The integration of language and society: initial orientation

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1 What this workshop is about: a preamble

There are several approaches to how language can be studied. One prevalent view is that language is a cognitive mechanism, whose nature can be uncovered through deductive hypotheses concerning various structural features. Other approaches link language to the world within which it is used. Some linguists espouse a relativism, in either of two directions.

A strong version of the Sapir-Whorf hypothesis suggests that the grammatical and lexical structure of a language determines the way in which its speakers view the world around them, their conceptualisations and categorisations. Approaching matters from the opposite direction, an alternative view is that it is the world which is 'the given', with the nature of the reality in which a language is spoken determining its grammatical categories and lexical contrasts (for overviews of Sapir-Whorf and varied approaches to the linguistic relativity hypothesis see Lucy 1992a,b, 1996, Enfield 2000, Bickel 2000, Brown 1976, Boroditzky 2003, additional critique in Deutscher 2010, Carroll 1963, Salzmann 2004, and papers in Gumperz and Levinson 1996, Mathiot 1979, to name a few).

We pursue a different agenda:

• **Starting point.** Language is a facet of human behaviour. It only has meaning and significance with respect to the society in which it is used. Language and society are mutually cross-defining as each reflects the other. In Dixon's (2014a: 46) words, 'language is a vital cultural tool… Its structure reflects the speakers' life-style, social organisation, way of viewing the world, and also their environment'.

• **Initial observations.**
(a) There are pervasive similarities of social behaviour and way of living across every group of people around the world.
(b) All languages share certain recurrent grammatical and semantic characteristics (word classes, commands and questions, possession, negation, distinct verbs for seeing and hearing, among others).

There is plainly a correlation between (a) and (b); our aim here is to uncover these.

• **The challenge**. There are also
(i) significant social and life-style differences between different groups; and

(ii) differences in many particular features of language structure.

What makes a language the way it is? A combination of factors are at play.

Firstly, each language has a genetic history. In each language, certain features and forms are inherited from the ancestral proto-language; others may have been lost. Having a shared ancestor may explain why related languages develop in similar ways, along the lines of Sapir's 'parallelism in drift' (1921: 171-2).

Secondly, contact between speakers of adjacent languages may result in sharing forms, categories, and ways of saying things. A language may be partly shaped by speakers' interaction with their neighbours. And some categories and concepts are more at risk of being spread through contact than others.

Thirdly, a language is likely to bear an imprint of its speakers' habitat and physical environment, their relationships to one another, and their beliefs and ways of viewing the world. These factors are a matter of concern within this Workshop. We focus on the mutual co-dependence between the grammar of a language and the non-linguistic parameters of the society where it is spoken.

We begin with a hypothesis.

HYPOTHESIS. Language and society are closely integrated and mutually supportive (rather than one being dependant on the other). An unusual (non-universal) facet of a language can relate to a specific trait of social organisation, or life-style, etc., evidenced among the society of language users.

Our **AIMS** are:

I. On the basis of detailed individual studies, to put forward inductive generalisations concerning recurrent correlations underlying the congruence, or mutual integration, of language and society, and to identify dependencies between the established correlations.

II. To put forward predictions concerning

(i) which linguistic features are likely to be associated with a given assemblage of societal values;

(ii) which cultural and societal characteristics are likely to co-occur with particular linguistic elements;

(iii) how these linguistic elements may change if the society changes.

The recurrent correlations between the language and the societal practices will help explain

(a) the patterns of language change which accompany societal changes, and

(b) the ways in which contact between societies may affect the languages spoken by their members. In this way, we expect the correlations to have a predictive power.

We now turn to the empirical basis for our endeavour.

2 The empirical basis: grammar versus lexicon

Meaning in language is essentially coded through two independent but interlocking parts — grammar and lexicon. Grammar involves sets of systems with limited choices — tenses, aspects, cases, genders, and so on. A closed grammatical system imposes limited options on the speaker. If a language has two grammatical genders — say, feminine and masculine — all entities have to be categorised as one or the other. This is in contrast to lexicon where the choices are potentially open: any language will have a large set of words referring to males, females and perhaps other natural and social genders (see Aikhenvald 2015a: 4-5, 2016: 3-5; Dixon 2010a: 47-54, 2016: 77, for further discussion). The third component of language is phonology dealing with the ways in which lexical and grammatical means are realised in communication. This has a tangential role in relation to our current investigation (see §4).

In Boas' (1938: 132-3) words, grammar 'determines those aspects of each experience that *must* be expressed… To give an example: while for us definiteness, number, and time are obligatory aspects, we find in another language location near the speaker or somewhere else, source of information — whether seen, heard, or inferred — as obligatory aspects'. And, consequently, 'the form of our grammar compels us to select a few traits of the thought we wish to express and suppresses many other aspects which the speaker has in mind' (Boas 1942: 182).[1]

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[1] This is reminiscent of Slobin's reformulation of a similar principle as 'thinking for speaking', whereby 'even within a single language grammar provides a set of options for schematising experience for the purposes of verbal expression. Any utterance is multiply determined by what I have seen or experienced, my communicative purpose in telling you about it, and the distinctions that are embodied in my grammar' (Slobin 1996: 75).

Our main question is:

Which of these limited traits interact with societal features and conventions, and how — if at all — can one be framed by the other? That is, how are the categories and distinctions made within the limited resources of the grammatical system integrated within the society of those who speak it?

The lexicon of each language will bear an imprint of the habitual activities and the beliefs of its speakers. Cattle-herding groups in East Africa are well-known for their elaborate categorisation of different kinds of cattle based on their distinctive colours. The Mursi, a Surmic-speaking group of south-western Ethiopia, have no colour terms other than those which correspond to the colour of their cattle (Turton 1980). A community with weaving as a traditional activity will have numerous specific terms for warp, weft, ribbing, twill, selvage and the like. The character of any society is reflected in the nature of its non-basic vocabulary. When, in Aboriginal Australia, anyone came to another group's campsite, they would stop just outside, waiting to be invited in. So, in Dyirbal, for instance, there is an appropriate verb *yilga-l* 'almost come to a place, but not quite reach it'. See also the lexical examples in Evans and Wilkins (2000).

A large community whose members are trained to compete and vie for superiority, be it in sports, head-hunting, or any social activities, would be expected to have an array of lexemes for 'compete', 'win', or 'lose'. As Dixon (2008: 814) put it, 'small tribes with an egalitarian social system and item-for-item trade do not generally indulge in competition; they often lack words for "compete", "win", "lose" and "beat" (as in a game)'. In Dixon's (2016: 93) words, 'in the traditional culture of Dyirbal speakers, from North Queensland, and of the Jarawara, from southern Amazonia [...], there was no factor of competitiveness. The vocabularies include no words which could render "compete", "win", "lose", "victory", or "victor"'. The same applies to Yalaku, spoken by just over 300 people in the hilly area off the Sepik river in PNG (Aikhenvald 2018c).

Such gaps in the lexicon may have consequences for the grammar. Many languages have dedicated comparative constructions, such as *Mary is bigger than Jean.* Languages spoken within small tribal societies with no institutionalised ideas of competition and hardly any lexemes meaning 'win' or 'lose (in a competition)' often have few if any such comparative constructions in their grammar. Instead, speakers will just juxtapose the opposite statements, saying *Mary is big, Jean is small*.

The erstwhile egalitarian groups with no tradition of competing inevitably come in contact with larger societies, where 'winning', 'losing', and competition are a key to success.

To render the notion of 'win', or 'surpass' — part and parcel of the mainstream PNG society — the Yalaku now employ the loan verb *winim* 'surpass, get ahead of someone', from Tok Pisin, the lingua franca of the country. The concept essentially alien to the Yalaku is now expressed with a foreign term.

