Expressions for emotions – and inner feelings – in Kilivila, the language of the Trobriand Islanders: A descriptive and methodological critical* essay

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Abstract

This paper reports on the results of my research on the lexical means Kilivila offers its speakers to refer to emotions and inner feelings. Data were elicited with 18 "Ekman's faces" in which photos of the faces of one woman and two men illustrate the allegedly universal basic emotions (anger, disgust, fear, happiness, sadness, surprise) and with film stimuli staging standard emotions. The data are discussed on the basis of the following research questions:

- How "effable" are they or do we observe ineffability the difficulty of putting experiences into words within the domain of emotions?
- Do consultants agree with one another in how they name emotions?
- Are facial expressions or situations better cues for labeling?

Keywords

Papua New Guinea, Trobriand Islands, Kilivila, Ekman Faces, Mind Reading Emotions Library

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Résumé

Cet article rend compte des résultats de ma recherche sur les moyens lexicaux que le kilivila offre à ses locuteurs pour exprimer des émotions et des sentiments. Les données ont été recueillies au moyen des 18 'visages d'Ekman',

^{*} I explicitly use the term "methodological critical" as a literal translation of the German technical term "methodenkritisch" – as it was used by representatives of the "Frankfurt school"; see e.g. Adorno *et al.* (1969).

photographies des expressions faciales d'une femme et de deux hommes censées illustrer les émotions fondamentales universelles (colère, dégoût, peur, bonheur, tristesse, surprise), ainsi qu'avec des stimuli cinématographiques mettant en scène des émotions standard. Les données sont discutées sur la base des questions suivantes :

- Dans quelle mesure les émotions sont-elles dicibles en d'autres termes l'expérience n'est-elle pas difficile à mettre en mots dans ce domaine ?
- Les informateurs s'accordent-ils entre eux pour dénommer les émotions ?
- Les états ou les expressions du visage sont-ils le meilleur indice pour l'identification des émotions ?

Mots-clés

Papouasie-Nouvelle Guinée, îles Trobriand, kilivila, visages d'Ekman, Mind Reading Emotions Library

1. Introduction

In 2006 the Language and Cognition department at the MPI for Psycholinguistics started a research project on emotion categories in language and thought. Ever since Charles Bell (1806), Charles Darwin (1872) and Guillaume Duchenne (1876) this domain has been researched from various angles. On Darwin's view, universal emotions and hard-wired facial expressions which reflect them should yield clear universal categories — with predicted agreement across languages in terms for emotions and their expressions. Hjortsjö's (1969) work laid the foundation for further elaboration of this claim by Ekman (1973, see also Ekman & Friesen 1975). Ekman and his co-workers have played an important role in keeping the Darwinian perspective alive, and in persuading the cognitive science community that the subject is more orderly and tractable than it appears at first sight: there are, they claim, a small set of universal basic emotions with universal expressions reflecting adaptive "affect programs" like mating, defence and flight.

Thus, research on emotion and on their facial expression has a relatively long tradition – but it also has always been a highly controversial topic (see e.g. Ekman 1994 and Russell 1994; also Izard & Saxton 1988). Criticism of Ekman's claim that there is a set of basic emotions with universal facial expressions which are labeled with the same emotion terms² came not only from psychologists like Russell, but also from anthropologists. From this tradition of close attention to cultural detail has come severe criticism of Ekman's understanding of basic emotions as universal human traits. Anthropologists noted interesting culture-

¹ This paper owes much to discussions I had with my colleagues at the MPI for Psycholinguistics and with colleagues within the CNRS "emotions" project after presenting my data in January 2012 in Villejuif. I express my great gratitude to the people of the Trobriand Islands, especially to the inhabitants of Tauwema for their hospitality, friendship, and patient cooperation. I would also like to thank the National and Provincial Governments in Papua New Guinea, the Institute for PNG Studies, especially Don Niles, and the National Research Institute, especially James Robins, for their assistence with, and permission for, my research projects.

² Ekman (1973: 220) claims: "Regardless of the language, of whether the culture is... industrialized or preliterate, facial expressions are labeled with the same emotion terms".

specific concepts embedded in local "ethnopsychologies". Rosaldo (1983), for example, showed that with the Ilongot, an ethnical group living in the Philippines, the concept "*liget*" which can be glossed as 'anger' is closely tied to the intense emotions of headhunting (for other such examples see the contributions in Levy:1983; see also Kuipers 1998).

The nature of natural language labeling of emotions has been relatively poorly explored, at least in a systematic way, despite the fact that many psychological investigations of emotions presuppose labels in one way or another. Our particular interest in emotion terms lies in their status as potential *ineffables*: linguistic expressions in which access to their referents cannot be directly shared. I can point to a color and say "blue", and thus you can learn the extension of "blue", but there seems no way to point to "anger" (as opposed to its typical behavioral manifestations) in the same way. Even if there is a clear set of basic internal states (à la Ekman), it is not clear how the terms can be mapped onto them in an identical way by different learners of a language.

In 2006 we did pilot studies in various field-sites to get an overview over the lexical means speakers of our field languages use to refer to emotions and their expressions and to explore what kind of methods would fit best in all our field-sites to elicit the relevant data. Leading questions for our research on emotions are:

- Is there evidence from language for a small set of universal basic emotions?
- How "effable" are they or can we observe ineffability within the domain of emotions?
- Do consultants agree with one another how they name emotions?
- Are facial expressions or situations better cues for labeling?
- How well can people map situations to facial expressions?

However, before we could tackle these highly complex questions, we first had to get an overview over the verbal expressions that speakers use to refer to emotions.

This paper reports on the results of my research in 2006 and 2008 on the lexical means Kilivila, the language of the Trobriand Islanders, offers its speakers to refer to and to describe emotions and inner feelings. Data were elicited with 18 "Ekman's faces" in which the faces of three persons (one woman, two men) illustrate the allegedly universal basic emotions (anger, disgust, fear, happiness, sadness, surprise) and film stimuli staging and demonstrating standard emotions based on English. This latter stimulus set is called "Mind Reading Emotions Library (MREL)". It was developed by Baron-Cohen and his co-workers in 2004. It is much larger than the "Ekman faces" stimulus, it has graded granularity (which follows age-norms, see below), and it is moving, not still (see: Mind Reading Emotions Library User Guide: 2004). We also collected data with scenarios to elicit emotion words in cultural scripts (see Levinson *et al.* 2007). However, in this

paper I will neither present this tool nor report on results gained with it.³ After the presentation of the elicited data I discuss them on the basis of our guiding research questions.

