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Referring to colour and taste in Kilivila

Stability and change in two lexical domains of sensory perception*

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This chapter first compares data collected on Kilivila colour terms in 1983 with data collected in 2008. The Kilivila lexicon has changed from a typical stage IIIb into a stage VII colour term lexicon (Berlin and Kay 1969). The chapter then compares data on the Kilivila taste vocabulary collected in 1982/83 with data collected in 2008. No substantial change was found. Finally the chapter compares the 2008 results on taste terms with a paper on the taste vocabulary of the Torres Strait Islanders published in 1904 by Charles S. Myers. Kilivila provides evidence that traditional terms used for talking about colour and terms used to refer to tastes have remained relatively stable over time.

Keywords: language of perception; Papua New Guinea; Trobriand Islanders

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1. Introduction

In 2008 I continued fieldwork on the Trobriand Islands in Papua New Guinea with the aim of researching the Trobriand Islanders' language of perception. In this chapter I will not only present data on how the Trobriand Islanders talk about colour and taste, but I will also try to answer the following question: how stable is the lexicon for perceptual experiences in these two domains?

Back in 1983 I collected data on Kilivila colour terms. In the first part of this chapter I compare these data with the data I collected in 2008. Many of the predictions I made about the development of colour categories in 1983 are confirmed. Integrating English colour terms as foreign words, the Kilivila colour term lexicon has changed from a typical stage IIIb into a stage VII colour term lexicon (Berlin and Kay 1969).¹ However, traditional colour terms as well as folkbotany terms that refer to the plants, fruits and soils used to make colours for dyeing grass-skirts are still used.

In the second part of the chapter I compare the data on taste vocabulary that I collected in 1982/83 with the results of my 2008 taste term elicitation experiment with a 'taste kit' developed by the Max Planck Institute's Language and Cognition Group. I did not find evidence of substantial change in this domain.

Before I conclude the chapter with a general summary of the results presented, I compare the 2008 results on taste terms with a paper on the taste vocabulary of

1. In my publication of the data collected in 1983 (Senft 1987) I heavily relied on Berlin and Kay (1969) and Kay and McDaniel (1978). For reasons of better comparison between my old and new data I stick in this chapter to the "stage" divisions of colour lexica proposed there. Berlin and Kay (1969) differentiate the following stages on the basis of the available basic colour terms:

- Stage I [white and black]
- Stage II + [red]
- Stage IIIa + [green]
- Stage IIIb + [yellow]
- Stage IV + [green and yellow]
- Stage V + [blue]
- Stage VI + [brown]
- Stage VII + [purple, pink, orange, grey]

All colours of earlier stages are present in later stages.

the Torres Strait Islanders published in 1904 by Charles S. Myers. It turns out that some of his original results can still be corroborated.

In what follows I briefly discuss general methodological considerations that underlie the present study and then introduce the Trobriand Islanders and their language Kilivila.

1.1 The use of stimuli in linguistic investigation

When we talk about the world we realise that our languages are relatively good at describing certain states of affairs, but quite limited in others. We can more or less easily provide descriptions of rooms (Ullmer-Ehrich 1982) or route descriptions (Weissenborn 1986; but see Senft 2000: 108), but it seems to be quite difficult to describe smells, tastes, tactile perceptions, faces, and other things we perceive and experience. Our project on 'Categories across language and cognition' at the Max Planck Institute for Psycholinguistics in the Language and Cognition Group deals among other things with the topic of 'ineffability', the difficulty or impossibility of putting certain experiences into words. To tackle this problem we followed the well-tryed methodological tradition of the Language and Cognition Group and developed a standardised set of stimuli of colour patches, geometric shapes, simple sounds, tactile textures, smells, and tastes. These stimuli kits were – and still are – used to elicit descriptions from speakers of more than a dozen languages which are spoken in various parts of the world. The languages are typologically and genetically very diverse – and this diversity is also reflected in the cultures of their speakers. Before we compare the overall languages in this study with each other (this research is still in progress), we examine how codable the different sensory modalities are for the individual languages by comparing how consistent speakers of the specific language are in how they describe the materials in each modality (see Majid and Senft 2009: 18–19).

Right from the beginning of our research, the members of the Language and Cognition Group (formerly the Cognitive Anthropology Research Group) have been working with stimuli kits to standardise our methods of data gathering and to ensure comparability of these data across languages and cultures (see Senft 1994). And right from the beginning of our research we were aware of the fact that these kits have certain inbuilt restrictions and constraints with respect to what kind of data is elicited with them – however, this was obviously the price we had to pay for eliciting comparative data. We attempted to design these kits so that they elicit in the speech communities under study as broad a range as possible of the verbal and behavioural data which are in the focus of our specific research interests.

The standardised stimuli allow us not only to replicate data elicitation sessions but also to compare the elicited data cross-linguistically and cross-culturally.

However, working with these kits for data elicitation requires a certain familiarity of the researchers with their fields and with the languages they research and speak themselves. It is only on the basis of their experience and their competence in the languages under study and of their deep understanding of the ethnography of the cultures researched that researchers can adequately use these kits for linguistic elicitation, that they can give the instructions to their consultants and that they can decide whether or not the gathered data represent the everyday usage of these linguistic responses (and the naturalness of other behavioural reactions) or whether the elicited data have to be regarded as ‘artefacts’ of the elicitation method.² So far the counterchecking of already existing corpora of naturally occurring discourse with the data which we have been eliciting for our research purposes over the last twenty years in the languages and cultures we have been researching convinced us that this last possible interpretation of our data does not hold for them.

To sum up, we have always been aware of what psychologists usually refer to as the ‘ecological validity’ problem of elicited data. We are convinced though that the kits we developed for focused data collection provide researchers with an adequate and reliable sample of speech data for their research questions. These corpora constitute our cross-culturally and cross-linguistically comparative data base for our various research projects (see Senft 2007: 242). To emphasise it once more, these corpora are based on “a comprehensive understanding of the linguistic system and a rich grounding in ethnography” (Majid and Levinson 2011: 10) which allow the researchers to refute possible alternative explanations of the data. Aiming for comparable data had – and always will have – its costs, but we are convinced that the benefits of the corpora collected with these data elicitation kits – which are always complemented with data that document naturally occurring discourse – by far outweigh these costs (see Senft 2007: 243).³ In what

2. In the last 28 years it happened only once that I questioned the validity of data I had elicited with a questionnaire in a pilot study on logical connectives in Kilivila. I was convinced that the data I got were artefacts because I never had heard my consultants use these forms in everyday interactions before and I had never used them, either. I bluntly asked them “This is Kilivila, but you do not speak like this, right?” and they confirmed my suspicion. This was the only time where I really collected ‘negative evidence’ for the elicited use of these specific logical connector forms (see also Bohnemeyer, this volume, who discusses negative evidence). It goes without saying that I never used these data.

3. Compare Jürgen Bohnemeyer’s argument in his contribution to this volume where he also argues “that observation of spontaneous interactions and elicitation should be pursued in tandem”. This is no wonder: Jürgen Bohnemeyer was first a PhD student (1995–1998) and then a staff member (1999–2003) of the Language and Cognition Group in Nijmegen.

follows, however, I first want to briefly introduce the Trobriand Islanders and their language.