It would, of course, be dangerous and simplistic to expect a one-to-one correlation between the idea of competitiveness and the presence of a comparative construction in a language, or the traditional lack of strict societal hierarchy, avoidance of direct commands, and the absence of a specialised imperative form. As for most linguistic generalisations, we expect to uncover tendencies rather than strict rules. Such tendencies may be indicative of current trends. Or they may be indicative of the attitudes and societal practices of the past. As Ameka (2004: 11) put it, 'from an ethnosyntactic point of view, today's grammatical constructions may reflect cultural preoccupations of yesterday'. Investigating the integration of language and society may contribute to a historical study of both.[2]

Throughout this workshop, we will take account of the features of lexicon, inasmuch as they are reflected in the grammar and relevant to it. Beyond these, we will not dwell on the immense and potentially limitless body of lexical correlates of societal structures and practices.[3]

Correlations between individual linguistic categories, cultural values, and social parameters have been the focus of a large body of work. Relevant studies include Enfield's

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[2] Difficulties in proving mutual co-dependence between grammatical phenomena and cultural or cognitive traits have been specifically addressed by Lucy (1996). The size of phonemic inventory was suggested as a correlate of community's isolation and its size (Trudgill 2004). Community size, degree of contact or isolation, and denseness or looseness of social networks have been claimed to influence the degree of 'complexity' of languages spoken (Trudgill 2009, 2011). In view of the difficulty in defining the universally applicable scale of 'complexity' at every level of linguistic structure, we refrain from addressing this tangled issue. Unjustified ideas have been expressed about how linguistic minorities — whose languages differ from the mainstream European lects — may have a different mentality which would explain 'why' their languages are so different from what a speaker of English would expect. One finds assertions about the 'passive' nature of ergative languages (more on those in Dixon 1994: 214-15), or a suggestion that people who live in damp areas tend to 'select sounds requiring minimal lip opening' (Brosnahan 1961: 19; further examples in Aikhenvald 2004: 356-7; 2000: 345, and Lucy 1996: 48). We eschew such questionable attempts, and will make no further mention of these.

[3] Wierzbicka (1997 and later work) attempted to describe different cultures in terms of what she considered 'key concepts' and 'cultural scripts'. Her work makes use of a hard-to-apply metalanguage and often ignores the relevant concepts in languages and cultures with which she does not have full familiarity (see the criticism in Aitchinson 1999; and a selection of 'key concepts' of Russian culture in Bulygina and Shmelev 1997 which are different from hers). This essentially simplistic and deductive approach will be avoided here.

analysis of 'ethnosyntax', which begins (2004: 3): 'Encoded in the semantics of grammar we find cultural values and ideas, we find clues about social structures which speakers maintain, we find evidence, both historically and otherwise, of the social organisation of speech communities'. Grammatical features and their social and cultural correlates were discussed by Bickel (1999, 2001) with regard to deixis (with Burenhult 2008 adding a further topographic dimension); by Trudgill (2011) with regard to the presence of unusual, or exotic, features; by Heine (1997) with regard to possession, comparison and spatial orientation; by Ameka (2004), for triadic communication and logophoric practices, Bauman and Briggs (1990) for poetic genres, and Enfield (2014) for the evolution of meaning (to name a few).

The main point of the present endeavour is the 'integration' approach. We aim at systematically investigating the associations and mutual dependencies of specific facets of language with particular traits of society.

Grammatical features which recur in all languages we know of can be considered universal, and presumably necessary, components of human language (see Dixon 2016: 47-73, for a summary). Every language will have a way of expressing negation or possession, saying who did what to whom, and what has what properties. In every language one can make a statement, ask a question, or issue a command or a request. Just some languages have several ways of expressing commands depending on who the speaker is or who they are addressing — something that will reflect social organisation and social hierarchies. The non-universal means of expressing seemingly universal concepts should alert us to the focal points of how language and society are integrated.

We now turn to the linguistic parameters which are demonstrably sensitive to societal traits.

3 The parameters

Five groups of linguistic parameters and corresponding categories show strong correlations and integration with non-linguistic societal traits. These are as follows:

1. Reference classification: the composition and use of genders and classifiers — §3.1

2. Types of possession — §3.2

3. Directing and addressing — §3.3

4. Information source, transmission of information, and interaction patterns — §3.4

5. Special speech styles — §3.5.

The focal clusters of the following non-linguistic traits can be demonstrably integrated with linguistics features:

A. Relations within a community, social hierarchies, and kinship categorisation

B. Social constraints (taboo and avoidance)

C. Principles of interaction and attitudes to information and its sources

D. Beliefs, religion, spirits, and dreams

E. Means of subsistence and physical environment

F. Language awareness, language engineering, and sensitivity to societal changes.

Parameters **A-D** are interrelated, and may be hard to disentangle. Parameter **E** may stand apart from all these.

Speakers may be aware of how a particular category correlates with their society and practices, and be prepared to talk about it and explain the social underpinnings of a linguistic form. Grammatical categories and meanings can be amenable to conscious language engineering, so as to adjust them to what speakers perceive as societal requirements. Grammatical categories which show a degree of integration with the society and their uses may change if the social conditions change. Thus, if the traditional societal practices fall into disuse, the linguistic category may no longer be in place, or undergo obsolescence and be gradually forgotten. These characteristics, subsumed under **F**, are different from **A-E**: they are useful for testing a correlation between a linguistic feature and a societal practice.

We now turn to some examples.

3.1 Reference classification: composition and use of genders and classifiers

Reference classification relates to gender, noun classes, and classifiers of various kinds. We distinguish numeral classifiers, noun classifiers, verbal classifiers, locative, and deictic classifiers (following the typological parameters in Aikhenvald 2000, 2017, forthcoming-a). Genders and classifiers are known to mirror social attitudes and hierarchies, social organisation, physical environment and means of subsistence (a critical overview and references are in Aikhenvald 2000, 2016, 2017; see also Denny 1979, Bradley 2001, and Bisang 2017, to name a few).

A. Relations within a community, social hierarchies, and kinship categorisation. The composition of a gender or of a noun class may reflect kinship categorisation and social hierarchies. Sets of specific classifiers in Korean and many South-east Asian languages

(Adams 1989, 1992; Lee 2014) reflect kinship relationships. So do noun classifiers for humans in Jacaltec and a few other Mayan languages (Craig 1986: 266-7; Aikhenvald 2000: 284-5). In Setswana (Bantu), all human beings and many names of peoples belong to the 'human' noun class (termed 1/2 in the Bantuist tradition). Ethnonyms which refer to groups perceived as inferior — such as the Chinese or the Bushmen — belong to Class 5/6 which comprises substances, such as dirt or clay, and also abstract nouns (including foreign institutions: Anderson and Janson 1997: 34-5; Joseph Tsonope, p.c.).

Specialised noun classifiers are used for respected relatives and humans of higher status (e.g. monks) in many Austroasiatic languages, including Vietnamese (see Adams 1989: 59-61; Aikhenvald 2000: 342-3 for further examples). In Luganda, the main Bantu language of Uganda, there is a honorific noun class prefix just for the king (Anne Storch, p.c.).

B. Social constraints (taboo and avoidance). Genders, noun classifiers, and classifiers of most types reflect social constraints. Gender choice may reflect power relations within a society. Manambu has two genders — masculine and feminine. Any non-human can be assigned to either gender, with masculine objects perceived as being longer, bigger, and more socially important than feminine ones (Aikhenvald 2012a). A traditional story will be referred to as masculine, and a less important tale as feminine (see also Ciucci 2019, on how gender choice in Ayoreo reflects societal roles and relationships). The expression of respect in stratified societies across the African continent correlates with noun class choice (see Storch 2013b: 100-1 and Irvine 1998: 54-55, for Ichibemba and other examples).

C. Principles of interaction, and attitudes to information and its sources. Social constraints may impact interaction between people, the ways in which they talk, and manipulate noun classification to reflect their status. Wolof, a West Atlantic language, has a complex system of noun classes, only in part based on semantic principles. Verbal fluency, correctness and elaboration are associated with low social rank. Using a wrong noun class on purpose is associated with high rank of the speaker: only respectable elders consistently make such deliberate errors (Irvine 1978: 41-43, 1990: 143).

D. Beliefs, religion, spirits, and dreams. A network of beliefs and legends may motivate the way in which objects of the real world are mapped into the system of reference classification. In Dyirbal, an Australian language, birds are believed to embody the spirits of deceased women and thus are placed in feminine gender. In Tamil, gods and demons are assigned to the

class of rational beings, alongside humans (Asher 1985: 136). Among the Manambu, blood is associated with matrilineal inheritance, and this could be the motivation for its assignment to the feminine gender.

E. Means of subsistence and physical environment. Large systems of classifiers often contain terms which reflect the ways in which people live. River-dwelling peoples, such as the Tariana and the Baniwa of north-west Amazonia, have a special classifier for canoe, and for numerous types of waterways. Numeral classifiers in Nivkh, a Paleo-Siberian isolate, reflect traditional arrangements of fish on skewers (Gruzdeva 2004). In many languages from northern Australia, there is one gender (exclusively or predominantly) for edible plants; others have a noun classifier with a similar meaning (Dixon 2015).

