# 5SSEL026 – Language Construction

SAMPLE ASSIGNMENT – Mandubza: The Lost Island Speaks

About Mandubza

Mandubza is a Pacific island which was, until recently, largely unvisited by the larger nations. Its remote location and its classification as an indigenous refuge 29 years ago meant that there was very little contact with the outside world. It's indigenous refuge status was actively enforced by the French Government, who still have official sovereignty over the island: until recently they had placed a ban on all visits to the island, which was officially known as Île des Forêts.
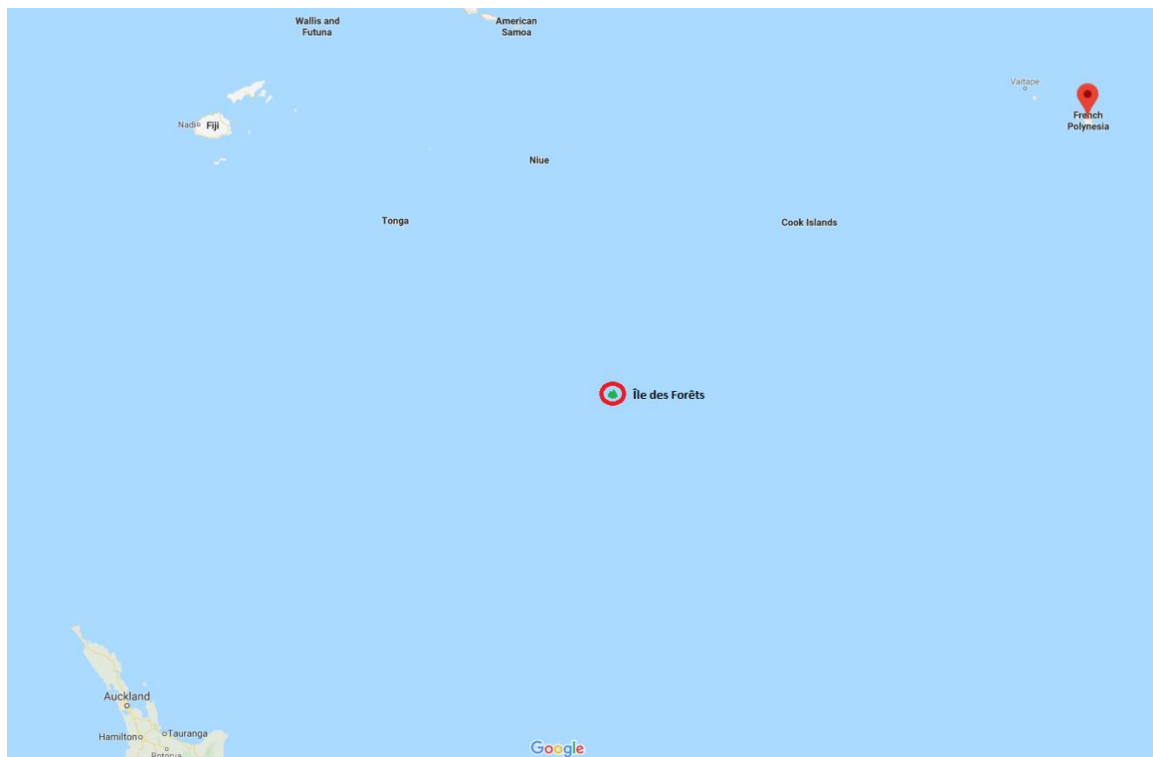
Île des Forêts, located between New Zealand and French Polynesia

The island was officially claimed by France in 1778, when a 30-strong expeditionary force from the frigate *La Belle Josette* landed on one of the few beaches below the cliff surrounding the island. They planted a flag and claimed the island for France, then began looking for ways to scale the cliffs and explore the centre of the island. They had been on the island for only two hours when they were attacked with a deadly rain of missiles and rocks from Mandubzans on the cliffs above them. Two of the three landing boats were destroyed, and all but four of the landing party killed. When the final boat got back to the *Josette*, the Captain ordered a token bombardment of the island, marked the

island as French on his maps, and sailed away. From that date until forty years ago, everyone who landed on the isle was either driven off or killed before they were able to scale the cliffs.