1.2 The Trobriand Islanders and their language Kilivila

The Trobrianders have become famous, even outside of anthropology, because of the ethnographic masterpieces on their culture published by the famous anthropologist Bronislaw Kasper Malinowski, who did field research there between 1916 and 1920 (Young 2004; also Senft 1999, 2006). The Trobrianders belong to the ethnic group called ‘Northern Massim’. They are gardeners, doing slash and burn cultivation of the bush; their most important crop is yams. Moreover, they are also famous for being excellent canoe builders, carvers, and navigators, especially in connection with the ritualised ‘Kula’ trade, an exchange of shell valuables that covers a wide area of the Melanesian part of the Pacific (see Malinowski 1978 [1922]; Persson 1999). The matrilinear but virilocal society is highly socially stratified. The Trobriand clan hierarchy consists of four clans with the Malasi clan as the socially highest ranked clan followed by the Lukuba clan, the Lukwasigiga clan, and finally the Lukulabuta clan. All four clans also differentiate between named subclans. The most important access to political power is membership in the highest ranking subclans. There are some other means to acquire status within the society, such as being a versatile rhetorician, a master-carver, an expert magician, and so on. However, compared to the political significance of inherited rank, these alternatives for achieving status are of secondary importance.

The Trobriand Islanders’ language Kilivila is one of 40 Austronesian languages spoken in the Milne Bay Province of Papua New Guinea. It is an agglutinative language and its unmarked word order pattern is VOS. The Austronesian languages spoken in Milne Bay Province are grouped into 12 language families; one of them is labelled Kilivila. The Kilivila language family encompasses the languages Budibud (or Nada, with about 200 speakers), Muyuw (or Murua, with about 4,000 speakers), and Kilivila (or Kiriwina, Boyowa, with about 25,000 speakers). Kilivila is spoken on the islands Kiriwina, Vakuta, Kitava, Kaile’una, Kuiawa, Munuwata, and Simsim. The languages Muyuw and Kilivila are each split into mutually understandable local dialects. Kilivila is classified as a Western Melanesian Oceanic language belonging to the Papuan-Tip-Cluster group (Senft 1986: 6). In former times some Trobrianders could also speak the lingua franca ‘Police Motu’, however, these days Motu is no longer heard. Children who attend school learn English, and by now more and more young Trobriand Islanders speak English with foreigners who visit the Islands; in everyday interactions, however, one observes only a few cases of code switching from Kilivila into English. Kilivila is the dominant language on the Islands.

2. Kilivila colour terms in 1983 and in 2008

2.1 Method, consultants and results of my 1983 study on Kilivila colour terms

In 1983 I collected data on colour terms with 60 consultants (30 female/30 male) representing five generations (ranging from 4 to 75 years of age). All consultants lived in Tauwema on Kaile'una Island, my place of residence on the Trobriands ever since I started my research on the Trobriand Islanders' language and culture. To elicit colour terms I used the plate on 'colour' in Pheby and Scholze's picture dictionary *Oxford Duden Bildwörterbuch* (Pheby and Scholze 1979: 600–601, plate 343). The aims, methods, and results of this study are reported in Senft (1987). In what follows I give a brief summary of the main findings. All in all I collected 30 terms that were used to refer to colours; 13 of these terms were also used to refer to flowers and to blossoms of trees. Kilivila has also a generic term for colour, *noku*; this term is also used to refer to a bush the roots of which women used to produce a reddish dye for their skirts. My consultants produced the following five categories of terms as a reaction to the colour stimuli presented in the picture dictionary, WHITE, BLACK, RED, YELLOW, GREEN, BLUE, BROWN, ORANGE, PINK, and VIOLET (note that this presentation of the data is just a rough sketch of the results presented in Senft 1987):⁴

1. Abstract or 'basic' colour terms in Berlin and Kay's (1969) sense: *pupwakau* (WHITE), *bwabwau* (BLACK), *bweyani* (RED).
2. Source terms belonging to the lexical set of 'folkbotany' (see Conklin 1955) referring to plants, trees, fruits, nuts, etc. that are used by themselves as colour terms: *digadegila* (YELLOW, BLUE, GREEN), *veravera* (PINK, BROWN), *(ya-)botova* (BLUE, PINK), *gisivoyala* (PINK), *vau* (RED), *sinigeyata* (ORANGE), *dararugu* (VIOLET), *uravera* (PINK, BROWN), *gana'ugwa* (ORANGE), *siluedala* (PINK, BROWN), *tauvau* (YELLOW), *pipimata* (PINK), *kasikesi* (PINK).
3. Other source terms, i.e. names for objects that characteristically have that colour: *kwinin* ('Quinine' was the name of a drug against malaria; Quinine tablets were yellow), *budakola* (charcoal, BLACK).
4. Loan words, i.e. colour terms borrowed from English, transformed and produced in the mould of Kilivila word formation principles: *pepol* (ORANGE), *bulum* (BLUE, GREEN), *kwegulini* (GREEN).

4. I use small caps to refer to colour stimuli; thus *white* refers to the colour term and WHITE refers to the stimulus.

5. English colour terms: *white* (WHITE), *black* (BLACK, BROWN), *red* (RED, ORANGE, GREEN), *yellow* (YELLOW, BLUE), *green* (GREEN, YELLOW, BLACK, BLUE, BROWN), *blue* (BLUE, BLACK), *brown* (BROWN), *orange* (ORANGE), *pink* (PINK, VIOLET).

The general picture with respect to the 1983 inventory and usage of Kilivila colour terms is as follows (see Senft 1987:331–332): *pupwakau* (WHITE), *bwabwau* (BLACK), *bweyani* (RED), and *kwinin* (YELLOW) seem to be the basic colour terms in Kilivila. Most people do not realise any more that *kwinin* is a term that once was used to refer to an anti-malaria drug. Therefore this term can be included into the set of basic colour terms. The same holds for the term *digadegila* (YELLOW), although its semantic scope is not as clear as the scope of *kwinin*. The terms *digadegila* and *kwinin* must have been competing with each other for a while; in 1983 the term *kwinin* had almost replaced the older term *digadegila*. Thus Kilivila would have a “typical stage IIIb basic color lexicon” in Berlin and Kay’s classic terminology (1969: 19; see below).

This fact is mirrored in the use of English colour terms as foreign words that were produced by Kilivila native speakers according to English lexical semantics, that is to say, BLUE elicited the term *blue*. However, the use of English colour terms indicates a change in the Kilivila basic colour term lexicon: we also observe that the English colour terms *green* and *blue* – including the loan words *kwegulini* and *bulum* (and also a very few tokens of the term *brown* that are negligible) – were more or less produced according to English lexical semantics. With this expanded basic colour lexicon we have a developing “typical stage IV lexicon” which – if we interpret the very few tokens of the term *brown* just as an indication of language change in progress – in the long run will lead to a stage V lexicon (Berlin and Kay 1969: 19; see below).

The use of source terms, i.e. terms belonging to the folkbotany lexical set and names for objects characteristically having that colour, seems to be of marginal importance. They are very rarely used by a few consultants only.

Kilivila offers three additional colour terms to refer to colours on traditional carvings, namely *pwaka* (lime (powder), WHITE), *kwanasi* / *pwawasi* (BLACK), and *marakana* (RED). These three terms, also so-called source terms (see categories 2 and 3 of terms above), were not produced by informants in the 1983 study.

