی علمی حیثیت متنازع ہو جاتی ہے چوں کہ مختلف ثقافتوں میں جذبات کا تصور مختلف ہے اور روزمرہ کی گفتگو میں جذبات کی موجودگی کے بارے میں توقعات کے سلسلے میں ثقافتی تنوع پایا جاتا ہے لہذا انگریزی ثقافت یا انگریزی زبان کی بنیاد پر مبنی کوئی بھی تجزیاتی اسکیم ثقافتی تغیرات کا احاطہ کرنے میں ناکام رہتی ہے۔ ایک متبادل نقطہ نظر کے طور پر یہ مقالہ بر کلچر کے لیے اس کی مخصوص لغت جذبات مرتب کرنے کی تجویز پیش کرتا ہے۔ لسانی اور ثقافتی بنیادوں پر مرتب کی گئی یہ لغات جذبات کے ان مختلف النوع ثقافتی نظریات کو جانچنے کا ایک موثر اور قابل اعتماد طریقہ ہے جو فریب دہ تقریر و بیان کی بنت پر منظم طریقے سے اثر انداز ہو سکتے ہیں۔

کلیدی الفاظ: جذبات، ثقافت، لغت، جذبات، دھوکا دہی کی تشخیص

Introduction

Deception and human capacity to detect deception both make a conspicuous part of the evolutionary package. It provides humans with a survival advantage. The prevalence of lies and deceits in daily life is now an attest ably oft-repeated fact (Peeters, 2018). Though deception has sparked scholarly interest in many fields and disciplines, the most prolific literature is published in the field of psychology. The focus of psychological research is to study mental states that accompany deception and verbal and non-verbal correlates of deception which leak out to make systematic detection of deception possible. Ekman (1992) demonstrates that fear of being caught, excitement about the possibility of cheating someone and guilt associated with the act of deceiving leave the liar detectably different from a truthful person. This assumption forms the core of the most popular stream of deception scholarship called the Leakage Hypothesis. Adherents of this view see deception as a state of arousal characterized by certain cues which tend to leak out to tell on deceptive behaviour. There are certain channels of behaviour that defy strategic control and tend to leak out during the act of deception (Ekman & Friesen, 1969). The idea dates back to Darwin who propounded that certain actions denote emotional states that evade our will to suppress them and get expressed involuntarily (Darwin, 1872). Freud also acknowledged how actions like fidgeting reveal betrayal which is concealed through words (Freud, 1953).

In a number of studies, it has been demonstrated that a deceptive message differs considerably from a truthful one for being loaded with negative emotion words that result out of feelings of fear, shame and guilt associated with the act of lying (Ekman, 1992). Research in deception detection has witnessed much correspondence between deception and emotions. The research focussing on verbal and non-verbal accompaniments of deception has largely focussed on the feelings of discomfort and anxiety created out of the act of lying. Moreover, liars do not necessarily experience the whole range of negative emotions only. Sometimes liars experience very positive emotions (Ekman, 1992). Ekman (1992) names one such emotion as 'duping delight' i.e., delight one experiences in accomplishing the task of befooling others. Emotional overtones are reflected through micro-facial expressions and pitch of voice and the use of more emotion words than are used in baseline speech. He is of the view that looking for imbalanced emotional arousal with an astute eye can lead to successful detection of deception.

Another point of intersection between emotions, deception and lying is a way to balance emotional experience in culturally desired ways (Ekman, 1992). DePaulo et al. (1996) look at emotions not as the result of the act of lying but as a motivation to lie. The lies about feelings form the largest category of lies in the domain of content. By introducing a taxonomy of lying, he introduces a category of 'other-oriented lies' which are told to safeguard feelings of the target person. Moreover, when people lie about their feelings or tell self-oriented lies, they do so to sound more positive, to safeguard their face and privacy and to regulate their own emotions (DePaulo et al., 1996).

Rather than DePaulo's motivation factors, the deception research seems more attuned to Ekman's line of research. The studies based on the Leakage Hypothesis ascribe the leakage to the cognitive load (Vrij, 2000) as well as to heightened emotional arousal (Ekman, 1992). The studies of this kind look for the traces of increased emotions in the verbal and physical expressions of the liar to establish veracity (or mendacity) of the statements. It is believed that a liar may use more negative words like hate, enemy and worthless etc. in their speech than a truth-teller (Newman et al., 2003b). Based on this premise, cue-based paradigm is being spun into practical usage and sophisticated text analytical schemes are being designed to automatize deception detection by looking at presence of certain emotion words in one's speech. These deception detection methods portend these cues as a supra-cultural, universal phenomenon constant across all cultural contexts. Nevertheless, it is important to note that deception, as well as emotions, are constructed within limits of a normative set of responses that are culturally and socially determined and are by no means set in stone. The difference in baseline behaviour directly influences the way deceptive behaviour is perceived

and detected. In the wake of growing cultural sensitivity, it is important to see how these findings located primarily in the North-American context travel across other cultures.