Forty years ago, a single Jesuit priest, Pere Pepin L'Arbre, decided to parachute onto the island to bring the Gospel to the presumably ignorant natives. The unusual tactic seems to have worked, and the strange man who floated out of the sky was able to persuade the islanders to find out about the World beyond their shores. Three years ago, following an official representation to the United Nations by Mandubzan islanders, the island was opened up to the world. Because of its location and few known resources, international interest is still not great; but some scientists (geologists and biologists) have been sent to the island to assess its potential. UNESCO has also funded an anthropologist and a linguist to record the culture of the islanders before it becomes too heavily infiltrated by the modern world.

This report sets out some of the features that have been identified in the Mandubzan language (there is one language spoken across the whole island) and shows how, despite its lexical and grammatical simplicity, it can still convey complex ideas effectively.

Cultural considerations

Mandubza is an unusual island in that it is the remnant of a volcanic plug, like Pitcairn. It is a rugged island with cliffs rather than beaches, and this means that the islanders, unlike most other Polynesian descendants, have very little interest in the sea as a resource. The have lived so far more like Amazonian forest-dwellers than Polynesian littoral-dwellers, which has made their culture unlike any other in the Pacific.

The island has many caves, which have been used as living spaces by the Mandubzans; and this, in concert with a much-reduced need for boats, has largely preserved the forest on the island. Until recently, a fierce mistrust of non-islanders, and a willingness to convert any interlopers into digestible protein, has kept frivolous exploration at bay; and the geographic disadvantages and lack of any known tradeable resources, have made large expeditions unprofitable.

The uniqueness of the Mandubzan language and culture means that the current period of openness provides an unrepeatable opportunity for anthropological and linguistic research, and we are grateful to the United Nations and UNESCO for funding the expedition.

Sound and writing systems of Mandubza

The phonology of Mandubza is simple. Every phoneme is voiced, which could have given the spoken language a droning effect. However, this is mitigated by the fact that there is no merging of vowel or consonant duples. Where two consonants or two vowels are next to each other, a small unvoiced /h/ sound occurs. This breaks up the voiced drone, and can even make speech sound staccato or stumbling. The vocal stop is represented in writing with an apostrophe (so Mandubza is actually written **man'dub'za**).

The writing system, as developed by Pere L'Arbre, is a simple transliteration of Mandubzan letter sounds into the Roman alphabet.

There are only nine consonants and five distinct vowels, as follows:

IPA symbol	Written sign	English sound
b	B, b	Bad
d	D, d	Dad
g	G, g	Gap
m	M, m	Man
n	N, n	Nap
ð	Th, th	That
v	V, v	Van
z	Z, z	Zone
ʒ	Zh, zh	Casualty
æ	A, a	Cat
e	E, e	Men
ɪ	I, i	Sit
oʊ	O, o	Rode
ʊ	U, u	Book

There does not seem to be any identifiable association between environmental sounds and language sounds – if there is any onomatopoeia in Mandubza, it has yet to be identified.

Grammar of Mandubza

The grammar of Mandubza is quite simple, and the organisation of constructs seems to be more paratactic than hypotactic: sentences tend to be short and contain little semantic hierarchy. The basic structure of a construct is subject-verb-object (SVO) with indirect objects occasionally following the

direct object (SVOI). There are no empty subject forms (e.g. passives) and no empty object forms (e.g. intransitives).

The language is fusional, and base meanings can be altered by a series of affixes. Prefixes on verbs have adverbial content, while suffixes indicate tense and modality; Prefixes on nouns have adjectival content, while suffixes are used to indicate adpositionals, associatives, count, possession, and temporality. This means that noun suffixes can get quite complex. There seems to be no fixed order for suffixes, but count is often the first suffix.

There are two main word-types, verbs and nouns. Verb stems invariably end in –o and noun stems in –a. It is possible to convert nouns to verbs and vice versa by simply changing the ending, but this should be done with care: there seem to be cultural restrictions on this which we have not fully identified, and some of our attempts have caused great hilarity to native Mandubzan speakers. The basic noun stem indicates singular, the basic verb stem indicates present tense. There is no inflection, no case and no gender in Mandubzan.

So far we have identified three secondary word types: pronouns (all simple vowel sounds, with plural forms being indicated by duplication of the vowel); connectors (a small and probably closed group for linking constructs); and one adverbial (used to indicate that what follows is a question, not a statement).