2. Data collection

As mentioned above, the "Mind Reading Emotions Library (MREL)" serves as one of our tools for data gathering. For Baron-Cohen "[e]motions are states of mind that arise as a result of specific experience and drive us to take action. Although emotions exist in the mind and so are essentially unobservable, they are frequently revealed through facial expressions, voice, posture and gesture..." (Mind Reading Emotions Library User Guide 2004: 6).

The "MREL" consists of 412 enacted forms of emotions which are grouped into 24 major groups. Each of the 412 emotions are represented by 6 actors. This results in 2472 movies! Because emotion vocabulary grows with age, the MREL further subcategorizes the films into 6 different levels of complexity.

For our pilot studies we used the "20 Big Emotions of Level 1" only. These emotions stage "afraid, angry, bored, disgusted, excited, fond, happy, hurt, interested, kind, liked, sad, sneaky, sorry, sure, surprised, thinking, unfriendly, unsure situations" and "wanting situations". We focused on the "Situation Enactments", that is little scenes in which the emotions are enacted within a brief context and on two follow up film clips which depict just the enacting of the respective emotion without such a context. We played the clips without sound and tried to get straight descriptions. We presented each stimulus and asked the following questions in our respective field languages:

- 1.) What does s/he feel?
- 2.) How does the face look?
- 3.) What kind of person is s/he?
- 4.) What might s/he (protagonist in the film) say?

I did this explorative pilot study in June 2006 with two male informants, Mokeilobu (65 years old) and Toyogima (30 years old).

The "Ekman's faces" consist of three series of six photographs each, which express – according to Ekman (see Ekman & Friesen 1975) – universal emotions. The first series (P1-P6) consists of six practice cards displaying six such universal emotions expressed in a man's face in the following order:

P1: Disgust P2: Happiness P3: Surprise P4: Anger P5: Sadness P6: Fear

The second series (F1-F6) consists of 6 experimental cards displaying the same subset of Ekman's "universal" emotions expressed in a woman's face in the following order:

³ Thus, I will not provide an answer here to the question "How well can people map situations to facial expressions?" which I raised above. Moreover, I cannot provide an answer to the typological question "Is their evidence from language for a small set of universal basic emotions?" here, either.

F1: Happiness F2: Anger F3: Fear F4: Sadness F5: Disgust F6: Surprise

And the third series (M1-M6) consists of 6 experimental cards displaying again the same subset of Ekman's "universal" emotions expressed in another man's face in the following order:

M1: Surprise M2: Sadness M3: Happiness M4: Fear M5: Disgust M6: Anger

I want to emphasize once more that Ekman and his coworkers claim that these cards illustrate the six allegedly universal basic emotions "anger, disgust, fear, happiness, sadness" and "surprise" (for photographs of these emotions see Ekman & Friesen 1975, especially pp. 175-201).

We presented each stimulus to the consultants and asked them the following questions in our respective field languages (see Levinson *et al.* 2007: 48):

- 1.) How does the face look?
- 2.) How does s/he feel?
- 3.) Is there a word for that feeling?

I collected data with the "Ekman faces" in 2008 with 5 male and 5 female consultants ranging in age from 16 to 66 years. Only one man had a High School education and spoke English (see Senft 2014).

3. Results

In this section I first present the results of my data elicitation using the "Mind Reading Emotions Library (MREL)" and then the results of the data elicitation in which I used the "Ekman faces" as stimuli.

3.1 Results of the data elicitation with the "MREL"

To illustrate the raw data I elicited I just present Mokeilobu's answers to the 4 questions I asked him after he saw the enactment of the afraid situation; then I summarize the results (for each emotion group, that is 20 reactions by two consultants to 4 questions each, asked after presenting 3 clips) in a more appropriate way. Here are the questions I asked Mokeilobu showing him one of the clips for "being afraid":

1.) What does she feel?

Ala kokola Her fear

2.) How does the face look?

Bi-valam 3.Fut-cry She is going to cry.

Table 1. Kilivila responses to "afraid" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
noun	kokola	fear
verb	-kokola-	to be afraid, to fear
phrase	nanola imwau	(her mind is heavy), she feels sad
verb	-vinu- / -vinuvinu-	to be close to crying
noun	valam	crying
verb	-valam-	to cry

Table 2. Kilivila responses to "angry" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
noun	leya	anger
noun	kaleya	anger
verb	-kaleya-	to be / to get angry
noun	gubuluva	anger, being annoyed
verb	-gubuluva-	to be angry, to be annoyed, to quarrel
adjective	-gubuluva	angry
adjective	-gasi	fierce, wild
verb	-kasigegina-	to grimace, to grin, to smile in a detached way
verb	*-titabelu-	to gossip
verb	-mitipayuyu-	to look angry / sad
verb	-kabelu-	to make a wry /angry/ cross face
phrase	ekabinam ala gabula	s/he bites her lips – as a sign of anger

3.) What kind of person is he/she?

Vivila bwena girl good A good girl

4.) What might she say?

E a-kokolayes 1.-afraidYes I am afraid.

In what follows I summarize the data collected with the "MREL" for each emotion group in separate tables.

For the "afraid situation" and the acting out of being "afraid" clips the reactions of the two consultants are summarized in Table 1 (see p. 354).

Other means that Kilivila offers its speakers to refer to this emotional state are the verbs -pogi- 'to fear, to be afraid of' which can also mean 'to be jealous, to poison' and -seluve-PPIV- 'to surprise someone, to make someone afraid of something'.

For the "angry situation" and the acting out of being "angry" clips the reactions of the two consultants are summarized in Table 2 (p. 354).

Other verbal means to refer to this emotional state are the verbs -gasisi-, 'to be angry, violent', -gubuluva- 'to feel angry', -guleya- 'to feel angry', -kaleya- 'to get angry' and -yosibului- 'to make angry'.

For the "bored situation" and the acting out of being "bored" clips the reactions of the two consultants are summarized in Table 3 (p. 356).

Other verbal means to refer to this emotional state are the verb -gwegwesi- 'to be bored, to feel homesick', which can also be used as an adjective and a noun (it is most often used in the phrase igwegwesi vovola 'it is/feels bored/homesick her/his body'), the verb -kamagwesi- 'to get bored, to be fed up with sth.', and the adjective -nunumata 'bored'.

For the "disgusted situation" and the acting out of being "disgusted" clips the reactions of the two consultants are summarized in Table 4 (p. 357).

Another verbal means to refer to this emotional state is the noun *minena* 'disgust, aversion'.

For the "excited situation" and the acting out of being "excited" clips the reactions of the two consultants are summarized in Table 5 (p. 357).

Another verbal means to refer to this emotional state is the phrase *itutu vovola* '(it hammers her/his body) s/he feels excited'.