Set within the backdrop of attest ably strong correlation that is believed to exist between deception and emotions, this study ventures to problematize the universality of emotions as a deception cue by seeking insights from ethno pragmatics. By invoking the interaction that exists between language, emotions and culture, the paper challenges the basic premise of increased affect quotient as a leading deception cue and suggests looking for an alternate approach to make deception scholarship more sensitive towards the cross-cultural effects. Cultures can exhibit much variance in how they prefer to channelize emotions in their baseline speech which in turn reflects systematically in any departure from normative behaviour including deceptive speech. The study proposes that the most efficient way to calibrate these cultural differences in the ways emotions are experienced is to build and study a language-specific affect lexicon (a dictionary of salient emotion terms). Moreover, it tries to establish that automatized stylometric sentiment analyses that are based on English emotion categories, may become ineffective for other languages which code emotion differently.

Here it would be apt to limit the scope of the study; It does not challenge the notion of emotion states that accompany deception but only the way increased affect quotient is considered and measured as a pan-cultural or universal sign of deception. It does not introduce any analytical scheme or any deception detection method per se. It simply imports the cultural insights and methods prevalent in ethno pragmatics and tries to synchronize it with deception detection scholarship that still appears to work on the plea of universality and affects so many lives in substantial ways. In the wake of the growing trust that the law enforcement agencies and policymakers are putting in these sophisticated text analyses, sensitizing deception detection methods to cross-cultural effect is crucial for the commonweal.

Review of Literature

The increase in emotion words is attest ably one of the most reported cues in deceptive speech and the fact has been verified in many studies (Newman et al., 2003b; Rubin, 2010; Twitchell et al., 2004; Wu & Zhou, 2015). Presence of an increased affect quotient is considered a non-strategic cue (Burgoon et al., 1995) because it is beyond the deceiver's control even if they are aware of its presence (Toma & Hancock, 2012). Anxiety, guilt and fear of getting caught (Buller & Burgoon, 2006; Vrij, 2000) generated out of social disapproval associated with the act of lying (Vrij, 2000) increases affect quotient indeceptive speech (Burgoon et al., 1995).

The studies in deception measure this state of arousal by keeping tabs on the linguistic behaviour of the deceiver. Negative emotions experienced by the deceiver get reflected either in words with more emotional valence (Newman et al., 2003) or more negations (Toma & Hancock, 2012). However when the speaker has time to plan their lie (Van Swol & Braun, 2014) or motivation to sound more positive (Toma & Hancock, 2012) they may be able to reduce the use of negative emotion words. Similarly, deceivers may use more positive and negative emotion words. The variety in the findings in various contexts may not confirm that negative emotions are always high in deceptive speech however it does not alter the fact that down-playing negative emotion remains ideal behaviour with occasional or involuntary break-outs in unexpected circumstances.

Though the deception studies do not portend that there is no one-on-one correspondence between increased emotion words and deceptions, the relationship is one of the most robust findings of deception research. Now we have to look for what this correlation entails for baseline speech. Though there is a growing realization about the contextual factors that affect linguistic markers of deception including emotions (Burgoon et al., 1996; Van Swol & Braun, 2014) deception scholarship has rarely dealt with the issue of negative emotions as a strong non-strategic cue from the cross-cultural, cross-linguistic perspective. Deception studies work under the notion that inner cognitive processes as reflected through the verbal statements provide a direct method to have access to mental states of the language users and these mental processes are not affected or altered by the cultural context. Findings that deceptive speech has an increased affect quotient (Zhou et al., 2004) presuppose that all cultures consider emotion regulation a desirable speech behaviour in their normal or baseline speech.

The idea stems from the dominant Anglo cultural assumption that emotions are antagonistic to goal of rational thinking and need to be put under strict control by downplaying the emotional experience (Wierzbicka, 1994). Nevertheless, alternate cultural models exist which may pose different expectations about up/down regulations of emotions (Miyamoto & Ma, 2011) in their baseline speech and as a consequence in deceptive speech as well. Moreover, the weight a culture puts on experiencing emotion and on deception itself can modify the way one experiences emotions while deceiving (Abel, 2008). However, these facts remain largely ignored and traditional deception studies work on implicit assumption that variance introduced by culture is irrelevant and emotions as a deception cue are consistent across cultures (Taylor et al., 2014).