In 1983 the following trends with respect to language change in progress affecting Kilivila colour terms were observed (see Senft 1987:338–341):

1. Relying on Berlin and Kay’s (1969) categorisation of typical basic colour lexica, the Kilivila basic colour term lexicon is changing from a typical stage IIIb lexicon with specific terms for the colour stimuli BLACK, WHITE, RED, YELLOW

to a typical stage IV lexicon with specific terms for the colour stimuli BLACK, WHITE, RED, GREEN, YELLOW (Berlin and Kay 1969:19) produced by informants ranging from 15 to 44 years of age. The schoolchildren (ranging from 8 to 14 years of age) have developed a typical stage V lexicon with specific terms for the colour stimuli BLACK, WHITE, RED, GREEN, YELLOW, BLUE (Berlin and Kay 1969:20) that is starting to develop into a stage VII lexicon with (8, 9, 10, or 11) specific terms for the colour stimuli BLACK, WHITE, RED, GREEN, YELLOW, BLUE, BROWN, PURPLE, PINK, and ORANGE, but with no term for GREY yet (Berlin and Kay 1969:22).⁵ Local missionaries and schoolchildren, especially girls (who are not playing truant as often as boys), that is consultants who learned or are learning English, are the main agents of this change, which is due to the adoption of English colour terms and their integration into the Kilivila lexicon.⁶

2. This process is to a high degree occurring in the production of colour terms by male consultants ranging from 15 to 44 years of age and by children, above all boys ranging from 4 to 7 years of age. Children start to acquire English colour terms during the period of first language acquisition, probably due to the fact that the schoolchildren – mainly the girls – use English colour terms at home thus influencing the colour term lexicon of their younger brothers and sisters while taking care of them.
3. The process of integrating English colour terms into the Kilivila lexicon is gradually replacing earlier attempts to incorporate English colour terms as loan words.
4. The process of integrating English colour terms as foreign words into the Kilivila lexicon has only partly affected the use of the traditional ‘basic’ colour terms *pupwakau*, *bwabwau*, *bweyani*, *kwinin*, and *digadegila*. Their extension, which is very broad in the group of consultants ranging from 45 to 75 years of age, has become narrower among younger consultants who also produce fewer tokens of these colour terms. However, although this clear semantic change can be observed it has not affected the fact that these traditional ‘basic’ Kilivila colour terms are still acquired.

5. In 1982/83 the children were taught in English by teachers who came from other areas of Papua New Guinea; the teachers did not speak Kilivila.

6. Officially Papua New Guinea has a compulsory education system, but on the Trobriands children may do as they please, and many of them, especially boys, prefer to either play with their mates or help their father or their matrilineal relatives in the garden or during fishing expeditions.

5. The process of integrating English colour terms as foreign words into the lexicon of Kilivila has affected the usage of source terms, especially of folkbotany terms, rather dramatically. The dying out of folkbotany terms may be explained by the fact that Western dyes based on chemicals are becoming increasingly available to Trobriand women. These dyes are, incidentally, sold under a label presenting the specific English colour term. The traditional knowledge of folkbotany for dyeing skirts is gradually becoming marginal.

2.2 Results of my 2008 study on Kilivila colour terms

Twenty five years later I once more collected data on Kilivila colour terms, though using a different method for data collection.

2.2.1 *Consultants and methods*

In 2008 I elicited data from twelve consultants using the so-called ‘colour kit’ developed by members of the Language and Cognition Group at the Max Planck Institute for Psycholinguistics (Majid and Levinson 2007). This colour kit is a booklet with 80 pages, each page containing a single colour chip. It is a reduced version of the standardised Munsell colours which samples 20 equally spaced hues at 4 degrees of brightness all at maximum saturation.⁷ The chips are presented in a fixed random order. There are also two stand-alone laminated colour plates which test for colour-blindness. Consultants are first tested for colour-blindness: they have to trace the winding lines between two X’s displayed on the two laminated cards. If consultants can do this, they are presented with the first page of the colour booklet and asked ‘What colour is this?’. The Kilivila equivalent of this question is:

- (1) *Amyagala ma-na-kwa noku*
 what.name DEM-DEM-CP.thing colour
 ‘What’s the name of this colour?’

The colours are presented to the consultants in a fixed order as in the booklet, from page 1 to page 80 (see Majid and Levinson 2007:23–24). Table 1 presents the five female and the seven male consultants participating in my study. They are all native speakers of Kilivila, ranging in age from 15 to 65 years. Two men and two women learned English in primary school, and one man and one woman learned English at the Kiriwina High School in Losuia on Kiriwina Island. They represent

7. The standardised Munsell colour chips were also used in Berlin and Kay’s by now classic 1969 study and in later studies like, for example, the World Colour Survey (see e.g. Kay and Regier 2003, 2006, 2007). The full kit has 330 colour chips – 320 chips sampled with 40 equally spaced hues, 8 degrees of brightness, all maximum saturation, plus 10 achromatic chips.

all four clans of the highly socially stratified Trobriand society (see Section 1.2). It is important to know the clan membership of consultants to see whether their status has any effect on their verbal behaviour. All consultants live in the village Tauwema on Kaile'una Island. I had no problems whatsoever in eliciting colour terms with my consultants in the way described above.

Table 1. Consultants in the 2008 'Colour Terms' study on the Trobriand Islands

Name	Age	Gender	Clan	Other Languages	School Education
C1 Moagava	45	M	Lukwasisiga	NO	NO
C2 Mounaki	24	M	Malasi	English	Primary School
C3 Galabagula	37	M	Lukwasisiga	NO	NO
C4 Toguguna	24	M	Lukwasisiga	English	Primary School
C5 Mwagesituma	20	F	Malasi	English	High School
C6 Pulia	38	M	Lukwasisiga	English	High School
C7 Dakevau	55	F	Lukulabuta	NO	NO
C8 Kaluakina	23	F	Malasi	English	Primary School
C9 Taidyeli	65	M	Malasi	NO	NO
C10 Bovenia	18	F	Lukulabuta	English	Primary School
C11 Ludi	15	F	Lukulabuta	NO	NO
C12 Gumadaka	40	M	Lukuba	NO	NO

2.2.2 Results⁸

The consultants produced the 46 expressions for the colour stimuli presented below. The results of this study can be summarised as follows:

1. The 2008 study reveals that there are gaps in the Kilivila colour lexicon; thus, Kilivila is a non-partition language (Kay and Maffi 2000: 745–746). None of the twelve consultants could produce names for all the colour stimuli presented – many of these gaps are the same across consultants. English colour terms were most probably produced to fill such gaps; however, not all English colour terms produced by the Trobriand Islanders are entirely synonymous with their English models. Language change is indeed in progress.

8. Colour stimuli used and a detailed documentation of colour terms produced by consultants can be found under the following URL: <http://www.mpi.nl/people/senft-gunter/research>.

2. The traditional Kilivila abstract colour terms (*bwabwau* – BLACK / *pubwakau* – WHITE / *bweyani* – RED) are still produced to refer to a relatively broad range of colour stimuli. Three younger consultants (C2, C10, C11) who range in age from 15 to 24 years did not produce any of these terms during the data elicitation session; instead, they produced the equivalent English colour terms. However, when I asked these consultants after the elicitation session whether they always use *black*, *white*, and *red*, they emphasised that they use the equivalent Kilivila colour terms (*bwabwau* / *pubwakau* / *bweyani*) to refer to objects in their material culture that are painted with these colours (like canoes, chiefly yams houses, body paintings, etc.). That means that the terms *pubwakau*, *bwabwau*, *bweyani* and the terms *white*, *black*, and *red* are used in different contexts. Thus, the existence of traditional abstract Kilivila colour terms are not affected by the language change in progress, although they have been restricted in their use and thus narrowed semantically.