In a similar vein, Craig (1986: 287) points out that the system of noun classifiers 'encompasses all aspects of traditional Jacaltec life'. There is a specific classifier *ixim* for 'corn', *tx'al* for 'thread', and *tx'añ* for 'twine'. The classifiers are 'few enough to isolate very selectively certain objects of the Jacaltec culture (corn but not beans, weaving but not carpentry)'.

A special type of reference classification devices are classifiers employed just in possessive constructions, to categorise the possessee. Having a special classifier for 'domestic animal, pet' is a linguistic corollary of having domestic animals. This is what we find in Yuman and in Uto-Aztecan languages, and a few languages in South America, including Zamucoan in Bolivia and Paraguay and Mataguayan in Argentina (Langacker 1977, Aikhenvald 2013: 25, Ciucci and Bertinetto forthcoming). Maká, a Mataguayan language from Argentina, has a possessive classifier for cultivated plants (Messineo 2011: 202). This reflects the fact that the Maká have agricultural practices.

F. Role in language awareness, language engineering, and sensitivity to societal changes. Speakers of languages with genders are often aware of their meanings, and are prepared to discuss them. The Manambu point out that dividing the world into 'female' and 'male' is a salient feature of their language. Larger objects are masculine, and smaller ones are feminine. Many of the Manambu people have studied overseas, and have been to London. We had endless discussions — initiated by Joel Yuakalu, a man with a degree from Sheffield — about whether Buckingham palace is 'big enough' to be considered masculine. Everyone agreed that Big Ben belongs to the masculine gender.

In many European languages, including English, the masculine gender form, such as *he*, or a generic term, such as *man,* are — or used to be — an unmarked choice. In recent times, this usage has come under fire: the generic *he* and the generic *man* are seen as a way of subsuming women under 'men', making them invisible and insignificant (see Aikhenvald 2016: 195-9, and also Lakoff 1973, 1975, Pauwels 1998, Cheshire 2008, to name a few). And why should our Lord be a 'he', reproducing the outdated male dominance? A gradual increase in linguistic awareness brought about a call for change. In November 1971, women-students at Harvard Divinity School openly called for a ban on the use of 'man' and masculine pronouns to refer to God and to people in general. This proposal to 'recast part of the grammar of the English language' provoked a famous letter to the Harvard University periodical, *The Harvard Crimson,* dated 16 November 1971. The letter was signed by many luminaries of linguistics — including Calvert Watkins, Jay Jasanoff, Sandra Chung, and Einar Haugen. The linguists pleaded that the language be left as it is — that the masculine is the unmarked choice, 'and hence is used as a neutral or unspecified term'.

Notwithstanding the plea, the public pressure has worked. And this part of the grammar of English is being recast. As Cheshire (2008: 9-10) put it, 'none of my colleagues would dare to use a generic *he* pronoun: if one should slip out accidentally, it is soon corrected, by someone else. This is surely a sign of change' — and a sign of relatively recent and relatively rapid integration of the societal principles of gender equality into the language.

Similarly, semantic extensions of noun classes can be manipulated by language planners. In Setswana, a Bantu language with a large set of noun classes, it is now considered politically incorrect to refer to ethnic minorities, such as the Chinese or the Bushmen, using noun class 5/6 (which includes inanimates); all humans have to be referred to with the 'human' class 1/2 (Anderson and Janson 1997: 34-5; Joseph Tsonope, p.c.).

The choice of numeral classifiers in Maonan, a Tai-Kadai language spoken in China, reflects the changing place of women within the society. Similarly to a number of languages of South-east Asia, women used to be counted with the classifier $t\theta^2$, which also subsumes animals and children. Respected women were typically counted using the human classifier $/ai^1$ (NUM.CL:HUMAN). At present, all women who have a professional status are referred to with the human classifier (Lu 2012: 83-4, 101-2, 119-21).

Numeral classifiers can be further amenable to language engineering. Following an order of King Mongkut issued in 1854 with regard to classifiers in Thai, 'noble' animals such as elephants and horses should be counted without any classifier; the classifier *tua* could only be used for animals of a 'lower' status (Juntanamalaga 1988).

Obsolescence of a societal practice may correlate with a loss of a meaning or a form within a system of reference classification. Cahuilla (Uto-Aztecan: Seiler 1977: 306) had a special possessive classifier for 'moiety animals'. In the early days Cahuilla society was divided into two moieties, one associated with the Coyote, and the other with the Wildcat. The two moieties were in an exogamous relationship. The obsolescence of the moiety system led to the loss of the appropriate classifiers. A drastic reduction in the system of numeral classifiers in Minangkabau (Marnita 1996: 163-165) goes together with a narrowing of the spheres in which the language is used, under the pressure of Indonesian, the national language. The increase in use of loan measure terms (metre, litre, and kilogram) contributed to the loss of traditional mensural classifiers. Young people appear to be unfamiliar with some culture specific classifiers, e.g. *sumpik* 'blowing bamboo weapon', simply because they do not use the object.

The principles of gender choice can be affected by cultural obsolescence. Schmidt (1985: 156-157) describes a series of changes in Young People's Dyirbal. Mythological association as a basis for gender membership is lost. In traditional times birds were believed to be spirits of dead human females, and consequently assigned to Gender II, 'feminine'. With the loss of this belief, speakers of Young People's Dyirbal treat birds as members of the 'animate' Gender 1.

3.2 Types of possession

Division of nouns into possession classes and the meanings of possessive classifiers reflect features of the societies where the languages are spoken. Distinctive ways of marking special relations often reflect 'the foundations of bio-socio-cultural kin relations which are being given special treatment in the grammar of possession' (Ameka 2013: 235).

A. Relations within a community, social hierarchies, and kinship categorisation. Kinship terms typically form a special subclass of inalienably possessed nouns (see Aikhenvald 2013, 2019b, Dixon 2010b). The ways in which different groups of relatives are assigned to different possession classes may depend on their status in the society. Maternal relatives in Hone and other Jukunoid-speaking groups in Nigeria are accorded privileged position, and the corresponding terms are always inalienably possessed (Storch 2013a).

Kinship terms in Paluai, an Oceanic language from the Manus province in Papua New Guinea, are directly — or inalienably — possessed, in agreement with a general Oceanic pattern (Schokkin 2014: 81-82). The term for 'in law', *polam,* is an exception: it is treated as

alienably, or indirectly, possessed. So is the term for 'cross-cousin', *pwai* (that is, the child of a parent's opposite sex sibling: mother's brother's child, or father's sister's child). The status of cross-cousins and in-laws in the traditional Paluai society provides an explanation for this exceptional behaviour. One is in a taboo relationship with the *polam* 'in law relative', and needs to treat them with special respect. The social distance between the ego and the in-law iconically correlates with linguistically longer and more elaborate expression of alienable possession. In agreement with the rules of Paluai kinship cross-cousins do not belong to the ego's lineage, and thus are less close to the speaker than other relations. This is reflected in the way possession is expressed.

One consanguineal kinship term, *pên* 'daughter', is also treated as alienably possessed in Paluai. Once again, societal practices provide a reason. Marriage in Paluai operates on exogamous principle, and so daughters usually marry someone who does not belong to their own clan; their children will belong to their husband's clan. Hence the treatment of 'daughter' — as a potential outsider not intrinsically connected to the speaker's clan — as alienably possessed. This is closely linked to B.

B. Social constraints (taboo and avoidance). In Jukun, male sexual organs and body effluvia are taboo and cannot be used in possessive constructions (Storch 2013a: 213). In Martuthunira, an Australian language, a special suppletive form of the first person singular pronoun *jurti* is used to code close kinship relationships and also relations between men established through male initiation (Dench 2013: 140).

Relations within a community, further social hierarchies and constraints are reflected in possessive classifiers in Pohnpean. The honorific register is used by common people to address a member of the nobility and by the nobility to talk between themselves. The humiliative register is used by socially inferior people to talk to the chiefs. There is also a common register, unmarked for politeness (more on this in Keating 1997, 1998, summary in Aikhenvald 2013: 23-5, 2000: 260-1, 344-5). The distinction between registers is reflected in a large system of possessive classifiers. Two 'common register' classifiers *kene* 'edible' and *nime* 'drinkable' correspond to three in the honorific speech: *koanoat* 'possession of food/drink by paramount chief', *pwenieu* 'possession of food/drink by paramount chieftainess', and *sahk* 'possession of food/drink by secondary chief'. In contrast, the humiliative register uses just one classifier, *ah tungoal*.