The need for efficient linguistic analysis coupled with advances in technology has led to automatization of deception detection methods. Based on the assumption

that deceivers use language differently than truth-tellers (Newman et al., 2003a; Twitchell et al., 2004; Zhou et al., 2004). Language-based approaches in deception detection use computerized text analysis to look out for the cluster of linguistic cues. Much of this research has used the software programme Linguistic Inquiry and Word Count (LIWC henceforth) (Van Swol et al., 2012) developed by Pennebaker and his associates (Pennebaker et al., 2001). The textual analysis scheme involves studying structural, cognitive and emotional components present in someone's speech or written response (Pennebaker et al., 2015). Proximity of certain psychological states and language use forms basic building block of the model. Certain psychological states are reflected more closely through language and design captures those psychological dimensions as important. For emotional component, the scheme involves processing each word in text and matching it with default dictionary entries in emotional domain. In the 2015 manual of LIWC, psychological processing is based on the presence of negative and positive emotions reflected through concrete words like love, nice, happy, sad, hate, and ugly.

The latest version of the software shows considerable advance over previous versions and registers short phrases and even emoticons along with the words as positive and negative emotion (Pennebaker et al., 2015). Though LIWC has been used to measure psychological processes in several fields such as personality judgment and health, LIWC is most widely used to attest presence/absence of deception cues listed in deception research. The studies using LIWC explore deception across diverse contexts such as opinions about topics like abortion (Newman et al., 2003a), deception in emails (Gupta, 2007), deception in conference calls (Larcker & Zakolyukina, 2012) and online dating profiles (Toma & Hancock, 2012).

Here it is important to note that it is not only presence of emotion words that make veracity of a text doubtful. These studies use co-occurrence of a cluster of linguistic cues to judge the veracity. The multivariate profile of deception including fewer self-references, exclusive words and negative emotion words has featured in several deception studies (DePaulo et al., 2003). However, it is a noteworthy fact that most of these studies are based on North American subjects who are referred to as people in general (Vincent Marrelli, 2004).

LIWC and other methods of automated models of deception detection operate within scientific paradigm reflected through terms like 'psychology of emotions' that characterize emotions as an objective and unadulterated account of mental states (Wierzbicka, 1994) or bio-physiologically determined invariant responses to social stimuli (Thoits, 1989). These studies operate within the Universalist approach of emotional experience (e.g., Ekman, 1992) and unwittingly or otherwise accord too much prominence to Anglo conceptualization of emotions as

a scientific and objective account of human emotional experience. There is no point in denying that while being deceptive liars may experience the emotions of fear, shame or guilt (Ekman, 1992), neither can be any denial of the fact that we may know about the people's states of mind by counting and categorizing the words they use (Newman et al., 2003a). However, what these emotions mean to different people is a highly contingent affair (Mesquita & Frijda, 1992) and how an individual's cultural values weigh particular emotions has serious repercussions for the presence of emotion words in their baseline speech which in turn might affect how they experience deception itself (Abel, 2008). Though the putative nature of these deception cues is registered elsewhere, role of culture as a key moderator of linguistic correlates of deceit is rarely acknowledged in deception research.

This paper uses this research gap as its launching pad and ventures to synchronize the culturally alive ethno pragmatic studies of emotions with (allegedly) scientific cue-based deception paradigm to sensitize deception detection methods to cross-cultural effects.

Methodology

The study is based on the integrative review combining the evidence from theoretical and empirical literature available on the topic of culture, emotions and language (The initial search consisted of key terms covering the concept). Further resources are collected by journal hand searching and ancestry or reference search method using different databases including Google Scholar and JSTOR. By synthesizing the individual findings in the different ethno pragmatic studies of emotions, the study proposes a new approach to work out the cultural norms regarding emotions. It also contests the suitability of automated methods of deception detection (most conspicuously through LIWC) that build on Anglo modelling of emotional behaviour.

Analysis and Discussion

The assumptions of deception scholarship can be problematic for it conceives emotions as a cognitive activity experienced and expressed uniformly by all human beings and unaffected by cultural context. Based on the presumption that normal state is a state of composure (Fehr & Russell, 1984), it also presumes that as normative/normal speech contains (or should contain) fewer emotion words, the increase in emotion words reeks of deception (or deviance). Both assumptions, though hardly explicated, are invoked on commonsensical grounds. However, it can be demonstrated what ostensibly appears as commonsensical is a cultural thought in Anglo-culture about nature and use of emotions in human lives. In Anglo-American cultural understanding, any occasional breakout of bad

feelings over which the experience has little control is equated with departure from normal state (Wierzbicka, 1994) and deception studies use this as a ground or justification for the emotional leakage cues of deception. Some other approaches register uniqueness of each cultural context in determining nature and forms of emotions. There is growing evidence from the field of sociology and anthropology (Thoits, 1989) that establishes variations in cultural models of emotional experience (Wierzbicka, 1994), expectations about dampening or savouring positive emotions (Miyamoto & Ma, 2011) and norms about which emotions are afforded or constrained (Dzokoto et al., 2016). Emotion expressions and their antecedents are culturally influenced (Kimel et al., 2017) and societies vary considerably in the norms of speech and expectation, attitudes and labels of emotional experience (Dzokoto et al., 2016; Mesquita & Frijda, 1992; Wierzbicka, 1999). However, all these approaches appear to be unbeknown to deception studies which operate within so-called scientific paradigm.