⁴ An asterisk (*) marks that I have no explanantion why the consultants produced the respective expression. Literal translations are given in brackets. Responses are listed according to their frequency. Most frequent, not so frequent and marginal responses are separated from each other by a dotted line in the tables.

Table 3. Kilivila responses to "bored" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	ala lumkola emwa	(her/his feeling goes off) s/he is
		feeling onerous
verb	-peki-	to disklike, to abhor
noun	gibugibu	sadness, dullness, sullenness
adjective	-gibugibu	dull, sad, sullen, indifferent, passive
phrase	egibugibu migila	it is dull her/his face
phrase	nanola imwau	(her/his mind is heavy), her/his
		mind is gloomy/sad
phrase	migila imwau	(her/his face is heavy), her/his face
		is dull/sullen
verb	-kaikai-	to be/feel miserable
phrase	ikaikai vovola	It feels miserable her/his body
verb	-masisi-	to sleep, to feel sleepy
phrase	nunupula matala	sleepy eyes
verb	-sivila-	to turn away from someone/
		something
phrase	gala magila bigisi	s/he does not want to see someone/
		something
phrase	*nanamsa egaga	thinking is bad
noun	balau	laziness

Table 4. Kilivila responses to "disgusted" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	lumkola gaga	her/his feeling is bad, feeling bad
phrase	lumkola mwau	her/his feeling is bad and heavy,
		feeling bad and sad
phrase	nanola gaga	her/his mind is bad
verb	-lagoba-	to vomit
verb	-minena-	to feel disgusted, to feel like
		vomiting
phrase	iminena nanola	her/his mind is affected with nausea
verb	*-kasigegina-	to be detached, to grimace, to grin
phrase	gidageda olumolela	pain inside
verb	-mitipayuyu-	to look angry and sad
phrase	matala epipisi	her/his eyes twinkle
noun	valam	crying
noun	kokola	fear
noun	kukoro-PPIV	aversion, dislike
verb	-peki-	to dislike, to abhor, to be disgusted
phrase	gala magila	s/he does not want it
phrase	bogwa desi	(already enough), it is enough

Table 5. Kilivila responses to "excited" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
noun	mwasawa	fun, love, surprise
verb	-bomwasawa-	to have fun, to love something
phrase	mamwasawa nanola	happiness/fun is on her/his mind
phrase	lumkola bwena	her/his feeling is good
adjective	-gigila	laughing
verb	-kasigegina-	smile, grin in a detached way
adjective	-karimwana	proud

Table 6. Kilivila responses to "fond" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	lumkola bwena	her/his feeling is good
phrase	lumkola migile'u	her/his feeling is bright
phrase	lumkola gigila	her/his feeling is like laughing
phrase	nanola migile'u	her/his mind is bright
adjective/adverb	bwenigaga	very good, best
adjective/adverb	uliyebweli	lovely
noun	mamwasila	happiness
adjective	-gigila	laughing
noun	kimwala	smile
adjective	-kalimwana, -kilimwana	proud, happy

Table 7. Kilivila responses to "happy" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
noun	mwasawa	fun, love, surprise
phrase	mwasawa ekaliseva	s/he is overjoyed with fun
noun	mamwasila	having fun, be in a good mood
verb	-wasau-	to be happy
verb	-bomwasawa-	to be happy
noun	*gibugibu	sadness
phrase	*ekapinum ala gabula	s/he angrily bites her/his chin
adjective	*-yovai	being eager to fight
adjective/adverb	*mwau	difficult, sad

Table 8. Kilivila responses to "hurt" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	lumkola mwau	feeling sad
phrase	migila ebelu	her/his face is deformed
phrase	migila emwau	her/his face is full of grief
phrase	migila evinuvinu	her/his face is sad / close to crying
verb	-mitubilibili-	to look away
noun	kokola	fear
phrase	ala ninamwau	her/his being hurt
verb	*-kalimwana-	to be happy and proud
phrase	*lumkola sigimnaka	feeling of showing off

Table 9. Kilivila responses to "interested" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
adjective	-kabitam	clever, knowing
adjective	bwena	good
phrase	lumkola bwena	feeling good
phrase	lumkola migile'u	feeling bright
phrase	migila migile'u	her/his face is bright
adjective	-migile'u	bright
adjective	-mwamwasila	happy
phrase	magila binukwali	s/he wants to know / is interested
noun	*leya	anger
adjective	*gagaveaka	very bad
phrase	*lumkola gaga	feeling bad
noun	*gubuluva	anger

Table 10. Kilivila responses to "kind" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
adjective/adverb	bwena	good, fine, kind, friendly
phrase	lumkola bwena	feeling good
phrase	lumkola gigila	feel like laughing
noun	gigila	laughing
phrase	migila mamwasila	her/his face is full of fun
phrase	migila nakalimwana	her face full of happiness
noun	mwasawa	fun, love, surprise
adjective	-manabweta	beautiful, attractive

Table 11. Kilivila responses to "liked" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
adjective/adverb	bwena	good, fine, kind, friendly
phrase	lumkola bwena	feeling good
phrase	lumkola mamwasila	feeling fun
phrase	migila bwena	her/his face is good
noun	gigila	laughter
verb	-gigila-	to laugh
verb	-yobweli-	to be liked, to love
adjective	-kalimwena	proud and happy

Table 12. Kilivila responses to "sad" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	nanola emwau	her/his mind is (heavy) sad
phrase	gigisa mwau	her/his face is (heavy) sad
phrase	lumkola mwau	feeling (heavy) sad
phrase	lumkola gaga	feeling bad
phrase	kaikai vovola	(miserable her/his body) s/he feels miserable
phrase	evinuvinu bivalam	s/he is close to crying
phrase	migila valam	her/his fave - crying
adjective	-valam	crying
phrase	egibugibu migila	it is sad / dull / sullen her/his face
noun	leya	anger
phrase	migila gubuluva	her/his face is full of anger
verb	-gumalava-	to be lonely
verb	-simaleta-	to feel lonely
phrase	katela ikivigi	her/his heart is broken

Table 13. Kilivila responses to "sneaky" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS	
adjective	-tiriki	tricky	
nominalized adjective	tovela, navela	(male) thief, (female) thief	
phrase	bubunela gaga	bad manners	
phrase	tau gaga	bad man	
phrase	gigisa gaga	bad looks	
verb	-gigila-	to laugh	
adjective	-gilikimwala	smiling	
phrase	lumkola -mitupipisi	feeling like blinking eyes	
phrase	*lumkola mwau gubuluva	feeling very angry	
noun	*gubuluva	anger	

For the "fond situation" and the acting out of being "fond" clips the reactions of the two consultants are summarized in Table 6 (p. 358).