C. Principles of interaction, and attitudes to information and its sources. Principles of interaction between different kinds of relations may correlate with the assignment of the kinship terms to possession classes (shown under A and B above). We have found no demonstrable correlations of marking possession with attitudes to information.

D. Beliefs, religion, spirits, and dreams. Possessive classifiers in Pohnpean correlate with traditional beliefs and kinship hierarchies (linking this with parameter A above). The notion of *mana* refers to 'the sacred and dangerous power which flows from the deities through the chiefs to the people'. *Mana* is believed to flow 'matrilineally to descendants within chiefly clans'. As a result, the 'belief that *mana* extends to possessions makes possessive constructions a meaningful category' in distinguishing honorific, status-lowering and common speech registers (Keating 1997: 249). As a sign of salience of the maternal line, the language has specific classifiers for maternal rather than for paternal relatives (Keating 1997: 253). Beliefs, attitudes, and traditional associations explain the structure of possessive classifiers. The honorific general classifier, *sapwellime*, is composed of *sapwe* 'land' and *lime* 'hand, arm'. This can be explained by a strong cultural link between high status and land ownership, especially for chiefs (Keating 1997: 263). In contrast, the all-purpose possessive classifier in humiliative speech, *tungoal*, means 'food, eating and this correlates with the link between low status and food, or nourishment as the product of the land' (Keating 1997: 264).

Possessive (or relational) classifiers in Oceanic languages reflect culture-specific ways of handling the Possessee which can only be understood within the peoples' belief system. Fijian dialects of Eastern Viti Levu have a classifier for an object which the Possessor contributes 'as a customary obligation — a mat or pig for presentation at a feast, a house being built for a chief, or a spade to be used in a communal garden project' (Geraghty 2000: 246). This same marker (*loga-/laga-*) is also used as a classifier for totems in part of northeast Viti Levu — reflecting the belief system and the totemic organisation of the world.

E. Means of subsistence and physical environment. The meanings of possessive classifiers tend to reflect the means of subsistence, physical environment, and traditional occupations. Travel by watercrafts is essential for the Mussau-Emira, speakers of an Oceanic language from Papua New Guinea who live on a group of islands. The language has a special possessive classifier for 'canoes, watercrafts', their means of transport. The presence of a possessive marker for domestic animals correlates with the practice of animal husbandry (Brownie and Brownie 2007: 71-86) (and see E in §3.1).

In Dakota, a Siouan language, 'natural objects like land, water, animals including the dog but excepting the horse cannot take the possessive pronoun, because under aboriginal conditions they could not be exclusive property of anyone' (Boas and Deloria 1941: 128; cf. Aikhenvald 2013: 16). We find similar restrictions in numerous languages of South America, including the Arawak-speaking Waujá and Baniwa of Içana of Brazil and the Nanti of Peru. What happens when these peoples are confronted with different, Western-based notions of ownership? This takes us to F.

F. Role in language awareness, language engineering, and sensitivity to societal changes. Traditionally, land was not considered 'ownable' among the Nanti, an Arawak-speaking minority in Peru (Michael 2013: 165). As a result of encounters with Western concepts of land ownership — through contact with the closely related Matsigenka, who are much more exposed to the Western influence — the Nanti started talking about land ownership. The word for 'land' is now used in a possessive construction: one can now say *no-gipatsi-te* (1sg-land-POSS) 'my (alienable) land'. Alexandra Aikhenvald observed a similar change among the Arawak-speaking Baniwa of Içana in north-west Brazil: as a result of recent changes and on-going issues to do with ownership rights for traditional lands, the noun *hipe* 'land' (cognate to Nanti *-gipa-* 'land') can now be used in possessive constructions (as alienably possessed).

A similar example comes from Dakota, a Siouan language (Boas and Deloria 1941: 128). Traditionally, 'animals including the dog but excepting the horse' could not take possessive prefixes. They were not possessible, just like 'land'. But 'at present the cattle on large ranches are considered as property and not as food. Therefore they are expressed as separable property by the prefix *t'a*'. A relatively new practice of having cattle on a ranch as property had affected possessive marking in the language. The prefix *t'a,* a marker of alienable possession, has been extended in its usage.'

3.3 Directing and addressing

Directing and addressing can be expressed through the choice of pronouns, or commands and directive speech acts (imperatives and other forms used for commands, requests, or entreaties, known as imperative strategies: Aikhenvald 2010: 212-18, 256-95).

A. Relations within a community, social hierarchies, and kinship categorisation. In many European languages, contrasting forms of second person pronouns (e.g., *tu* and *vous* in French) depend on social relationships. In Fijian a single person may be addressed with

second person dual, paucal or plural pronoun. The second person dual pronoun is used for a single person belonging to one set of in-law relatives (mother-in-law, father-in-law, son-in-law, daughter-in-law) and the second person paucal pronoun is used to the other set (an actual or classificatory brother-in-law or sister-in-law of the opposite sex). Second person plural pronoun is reserved for addressing a village chief (Dixon 2012: 444).

Along similar lines, plural form for the addressee in commands in Luwo expresses a deferential attitude, as this 'symbolically heightens the agency and role of the addressee and thereby helps to soften an otherwise irrevocable command' (Storch 2014: 143; further examples are in Aikhenvald 2010: 212-18). In Japanese, commands are couched in a different manner according to the social status of speaker and of addressee (a comprehensive analysis and references are in Jarkey 2017). The choice of honorific speech level in commands in Korean is determined by the relative status of the speaker with regard to the addressee (Sohn 1994: 9-10). The choice between regular, polite, and impolite imperative in Maale, an Omotic language from Ethiopia, also depends on the status and age of speaker and addressee (Azeb Amha 2001: 126).

Similarly, commands among the Ilongot of the Philippines are used in line with 'age- and sex-linked social rank' (Rosaldo 1982: 204). The use of direct imperative or of another form to express commands and injunctions in Arapaho correlate with age and kinship relations (Cowell 2007; and also see Mihas 2017, for the role of a person's status in the choice of an imperative form among the Ashaninka Satipo).

The absence of dedicated imperative forms in a language may reflect the original societal conventions and organisation. Traditional Dyirbal, spoken in a society where 'life was regulated by common consent', had 'no clearly defined speech act of command' (Dixon 2017: 128). Forms with potential meaning were used to phrase suggestions and injunctions. A combination of particle plus verbal suffix was used to 'provide advice about some negative happening which might eventuate' (p. 142). These could, at a pinch, be translated into English as positive and negative imperatives. But such labels would not fully bring out the genius of the language as used by a small, egalitarian, and consensus-based group where commands didn't used to be part of traditional social practices.

B. Social constraints (taboo and avoidance). Yankunytjatjara, an Australian language (Goddard 1983: 306-7), has a strict avoidance relationship between a man and his parents-in-law. This imposes restrictions on the use of an imperative. A mother-in-law's or father-in-law's requests for food cannot be addressed directly at the son-in-law, and have to be done

through an intermediary. Even the intermediary's speech cannot contain a direct command (or an imperative form of the verb). A request has to be relayed using the quotative particle *kunyu* without any reference to a request. Among the Manambu, an initiated man could, traditionally, only be commanded by someone of the same level of initiation (or above).

C. Principles of interaction and attitudes to information and its sources. Principles of interaction and societal conventions may help explain gaps in paradigms and exceptional grammatical behaviour in vocative forms. Affinal relatives among the Trio, a North Carib-speaking group of Brazil and Suriname, do not talk to each other directly, as part of an avoidance register. This correlates with a gap in the paradigm of vocative forms — typically used in direct address: there are no such forms for father-in-law, mother-in-law, son-in-law, and daughter-in-law (Carlin 2004: 140). As Rivière (1969: 198) put it, 'that affines do not talk to each other is logically portrayed in the absence of direct address forms for affines'.

Obligatory marking of information source in grammar, or evidentiality, may correlate with the cultural requirement to be precise. We return to this in §3.4. A few languages with obligatory marking of information source mark it not just in statements, but also in commands. A most typical evidential in this context is reported evidential (Aikhenvald 2010: 138-44; 2017: 19-20).