As the finding of deception studies are either grounded in North American culture or use it as a yardstick to measure other cultures, we enumerate at least three grounds on which this can be problematic. Firstly, English Emotion words reflect English reality. English emotion words primarily denote an internal mental state (Wierzbicka, 1991). Though this view about emotions as an internal thought related phenomenon has dominated scientific discourses for a long (Dzokoto et al., 2016), close ethnographic studies have proved it contrary to the lived experience of many collectivist societies that situate emotions externally (Lutz & White, 1986). Lately, deception scholarship has developed an interest in deception across cultures but this is mainly being achieved by using Anglo conceptualizations of emotions and other related cues and by using English words or categories to describe any difference of behaviours. Though analytical scheme seems to be meticulously designed to monitor emotional overtones of written or transcribed texts, it is primarily useful to code the English experience of emotions and has little usefulness for other languages that code emotions differently. LIWC affect dictionaries do not work for irony, sarcasm or metaphor. It takes emotion words as a default way of denoting emotions while ignoring metaphoric expressions as ornamental or subsidiary. For languages favouring embodiments of emotional experience, somatic imagery or body metaphors are the default way of expressing emotions (Dzokoto et al., 2016) which may either go unnoticed in LIWC analysis or may be altered to fit English reality. Furthermore, various versions of LIWC affect categories developed for other languages are based on the translation of English words into other languages with consistent or inconsistent results (Andrei, 2014). This process may or may not work depending upon closeness or similarities between two languages. For example, there was found high consistency between Arabic and English affect dictionaries (Andrei, 2014) but for the Belgian Portuguese dictionary of negative emotions, there was very little consistency with the English dictionary available (Filho et al., 2013).

The very use of word 'emotion' to denote an objective and biological phenomenon becomes contestable when the filter of language and culture is applied (Wierzbicka, 1999). Russell's (1991) insistence on knowing the vocabulary of all people to know about the emotions of all people is a corollary of the same thought. Despite the claims about centrality and universality of emotions, there are a few languages (for instance German language) that do not have any specific word for 'emotion' (Wierzbicka, 1999). Even when a translation or cognate for the word 'emotion' is available in a language, there is partial matching between meanings (Santos & Maia, 2018) and the word does not seem to carry a three-pronged understanding of emotion found in Anglo culture i.e. having a thought, feeling and bodily response-related component (Wierzbicka, 1999).

The same applies to the specific words to denote various emotions. To quote Russell

We speakers of English find it plausible that our concepts of anger, fear, contempt and the like are universal categories, exposing nature at its joints. One way to overcome the influence of such implicit assumptions is to emphasize alternative conceptualizations.
(Russell, 1994, p. 137)

The words for negative emotions in various languages invoke a different conceptual domain that makes meaning of that term characteristically different from their counterparts in other languages (Mesquita & Frijda, 1992). For example, *kızgınlık*, the Turkish word for anger combines feelings of sadness and disappointment in its meanings. This difference in meaning and connotation may affect the way people experience and express negative emotions in their day-to-day lives.

Second ground of our argument is that cultures code emotions differently. Emotions are defined as having a psychological, cognitive and physiological component (Mesquita & Boiger, 2014) but there is a considerable difference among cultures as to what component is weighed above others (Dzokoto et al., 2016). Dzokoto et al. (2016) demonstrate that this difference of focus is materialized in different emotion lexica. Emotional terms in one language may prioritize or foreground psychological state over physiological one or vice versa. As stated earlier, English emotion terms denote an internal mental state (Wierzbicka, 1999). Not all languages view emotions as a state of mind. Some languages see emotions as inner activities or a process rather than states and denote emotions more often in the form of verbs rather than adjectives (Wierzbicka, 1992). All these word choices affect how emotions are conceived

and processed in daily lives and how emotions are experienced during a non-normative behaviour like deception.

Third and the most powerful ground for challenging correlation between emotions and deception comes from the observation that cultures set different expectations about emotions regulation (Miyamoto & Ma, 2011) and display rules (DePaulo et al., 2003) which direct culturally-determined ways of managing emotion expressions. Emotion when seen from the Anglo perspective are conceptualized as hostile to rationality (Wierzbicka, 1999) and control over emotions is seen as ideal human behaviour (Santos & Maia, 2018). Not all cultures see emotions as disruptive (Wierzbicka, 1995). Some cultures (Russian culture, for instance) promote up-regulation of emotions and they have sanctioned allowance for increased emotion quotient in their normal day-to-day conversations (Wierzbicka, 2002). How a culture treats emotions in baseline speech has in turn serious repercussions for deceptive message formulation. With a difference in baseline treatment of emotions, there are two-way possibilities for deceptive speech: It may have even more accentuated expression of emotions or it may mitigate emotional overtones to sound more factual. As this conclusion needs serious deliberations or experimental validations, here it would be apt to only look at the alternate ways that different understandings of emotions may invoke.