Another verbal means to refer to this emotional state is the verb *-yobweli-* 'to be fond, liked, romantic, caring, flirtatious' and the noun *yobweli* 'fondness'.

For the "happy situation" and the acting out of being "happy" clips the reactions of the two consultants are summarized in Table 7 (p. 358).

Other verbal means to refer to this emotional state are the noun *kalimwana* 'happiness, pride', the verb *-kalimwana*- 'to be happy, to be proud' and the phrase *itutu vovola* '(it hammers her/his body) s/he feels excited'.

For the "hurt (bullied) situation" and the acting out of being "hurt" clips the reactions of the two consultants are summarized in Table 8 (p. 358).

Other verbal means to refer to this emotional state are the verbs -*geda*- 'to bite, to sting, to hurt', -*sim*- 'to sting, to hurt' and -*teganini*- 'to ache, to hurt'.

For the "interested (asking) situation" and the acting out of being "interested" clips the reactions of the two consultants are summarized in Table 9 (p. 359).

For the "kind (friendly) situation" and the acting out of being "kind" clips the reactions of the two consultants are summarized in Table 10 (p. 359).

Other verbal means to refer to this emotional state are the adjective *-yobweli* 'lovely, flirtatious' and the verb *-yobweli-* 'to love, to be lovely, to be liked'.

For the "liked situation" and the acting out of being "liked" clips the reactions of the two consultants are summarized in Table 11 (p. 359).

For the "sad (lonely) situation" and the acting out of being "sad" clips the reactions of the two consultants are summarized in Table 12 (p. 360).

Another verbal means to refer to this emotional state is the noun *tutamwau* 'sadness, grief'.

For the "sneaky situation" and the acting out of being "sneaky" clips the reactions of the two consultants are summarized in Table 13 (p. 360).

For the "sorry situation" and the acting out of being "sorry" clips the reactions of the two consultants are summarized in Table 14 (p. 362).

Another verbal means to refer to this emotional state is the noun *kapisila* 'feeling sorry'.

For the "sure situation" and the acting out of being "sure" clips the reactions of the two consultants are summarized in Table 15 (p. 362).

Another verbal means to refer to this emotional state is the verb *-mokwita-* 'to be sure, to be right'.

For the "surprised situation" and the acting out of being "surprised" clips the reactions of the two consultants are summarized in Table 16 (p. 363).

Other verbal means to refer to this emotional state are the phrase *itutu nanola* '(it hammers her/his mind) s/he is surprised', the noun *yakaula* 'surprise', the verb *-kayou-* 'to startle, to surprise', and the verb *-seluve-PPIV-* 'to surprise someone, to make someone afraid of something'.

Table 14. Kilivila responses to "sorry" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS	
adjective/adverb	gaga	bad	
phrase	lumkola gaga	feeling bad	
phrase	bubunela gaga	bad manners	
phrase	migila gaga	bad face	
phrase	migila valam	face like crying	
phrase	lumkola mwau	feeling sad (heavy)	
phrase	migila gibugibu	sad and dull face	
phrase	ekabelu evinuvinu migila	her/his face is wry, close to	
		crying	
phrase	migila gubuluva	angry face	
phrase	migila kokola	face full of fear	
noun	kokola	fear	
nominalized	tovelau, navelau	(male) thief, (female) thief	
adjective			

Table 15. Kilivila responses to "sure" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
adjective/adverb	bwena	good
adjective	-kabitam	clever
adjective	-pe'ula	strong
phrase	bogwa lanukwali	I already knew
phrase	lumkola gigila	feeling like laughing
phrase	lumkola bwena	feeling good
phrase	migila gigila	laughing face
phrase	migila mwamwasila	face full of fun
phrase	tau gaga	bad man
verb	-gubulua-	to be angry
phrase	migila kasigegina	detached face

Table 16. Kilivila responses to "surprised" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	lumkola bwena	feeling good
phrase	lumkola kabitam	feeling clever
adjective	-kalimwana	happy
verb	-gigila-	to laugh
adjective	-gigila	laughing
adjective	-yana	showing off
adjective	-seaveaka	showing off

Table 17. Kilivila responses to "thinking" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
verb	-nanamsa-	to think
phrase	migila makala nanamsa	her/his face looks like thinking
adjective	-nanamsa	thinking
adjective	-kabitam	clever
adjective/adverb	bwena	good
adjective/adverb	тwаи	heavy, sad
adjective/adverb	gaga	bad
phrase	migila kaikai	face looks miserable
phrase	vovola kaikai	body feels miserable
phrase	elau vovola	body feels lazy
phrase	migila gasisi	fierce / violent face
noun	leya	anger

Table 18. Kilivila responses to "unfriendly" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	sena gaga avaka evagi	it is very bad what s/he is doing
phrase	gala magila	s/he does not want this
phrase	tau / vivila gaga	a bad /unfriendly man / woman
phrase	gala bwena	not good
adjective	-gasisi	fierce, violent
phrase	migila egubuluva	angry face
adjective	-gubuluva	angry, annoyed
phrase	bubunela gaga	bad manners
noun	leya	anger
adjective	-yovai	fighting
phrase	sena kokorola	much aversion

Table 19. Kilivila responses to "unsure" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
phrase	lumkola gaga	feeling bad
adjective/adverb	gaga	bad
phrase	gaga nanola	bad mind
adjective/adverb	bwena	good
phrase	lumkola gala bwena	not feeling good
phrase	lumkola bwena mamwasila	feeling good and having fun
phrase	bubunela bwena	good manners
phrase	bubunela gaga bad manners	
verb	-kapakala- to be reserved, withd	
adjective	-kutabova	quiet
phrase	lumkola kalimwana	feeling happy and proud
adjective	-gubuluva	angry

Table 20. Kilivila responses to "wanting" clips

PART OF SPEECH	KILIVILA EXPRESSION	ENGLISH GLOSS
adjective/adverb	bwena	good
adjective/adverb	gaga	bad
phrase	bubunela bwena	good manners
adjective	-gasisi	fierce, violent
phrase	lumkola mwau	feeling sad
phrase	nanola imwau	s/he is sad
phrase	migila gibugibu	sad and dull face
adjective	-gubuluva	angry
verb	-gilikimwala-	to smile
adjective	-kolimwana	proud
adjective	-seakava	showing off

For the "thinking situation" and the acting out of being "thinking" clips the reactions of the two consultants are summarized in Table 17 (p. 363).

Other verbal means to refer to this emotional state are the verbs *-doki-* 'to think, to guess', *-ka'isi-* 'to suppose, to think, to suggest', *-viseki-* 'to guess, to think, to give an example', *-pikwaku-* 'to think of, to worry about', *-yelu-* 'to remember, to think of', and *-kabitamu-* 'to think something over'.