D. Beliefs, religion, spirits, and dreams. Deities can be addressed in unusual ways, e.g. in Russian, God is usually spoken to with the familiar second person singular pronoun (Aikhenvald 2010: 232, and Maiden and Robustelli 2007: 463 on how some speakers of Italian address God). Speakers of Arapaho, an Algonquian language, use the indirect imperative in their prayers to God, as they 'seem reluctant to "order" God' directly (Cowell 2007: 47). Among the Ashaninka Satipo, special address forms reflect the indigenous classification of spirits and powers attributed to them (Mihas 2017: 102).

E. Means of subsistence and physical environment. Special directives and imperative form may reflect life-style and means of subsistence. Zargulla, an Omotic language from Ethiopia, is rich in special directive forms addressed to domestic animals. This feature — shared with other Omotic languages, including Maale and Wolaitta, fits in well with the cultural focus on animal herding in this society, and the variety of cattle and domestic animals traditionally bred (Azeb Amha 2013). In contrast, the Matses, for whom hunting is the major activity, have

special directives only for hunted animals and hunting dogs (Aikhenvald 2010: 318-20). We have found no examples so far of how directives may correlate with physical environment.

F. Role in language awareness, language engineering, and sensitivity to societal changes. Speakers are generally aware of the correlations between the ways of addressing and directing and relations within the community; they will provide explanations to researchers as to how politeness forms are to be used: see, for instance, explanations given by the Ilongot to Rosaldo (1982), or by the Arapaho to Cowell (2007).

A social change may accompany the frequency of use and the ways of framing a command. Traditional Lakota, a Siouan language, had a number of imperative particles used by men, or by women (see Boas and Deloria 1941; Ullrich 2008: 764-5; Trechter 1995: 189). Nowadays 'the speaker who most often uses a command form is a woman, correcting the delivery style of her husband as she interrupts his explanation […] to tell him to speak in Lakota or to clarify his explanations'. This new role of a woman as a language keeper — and an authority in matters traditional — has impacted the sheer frequency of commands in women's speech, and the way the commands are phrased.

Imperatives and commands appear to be especially susceptible to the impact of language contact. With the introduction of Western-type politeness conventions, systems of address and imperatives may reflect new social hierarchies, as in Nivkh (a summary is in Aikhenvald 2010: 382-5).

3.4 Information source, transmission of information, and interaction patterns
Grammatical marking of information source, or grammatical evidentiality, shows demonstrable correlations with a number of societal features. So do conventionalised modes of interaction within communities. The parameters under A-D are intertwined.

A. Relations within a community, social hierarchies, and kinship categorisation. In numerous West African communities, one tends not to communicate information directly to the addressee. Instead, this is done through an intermediary, or a spokesperson. The societies in the Sahel region are stratified; the 'nobles' are not allowed to speak in public, using bards or griots as their spokespersons. In the societies along the coast, 'respect' for the king or the chief requires the use of his spokesperson in communicating with the public (Ameka 2004: 6, Irvine 1990). If A wishes to tell something to B, they are likely to use C, an intermediary: A will be telling C who in turn tells B, rather than A speaking directly to B. The presence of

triadic communication patterns in West African languages correlates with the presence of logophoric markers: special pronominal forms that ensure the avoidance of ambiguity of an anaphoric pronoun and thus confusing A, B, and C. This cultural practice of triadic communication may involve one intermediary, or a chain of intermediaries. Or there can be a social class or a caste of griots, specialised as speech intermediaries (Ameka 2004: 13-15 offers examples and references).

Within the West African context, the presence of logophoric marking can be seen to 'reflect a preoccupation with channelling information through intermediaries, and therefore constitute 'an instance of the grammatical elaboration of a cultural theme' (Ameka 2004: 25), and 'an instantiation of a cultural preoccupation in grammar' (Ameka 2017: 533).

The choice of preferred information source marker, in languages with evidentiality as part of grammar, may correlate with speaker's status in the community. In many Amazonian communities, and also among the Huallaga Quechua, the visual evidential is used sparingly — only if a person has really seen what they are talking about, or if they have sufficient authority to show that they can see what others cannot. Someone who is neither a respectable authority nor a shaman, and thus has no obvious reason to over-use a visual evidential may be in trouble: they could be accused of being unreliable, or crazy, and suffer social exclusion (see Weber 1986: 142).

B. Social constraints (taboo and avoidance). We have just seen that the principles of indirect communication through a third party in a number of West African societies, including the Wolof, correlate with social constraints. In languages of the Vaupés region of north-west Amazonia, a shaman will be expected to use visual evidential to describe their supernatural experience. But when talking about shamanic actions and visions, common people will use the non-visual evidential (Aikhenvald 2004, forthcoming-b; Stenzel and Gomez-Imbert 2018).

C. Principles of interaction, and attitudes to information and its sources. We saw, under A, how the presence of logophoric marking reflects attitudes to the ways in which information is transmitted. In many languages with grammatical evidentiality, visual evidential has overtones of certainty, and an inferred, a nonvisual, or reported may be used to cast doubt on what is being discussed (see Aikhenvald 2014: 12-15, 29-30, and 2004: 154-85). The conceptualisation of knowledge and truth in Maaka, a Chadic language, is reflected in the use of an elaborate system of non-propositional evidentials (Storch and Coly 2014, Lüpke and Storch 2013: 245-53). The correct use of evidentials is the token of a good speaker, and a

reliable person, among the Mamaindê of central Brazil (Eberhard 2009: 468, 2018). Along similar lines, the accurate use of information source markers is 'a prerequisite to a claim to human status' for the Jaqi of Bolivia (Hardman 1986: 131; see also McLendon 2003: 113, on Eastern Pomo, and Nuckolls 2018, on Pastaza Quichua). Being precise in one's information source tends to be a cross-linguistic corollary of obligatory evidential systems, especially large ones, taking us to D.

D. Beliefs, religion, spirits, and dreams. The requirement to be precise among the Tariana and their neighbours in the Vaupés region appears to be related to a common belief that there is an explicit cause for every mishap (see Aikhenvald 2015a: 298-302, 2018a: 27-30, and also Barnes 1984). Such causes often involve sorcery — real, or suspected. If a speaker is remiss in using the correct marker of information source, they run the danger of being deemed sorcerers, or just unreliable and 'useless' people. Conventionalised choices of evidentials may reflect the status of the speaker: we mentioned, in B, that in many languages of the Vaupés shamanic actions will be described using non-visual evidential (as a speaker of Tariana explained, they are done with the shaman's 'mind' which cannot be seen). The Tariana will use the non-visual evidential when talking about attacks of evil spirits who are 'not seen'. Speakers of Trio and Wayana, Carib languages of Suriname, French Guyana, and the adjacent regions of Brazil, talk about shamanic attacks using the non-witnessed evidential: these are said to bring about an altered state of consciousness in the victim. The shamans themselves talk about their experiences using a witnessed evidential — for them, their revelations represent an 'alternative reality' (Carlin 2018). A speaker of Dyirbal would use a non-visual marker when talking about spirits (Dixon 2014b).

In their traditional life, speakers of Kagwahiv (a Tupí-Guaraní language, from the Upper Madeira River basin) used to rely on dreams, to forecast the presence of game, plan the day's hunt, and foresee illness and death. Every sentence in a dream contains a marker of nonfirsthand information. As Kracke (2009: 73) put it, 'the knowledge in a dream is received as a communication from beyond. Hence it cannot be coded as personal experience'. In a number of languages dreams are indeed treated as 'unconsciously acquired experience', and then told using a reported evidential (see Pan 2018 on Kanakanavu, Saaroa, and Tsou, Formosan languages; Daguman 2018 on Kankanaey, a Philippine language, and Brosig and Skribnik 2018 on Kalmyk, a Mongolic language).

Experience acquired in a dream may be marked differently depending on who the 'dreamer' is. In Shipibo-Konibo, dreams experienced by ordinary humans are not part of

reality — and so they are recounted using the reported evidential =*ronki*. However, if a shaman has a dream or a vision induced by the hallucinogenous *ayahuasca* he will retell this experience using direct evidential (Valenzuela 2003). Similarly, shamanic dreams in Tariana, Tucano, and a few other languages from the Vaupés are cast in visual evidential: the shamans are said to have the power of 'seeing' what has happened or will occur, through their dreams. Common people recount their dreams using non-visual evidential (Stenzel and Gomez-Imbert 2018: 382-3, Aikhenvald 2004: 346-7).

E. Means of subsistence and physical environment. There do not appear to be any demonstrable correlations between means of subsistence, or physical environment, and the marking of information source or the transmission of information. The presence of evidentiality may correlate with the form of language transmission — whether oral, or written. It appears to be the case that large evidential systems tend to occur in languages with a predominantly oral tradition (see also Daguman 2018: 291). And when writing is introduced, an evidential system may adapt, or fade into partial obsolescence. This takes us to F.