Ethno Pragmatics of Emotions: An Alternate Approach

Failing to attend to complexity of emotional experience in a cultural context and uniformly applying the findings of deception research done in predominantly North American settings to all cultures is tantamount to ignoring difference in baseline expectations against which the deceptive behaviour is measured. The existing practices are prone to labelling any imbalance in the emotional component in speech of someone from cultures other than Anglo one as deceptive while it can be a normal speech behaviour operating within norms of that culture. In the wake of growing complexity, what we suggest to deception studies is to synchronise with the alternate, culture-sensitive approaches to sensitize their detection methods.

Sociology of emotions has taken micro and macro perspectives to emotions (Thoits, 1989) which can be used to study cultural specification concerning emotions but this can be an unnecessarily long and non-pragmatic detour for deception research because deception research is not directly concerned with sociology of emotions per se but only to establish baseline speech profile to generate a profile of deviant or deceptive speech. It cannot afford to spare a substantial amount of energy and resources to single out the nuances of emotional behaviour across diverse cultures. It also requires aggrandized effort to tap into cultural psychology of a people by administering large scale experiments,

simulations or ethnographic studies and then code resulting behaviours as emotionally exuberant, under toned or balanced. Having said that, deception studies need to sensitize their methods for cross-cultural differences in various linguistic indicators of deceptive behaviour. For this, deception studies need a method that does not require the field to reinvent the wheel but has potential to explain culture-specific speech behaviours efficiently and effectively. We propose deception scholarship to link with the findings or methods of ethno pragmatics or intercultural pragmatics (two terms used alternatively), an emerging paradigm that is critical of mainstream universalist approach towards human interaction (Kecskes, 2014; Levison, 2016; Wierzbicka, 2003).

Ethno pragmatics bucks the trend of viewing Anglo models of human interaction as a default way of human behaviour (Levison, 2016) and seeks to bring out the uniqueness of cultural models by studying cultural keywords (Goddard & Wierzbicka, 2002, 2004; Wierzbicka, 2010). The socio-cultural view of emotions does not undermine cognitive or physiological aspects of emotions. It simply takes into account the cultural influences that might concur with these factors to shape overall emotional experience (Aranguren, 2015). Ethno pragmatics can provide rich ground to propose an efficient method to calibrate cultural differences in human interactional norms that might inform deception detection methods. This paradigm can be used to efficiently demonstrate how emotion handling in a baseline speech of a given culture can affect the accuracy of the results generated by profiling deceptive behaviour.

As deception cues are mainly based on linguistic evidence, the most plausible route to discover cultural nuances of emotional experience seems to be through language. Within the ethno pragmatic paradigm, this can be achieved by looking at the affect lexicon of corresponding culture which comprises all the salient terms denoting various emotions. The idea is motivated by a strong strain in social sciences to see language as a key to describe the emotional experience. Social constructionist view of psychology views emotions as inherently dissociable from language component used to code them (Aranguren, 2015). We can experience emotions independent of words but we can only express them within confines (or leverages for that matter) of our language.

Language and emotions are paired in dialectical ways. Cultural norms that guide human perceptions about what emotions are and how they function solidify over time in the form of cultural products (Tsai et al., 2006) and start reflecting through emotion terms (Dzokoto et al., 2016; Wierzbicka, 1999). Once codified, the affect lexicon as a collection of all emotion terms becomes the most powerful storehouse of cultural wisdom to transmit the shared cultural beliefs to the next generation (Dzokoto et al., 2016) and starts affecting the ways people experience

emotion (Gendron et al., 2012). People interpret their own emotions against the lexical grid found in their native language (Wierzbicka, 1999). There is growing evidence that an up-close analysis of emotion terms can reveal norms, attitudes and beliefs about emotions (Dzokoto et al., 2016; Mesquita & Frijda, 1992; Wierzbicka, 1999) and this lexically derived knowledge can be used to articulate cultural expectations about which emotions are sought or avoided or what events can elicit which kind of emotions (Dzokoto et al., 2016). Within the field of cross-cultural studies, these articulated forms of expectations, norms and beliefs are called cultural scripts (Goddard, 1997; Goddard & Wierzbicka, 2004; Wierzbicka, 2010) or emotion scripts for their special reference to emotion.