Only three consultants each produced the terms *kwinin* and *digadegila*. They seem to be in the process of being superseded by the English term *yellow*. However, the use of other source terms belonging to the folkbotany set can still be observed, not only with two male and one female consultants ranging in age from 45 to 65 years (C1, C7, C9) – they produced four (so far undocumented) terms of this type: *semtamata* (GREEN), *dararugu*, *gana'ugwa*, and *veravera* – but also with younger consultants. 23-year-old Kaluakina produced the term *gana'ugwa*, 20-year-old Mwagesituma produced the term *soso'u* (VIOLET) and 24-year-old Toguguna produced the terms *botova*, *oravera* (PINK, BLUE, GREEN, ORANGE), and *soso'u*. It is interesting to note that Toguguna, a young man, still produced three terms of this type. Thus, contrary to my predictions these source terms are still – though rather rarely – used to refer to colours.

3. Only Toguguna and 20-year-old Mwagesituma produced the English loan word *kwegulini*; Mwagesituma also produced the loan word *gulini*. As predicted these terms were replaced by English colour terms.
4. All English colour terms (*black* / *white* / *red* + *light red*, *dark red*, *pink red* / *yellow* + *light yellow*, *dark yellow*, *pink yellow*) that cover the traditional Kilivila stage IIIb lexicon were produced by four (C2, C6, C10, C11) of the twelve consultants; the consultants C3 and C12 used the English colour terms *black*, *red*, and *yellow*, and three other consultants (C1, C4, C5) used the term *yellow* (when they speak Kilivila). This result mirrors the findings on the use of the traditional Kilivila colour terms (see Section 2.1), emphasising the role of the younger generation with school education as the agents of this language change in progress which affects Kilivila colour terminology.
5. All consultants produced tokens of the colour terms *green* (referring to GREEN and BLUE) and *purple* (note that the terms do not always refer to an adequately

matching stimulus). Eight consultants each produced tokens of the colour terms *brown* and *blue* (referring with the latter term to BLUE and GREEN). And six consultants each produced tokens of the colour terms *light blue*, *orange*, and *pink*. Thus, *green*, *purple*, *blue*, *brown*, *orange*, and *pink* are obviously colour terms that already found their way into the Kilivila colour term lexicon or are in the progress of being integrated into it – although not all of them are produced according to English lexical semantics.

Five consultants produced tokens of the colour term *dark green*. Four consultants each produced tokens of the colour terms *light green*, *light blue*, and *dark blue*. Three consultants each produced tokens of the colour terms *light orange* and *dark purple*. Two consultants produced tokens of the colour terms *light purple* and *dark purple*. And one consultant produced tokens of the colour terms *sky blue*, *pink blue*, *indigo*, *dark orange*, and *violet*. These colour terms seem to play only a marginal role in the Kilivila colour term lexicon.

The differentiation of colours into ‘dark’ and ‘light’ is made by six consultants (C2, C3, C6, C8, C10, C11), most of which belong to the younger generation. All consultants have a good school education. It could also be that the colour differentiation the speakers try to make with these compound terms actually hedge their insecurity with respect to the adequate use of these terms.

Consultant C10 produced twelve colour terms mentioned in this section,⁹ consultant C2 produced eleven terms, consultant C11 produced ten terms, consultant C6 produced nine terms, and consultant C8 produced eight terms. Four of these consultants belong to the young generation and one of them (C6) got a good High School education. The consultants C1, C7, and C9 produced only one of these terms each – they range in age between 45 and 65 years.

The consultants were not consistent in the use of English colour terms. The majority of the speakers who use English terms belong to the younger generation who had school education; they are still the agents of the language change in progress which affects the Kilivila colour term lexicon.

2.3 Colour terms in Kilivila then and now

Although the results reported for the 2008 study are based on data produced by only twelve consultants – and not by 60 consultants as in the 1983 study – a comparison between these data reveals the following:

1. The 2008 elicitation study confirmed my long-term impression based on my intensive field research on the Trobriands ever since 1982 and on my own

9. These terms are *green*, *purple*, *brown*, *blue*, *orange*, *pink*, *indigo*, *violet*, *sky blue*, *pink blue* and the differentiation between ‘dark’ and ‘light’ colours.

competence as a fluent speaker of Kilivila that Kilivila is a non-partition language (Kay and Maffi 2000: 745–746; Kay et al. 2009, especially Section 5), i.e. it is a language lacking an exhaustive colour-naming system (see also de Vos 2011; Hill 2011, who report the same result for their study on Kata Kolok and Umpila colour terms within our ‘Categories across language and cognition’ project). Thus Kilivila – and also Kata Kolok and Umpila – are counterexamples to the claim Paul Kay and his colleagues have maintained since 1969 and lately repeated in their World Language Survey (Kay et al. 2009) where they state that the languages studied give no indication of any non-partition status. I assume that the younger speakers of Kilivila most likely produce English colour terms to fill gaps in their language naming system; however, note that not all English colour terms are entirely synonymous with their English models (yet).

2. In 2008 the consultants still produced Kilivila basic colour terms in Berlin and Kay’s (1969) sense; the traditional indigenous basic stage IIIb colour term lexicon was still observable. However, we note that the terms *kwinin* and *digadegila* seem to be being superseded by the English term *yellow*. Nevertheless we have to note that the existence of traditional basic colour terms of Kilivila is not affected by the integration of English colour terms into the Kilivila lexicon, although their extension has become narrower. The terms *pubwakau*, *bwabwau*, *bweyani*, and even *kwinin* and *digadegila* and the English terms *white*, *black*, *red*, and *yellow* are used at one and the same time, in different contexts though.
3. The consultants still produced source terms that belong to the lexical set of folkbotany. Although these terms are of marginal importance only, my prediction that they may become obsolete (Senft 1987: 341) is not supported by the 2008 data.
4. With the exception of the term *kwinin* the consultants did not produce any other source terms that refer to objects which characteristically have the colour of the stimulus chip presented.
5. In 2008 only two loan words, i.e. colour terms borrowed from English, transformed and produced in the mould of Kilivila word formation, were realised by two consultants. Despite the fact that these two consultants are in their early twenties, these loan words are superseded by English colour terms which were borrowed as foreign words. This result verifies my predictions (Senft 1987: 340).
6. In 2008 the majority of the consultants’ production of colour terms almost equals a stage VII lexicon with specific terms for the colour stimuli BLACK, WHITE, RED, GREEN, YELLOW, BLUE, BROWN, PURPLE, PINK, and ORANGE; it is only GREY for which they have no colour term (Berlin and Kay 1969: 22). This verifies my predictions (Senft 1987: 340); however, I have to point

out that this language change is still in progress. As already noted in Senft (1987:340), members of the younger generation with school education are the agents of this observed language change in progress. This group of Kilivila native speakers also starts differentiating colours into ‘dark’ and ‘light’. It could be argued that this result may be the fact of the extensive stimuli set, but I have been noting this differentiation also in everyday interaction. I assume that this differentiation is one of the means and strategies to fill gaps in the non-exhaustive colour-naming system of Kilivila.