F. Role in language awareness, language engineering, and sensitivity to societal changes. Speakers of languages with evidentiality tend to be highly aware of how evidentials are to be employed, offering explanations for their use, and their lexical reinforcement (examples are in Aikhenvald 2004: 335-343). Speakers of languages with evidentials — from Amazonia to the Balkans — are aware of their absence in major languages, English, Spanish, and Portuguese. As a consequence, evidentials tend to spread from one language to the next in a contact situation. Expressing one's information source, and being precise about it, becomes a speech habit, and a necessity. Evidentials have been developed in local varieties of South American Spanish and Portuguese under the influence of indigenous languages, including Quechua and Aymara (see Aikhenvald 2018b: 165-8, and references there). The development of a speech report marker in Ghanaian English could be attributed to the influence of Ga and Akan (Ameka 2004: 22).

We have no information concerning evidentials and language engineering. Evidentials appear to be particularly sensitive to change, as new means of knowing things come about (see also Aikhenvald 2014: 34-6). New practices — reading, television, radio, telephone and internet — help us understand just how pliable the systems are. A Shipibo-Konibo speaker will now use reported =*ronki* to talk about what they read in a book. And a speaker of Tariana or Tucano will use an assumed evidential, typically used for information acquired by

interpretation, reasoning and common sense. If a Shipibo-Konibo watches something on television, this implies 'experiencing the event oneself, since one actually "sees" what is happening' — and so they would use the direct evidential =*ra*. The Tariana and the Tucano speakers would use a visual evidential. But if a Shipibo-Konibo hears something on the radio, or hears a TV report without seeing the picture, they will use the reported =*ronki*. A Tariana or a Tucano would use a non-visual evidential.

A speaker of Hinuq, a Daghestanian language, or of Tatar, from the Turkic family, would retell something they have seen on TV or heard on the radio using the non-witnessed evidential form, as they were not there to see the event themselves (Forker 2014, Greed 2014). The introduction of writing into the Bosavi (or Kaluli) language tradition, from Papua New Guinea, has resulted in the creation of a new evidential referring to something known from this source and not known before (Schieffelin 2008, Wood 2018: 247).

An evidential can become obsolete if the styles which require it are lost. As Daguman (2018: 691) put it, 'the formulaic and other discourse functions of the reportative in traditional oral storytelling is disappearing as fast as the verbal arts are falling out of use'; the reported evidential is hardly used in written collections of traditional stories. But it is still much alive in literary pieces of other genres — the presence of an evidential there 'contributes to making the written material sound natural rather than staid'. This takes us to §3.5.

3.5 Special speech styles

Special speech styles and their properties show strong evidence of integration with societal features.

A. Relations within a community, social hierarchies, and kinship categorisation. The honorific style in Japanese, and the choice of speech levels in Korean are motivated by the social hierarchies. So is the choice of honorific and humiliative speech registers in Pohnpean and in Javanese (Blust 2009: 118-125, Keating 1997, 1998). Noble-like speech and griot-like speech in Wolof have numerous special features, among them choice of noun class marker, use of deictics, and constituent order (Irvine 1990: 143; Ameka 2004: 18). The honorific language among the Anywa, a Nilotic-speaking group of Sudan and Ethiopia, is used by the king and those who speak to him (Storch 2013b: 99; further examples in Storch 2011: 23-8).

B. Social constraints (taboo and avoidance). In many Australian languages (and in Kalapalo and Kamaiurá from southern Amazonia) an avoidance style is used in the presence

of certain kin relatives. Avoidance register between a man and a potential mother-in-law, or between a woman and a potential son-in-law, in a number of Australian and Amazonian languages involves distancing: not touching each other, not talking to each other directly, and not looking at each other. Above all, a special speech style was to be used in the presence of, or within earshot of, an avoidance relative. (Among the Kalapalo, a Carib-speaking group in Xingu (Brazil), in-laws cannot be addressed directly, and their names cannot be uttered; circumlocutions have to be used: Basso 2007.)

The 'mother-in-law' Jalnguy style in Dyirbal had to be used instead of the everyday style called Guwal in the presence of an in-law relative with whom contact had to be minimised. While speaking Guwal, one needs to be as specific as possible. In contrast, Jalnguy is purposely vague, and deals in generic terms only: hence a one-to-many correspondence of numerous lexical terms between Jalnguy and Guwal (Dixon 2010a: 293; 2012: 448). An example is in Diagram 1: four terms for each species of kangaroo and wallaby in Guwal correspond to just one in Jalnguy.

Table 1 An example of one-to-many lexical correspondences in Guwal and Jalnguy

Guwal	Jalnguy
yuri 'eastren grey kangaroo (*Macropus giganteus*)'	*jaŊanbarra*
barrgan 'agile wallaby (*Macropus agilis*)'	
jabali 'whiptail kangaroo (*Macropus parryi*)'	
mabi 'tree-climbing kangaroo (*Dendrolagus lumholtzi*)	

Social constraints are at play in numerous honorific and respect languages across the African continent (see examples in Storch 2013b: 100-1, 2011: 31-4, 2017). Distance between 'forbidden' relatives can be reflected in the choice of grammatical form. In talking about a forbidden relative, the Kamaiurá, a Tupí-Guaraní speaking group from Xingu, use plural rather than singular (Seki 2000: 327, 395).

C. Principles of interaction, and attitudes to information and its sources. A special speech style is used between initiated men across Australia, and among the Tenda of south-east Senegal. This is directly related to D and E.

D. Beliefs, religion, spirits, and dreams. In East African societies, a distinct vocabulary is typically used in the presence of spirits (Storch 2011 offers numerous examples from African languages; also see Needham 1973: 307, and Keating 2002: 209-10 on the inversion of

meanings, actions, and values in the spirit world, in the languages of the Pacific). Among the Tariana of northwest Amazonia, women were not permitted to witness the Yurupary ritual or to see the magic flutes associated with it. Consequently, no terms associated with the ritual could be used in the presence of women, and alternative forms were deployed (Aikhenvald 2019a).

The Murui (Witoto) people of Colombia consider the jungle at night a dangerous place inhabited by malevolent spirits and shamans who can appear in the form of a jaguar or of a snake. When the Murui have to go hunting at night, they have to disguise their voices so that evil spirits won't know that there are humans around. The 'jungle talk' is characterised by high pitch (double the fundamental frequency of normal interaction, and frequent use of interjections, imitating a non-human voice), so as to deceive a spirit (Wojtylak forthcoming). Many Australian groups used to have special speech styles used only between initiated men and taught to youths at initiation; some still do (Dixon 2002: 91-2 offers a summary).

E. Means of subsistence and physical environment. Means of subsistence and physical environment correlate with special speech styles through the intermediary of peoples' beliefs. The Kewa from the highlands of PNG employ a special vocabulary when gathering pandanus nuts. The Murui, a Witotoan-speaking group from Colombia, have a special speech style used while hunting big animals, and interpreting dreams (Wojtylak 2015). Avoidance speech styles used while hunting or preparing food in the jungle have been documented for Semelai and other Aslian languages of Malaysia, and Austronesian languages of Borneo and Sumatra (Kruspe 2004: 7-10).

F. Role in language awareness, language engineering, and sensitivity to societal changes. Speakers are typically aware of the existence and rule of use of special speech styles, and are often prepared to explain these to researchers. Special speech styles can be subject to language engineering (see Storch 2017, for a general perspective). An unusual initiation language, the Damin style of Lardil, was said to be invented by a legendary ancestor. It shares a number of properties with invented languages, or 'language games', which are known to be the result of language engineering or manipulation (see Hale and Nash 1997; Dixon 2002: 92). Linked to this are special 'in-group languages'. Mous (1994, 2003) describes how the Mbugu, in Tanzania, wished to set themselves apart from neighbours who speak similar Bantu languages, and developed a language with Bantu grammar but a basically Cushitic vocabulary.

Youth languages and other special purpose languages are a further case in point (see Kiessling and Mous 2004, Storch 2013b: 104ff, and 2017).

Special speech styles may be affected by the attrition of relevant practices. Such 'stylistic shrinkage' (term from Campbell and Muntzel 1989: 195) goes together with cultural obsolescence. The knowledge of a ritual 'pandanus' language used by a number of peoples of the Southern Highlands province during the harvest of pandanus nuts has decreased during the past thirty to forty years, as Franklin and Stefaniw (1992) report for Kewa and Imbongu. The stylistic reduction in Manambu has resulted in gradual obsolescence of funerary songs with their special lexicon.