For the "unfriendly (bullying) situation" and the acting out of being "unfriendly" clips the reactions of the two consultants are summarized in Table 18 (p. 363).

For the "unsure situation" and the acting out of being "unsure" clips the reactions of the two consultants are summarized in Table 19 (p. 364).

Another verbal means to refer to this emotional state is the noun wo'uya 'unsureness'.

For the "wanting situation" and the acting out of "wanting" clips the reactions of the two consultants are summarized in Table 20 (p. 364).

Another verbal means to refer to this emotional state is the noun *magi-PPIV* 'wish, want'.

We can summarize these results as follows:

- The Trobriand Islanders characterizations of the clips for the 5 emotion groups "Afraid, Angry, Sad⁵, Unfriendly" and "Thinking" overall agree with the "MREL" stimulus descriptions.
- The Trobriand Islanders characterizations of the clips for the 8 emotion groups "Disgusted" (feeling bad, like vomiting)⁶, "Kind" (feeling good, fine), "Fond" (good, bright, laughing), "Sorry" (sad, bad, crying), "Hurt" (sad, fear)⁷, "Happy" (fun, happy), "Bored" (gloomy, sleepy, dull miserable), and "Excited" (good feeling, fun) come close to the "MREL" stimulus descriptions.
- The Trobriand Islanders characterizations of the clips for the 2 emotion groups "Sneaky" (thief, tricky) and "Liked" (fine, fun) are more or less in the realm of the "MREL" stimulus descriptions.
- The Trobriand Islanders characterizations of the clips for the 5 emotion groups "Sure" (clever, strong, laughing, writing), "Surprised" (clever, laughing, showing off), "Unsure" (feel happy, feel bad), "Wanting" (fierce, sad, proud) and "Interested" (bright, clever, anger) hardly agree or do not agree at all with the "MREL" stimulus descriptions.

⁵ Note that this acted out emotion was also interpreted as an expression of "anger".

⁶ Note that this acted out emotion was also interpreted as an expression of "sadness, fear" as well as "anger".

⁷ Note that this acted out emotion was also interpreted as an expression of "happiness"

⁸ Note that this acted out emotion was also interpreted as an expression of "sadness" as well as "anger".

⁹ Note that this acted out emotion was also interpreted as an expression of "disgust" as well as "sadness".

Table 21. Emotion: ANGER (Ekman Photos P4, F2, M6)

Photo	Consultant(s)	Part of speech	Kilivila term	English gloss
P4	2,3,4,6, 7,9,10	verb, adjective	gubuluva	(to be) furious
	6	adjective	gaga	bad
	1	verb	etakenova	he does not know
	5	phrase	ala gigisa mwau	his face is sad
	8	phrase	ekebiga "a"	he says "ah" (surprise)
	2	phrase	gala magila	he does not like it
	8	phrase	egisi vavagi kwemanabweta	he sees a beautiful thing
F2	6,8,9	adjective	gaga	bad
	4,9	verb	ekapwagega	she opens her mouth
	1	verb, adjective	gubuluva	(to be) furious
	7	verb	ekasigegina	she shows her teeth angrily
	2	verb	eyakaula	she is surprised
	3	phrase	ekebiga "wai"	she says "wai" (disgust)
	5	phrase	sena ala leya	her big anger
	10	noun	тауиуи	pain
	2	phrase	etutu nanola	she is impressed
	3	phrase	gala bwena	not good
	8	phrase	ekebiga "a"	s/he says "ah" (surprise)
M6	3,7	verb	emitupayuyu	he closes his eyelid
	1	noun; adjective	togasisi	fierce man
	2	verb	imitakavati	he inspects sth.
	4	noun	gigila	laughter
	5	noun	gibugibu	sadness
	6	phrase	nanola mwau	his mind is sad, he is disappointed
	8	phrase	ekebiga "a"	he says "ah" (surprise)
	9	adjective	bwena	good
	10	phrase	ala kokola	his fear

- Persons acting in the clips for the emotion groups "Liked, Kind, Fond, Surprised" (6 tokens each), "Sure, Excited" (5 tokens each) and "Happy" as well as "Interested" (4 tokens each) were characterized as being "good".
- Persons acting in the clips for the emotion groups "Disgusted, Bored, Unfriendly" (6 tokens each), "Angry, Hurt, Sorry, Sad" (5 tokens each) and "Sneaky" as well as "Unsure" (4 tokens each) were characterized as being "bad".
- Persons acted in the clips for the emotion groups "Afraid, Thinking" and "Wanting" were characterized as either being "good" or "bad".

Thus, the MREL elicitation tool reveals that the Trobriand Islanders refer to 15 out of 20 basic emotional states in more or less the same way as speakers of English do. These emotional states include analogues to English 'Afraid', 'Angry', 'Sad', 'Unfriendly', 'Thinking', 'Disgusted', 'Kind', 'Fond', 'Sorry', 'Hurt', 'Happy', 'Bored', 'Excited', 'Sneaky' and 'Liked'. It was unclear whether the Kilivila characterizations of the remaining 5 basic emotional states corresponded in any way to the English descriptions. These emotional states encompass the following: 'Sure', 'Surprised', 'Unsure', 'Wanting' and 'Interested'.

3.2 Results of the data elicitation with the "Ekman faces"

In this subsection I present the results of the data elicitation session during which I presented photos of the "Ekman faces" to my consultants asking them to name the emotions expressed on the faces. I list the 6 basic emotions presented in the 3 series of photographs (i.e., I also present the data I collected with the practice photos P 1-6), the consultants verbal reactions (some consultants produced two responses) and refer to the individual consultants with a number (see Senft 2014).

Table 21 (p. 366) presents the consultants' reactions to the photos depicting the emotion "Anger":

This table shows that the consultants produced a broad variety of responses. Seven consultants (2,3,4,6,7,9,10) described the facial expression presented in P4 as expressing "Anger", three consultants (1,7,5) did that with photo F2, too, and just one consultant (1) did it with photo M6.

However, we also find descriptions of these photos that reveal that the consultants perceived the faces as expressing – among other things – "Sadness" (5,6), "Surprise" (8 (three times),2), "Dislike/Disgust" (2,3), "Fear" (10) and "Happiness" (4).

Table 22 (p. 368) presents the consultants' reactions to the photos depicting the emotion "Disgust".

We see that with the exception of one consultant (1 with photo F5) nobody describes the faces on the photos as expressing "Disgust". The descriptions show that the Trobiand Islanders perceived these faces also as expressing – among other

 $^{^{10}}$ Note that this acted out emotion was also interpreted as an expression of "happiness" as well as "anger".