Many of the nouns contain adpositional meaning within them (e.g. the noun **iga** does not mean [idea], it means [idea-about], and is usually followed by what in English would be an indirect object, what the idea is about; where there is no indirect object it is because it has already been established earlier in the exchange). There are, however, a small number of adpositional suffixes which can establish a relationship between the direct and indirect objects (O contains I, I contains O, I is a consequence of O, etc.). These are always attached to the indirect object. Mandubza can handle relationships between O and I (e.g. *I saw a house with chimneys*), but not between V and I (e.g. *I saw a house with binoculars*; this would be *I saw a house; I used binoculars*), or between S and I (e.g. *I saw a house with Mary*; this would be *I and Mary saw a house*) or between SVO and I (e.g. *I saw a house with surprise*; this would be *I saw a house; It surprised me*).

Mandubza also uses fusion to create new word forms, and this can occur with verbs or nouns. For instance, the verb **man'dub'zo** (to converse) is a fusion of **mano** (to speak to), **dubo** (to listen to), and **zo** (to do this thing); and the noun **baz'mada** (shaman) is a fusion of **baza** (the unknown thing) and

mada (person). So far we have only seen verbs fused in verb forms, and nouns fused in noun forms. This has been quite useful, and we have been able to interpolate unidentified verbs and nouns from these blends.

Mandubza has a Reichenbachian tense system, and it also differentiates between completed and ongoing events (perfectives and imperfectives). It is therefore able to produce the following tenses:

English	Reichenbach relationship	Mandubzan
Go	Present	Go
Am going	Present imperfect	Go'u
Went	Past	Go'ad
Was going	Past imperfect	Go'adu
Will go	Future	Go'ob
Will be going	Future imperfect	Go'obu
had gone	Past in past	Go'adad
Had been going	Past in past imperfect	Go'adadu
Have been going to go	Future in past	Go'adob
Have been going to be going	Future in past imperfect	Go'adobu
Will have gone	Past in future	Go'obad
Will have been going	Past in future imperfect	Go'obadu
Will be going to go	Future in future	Go'obob
Will be going to be going	Future in future imperfect	Go'obobu

The order of tense markers is fixed: modality marker, reference point, event point, imperfection. So "may have been going to be doing" is "zo'azadobu". Mandubza is similar to English in this ordering, although English uses separate lexical units where Mandubza uses suffixes.

Number system of Mandubza

Manbubza does not have an effective numbering system. There is a set of noun count suffixes for none (-eni), two (-em), all (-edi), and more than two but not all (-ed); the default unsuffixed form represents one. The time counting system is equally crude. They recognise thama'ad (last year) and thama'az (next year) but "three years ago" or "in three years' time" cannot be properly translated. To help the Mandubzans develop a number system, simple reduplication has been suggested for small numbers (for instance, thama'ad'ad'ad has been suggested to represent three years ago); but it is a form not extensively used by the Mandubzans, and it breaks down quickly with numbers larger than two – you need a counting system before you can count the number of repetitions needed to represent the

number, and their current counting system only goes up to two. Dates, like 1837, are completely opaque.

Correspondences to nearby languages

Mandubza has some similarities to the Polynesian group of languages, which extend across most of the Pacific. For instance, it has a similar plurality system of one-two-some-many. The correspondence with Polynesian is not strong, though, and the differences outweigh the similarities: the Mandubza phonology is much more restricted than most Polynesian languages, there seem to be few correspondences between Mandubza and Polynesian words, and the Mandubza grammar seems to be fusional where the Polynesian grammars are isolating. The fusional nature of Mandubza is unlike most of the other regional languages, and has even led to a rather wild speculation that the fusional element of the language came from Navajo explorers, over 2,000km to the East. Quite how the Navajo developed (and presumably lost) sea-faring skills, and why they should have influenced only one island in the whole Pacific, has not been explained.

It seems more likely that the island was settled from Hawai'i about 1,100 years ago, somehow lost contact with the homeland soon after settlement, and has been following its own cultural and linguistic developmental trajectory for over a millennia. Some words could be remnants of Hawai'ian: for instance **vava**, meaning the place of the ancestors, could be derived from the word **Hawai'i** itself, but it is usually associated with the Milky Way, not any terrestrial location; and the Hawai'ian **mea** (person) could have evolved into Mandubzan **mada**. These correspondences are uncommon, however, and not systematic.