Emotion regulation in each culture is influenced by cultural scripts (Miyamoto & Ma, 2011). The relationship between culture and emotion scripts is so potent that a careful investigation of appraisal of various emotions by native speakers can be used to trace back the cultural origin of the individuals (Mesquita & Boiger, 2014). Emotions scripts have also potential to explain how existing correlation between deception and emotion is situated within Anglo cultural norms about experiencing or expressing emotions. Anglo emotion script conditions that to secure personal autonomy and safeguard rationality, our normal speech should have minimal negative affect component (Wierzbicka, 1999). Being carried away by a powerful emotion is considered as an act of losing self-control (Mesquita & Frijda, 1992; Wierzbicka, 1992) which in turn becomes a threat to personal autonomy (Wierzbicka, 1999). Contrarily, Eastern cultures operate on dominant emotion script of seeking the middle way in experiencing positive and negative emotions (Miyamoto & Ma, 2011). Such explication of emotion scripts based on emotion terms and cultural values can be replicated for any pair of cultures under investigation to generate a profile of baseline speech behaviours that may systematically affect detection of deceptive behaviour.

Conclusions

Deception studies work on assumption that whenever a piece of speech has an increased emotion quotient, it is symptomatic of some sort of arousal or deviance from the normal state and this fact can be exploited to detect deception. This study has tried to problematize this notion on cultural grounds. While the premise can be true for Anglo-American people, it is unjust to argue the same for people across all cultures. When approached from perspective of ethno pragmatics which looks for cultural-specific scripts and pragmatic norms of human interaction it becomes difficult to affirm the correlation between emotional experience and deception across all domains and cultures. Different cultures pose different expectations about experiencing emotions. Furthermore, Using the English words for emotions as a default way of coding emotions is likely to undermine cultural variance that exists concerning key emotion terms. Instead of looking for one-

word equivalents of English emotions, the textual analytical schemes should work on building culture-specific affect lexica. This approach will not only create reliable cultural information but will also save deception scholarship from facile generalizations based on one dominant culture.

References

- Abel, T. (2008). *Cultural components of deception* (Vol. 3368120) [Alliant International University, Los Angeles]. <https://search.proquest.com/docview/304827844?accountid=135034>
- Andrei, A. L. (2014). *Development and Evaluation of Tagalog Linguistic Inquiry and word count (LIWC) Dictionaries for Negative and Positive Emotions*. <https://www.mitre.org/publications/technical-papers/development-and-evaluation-of-tagalog-linguistic-inquiry-and-word>
- Aranguren, M. (2015). Emotional mechanisms of social (re)production. *Social Science Information*, 54(4), 543–563. <https://doi.org/10.1177/0539018415598403>
- Buller, D., & Burgoon, J. (2006). Interpersonal Deception Theory. *Communication Theory*, 6, 203–242. <https://doi.org/10.1111/j.1468-2885.1996.tb00127.x>
- Burgoon, J., Buller, D., Guerrero, L., Afifi, W., & Feldman, C. (1996). Interpersonal deception: XII. Information management dimensions underlying deceptive and truthful messages. *Communication Monographs - COMMUN MONOGR*, 63, 50–69. <https://doi.org/10.1080/03637759609376374>
- Burgoon, J. K., Le Poire, B. A., & Rosenthal, R. (1995). Effects of preinteraction expectancies and target communication on perceiver reciprocity and compensation in dyadic interaction. *Journal of Experimental Social Psychology*, 31(4), 287–321. <https://doi.org/10.1006/jesp.1995.1014>
- Darwin, C. (1872). *Expression of the emotions in man and animals*. John Murray. <https://doi.org/http://dx.doi.org/10.1037/10001-000>
- DePaulo, B. M., Lindsay, J. J., Malone, B. E., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, 129(1), 74–118. <https://doi.org/10.1037/0033-2909.129.1.74>