Why do we observe stability as well as change in the Kilivila colour term lexicon? On the one hand, the fact that the traditional Kilivila terms which refer to the colours BLACK, WHITE, and RED – *bwabwau*, *pubwakau*, and *bweyani* – are still produced by all Trobriand Islanders seems to reflect the importance of the art of colouring canoes, the Malasi chiefs’ big yams, houses, bodies, etc. On the other hand, children learning English at school is the most important reason why the Kilivila colour term lexicon has been changing into the direction of the English colour term lexicon over the last years. However, not all English colour terms Kilivila speakers produce are synonymous with their English models. In addition, globalisation, especially changes in clothing style (with very colourful clothes) and in dyeing traditional grass-skirts (with a variety of new chemical dyes) also plays an important role in stimulating this language change in progress; this illustrates once more the strong interdependence and interrelationship between language (change) and culture (change) in (language and culture) contact situations.

3. Pacific Islanders talking about taste then and now

3.1 Taste terms gathered in 1982 and 1983

In connection with my first general language documentation of Kilivila in 1982 and 1983, which resulted in a grammar and dictionary of this so far undescribed language (Senft 1986), I extracted the following terms for tastes and flavours from my first corpus of Kilivila data which served as the basis for compiling the Kilivila lexicon:

<i>sumakenia</i>	‘sweet, rich, tasty’
<i>payuyu</i>	‘sour, bitter, unripe’
<i>yayana/yayani</i>	‘bitter, hot, harsh’
<i>yona</i>	‘salt, salty, saltwater’
<i>bolova</i>	‘stale, insipid’
<i>gegeda</i>	‘biting, hurting’
<i>gasisi</i>	‘fierce, wild, terrible’

The general evaluators

<i>bwena</i>	'good'
<i>gaga</i>	'bad'

were also rather frequently used to refer to tastes and flavours.

These terms were not specifically elicited, but used by my consultants in everyday speech; they occurred in stories, myths, and other text categories.

3.2 My 2008 study on Kilivila taste terms

In 2008 my interest in the Trobriand Islanders' language of perception included a focused and well prepared investigation of how Kilivila encodes taste experiences. I wanted to know whether there is a more comprehensive, specific, dedicated vocabulary for encoding taste than the vocabulary I had documented in the Kilivila dictionary and whether taste and flavour terms are also affected by language change. Moreover, I also wanted to find out how much consistency my consultants show in describing taste experiences.

3.2.1 *Methods and consultants*

Bartoshuk (1978:5; see also 1988:483) presents a 'Selected List of Taste Quality Names' showing that the so-called 'four basic tastes' – SWEET, BITTER, SOUR, SALTY – have played a crucial role from the very beginning of taste research which goes back to Aristotle (384–322 B.C.; see also Backhouse 1994:160). As Lawless (2001:616–617) points out, UMAMI (from Japanese for 'delicious taste'), i.e. glutamate, is proposed in more recent research as another basic taste (see also Ishii and O'Mahoney 1987; Senft et al. 2007:42). Thus, in our study we are concentrating on these five taste qualities. To elicit the data I used the Language and Cognition Group's standardised 'taste kit'. This kit consists of (see Senft et al. 2007:43–44):

1. Four small white plastic containers with red caps with 10 grams of sucrose (SWEET), 7.5 grams of sodium chloride (SALTY), 0.05 grams of quinine hydrochloride (BITTER), 5 grams of citric acid monohydrate (SOUR), and a big white plastic container with a red cap with 20 capsules filled with glutamate (UMAMI).
2. Four bottles labelled 'sweet', 'sour', 'bitter', and 'salty' and a black 100 ml content marking.
3. Four plastic syringes and four adhesive paper labels ('sweet', 'sour', 'bitter', 'salty').
4. Four white bottles with black caps and four adhesive paper labels ('sweet', 'sour', 'bitter', 'salty').

5. Four spraying devices and four pipettes that can be screwed on top of the white bottles. The spraying device consists of a pump and a device for directing the spray.
6. Four small plastic bags with labels 'sweet', 'sour', 'bitter', and 'salty' for the spraying devices and pipettes.

This kit is used as follows (I again rely heavily on Senft et al. 2007: 44–45):

1. First, at least half a litre of (mineral or rain) water is boiled. Then the boiled water has to cool down before it can be filled into the bottles.
2. Then the syringes are unpacked and the adhesive paper labels are put on them to ensure that the syringes are not used for different solutions.
3. Then the syringe labelled 'sweet' is taken, 100 ml of the boiled but by now cool water are drawn up and about half of the water (50 ml) is injected into the bottle that is labelled 'sweet'. This is the bottle with the black 100 ml marking. Then the white plastic container labelled 'sucrose (sweet)' is taken, opened and its content is put into the half-filled bottle. The bottle is shaken gently until the sucrose has dissolved. Then the syringe labelled 'sweet' is taken again and the bottle is filled with water up to the 100 ml mark. Then this bottle is carefully closed with its lid. After this the procedure is repeated with the syringes and bottles labelled 'sour', 'bitter', and 'salty'. The containers and syringes used must not be mixed up. On completion of this, the researcher has four 100 ml solutions, one for SWEET (10 %), one for SOUR (5 %), one for BITTER (0.05 %), and one for SALTY (7.5 %) and the bag with the capsules filled with glutamate (UMAMI). Preferably all this should be done in the field just before starting the data collection.
4. Before researchers start with the taste experiment, they have to carefully open the bottles with the solutions and put on the spraying device or the pipette. If the spraying device is used, one has to first pump a bit until the device is filled. Then the solution is sprayed onto the consultant's tongue. Consultants have to rinse their mouth with water before the experiment and they should not have smoked or chewed betelnuts etc. some time before they participate in the experiment. After every solution and after some of the glutamate for the 'umami' sensation was put on the consultant's tongue, they have to rinse their mouth with water again. When the solutions are applied, the bottles need to be held in such a way that literate consultants cannot read the English labels on the bottles. The solutions have to be applied in random order.

I elicited data from twelve Trobriand Islanders using this standardised kit. Table 2 presents the four female and eight male consultants participating in this study.

They are all native speakers of Kilivila, ranging in age from 25 to 72 years. Only Iilitula (consultant C10) had some years of primary school experience and speaks some English. They represent three of the four clans of the highly socially stratified Trobriand society (see Section 1.2). All consultants live in the village Tauwema on Kaile'una Island.

Table 2. Consultants in the 2008 'Taste' study on the Trobriand Islands

Name	Age	Gender	Clan	Other Languages	School Education	
C1	Yabilosi	25	M	Lukwasisiga	NO	NO
C2	Mogega	44	M	Malasi	NO	NO
C3	Molilagua	33	M	Malasi	NO	NO
C4	Kwelava	36	M	Lukwasisiga	NO	NO
C5	Moagava	45	M	Lukwasisiga	NO	NO
C6	Taidyeli	65	M	Malasi	NO	NO
C7	Dubiligaga	73	F	Lukwasisiga	NO	NO
C8	Bulasa	72	M	Lukulabuta	NO	NO
C9	Sulumada	28	M	Lukwasisiga	NO	NO
C10	Iilitula	38	F	Malasi	English	Primary School
C11	Ibonoma	38	F	Malasi	NO	NO
C12	Ilakelava	55	F	Lukulabuta	NO	NO

I had no problems whatsoever collecting data with my consultants in the way described above. I asked my consultants the following two questions before and after I sprayed the solutions onto their tongues:

- (2) *Amakala kamwena-la?*
 how taste-its?
 'How does it taste?'
- (3) *Avaka kamwena-la makala?*
 what taste-its like
 'What is this taste like?'
 'What tastes like this?'