3.6 An interim summary

The integration between linguistic and societal parameters illustrated so far is summarised in Table 2.

Table 2 The integration between language and society: an initial summary

SOCIETAL PARAMETERS	LANGUAGE PARAMETERS				
	1. Reference classification	2. Types of possession	3. Directing, addressing	4.Information source	5. Speech styles
A. Relations within a community, social hierarchies, and kinship	√	√	√	√	√
B. Social constraints (taboo, avoidance)	√	√	√	√	√
C. Principles of interaction, and attitudes to information and its sources	few	none	√	√	√
D. Beliefs, religion, spirits, and dreams	√	√	√	√	√
E. Means of subsistence,physical environment	√	√	√	none	few
F. Role in language awareness, language engineering, and sensitivity to societal changes	√	√	√	√	√

The ticks in this table show the society/language associations which we have inferred from the literature (and our first-hand knowledge) across the world. For each specific society/language parameters only **some** of the ticks in a given row or a given column will apply.

Most of the correlations have a straightforward explanation. The main function of reference classification devices is to categorise the objects of the real world as viewed by the speakers; hence the correlations with the structure of the society, beliefs, means of subsistence and physical environment. Possession, and directing and addressing are directly related to the ways objects and people are treated and handled and to their relationships within societies. Marking information source is directly related to access to knowledge, and thus social hierarchies, constraints and beliefs.

As the Workshop progresses, we shall look for links between individual ticks; e.g. if there is an association B–2, there is also likely to be B–4. Similarly, A–1 with C–4.

We now turn to further linguistic features which could be indicative of the integration with the societies of speakers.

4 Further indicators of integration between language and society

A number of further linguistic features appear to show integration with societal traits.

FUNCTIONAL MARKEDNESS can be partly determined by societal practices. There is a fundamental distinction between two kinds of markedness in a language — formal and functional. A formally unmarked term will be the only one in its system to have zero realisation (or a zero variant). In contrast, functional markedness relates to how the forms are used (not what they look like). The marked term(s) may be used each in a restricted, specifiable situation, with the unmarked term used in all other circumstances. The functionally unmarked term, or category, will appear in neutralised contexts, or if one does not wish to be specific, or refers to someone or something in general.

In many familiar Indo-European languages, the masculine gender form is, or was, to be used to refer to person in general, a group of mixed sexes, or those whose sex is unknown as a default choice. This usage is currently perceived as sexist and is continuously under attack (see E under §3.1). In Manambu, contrary to English, feminine gender is both formally and functionally the unmarked choice, especially when talking about children, animals, and inanimates. But culturally important objects associated with male cults such as male houses are always referred to with masculine gender. The choice of default gender depends on the meaning of the noun, and its role in the rituals. Markedness correlates with societal practices.

THE INTERNAL COMPOSITION OF WORD CLASSES may reflect societal practices and values. Many languages from South America and from the Papuan region have a small adjective class which consistently lacks colour terms. (Naturally, colour terms are assigned to

other word classes.) In contrast, small adjective classes in African languages consistently include colour terms. It does appear that colour denominations have particular colour saliency for many African languages and the societies where they are spoken. A small adjective class is in the process of evolving in Krahn/Wobe, from Kru family (Liberia), consisting just of three colour terms (Dixon 2010b: 74-6; Bing 1991). This is congruent with the cultural importance of colour in many East African societies (see, for instance, Turton 1980 and Payne 2006).

In the traditional Manambu society, clan allegiance and name ownership used to be pivotal. The knowledge of names, totemic terms, and terms of address associated with each subclan were critical in contesting land ownership, and finding a marriageable partner. Addressing your interlocutor correctly, using the address term belonging to their mother and father, was — and still is — a key to successful communication. Address terms form a special subclass of nouns, with restricted nominal properties (they cannot be pluralised, or occur with modifiers or in possessive constructions: Aikhenvald 2008: 75-7).

The structures and types of PERSONAL PRONOUNS tend to reflect social hierarchies and also kinship relations. In many languages of East and Southeast Asia pronouns 'seem to be specifically adapted to allow people to express…messages to do with differences in social standing, respect, deference, and the like' (Goddard 2005: 19). There are often special forms whose choice depends on the identities of speaker and of addressee, and their relationships to each other. For instance, the first-person pronoun *àattàmaa* in Thai is used by a Buddhist monk when speaking to a non-intimate layman or a lower-ranking monk. The second person pronoun *fàabàat* is used by a commoner when speaking to lower-ranking royalty (see Iwasaki and Ingkaphirom 2005). An array of pragmatic alternatives for referring to first, second, and third person effectively creates open-class systems for person reference (see Enfield 2015: 133-47, 2017: 612-14).

In a number of Australian languages, pronominal forms vary, depending on whether people belong to the same moiety or to different moieties, and they belong to same or to different generation levels. The Arabana of South Australia used to be divided into two moieties. Back in the old days, marrying someone from the same moiety was 'like marrying your own sister' (Hercus 1994: 12). (This restriction got somewhat relaxed as the traditional conventions fell into disuse.) Personal pronouns reflect these relationships. For instance, the first person dual pronoun *alantha* 'we two' will be used if you and me belong to the same moiety. If we belong to different moieties, the form is *alakiya*. Distinct pronouns for members

of the 'same moiety' and 'different moiety' used to be a feature of Diyari (see Dixon 2002: 283-4, and references there).

Small egalitarian societies typically do not encompass the notion of competition, and will have no lexical words for 'compete' or 'win', and lack a dedicated COMPARATIVE CONSTRUCTION in their grammar.

The size and composition of the class of NUMBER WORDS depends on the presence of counting routine in a language. Small systems of number words are a feature of Amazonian and Australian languages with little if any counting as a social practice (see Aikhenvald 2012b: 350-60, Dixon 2012: 71-5). This is in contrast to those peoples for whom counting is a salient practice — including Indo-European, Semitic, and many Papuan languages. Exact quantities of goods, contributions to exchange and to mortuary payments, and of enemies' heads one has taken are the basis of interaction within the community. The systems of number words in these languages are rather elaborate. Societies with a developed trade network require a counting system, whereas small self-contained communities often had no habit of counting and lacked number words. [4]

In each of these instances, a feature of the society helps explain a feature of the language which could be considered unusual if seen in a cross-linguistic perspective. Physical features of the environment can be directly reflected in language: we address these in Appendix 1.

Further relevant linguistic issues may include:

• *In some societies direct questioning is unwelcome*. Needed information is obtained indirectly, by offering relevant information about oneself, which naturally invites a response.

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[4] It is undoubtedly the case that some putative correlations are weaker and easier to falsify than others. Many Amazonian languages, and just a handful of languages outside Amazonia, have a special 'frustrative' marker. Its meaning was aptly captured by Sparing-Chávez (2003) as 'I want to, but I can't', for Amawaka, a Panoan language from Peru (Overall 2017 contains a detailed study of frustratives in Amazonian languages). The presence of the frustrative in the grammar of Amawaka may well be motivated by their attitudes. As Sparing-Chávez (2003: 12) put it, 'The Amahuaca people are shame oriented and it seems to me that the frustrative helps them to save face by covering up their own shortcomings. They blame others, natural forces, or circumstances. It also helps them to express disagreement or carefully accuse someone without having face-to-face confrontation'. However, quite a few groups whose language does have a frustrative are not particularly shame-oriented and not averse to face-to-face confrontations. Conversely, not all the groups that are averse to face-to-face encounters have a frustrative. The correlation between having a frustrative in the grammar and people's attitude remains conjectural.

• *Can patterns of grammaticalisation be linked to practices and beliefs*? For speakers of Pennsylvania German, an individual is not supposed to make definite statements about the future, in agreement with a cultural value central to their belief system — 'subordination of individual will to the will of God' (Burridge 2006: 184). The tentative expressions of future using *figger* 'figure', *plaenne* 'plan' and *zehle* 'count' based on English calques are 'made to measure for a group of speakers reluctant to talk about the future'. As a consequence, they can now be considered means of obligatory expression of future, as a grammatical category.

• *The nature and role of a special 'in-group language'*. Mous (1994, 2003) describes how the Mbugu, in Tanzania, wished to set themselves apart from neighbours who speak similar Bantu languages; and developed a code with Bantu grammar but a basically Cushitic vocabulary. How do special purpose languages, including youth languages, interrelate with the social organisation?