Table 22. Emotion: DISGUST (Ekman Photos P1, F5, M5)

Photo	Consultant(s)	Part of speech	Kilivila term	English gloss
P1	1,3,4,5, 7,9	verb, adjective	gubuluva	(to be) furious
	2	verb	etakenova	he does not know
	6	adjective	gaga	bad
	8	verb	isekila	he does not know
	10	verb	ekabelu	he twists his mouth
F5	6,10	noun	тауиуи	pain
	7,9	noun	kasigegina	angrily showing teeth
	1	phrase	esukwani bogina	she smells a stench
	2	phrase	gala magila bigisi	she does not want to see
	3	adjective	gaga	bad
	3	phrase	gasisi magila biweya	fiercely / violently she will want to fight
	4	noun	gigila	laughing
	5	adjective	mwau	sad
	7	phrase	la leya	her (hot) anger
	8	noun	kasiwelu	uneasiness, fear
M5	1,4,9	verb, adjective	gubuluva	(to be) furious
	2	verb	etakenova	he does not know
	3	adjective	gaga	bad
	5	adjective	mwau	sad
	6	phrase	bivutukokola gugwadi	he will frighten children
	7	phrase	ikaikai vovola	it worries her/him, it makes her/him lazy
	8	phrase	ekebiga "eseki"	he says "we'll see"
	10	adjective	bwena	good

Table 23. Emotion: FEAR (Ekman Photos P6, F3, M4)

Photo	Consul-	Part of speech	Kilivila term	English gloss
	tant(s)			
P6	2,4,8	phrase	eyou lopola	it leaps the stomach = it makes his heart leap
	1	verb	emitikavati	he inspects
	3	phrase	ekilali matala	he opens his eyes
	5	verb	isibalutuva	he is frightened
	6	phrase	gaga migila	his face is bad
	7	phrase	ala kokola	his fear
	9	phrase	matala	his eyes – he opens them
			imitupunapuna	angrily
	10	verb	ekapakala	he does not turn a muscle
F3	1,2,10	phrase	ala kokola	her fear
	5,8	phrase	ikipwinipwini	she stares angrily
			matala	
	3	phrase	egibugibu ala	it is sad her sight
			gigisa	
	4	phrase	eyou lopola	it makes her heart leap
	5	phrase	ala leya	her anger
	6	phrase	gaga wala	just bad
	7	phrase	kaikai vovola	tired is her body
	9	verb	imitupunapuna	she opens (her eyes) angrily
M4	1,6	noun,verb	kokola	(to) fear
	7,10	phrase	ala kokola	his fear
	2	phrase	gala magila	he does not want sth.
	3	phrase	nanola mwau	his mind is sad
	4	phrase	eyou lopola	it makes his heart leap
	5	verb, adjective	gubuluva	(to be) furious
	8	sentence	kwetala vavagi	he saw one thing and wants
			egisi e magila tuvela bigisi	to see it again
	9	adjective	bwena	good

Table 24. Emotion: HAPPINESS (Ekman Photos P2, F1, M3)

Photo	Consultant(s)	Part of speech	Kilivila term	English gloss
P2	1,2,3,5,6,7,8,	verb, noun	gigila	to laugh, laughter
	9,10			
	1,4,8	noun	to(mwa)mwasila	man in a good mood
	2	noun	mwasawa	fun, love, surprise
F1	1,3,4,5,6,7,8,	verb, noun	gigila	to laugh, laughter
	9,10			
	3,4,5,7	noun	na(mwa)mwasila	man in a good mood
	2,8	verb, noun	mwasawa	fun, love, surprise
	1	adjective	kalimwana	happy
	6	adjective	bwena	good
M3	1,4,5,7,9	verb, noun	gigila	to laugh, laughter
	1,2,7,8,10	verb, noun	mwasawa	fun, love, surprise
	3,5	noun	to(mwa)mwasila	man in a good mood
	6	adjective	bwena	good

Table 25. Emotion: SADNESS (Ekman Photos P5, F4, M2)

Photo	Consultant(s)	Part of speech	Kilivila term	English gloss
P5	1,2,7,10	phrase	nanola mwau	his mind is sad
	5,8	noun	gibugibu	sadness
	6	verb	bivalam	he will cry
	3	verb	етітирауиуи	the eyelid goes down
	4	verb, adjective	gubuluva	(to be) furious
	9	adjective	bwena	good
F4	1,3,7,8	phrase	nanola mwau	her mind is sad
	4,5	noun	gibugibu	sadness
	2	phrase	gibugibu nanola	sadness on her mind
	9	verb, adjective	gubuluva	(to be) furious
	6,10	noun	valam	crying
M2	1,5	phrase	nanola mwau	his mind is sad
	3,7	noun	gibugibu	sadness
	6,10	noun, verb	valam, bivalam	crying, to cry
	6	noun	тауиуи	pain
	2	phrase	ikaikai nanola	it worries his mind
	8	phrase	ebubusi mitilagila	they flow his tears
	9	phrase	esisu edubaduba	he sits motionless
	3,4	verb, adjective	gubuluva	(to be) furious
	5,6	adjective	gaga	bad

things – emotions like "Anger" (1,3 (twice),4,5,7 (twice),6, 9 (twice), "Happiness" (4), and "Sadness" (5 (twice)).

Table 23 (p. 369) presents the consultants' reactions to the photos depicting the emotion "Fear".

Five consultants (2,4,5,7,8) described the facial expression presented in P6 as expressing "Fear", four consultants (1,2,4,10) did that with photo F3 too, and five consultants (1,4,6,7,10) did it with photo M4. The Trobriand Islanders' hearts leap both for joy and for fear – this phrase is used by consultant 2, 4 (twice) and 8 to refer to the facial expression depicted on the photos.

However, the Trobriand Islanders perceived these faces also as expressing – among other things – emotions like "Anger" (5 (three times),8,9) and "Sadness" (3 (twice)).

Table 24 (p. 370) presents the consultants' reactions to the photos depicting the emotion "Happiness".

This table shows that all the consultants clearly perceive the faces on all the photos as expressing (something like) "Happiness" and that they also verbally refer quite consistently to this emotion, characterizing it with expressions that refer to laughing and laughter, fun, happiness and being in a good mood.

Table 25 (p. 370) presents the consultants' reactions to the photos depicting the emotion "Sadness".

Seven consultants (1,2,5,6,7,8,10) described the facial expression presented in P5 as expressing "Sadness", nine consultants (1,2,3,4,5,6,7,8,10) did that with photo F4, and seven consultants (1,3,5,6,7,8,10) did it with photo M2. They also refer verbally relatively consistently to this emotion, using Kilivila expressions for "sadness, being sad" and for "crying". However, three consultants (3,4,9) perceive these faces also as expressing "Anger".