The second question was asked – after a short pause – to encourage them to follow an alternative strategy for producing an answer if they would not have, or know of, a specific taste term. In what follows I present the results of this study.

3.2.2 Results

The first response all twelve consultants gave for the sucrose (SWEET) stimulus was *sumakenia* – 'sweet'.

Second responses were *bwebwai* – ‘milk of a green coconut’ (C4), *kitolina* – a sweet tasting insect seasonally eaten by the Trobrianders (C5), *suga* – ‘sugar [English loan word]’ (C3, C6, C9), *tia* – ‘sweetened tea’ (C1, C2, C11), *to’u* – ‘sugar cane’ (C7, C8, C10), and *usi* – ‘banana(s)’ (C12).

Consultant C4 was the only one who realised besides *sumakenia* and *bwebwai* also *suga* as a third response to the stimulus. Thus we can conclude that Kilivila has *sumakenia* as the preferred specific term to refer to the taste SWEET. A secondary strategy to refer to this taste uses source terms like sweet tasting edible things (like sugar, sugar cane, bananas and a species of insect) and sweet tasting potable liquids (like the milk of green coconuts and sweetened tea).

The first responses consultants gave for the sodium chloride (SALT) stimulus were *yayani/yayana* – ‘bitter’ (C1, C2, C7, C9, C11, C12), *yona* – ‘saltwater, salt, salty’ (C4, C5, C6, C10), *tumwaka* – ‘brackish’ (C3), and *manoni* – a fruit (C8).

Second responses were *yona* – ‘saltwater, salt, salty’ (C1, C2, C7, C9, C11, C12), *sumakenia e yayani* – ‘sweet and bitter’ (C3), *solot* – ‘salt [English loan word]’ (C6), *payuyu* – ‘sour’ (C8), and *yayani* – ‘bitter’ (C10).

Third responses were *yona* – ‘saltwater, salt’ (C3) and *lemoni* – ‘lemon’ (C8).

Consultant C8 also produced *yona* – ‘saltwater, salt, salty’ as his fourth response to this stimulus. I would like to note here that together with the loan word *solot*, *tumwaka* is the only term that I had not already documented in my Kilivila dictionary in Senft (1986).

Thus we can conclude that all twelve consultants sooner or later produced *yona* – the Kilivila expression for ‘saltwater’ as a term to refer to the taste SALTY. Moreover, one consultant each produced the English loan *solot* and the term for ‘brackish (water)’ – *tumwaka*. However, six consultants produced the term *yayani/yayana* – ‘bitter’ as their first reaction to this taste stimulus; one consultant produced this term as his second reaction and another consultant produced the phrase *sumakenia e yayani* – ‘sweet and bitter’ as his second reaction.

One consultant produced the term *payuyu* – ‘sour’ as his second response to the stimulus. Another strategy to react to the stimulus was to produce a term that refers to a lemon (and its taste).

In general we have to note that despite the fact that all consultants sooner or later produced the Kilivila term that refers to saltwater and salt or the English loan word used to refer to salt or the adjective that refers to brackish water, these terms for SALTY taste are in competition with the term *yayani/yayana* for the taste BITTER, which was produced by eight consultants within this session.

The first response nine consultants gave for the quinine hydrochloride (BITTER) stimulus was *yayani/yayana* – ‘bitter’ (C2, C3, C4, C5, C7, C8, C10, C11, C12). The consultants C1 and C9 produced the term *bolova* – ‘tasteless, stale’ and consultant C6 produced the term *payuyu* – ‘sour’ as first responses to the stimulus.

Second responses were the source terms *morabau* – a plant with a bitter tasting fruit (C3, C10, C12) and *tuva* – ‘root to make fish poison’ (C7, C8), the evaluative term *gaga* – ‘bad’ (C6), *gala sumakenia* – ‘not sweet’ (C1), and *tumwaka* – ‘brackish (water)’ (C2).

Third responses were the source terms *morabau* – a plant with a bitter tasting fruit (C6) and *yeyelu* – ‘brackish sweet water well (close to the sea)’ (C2).

And consultant C2 produced as his fourth response to this stimulus the phrase *yona deli sumakenia emikisi* – literally ‘salt (water) with sweet (water) they mix’.

We can conclude that the term *yayani/yayana* is the preferred term for two thirds of the consultants to refer to the taste BITTER. However, we should keep in mind that the consultants produced also six other terms in this session.

The first response eight consultants gave for the citric acid monohydrate (SOUR) stimulus was *payuyu* – ‘sour’ (C1, C3, C4, C5, C7, C9, C10, C11). Consultants C2 and C6 produced the term *yayani* – ‘bitter’, consultant C8 produced the source term *pipi* – a fruit, and consultant C12 produced the flavour term *gegeda* – ‘hot (flavour), spicy’ as their first reaction to this stimulus.

Second responses were the source terms *lemoni* – ‘lemon’ (C3, C5, C11), *manoni* – a fruit (C1, C4, C9), *wewa* – ‘mango’ (C12), *pipi* – a fruit (C7), *bule’i* – a fruit (C10), and the terms *payuyu* – ‘sour’ (C2, C6), and *gegeda* – ‘hot (flavour)’ (C8).

Finally, consultant C2 produced the source term *lemoni* – ‘lemon’ as his third response.

We can summarise that the majority of the consultants used *payuyu* as their preferred term to refer to the taste SOUR. Their secondary strategy to refer to this taste was to refer to source terms, i.e. to fruits that taste like the stimulus.

The first responses the consultants gave for the glutamate (UMAMI) stimulus varied to a relatively high degree. Three consultants (C1, C5, C6) produced the evaluative term *gaga* – ‘bad’. Consultant C3 and consultant C10 produced the loan word *nudusi* – ‘noodles’, referring to Maggi [a specific brand] noodle soup which is sold with a separate packet of glutamate (!) within the bigger soup packet. This neologism is a nice illustration of the fact that speakers are highly opportunistic in what terms they chose and use to refer to things that are new within their culture. Note, however, that *nudusi* is not only a taste category but also a commodity. Two consultants (C7, C9) produced the term *bolova* – ‘tasteless, stale’, and one consultant each produced the term *sumakenia* – ‘sweet’ (C2), *mutamota* – ‘dirt’ (C4), *yona* – ‘saltwater, salt’ (C8), *tumwaka* – ‘brackish (water)’ (C11), and *manoni* – a fruit (C12) as their first responses to this stimulus.

Second responses include the evaluative terms *bwena* – ‘good’ (C3, C12) and *gaga* – ‘bad’ (C4), the source term *mutamota* – ‘dirt’ (C6), and *yeyelu* – ‘brackish sweet water spring (close to the sea)’ (C11).

Consultant C12 produced the phrase *gala sumakenia* – ‘not sweet’ as her third response and the phrase *gala payuyu pe’ula* – ‘not sour strongly’ as her fourth response.

We can conclude that the Trobriand Islanders are not at all consistent in referring verbally to this taste.

Table 3 lists the terms the Trobriand Islanders used to refer to tastes, flavours, and objects that taste like the stimulus presented for these tastes, thus trying to answer the first central question of my research whether there is a specific, dedicated vocabulary for encoding taste in Kilivila. Table 3 also summarises the results of my taste experiment with our ‘taste kit’ on the Trobriand Islands with respect to the second central research question about the consistency within a community with respect to describing taste experiences.