- Dzokoto, V., Senft, N., Kpobi, L., & Washington-Nortey, P.-M. (2016). Their Hands Have Lost Their Bones: Exploring Cultural Scripts in Two West African Affect Lexica. *Journal of Psycholinguistic Research*, 45(6 LB-Dzokoto2016), 1473–1497. <https://doi.org/10.1007/s10936-016-9415-5>
- Ekman, P. (1992). An argument for basic emotions. *Cognition and Emotion*, 6(3–4), 169–200. <https://doi.org/10.1080/02699939208411068>
- Ekman, P., & Friesen, W. V. (1969). Nonverbal Leakage and Clues to Deception. *Psychiatry*, 32(1), 88–106. <https://doi.org/10.1080/00332747.1969.11023575>
- Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. In *Journal of Experimental Psychology: General* (Vol. 113, Issue 3, pp. 464–486). American Psychological Association. <https://doi.org/10.1037/0096-3445.113.3.464>
- Filho, P. B., Pardo, T., & Aluísio, S. (2013). An Evaluation of the Brazilian Portuguese LIWC Dictionary for Sentiment Analysis. *STIL*.
- Freud, S. (1953). Fragment of an analysis of a case of hysteria (1905 [1901]). In *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume VII (1901-1905): A Case of Hysteria, Three Essays on Sexuality and Other Works* (pp. 1–122).
- Gendron, M., Lindquist, K. A., Barsalou, L., & Barrett, L. F. (2012). Emotion words shape emotion percepts. *Emotion (Washington, D.C.)*, 12(2), 314–325. <https://doi.org/10.1037/a0026007>
- Goddard, C. (1997). Cultural values and ‘cultural scripts’ of Malay (Bahasa Melayu). *Journal of Pragmatics*, 27(2), 183–201. [https://doi.org/https://doi.org/10.1016/S0378-2166\(96\)00032-X](https://doi.org/https://doi.org/10.1016/S0378-2166(96)00032-X)
- Goddard, C., & Wierzbicka, A. (2002). Semantic primes and universal grammar. In *Meaning and Universal Grammar: Theory and Empirical Findings Volume I*. John Benjamins Publishing Company.
- Goddard, C., & Wierzbicka, A. (2004). Cultural scripts: What are they and what are they good for? In *Intercultural Pragmatics* (Vol. 1, p. 153). <https://doi.org/10.1515/iprg.2004.1.2.153>
- Gupta, S. (2007). *Modelling Deception Detection in Text* [Queen’s University at Kingston]. <http://hdl.handle.net/1974/922>

- Kecskes, I. (2014). *Intercultural pragmatics*. Oxford University Press.
- Kimel, S. Y., Mischkowski, D., Kitayama, S., & Uchida, Y. (2017). Culture, Emotions, and the Cold Shoulder: Cultural Differences in the Anger and Sadness Response to Ostracism. *Journal of Cross-Cultural Psychology*, 48(9), 1307–1319. <https://doi.org/10.1177/0022022117724900>
- Larcker, D. F., & Zakolyukina, A. A. (2012). Detecting Deceptive Discussions in Conference Calls. *Journal of Accounting Research*, 50(2), 495–540. <https://doi.org/doi:10.1111/j.1475-679X.2012.00450.x>
- Levison, C. (2016). Levisen, Carsten (2016). The ethnopragmatics of speech acts in postcolonial discourse: “Truth” and “trickery” in a transculturated South Pacific tale. In S. Christoph & V. Laurenz (Eds.), *Pragmatic perspectives on postcolonial discourse: Linguistics and literature* (pp. 41–64). Cambridge Scholars Publishing.
- Lutz, C., & White, G. M. (1986). The Anthropology of Emotions. *Annual Review of Anthropology*, 15, 405–436. <http://www.jstor.org/stable/2155767>
- M. DePaulo, B., A. Kashy, D., E. Kirkendol, S., M. Wyer, M., & Epstein, J. (1996). *Lying in Everyday Life* (Vol. 70). <https://doi.org/10.1037/0022-3514.70.5.979>
- M DePaulo, B., Lindsay, J. J., E Malone, B., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to Deception. *The American Society for Information Science and Technology*, 129, 74–118. <https://doi.org/10.1037/0033-2909.129.1.74>
- Mesquita, B., & Boiger, M. (2014). Emotions in Context: A Sociodynamic Model of Emotions. *Emotion Review*, 6(4), 298–302. <https://doi.org/10.1177/1754073914534480>
- Mesquita, B., & Frijda, N. (1992). Cultural variations in emotions: A review. *Psychological Bulletin*, 112, 179–204. <https://doi.org/10.1037/0033-2909.112.2.179>
- Miyamoto, Y., & Ma, X. (2011). Dampening or savoring positive emotions: a dialectical cultural script guides emotion regulation. *Emotion*, 11(6), 1346–1357. <https://doi.org/10.1037/a0025135>
- Newman, M. L., Pennebaker, J. W., Berry, D. S., & Richards, J. M. (2003a).