Table 26 (p. 372) presents the consultants' reactions to the photos depicting the emotion "Surprise".

Four consultants (1,2,5,8) described the facial expression presented in P3 as expressing "Surprise", 3 consultants (1,4,8) did that with photo F6, too, and 1 consultant (4) did it with photo M1 (if we interpret the phrase 'it makes her/his heart leap' as a "surprise" reaction). The majority of the consultants, however, perceives these faces also as expressing among other things "Anger, Sadness" and "Fear".

We can summarize these results as follows:

- The only emotion expressed in all the respective "Ekman faces" stimuli which was perceived by all consultants in the predicted way was "Happiness".
- Seven consultants perceived stimuli for the emotion "Sadness" in the predicted way for stimulus P5, nine for stimulus F4 and seven for stimulus M2.
 Consultants also interpreted the stimuli among other things as expressions of "Anger".
- Five consultants perceived stimuli for the emotion "Fear" in the predicted way for stimulus P6, four for stimulus F3, and five for stimulus M4. Consultants

Table 26. Emotion: SURPRISE (Ekman Photos P3, F6, M1)

Photo	Consul-	Part of speech	Kilivila term	English gloss
	tant(s)			
P3	1,2,5,8	phrase	eyou lopola	it makes his heart leap
	3,4,6,7,	phrase	imitupwinapwina	his eyes stare angrily
	9,10		matala	
	2	verb	isibalutuva	she is surprised
	6	adjective	gaga	bad
F6	6,9,10	adjective	bwena	good
	1,4	phrase	eyou lopola	it makes her heart leap
	2	phrase	magila bisakesi	her wish she will give
	3	noun	mwamwasila	good mood
	5	adjective	mwau	sad
	5	verb, adjective	gubuluva	(to be) furious
	7	noun	kokola	fear
	8	sentence	esisu vavagi	there is a beautiful thing
			kwemanabweta	(and) she says "ah"
-			ekebiga "a"	
M1	5,9	verb, adjective	gubuluva	(to be) furious
	1	phrase	gaga leya	bad hot anger
	2	adjective	bwena	good
	2	phrase	sena magila	he really wants sth.
	3	noun	tobidadem	ugly man
	4	phrase	eyou lopola	it makes his heart leap
	6	phrase	kaikai vovola	tired is his body
	7	phrase	emitupwinapwina	he stares angrily and
			evitukokola	frightens (somebody)
	8	verb	evalam	he cries
	10	phrase	nina mwau	his mind is sad

also interpreted the stimuli among other things as expressions of "Anger" and "Sadness".

- Seven consultants perceived stimuli for the emotion "Anger" in the predicted way for the stimulus P4, three for the stimulus F2 and one for the stimulus M6. Consultants also interpreted the stimuli among other things as expressions of "Sadness, Surprise, Disgust (Dislike)" and "Happiness".
- Four consultants perceived stimuli for the emotion "Surprise" in the predicted way for stimulus P3, three for stimulus F6, and one for stimulus M1. Consultants also interpreted the stimuli among other things as expressions of "Anger, Sadness" and "Fear".
- One consultant perceived the stimulus F5 for the emotion "Disgust" in the predicted way. Otherwise, the consultants interpreted these stimuli among other things as expressions of "Anger, Happiness" and "Sadness".
- The consultants randomly characterized the faces depicted on the "Ekman faces" stimuli cards either as "good" or "bad".

4. Discussion and a criticism of methods in researching the facial expression of emotions

In this section I provide the answers to the questions asked in the introduction.

4.1 How "effable" are emotions (that are claimed to be basic) or can we observe ineffability within the domain of emotions?

The data presented above document that with respect to the language of the Trobriand Islanders, emotions are a domain where we cannot observe ineffability – on the contrary, Kilivila has a rich inventory of terms (nouns, verbs, adjectives and idiomatic phrases and expressions) to precisely refer to, and to differentiate, emotions and inner feelings (see also Senft 1998; 2014).

4.2 Do consultants agree with one another how they name emotions?

The fact that Kilivila provides its speakers with a broad inventory of verbal means to refer to emotions has consequences for the consistency of the consultants' responses. In their responses to the "Ekman faces" stimuli all consultants agreed in naming the facial expression of "Happiness" in the predicted way, and the majority of the consultants agreed in naming the facial expression of "Sadness" in the predicted way. However, there is hardly any consistency in my consultants naming the other facial expressions for the four emotions "Fear, Anger, Surprise" and "Disgust" displayed in the "Ekman Faces" stimuli. The rank order of the other "basic" emotions that were perceived by my consultants in the predicted way is:

Happpiness > Sadness > Fear > Anger > Surprise > Disgust
$$(10/10/10)$$
 $(7/9/7)$ $(5/4/5)$ $(7/3/1)$ $(4/3/1)$ $(0/1/0)$

The numbers below the names for the emotions indicate the number of consultants that perceived the three "Ekman faces" stimuli in the predicted way.

But I have to point out once more that some consultants interpreted

- stimuli for "Sadness" as stimuli for "Anger",
- stimuli for "Fear" as stimuli for "Anger" and "Sadness",
- stimuli for "Anger" as stimuli for "Sadness, Surprise, Disgust" and even "Happiness",
- stimuli for "Surprise" as stimuli for "Anger, Sadness" and "Fear", and
- stimuli for "Disgust" as stimuli for "Anger, Happiness" and "Sadness".

However, the results of the pilot study which I conducted with just two consultants using the "Mind Reading Emotions Library (MREL)" stimuli revealed that the consultants referred to 15 out of 20 basic emotional states in more or less the same way as speakers of English do. These emotional states include analogues to English "Afraid, Angry, Sad, Unfriendly, Thinking, Disgusted, Kind, Fond, Sorry, Hurt, Happy, Bored, Excited, Sneaky" and "Liked". This observation – anecdotal as it may be – has consequences for answering the last question I pose in this paper.