Table 3. Terms the Trobriand Islanders used to refer to tastes and to objects tasting like the taste stimulus presented; consistency in describing taste experiences

Taste	Taste / flavour term [No. of consultants producing it]	Things tasting like the taste stimulus [No. of consultants producing it]
SWEET	<i>sumakenia</i> ‘sweet’ [12]	<i>suga</i> ‘sugar’ [4] <i>tia</i> ‘sweet tea’ [3] <i>to’u</i> ‘sugar cane’ [3] <i>bwebwai</i> ‘coconut milk’ [1] <i>kitolina</i> an insect [1] <i>usi</i> ‘banana’ [1]
SALTY	<i>yona</i> ‘salt water, salt, salty’ [12] <i>yayana/yayani</i> ‘bitter’ [7/8] <i>solot</i> ‘salt’ [1] <i>tumwaka</i> ‘brackish’ [1] <i>payuyu</i> ‘sour’ [1] <i>sumakenia e yayani</i> ‘sweet and bitter’ [1*]	<i>manoni</i> a fruit [1] <i>lemoni</i> ‘lemon’ [1]
BITTER	<i>yayana/yayani</i> ‘bitter’ [9] <i>bolova</i> ‘tasteless, stale’ [2] <i>payuyu</i> ‘sour’ [1] <i>tumwaka</i> ‘brackish’ [1] <i>gaga</i> ‘bad’ [1] <i>gala sumakenia</i> ‘not sweet’ [1]	<i>morabau</i> a fruit [4] <i>tuva</i> ‘root, fish poison’ [2] <i>yeyelu</i> ‘brackish sweet water well’ [1] <i>yona deli sumakenia emikisi</i> ‘salt water with sweet water they mix’ [1]
SOUR	<i>payuyu</i> ‘sour’ [10] <i>yayana/yayani</i> ‘bitter’ [2] <i>gegeda</i> ‘hot flavor’ [2]	<i>lemoni</i> ‘lemon’ [4] <i>manoni</i> a fruit [3] <i>pipi</i> a fruit [2] <i>wewa</i> ‘mango’ [1] <i>bule’i</i> a fruit [1]

(Continued)

Table 3. (Continued)

UMAMI	<i>gaga</i> 'bad' [4]	<i>nudusi</i> 'noodles' [2]
	<i>bwena</i> 'good' [3]	<i>mutamota</i> 'dirt' [2]
	<i>bolova</i> 'tasteless, stale' [2]	<i>manoni</i> a fruit [1]
	<i>sumakenia</i> 'sweet' [1]	<i>yeyelu</i> 'brackish sweet water well' [1]
	<i>gala sumakenia</i> 'not sweet' [1]	
	<i>yona</i> 'salt water, salt' [1]	
	<i>tumwaka</i> 'brackish' [1]	
	<i>gala payuyu pe'ula</i> 'not very sour' [1]	

* The star indicates that the term *yayani* is counted twice:

1. in isolation, but taken from the utterance *sumakenia e yayani*,
2. in the complete utterance *sumakenia e yayani*.

This table shows that all consultants produced the term *sumakenia* to refer to the stimulus for the SWEET taste. Thus the Trobriand Islanders have a specific term for this taste and use it consistently.

All consultants used the term *yona* to refer to the stimulus for SALTY taste. However, seven – and if we count the term in the phrase *sumakenia e yayani* even eight – consultants also produced the term *yayana* or its variant *yayani* referring to this taste. Other alternative terms were only produced by one consultant each and can be neglected here. Only one consultant referred to two fruits claiming that they have a salty taste (but note that these fruits were also used by different consultants to refer to the tastes SOUR and UMAMI). Thus we can note here that the term *yona* was used by all consultants and the term *yayana/yayani* by two thirds of the consultants to refer to the SALTY taste. This usage reveals that the two terms are obviously competing with each other. Thus we note that the Trobrianders have a problem in differentiating between SALTY and BITTER taste perceptions.

Nine of the twelve consultants produced the term *yayana/yayani* to refer to the stimulus for BITTER taste. One other alternative term was only produced by two, and five other terms were only produced by one consultant each and thus can be neglected here. Six consultants mentioned a fruit, a root and specific wells claiming that they or their water respectively taste like the stimulus for BITTER taste (C6 mentioned the fruit as well as the well). Thus we can conclude that the majority of the consultants used the term *yayana/yayani* quite consistently to refer to the BITTER taste.

Ten of the twelve consultants produced the term *payuyu* to refer to the stimulus for SOUR taste. Only two other terms were produced by two consultants each and thus can be neglected here. However, note that C6 produced the term *payuyu* for BITTER and the term *yayani* for SOUR taste, thus obviously mixing up the two taste qualities. Ten consultants referred to different fruits claiming that they have a sour taste. Thus we can conclude that the vast majority of the consultants used the term *payuyu* consistently to refer to the SOUR taste.

If we look at the consultants' responses to the stimulus for the UMAMI taste, the picture gets rather chaotic. The consultants used eight different terms to refer to this taste. Seven of the consultants simply produced 'bad' (four) or 'good' (three), and two characterised the flavour of the stimulus as 'tasteless, stale'. Six consultants referred to a fruit, to dirt, to a brackish sweet water well, and to a Maggi noodle soup. Thus we can conclude that the Trobrianders have no term which they can use consistently to refer to the UMAMI taste.

To sum up, in this taste study the twelve Trobriand Islanders produced six abstract terms (the flavour terms *bolova* – 'tasteless, stale', *gegeda* – 'hot', *tumwaka* – 'brackish', and the taste terms *payuyu* – 'sour', *sumakenia* – 'sweet', *yayana/yayani* – 'bitter, salty (?)'), two descriptive terms (*bwena* – 'good', *gaga* – 'bad'), and two source terms (*solot* – 'salt', *yona* – 'saltwater, salt, salty'). There is another term to refer to a hot flavour, *gasisi* (which also means 'fierce'), but this term was not realised during this study. A few source terms that refer to fruits having a specific taste were also produced, though rather rarely; thus, they can be neglected here. Although globalisation has also reached the Trobriands, hardly any effects of this gets reflected in the Islanders' taste vocabulary (I will come back to this observation in Section 3.3). Only one English loan word found its way into the Kilivila lexicon – *solot*. It was only produced once by Taidyeli, a 65-year-old man; however, he belongs to the highest ranking clan and may have used the English loan to mark his status. The other notable observation is the fact that two informants (C3 and C10) produced as a reaction to the UMAMI stimulus the loan word *nudusi* – referring to a Maggi noodle soup. Note that Molilagua and Ilitula are also members of the highest ranking clan.

3.3 Pacific Islanders talking about taste then and now

If we compare the results of my 2008 study with the lexical entries in my dictionary, we observe almost no change at all. The only new insight we get is that the term *yayana/yayani*, which is used consistently across speakers to refer to the BITTER taste, competes with the term *yona* to refer to the SALTY taste. Moreover, it turns out that the flavour terms *gegeda* and *gasisi* should also be glossed as 'hot' (with respect to a spicy flavour; note that the latter term was not produced by my consultants in the 2008 elicitation study). Thus we can conclude that although globalisation has reached the Trobriands, hardly any effects of this get reflected in the Islanders' taste vocabulary. But taste terms are not taught at school in the same way that colour (and shape) terms are. I would also like to emphasise again that globalisation does not affect the Trobriand Islanders' 'cuisine' – despite the noodles sold in the stores on Kiriwina Island.