- Lying Words: Predicting Deception from Linguistic Styles. *Personality and Social Psychology Bulletin*, 29(5), 665–675. <https://doi.org/10.1177/0146167203029005010>
- Newman, M. L., Pennebaker, J. W., Berry, D. S., & Richards, J. M. (2003b). Personality and Social Psychology Bulletin. *Society*, 1901. <https://doi.org/10.1177/0146167203251529>
- Peeters, B. (2018). (White) lies and (pieux) mensonges: ethnolinguistic elaborations on not telling the truth. *Etnolingwistyka. Problemy Języka i Kultury*, 30, 169. <https://doi.org/10.17951/et.2018.30.169>
- Pennebaker, J., Francis, L., & Booth, R. (2001). Linguistic inquiry and word count: LIWC2001. *LIWC Operators Manual 2001*.
- Pennebaker, J. W., Boyd, R. L., Jordan, K., & Blackburn, K. (2015). *The development and psychometric properties of LIWC2015*.
- Rubin, V. (2010). *On Deception and Deception Detection: Content Analysis of Computer-Mediated Stated Beliefs* (Vol. 47). <https://doi.org/10.1002/meet.14504701124>
- Russell, J. (1994). Is there universal recognition of emotion from facial expression? A review of the cross-cultural studies. *Psychological Bulletin*, 115 1, 102–141.
- Russell, J. A. (1991). Culture and the categorization of emotions. In *Psychological Bulletin* (Vol. 110, Issue 3, pp. 426–450). American Psychological Association. <https://doi.org/10.1037/0033-2909.110.3.426>
- Santos, D., & Maia, B. (2018). Language, emotion, and the emotions: A computational introduction. *Language and Linguistics Compass*, 12(6), e12279. <https://doi.org/https://doi.org/10.1111/lnc3.12279>
- Thoits, P. A. (1989). The Sociology of Emotions. *Annual Review of Sociology*, 15, 317–342. <http://www.jstor.org/stable/2083229>
- Toma, C. L., & Hancock, J. T. (2012). What Lies Beneath: The Linguistic Traces of Deception in Online Dating Profiles. *Journal of Communication*, 62(1), 78–97. <https://doi.org/10.1111/j.1460-2466.2011.01619.x>
- Tsai, J., Knutson, B., & Fung, H. (2006). Cultural variation in affect valuation. *Journal of Personality and Social Psychology*, 90, 288–307. <https://doi.org/>

10.1037/0022-3514.90.2.288

- Twitchell, D., Nunamaker, J., & Burgoon, J. (2004). Using speech act profiling for deception detection. *Intelligence and Security Informatics*, 403–410.
- Van Swol, L., & Braun, M. (2014). Communicating Deception: Differences in Language Use, Justifications, and Questions for Lies, Omissions, and Truths. *Group Decision and Negotiation*, 23. <https://doi.org/10.1007/s10726-013-9373-3>
- Van Swol, L. M., Braun, M. T., & Malhotra, D. (2012). Evidence for the Pinocchio Effect: Linguistic Differences Between Lies, Deception by Omissions, and Truths. *Discourse Processes*, 49(2), 79–106. <https://doi.org/10.1080/0163853X.2011.633331>
- Vincent Marrelli, J. (2004). Different cultures, different ways of truth and deception. In *Words in the Way of Truth: Truthfulness, Deception, Lying across Cultures and Disciplines* (pp. 315–376). Edizioni Scientifiche Italiane. <https://books.google.com.pk/books?id=0bf0PAAACAAJ>
- Vrij, A. (2000). *Detecting lies and deceit: the psychology of lying and the implications for professional practice* / Aldert Vrij. John Wiley.
- Wierzbicka, A. (1991). *Cross-cultural Pragmatics: The semantics of human interaction*. Mouton De Gruyter.
- Wierzbicka, A. (1992). Defining Emotion Concepts. *Cognitive Science*, 16(4), 539–581. https://doi.org/https://doi.org/10.1207/s15516709cog1604_4
- Wierzbicka, A. (1994). *Emotion, language, and cultural scripts*.
- Wierzbicka, A. (1995). Emotion and Facial Expression: A Semantic Perspective. *Culture & Psychology*, 1(2), 227–258. <https://doi.org/10.1177/1354067X9512005>
- Wierzbicka, A. (1999). Emotions across Languages and Cultures: Diversity and Universals. In *Studies in Emotion and Social Interaction*. Cambridge University Press. <https://doi.org/DOI: 10.1017/CBO9780511521256>
- Wierzbicka, A. (2003). *Cross-cultural pragmatics: The semantics of human interaction*. Walter de Gruyter.
- Wierzbicka, A. (2010). Cultural scripts and intercultural communication. In A. Trosborg (Ed.), *Pragmatics across Languages and Cultures*. De Gruyter

Mouton.

Wu, J., & Zhou, L. (2015). DOBNet: Exploiting the discourse of deception behaviour to uncover online deception strategies. *Behaviour and Information Technology*, 34(9), 936–948. <https://doi.org/10.1080/0144929X.2015.1016116>

Zhou, L., Burgoon, J. K., Nunamaker, J. F., & Twitchell, D. (2004). Automating Linguistics-Based Cues for Detecting Deception in Text-Based Asynchronous Computer-Mediated Communications. *Group Decision and Negotiation*, 13(1), 81–106. <https://doi.org/10.1023/B:GRUP.0000011944.62889.6f>

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