4.3 Are facial expressions or situations better cues for labeling?

In my description of the MREL in section 2 of this paper I quoted Baron-Cohen's and his co-workers' definition of Emotions as "states of mind that arise as a result of specific experience and drive us to take action. Although emotions exist in the mind and so are essentially unobservable, they are frequently revealed through facial expressions, voice, posture and gesture..." (Mind Reading Emotions Library User Guide 2004: 6). This quote illustrates that emotions are not just displayed with facial expressions. On the contrary, the expression of emotions and inner feelings is done in "complex behaviour patterns" (Eibl-Eibesfeldt 1989: 492) which control and regulate not only facial expressions, but also posture and position of the body, muscular tonus, gesture, speech utterances, voice, pitch, personal distance between interactors (proxemics; see Hall 1966), eye-contact or its avoidance, skin temperature, pulse rate, etc. Some of the expressive motor patterns that constitute these behaviour patterns are "fixed action patterns" that are innate – as proven in research on the expressive behavior of deaf-and-blind-born children (Eibl-Eibesfeldt 1973; also 1989: 466, 492), many other of these behaviour patterns are ritualized in culture specific ways (Eibl-Eibesfeldt 1989; 546f.). Even if we accept Ekman's claim that there is a set of basic emotions, these basic emotions are expressed not just in the face, but in much more complex interactional behavour patterns – which may have even evolved into (ritualized) interaction strategies (see Eibl-Eibesfeldt 1989: 520f.; 546f.). Therefore, photographs of static facial expressions seem to be a rather inadequate means to elicit terms for the emotions claimed to be expressed by these "frozen" facial expressions. I think the results of that part of my study on expressions for the emotions in Kilivila that used the "Ekman Faces" stimuli has clearly shown the inadequacy of this elicitation tool. These results also refute Ekman's strong claim

quoted in the introduction to this paper in footnote 2, namely that "[r]egardless of the language, of whether the culture is ... industrialized or preliterate, facial expressions are labeled with the same emotion terms" (Ekman 1973: 220). This is clearly not the case – neither across languages – as the comparison of Kilivila and English shows, nor within a language – as the Kilivila data presented above show.

However, if we look at the results of the exploratory pilot study, it seems that tools like the "Mind Reading Emotions Library" with film clips and especially with film clips where emotions are enacted within a brief context – thus being contextualized in an instance of a specific social interaction – are a more adequate tool to do research on the language of emotions.

But I have to concede here that the emotion clips of the MREL are "staged" by professional actors - so they are not "the real thing" so to speak, but a kind of "fictive" emotion (if this analogy to the literary sciences may be permitted). I think the best way to falsify - or verify - universal claims à la Ekman would be to gather film documents of how members of various cultures express emotions in everyday interactions.¹¹ However, then we have to answer the question how the persons expressing these emotions and their interactors would classify and label what they were doing and whether or not other members of this (sub-)culture would validate their classification and their choice of an emotion term. Moreover, we have to find out what people really do when they (claim that they) refer to emotions. Do they specify an emotion or rather the cause(s) of a felt (?) or sensed (?) inner state or do they refer to a learned cultural concept that is said to be adequate in a given, described situation? Thus, we are faced with severe methodological problems, if not dilemmata, which we have to overcome in some way or another if we really want to do more adequate research on the expression of, and the reference to, emotion in various languages and cultures than the research that has been done so far.

Abbreviations

- 1. first person
- 3. third person
- CP classificatory particle, classifier
- FUT future
- PPIV possessive pronoun (marking inalienable possession)

References

ADORNO Theodor W., Hans Albert, Ralf Dahrendorf, Jürgen Habermas, Harald Pilot and Karl Popper, 1969, *Der Positivismusstreit in der deutschen Soziologie*, Darmstadt, Luchterhand.

BARON-COHEN Simon, et al. 2003, Mind Reading, the Interactive Guide to Emotions, Cambridge, University of Cambridge, Jessica Kingsley Publishers.

¹¹ For a most recent study that falsifies Ekman's claims see Jack et al. (2012).

- BELL Charles, 1806, Essays on the Anatomy of Expression in Painting, London, Longman, Reese, Hurst & Orme.
- DARWIN Charles, 1872, The Expression of Emotion in Man and Animals, London, Murray.
- DUCHENNE Guillaume B. A., 1876, Mécanisme de la physiognomie humaine ou analyse électro-physiologique de l'expression des passions, Paris, J. B. Bailliere et Fils.
- EIBL-EIBESFELDT Irenäus, 1973, The Expressive Behavior of the Deaf-and-Blind Born, in M. von Cranach and I. Vine (eds), *Social Communication and Movement*, London, Academic Press: 163-194.
- 1989, *Human Ethology*, New York, Aldine de Gruyter.
- EKMAN Paul, 1973, Cross-Cultural Studies of Facial Expressions, in P. Ekman (ed), Darwin and Facial Expression – a Century of Research in Review, New York, Academic Press, 169-222.
- 1994, Strong Evidence for Universals in Facial Expressions: A Reply to Russell's Mistaken Critique, *Psychological Bulletin*, 115: 268-287.
- EKMAN Paul and Wallace V. FRIESEN, 1975, *Unmasking the Face. A Guide to Recognizing Emotions from Facial Expressions*, Englewood Cliffs, Prentice Hall.
- HALL Edward T., 1968, Proxemics, Current Anthropology 9: 83-95 & 106-108.
- HJORTSJÖ Carl-Herman, 1969, Man's Face and Mimic Language, Malmö, Student-litteratur.
- IZARD Carroll E. and Patricia M. SAXTON, 1988, Emotions, in R. C. Atkinson, R. J. Herrnstein, G. Lindzey, and R. D. Luce (eds), Stevens' Handbook of Experimental Psychology, Second Edition, Volume 1, Perception and Motivation, New York, John Wiley & Sons, 627-676.
- JACK Rachael E., Oliver G. B. GARROD, Hui YU, Roberto CALDARA and Philippe G. SCHYNS, 2012, Facial Expressions of Emotions are not Culturally Universal, *PNAS Early Edition*, 4p. www.pnas.org/cgi/doi/10.1073/pnas.1200155109
- KUIPERS Joel C., 1998, *Language*, *Identity and Marginality in Indonesia*, Cambridge, Cambridge University Press.
- LEVINSON Stephen C., Gunter SENFT and Asifa MAJID, 2007, Emotion Categories in Language and Thought, in A. Majid (ed), *Language and Cognition Group Field Manual Volume 10*, Nijmegen, Mimeo, 46-52.
- LEVY Robert I. (ed), 1983, Self and Emotion. Special Issue of Ethos 11.
- Mind Reading Emotions Library User Guide, Version 1.2., 2004, London, Jessica Kingsley.
- ROSALDO Michelle Z., 1983, The Shame of Headhunters and the Autonomy of Self, *Ethos* 11: 135-151.
- RUSSELL James A., 1994, Is there Universal Recognition of Emotion from Facial Expression? A Review of the Cross-Cultural Studies, *Psychological Bulletin* 115: 102-141.
- SENFT Gunter, 1986, *Kilivila The language of the Trobriand Islanders*, Berlin, Mouton de Gruyter.
- 1998, Body and Mind in the Trobriand Islands, Ethos 26: 73-104.
- 2014, Expressions of emotions, in *Gunter Senft/Research*, Web resource: http://www.mpi.nl/people/senft-gunter/research/expressions-for-emotions