Phonology has not been mentioned in this Initial Orientation paper, since it is hard to make any generalisations concerning how it may fit in with the parameters discussed. However, it is important to see if phonological traits can correlate with any of the societal features. For instance, phonological features (including unusual sounds and pitch levels) may play a role in special-purpose languages, including youth languages (see the discussion in Storch 2011, Lüpke and Storch 2013, Wojtylak forthcoming, and Irvine 1990: 139). Individual contributors will need to refer to these as appropriate.

5 To conclude

A grammar of every language will contain meanings and choices which reflect societal practices. This resonates with Enfield's statement that 'our language faculty must have evolved synergistically with our general cognitive capacities for (and the demands of) complex and interactive social organisation' (2000: 149). Or, as Heine (1997:14) put it, 'the way people in Siberia or the Kalahari desert experience the world around them can immediately be held responsible for the way they shape their grammars'.

Each language will show some degree of integration with the features of the society of its speakers. It is our aim to try and understand how this integration works, what linguistic categories it affects and why.

We have identified five groups of meanings expressed in grammar which are likely to reflect five groups of societal factors (see Table 2, and §3). Each of the five groups of

linguistic traits tend to play a role in language awareness and language engineering, and show sensitivity to societal changes. They tend to succumb to obsolescence when a relevant cultural practice is no longer in place. Those parts of grammar which show strong integration with societal requirements and conventions are susceptible to diffusion from one language to the next when their speakers come in contact with each other (in agreement with predictions in Aikhenvald 2006: 27-8).

Will this work the other way around? Can a specific societal feature be expected to have a correlate in language? We suspect that the answer will tend to be 'yes'. For instance, a language spoken by a highly stratified society will have to have lexical and perhaps also grammatical means reflecting the divisions. But what part of grammar will be co-opted to reflect this very much depends on the language, its history, and the resources at hand.

The idea of integration between language and society can be developed further. As Du Bois (1985: 363) put it, 'grammars code best what speakers do most'. Would it also be the case that speakers do most what grammars code best? Are linguistic features which show demonstrable correlations with societal practices the ones most frequently used in natural discourse?

And do some languages have more features indicative of their integration with society than others? If so, does this degree of integration correlate with the size of the linguistic community, their networks of interaction, degree of geographic isolation, and the history of their speakers? How can the degree of interaction be affected by externally-motivated and internally-motivated change? Which factors facilitate the integration, and which impede it?

Insights into these questions will bring us a step closer to understanding 'why' each language is the way it is.

Appendix 1 Language and its geographical environment

Grammar reflects the features of geographical terrain and physical environment in a few specific ways. Nominal demonstratives, locational markers, and directionals affixes on verbs may encode topographic dimensions — that is, 'uphill', 'downhill', and 'same level as the speaker'. We find these in quite a few languages spoken in hilly environments — examples come from Northeast Caucasian languages, including Archi, Akhvakh, Tindi, and Chamalal, Tibeto-Burman, Australian, Austroasiatic, and languages of Papua New Guinea and the Pacific (see Palmer 2002, Burenhult 2008, and a summary in Aikhenvald 2015b: 31-33).

Languages vary in how many distinctions they make. In Nungon, a Finisterre-Huon language spoken in Morobe province of Papua New Guinea, both near distance demonstrative *-o* 'this' and the far distance demonstrative *-u* combine with three sets of elevational markers (Sarvasy 2017: 361):

(1) Proximal series   *om-o*   *og-o*   *on-o*   *Nungon*
                       downhill-PROXIMAL   level-PROXIMAL   uphill-PROXIMAL
                       'this downhill'   'this same level'   'this uphill'

      Distal series   *om-u*   *og-u*   *on-u*
                       downhill-FAR   level-FAR   uphill-FAR
                       'that downhill'   'that same level'   'that uphill'

Nungon is spoken in a hilly area, and it is appropriate for the speakers to specify both the distance of an object and its relative height with respect to them.

Dyirbal is spoken in a mountainous rainforest area with heavy rainfall and many rivers. Locational suffixes in Dyirbal reflect the location of a referent of a noun with respect to the river (upriver or downriver) and also the mountains (uphill and downhill). Central and southern dialects have twelve terms, shown in Table A (Dixon 2010a: 16).

Table 2 Locational suffixes in Dyirbal

-bayji	short distance downhill	*-dayi*	short distance uphill
-bayja	medium distance downhill	*-daya*	medium distance uphill
-bayju	long distance downhill	*-dayu*	long distance uphill
-balba	medium distance downriver	*-dawa*	medium distance upriver
-balbu	long distance downriver	*-dawu*	long distance upriver
-guya across the river			

The grammar thus enables a speaker to supply information concerning whether something they are talking about is up or down hill or river, and how far up or down. Note that *-u*

indicates a long way, -*a* a medium distance, and (just for the hill suffixes) -*i* a short distance.

The mighty Sepik river is the main source of livelihood, and point of reference, for the Manambu people. Hills of various dimensions pepper their habitat. No wonder demonstratives and directional suffixes on verbs in the language reflects riverine and hilly orientation. Unlike Dyirbal, one set of forms is used for 'uphill' and for 'upriver' and another one for 'downhill' and 'downriver' (see Aikhenvald 2015b: 18-21, for complicated correlations between direction and distance in Manambu demonstratives). Munya and Yonghe Qiang, from the Qiangic subgroup of Tibeto-Burman family, are spoken in river valleys. Both languages have directional prefixes on verbs which indicate directions upstream and downstream from the speaker (Bai forthcoming, Sims and Genetti 2017: 121-2).

Galo, of the Tani subgroup of Tibeto-Burman, is spoken in the hilly regions of Arunachal Pradesh, in north-east India. Its demonstratives distinguish directions uphill and downhill, and also the distance (close or far from the speaker). A closely related Apatani is strikingly different: the demonstratives distinguish distance, but not the up-down direction. The environment offers a likely explanation. Apatani, unlike its other relatives within the subgroup, is spoken almost exclusively within a *plateau* area, with neither mountains nor rivers as sufficiently salient features of the terrain (Post 2011: 138, 151). Mising, another language from the same subgroup, employs the topographic directional terms, but again with different meanings: the direction 'uphill' was reinterpreted as 'upriver', and 'downhill' as 'downriver'. The explanation lies in the nature of the terrain: the overwhelmingly dominant environmental feature of the area where Mising is spoken is the Brahmaputra river, and there are virtually no hills of any noticeable size (Post 2011: 150).

Topographic deixis appears to be a shared feature of most Tani languages, but its realisations vary, depending on the environment — hilly, flat, or riverine. Along similar lines, Yalaku, a Ndu language closely related to Manambu, is spoken away from the river in a hilly area. Its demonstratives and verbs occur with suffixes indicating directions uphill and downhill — but not upriver and downriver, since the river is irrelevant to people's life style.

While a topographic distinction in a language may be explained through a correlation with environment, a feature of the environment will never be enough to predict with any certainty what a language will have.

In many languages, demonstratives and directionals appear to be shaped by the salient landmarks in the geographic environment. But not always so. Iatmul is closely related to Manambu, and is spoken along the Sepik river in a hilly country. Yet, there are no topographic distinctions in the demonstratives nor in verbs. Could this be an indication that

the speakers moved into the region fairly recently, and didn't have the time to develop the uphill/downhill distinctions? Or can there be another reason?

Correlations between the geographical terrain and grammatical systems of demonstratives or directionals appear to be a prerogative of relatively small communities, whose members live in a similar landscape. A larger group, of tens of millions of people, spread over a wide territory, will be less likely to have an obligatory grammatical system relating to a specific type of terrain. Iatmul is spoken by ten times as many people as Manambu, across a much wider area. This could be a reason for the absence of topographic distinctions in its demonstratives.

Correlations between other features of physical environment and linguistic categories are more difficult to capture. Denny (1979: 108, 112-115) attempted to link the existence of deictic classifiers in Eskimo and Toba which are fused with the distinction 'in view/not in view' by the fact that they 'hunt in open treeless environment'. On the other hand, quite a few languages with visibility distinctions in demonstratives are spoken in other kinds of environments — Dyirbal in dense rainforest, Palikur in moderately forested area, and Lilloeet in a largely open country. The question of whether the visibility distinctions in grammar correlate with any geographical feature remains open.

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