We observe great stability in the Kilivila taste lexicon with hardly any influence from English. The fact that we only find eleven taste and flavour terms (two of which just meaning ‘good’ and ‘bad’) that are used highly consistently by the consultants probably mirrors the fact that the Trobrianders have never developed a sophisticated ‘cuisine’. There is hardly any variety in their daily diet which consists of cooked yams, taro, sweet potatoes, greens, fish, and other seafood, and rather rarely – mostly during feasts and ritual ceremonies – a piece of pork. Yams, taro, and sweet potatoes are scraped and boiled in a pot of water which just contains a cup of saltwater; greens are boiled in the same way. Moreover, women use almost no spices – with the exception of a cup of saltwater – when they cook the meals for the family, despite the fact that small chillies, ginger, and other spices grow in the bush. Malinowski (1929:441) already pointed out that the Trobriander Islanders have a specific relationship to food and eating:

Eating is not regarded as indispensable to life, nor is the value of food as a utility recognized and formulated by the natives ... they have no idea that there is such a thing as a physiological need for alimentation.

David Howes (2003:68) aptly describes this attitude as follows:

Food is not counted among the necessities of life in the cultures of the Massim, nor is it appreciated for its nutritional value: one eats because one wants to, not because one needs to ... If eating well has little to do with nutrition, it has even less to do with quality or taste. A good feast is one at which people eat ‘till we vomit’, as they say – a case of quantity over quality ...

And

The Trobriand adult is ... acutely conscious of the act of food consumption as being intrinsically ‘wasteful’. Its negativity is summed up in its most salient effect or ‘yield’, the stench of excrement. (Howes 2003: 179)

However, Howes (personal communication 2010) also pointed out to me that there is yet another explanation for the fact that we only find eleven taste and flavour terms in Kilivila. This finding could possibly reflect the fact that the Trobrianders remain more interested in displaying and exchanging food than in savouring it. Indeed, the Trobrianders value food not for consumption, but as an important and absolutely necessary component for exchange rituals of all kinds. It would appear that for the Trobrianders it is considered better to give food to others than to eat it themselves, because giving is the path to fame or ‘noise’ (*butula*), and Trobrianders generally attach greater cultural importance to being heard and/or talked about than to enjoying a full belly (see Howes 2003: Ch. 3).

4. An aside with an excursus to the Torres Straits Islands

Studies on taste in non-Indo-European languages are still rather rare (see e.g. Kuipers 1984; Howes 2003). One of the first studies on taste terms of people speaking non-Indo-European languages, however, and probably the first study on taste terms of people living in Oceania is Charles S. Myers' article 'The taste names of primitive peoples' which he published 1904 in the *British Journal of Psychology* (see also, for example, Chamberlain 1903; Rivers 1905). In this paper Myers first reports on his and Seligman's efforts to investigate the taste vocabulary of the Torres Strait Islanders during the famous Cambridge Anthropological Expedition to Torres Straits. They "tested the islanders with dilute solutions of sugar, salt, acid and quinine, and thereby obtained their equivalent words or expressions for sweet, salt, sour and bitter" (Myers 1904: 118–119). Myers (1904: 119) summarises his and Seligman's research results as follows:

1. The literal meaning of the phrase commonly used in the Torres Straits to denote sweetness is 'tasting good'.
2. The same phrase is applicable to denote saltiness.
3. The usual word for saltiness is derived from sea-water.
4. The taste-names for salt and sour tend to be confused.
5. There is no specific name for the bitter taste.

Myers (1904: 119–120) then "examines ... taste names of Indo-Germanic languages" and presents taste terms in non-Indo-European languages which he obtained by sending questionnaires to "officials, missionaries and European residents abroad" (Myers 1904: 121–124). These people were asked the following questions (Myers 1904: 121):

By what words in their own language would the natives describe the taste of solutions of (a) sugar, (b) salt, (c) weak acid, (d) quinine (i.e. the tastes we call sweet, salt, sour, bitter)? ... Give, if possible, the exact meaning of the[se] words ...

Backhouse (1994: 7) summarises Myers' overall research results as follows:

- i. Several languages have two taste words, one applied to sweet, salt and other agreeable flavours, the other to unpleasant flavours.
- ii. The use of a common word applied to both sweet and salt is widely attested.
- iii. The taste word for salt, where present, is commonly derived from the word for sea-water.
- iv. Confusion between salt and sour, and more especially between salt and bitter, is frequently attested. In New Guinea, New Hebrides, and much of Polynesia,

the same word denotes salt, sour and bitter. These words doubtless mean 'rough', 'unpleasant' or 'biting'.

- v. In several languages, the same word denotes sour or bitter. A notion of distaste, astringency or pain underlies these words ...

If we allow – with all necessary caution, of course – a comparison of the results of my 2008 study with the results Myers presented in his 1904 paper, we note the following:

1. Contrary to Myers' findings for the Torres Strait Islanders, the Trobrianders have a specific term to denote sweetness – *sumakenia*; its literal meaning is not 'tasting good', but 'sweet'.
2. Unlike the Torres Strait Islanders only one Trobriand Islander produced the term for sweetness to denote saltness in the phrase 'sweet and bitter' – *sumakenia e yayani*.
3. Like the Torres Strait Islanders the Trobrianders usual word for saltness – *yona* – is derived from sea-water.
4. Whereas the Torres Strait Islanders taste-names for salt and sour tended to be confused, the Trobriand Islanders taste-names for salty – *yona* – and for bitter – *yayana/yayani* – are competing with each other in denoting a salty taste. However, this agrees with the overall results of Myers' study which attests the frequent confusion between terms for salty and bitter tastes.
5. Unlike the Torres Strait Islanders, the Trobrianders have a specific name for the bitter taste – *yayana/yayani* (but see previous item).

Thus, my study still corroborates two of the five results of Myers' study. I think this is absolutely amazing, given the fact that more than a hundred years lie between these two studies. These hundred years include the period of colonisation, World War I and II, the period of seeking for and getting independence, and the era of globalisation. All this and all the contacts with foreign cultures and forms of civilisation obviously had hardly any effect on the Islanders' taste vocabulary.

5. Concluding remarks

This case study of Kilivila colour and taste terms suggests that the sensory vocabularies in question remained fairly stable over time. Members of the younger generation with school education have managed to expand the Kilivila inventory of colour terms by integrating English colour terms into the Kilivila lexicon. But speakers still produce traditional abstract Kilivila colour terms; they use the

respective English colour terms, too, albeit in different contexts. English colour terms have neither superseded traditional colour terms nor most of the source terms used to refer to colours.

In the Kilivila taste lexicon we observe great stability; it has not been affected by any kind of language change. If we allow a comparison of the results of my 2008 study with the results of Myers (1904) study on taste terms of Torres Strait Islanders, two of five observations Myers made still hold in 2008.

These results are amazing if we look at the many dramatic changes I have been observing in the Trobriand Islanders' language and culture just six years after my first period of field research in 1982/83 (Senft 1992) and which I have been observing over the last 28 years (Senft 2010). In any case, the Kilivila lexicon for perceptual experiences seems to be quite resistant and persistent within the Trobriand Islanders' dramatically changing world.

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