Mandubzan Dictionary

A short extract from the Mandubzan dictionary, currently being compiled, is provided in appendix I to assist understanding of the translation which follows. The dictionary is arranged around affixes rather than whole words, to reflect the semantically fusional nature of the language. Prefixes are indicated by a following dash (e.g. godad-), while suffixes are indicated by a preceding dash (e.g. -i'i).

Translation into Mandubzan

To illustrate Mandubzan in action, a short translation from English into Mandubzan is given. The translated text was selected from a choice of four because it highlights some of the particular problems of moving ideas between English and Mandubzan. As the translation shows, the cultural and technological lexis of English are an issue, and some imagination is needed to provide a reasonable

semantic approximation. The use of numbers is particularly problematic, and dates have to be represented in Mandubzan by a general phrasal unit placing them into the indeterminate past (Thama'edad).

Because the grammatical construction of Mandubzan (a synthetic/fusional language) is so different from English (an analytic/isolating language), it was decide that a four-column translation analysis would work best: the English text has to be transliterated before it can be transposed and translated.

Original	Transliteration	Transposition	Translation
When on board H.M.S. 'Beagle,' as naturalist, I was much struck with certain facts in the distribution of the inhabitants of South America, and in the geological relations of the present to the past inhabitants of that continent.	I was a naturalist	I be-PAST-incomplete naturalist	a mo'ad'u nad'mana
	And	and	ub
	I was on-board HMS Beagle.	I [be-on-a-boat]-PAST boat Beagle	a dego'ad bima Bigo .
	I had some ideas-about the location	I have-PAST [ideas about]-some place	A vo'ad iga'ed zhana
	of people	Person-all-[owns-location]	mada'edi'av
	in South America,	[South America]-[contains-people]	Zozameniga'azh ,
	And	and	ub
	I had some ideas-about the geology.	I have-PAST [ideas-about]-some geology	a vo'ad iga'ed thab'zan'mana .
	Did it make-the-same	QUESTION it [make-the-same]-PAST	Zhi, e dano'ad
	now-people	Person-all	mada'edi
	And then-people?	Person-all-PAST-and	mada'edi'adub ?
These facts seemed to me to throw some light on the origin of species—that mystery of mysteries, as it has been called by one of our greatest philosophers.	I had some ideas-about this:	I have-PAST [ideas-about]-some this	A vo'ad iga'ed bada :
	That	that	ug
	The ideas-about could reveal the origin	[ideas-about]-some reveal-MODAL origin	iga'ed dozho'az geda
	Of species.	[animal-type]-[owns-origin]	mega'av .
	This is a big mystery,	This be big-[unknown-thing]	Bada mo ded'baza ,

Original	Transliteration	Transposition	Translation
	Our great philosopher says it.	Big-shaman-all-our [speak-to] this	ded'baz'mada'edi'a'a mano bada .
On my return home, it occurred to me, in 1837, that something might perhaps be made out on this question by patiently accumulating and reflecting on all sorts of facts which could possibly have any bearing on it.	In 1837	Year-some-PAST	Thama'edad [1837][1]
	When I returned home	That I return-PAST here	ug a gobo'ad bada
	I had an idea-about the ideas-about:	I have-PAST [idea-about] [idea-about]-some	a vo'ad iga iga'ed :
	That	That	ug
	I could patiently-gather facts	I slowly-gather-MODAL-PAST facts	I zad'nono'azad zaniga'ed
	Then	That	ug
	I could prove the ideas-about.	I show-MODAL-PAST [idea-about]-some	a dozho'azad iga'ed .
After five years' work I allowed myself to speculate on the subject, and drew up some short notes;	During five years	Year-some-PAST-during	Thama'edadazh [5]
	I worked-on the ideas-about	I [work on]-PAST [idea-about]-some	a dozo'ad iga'ed
	Then	Then	ug
	I wrote some notes.	I write-PAST writing-some	a zhomano'ad zhomana'ed .
these I enlarged in 1844 into a sketch of the conclusions, which then seemed to me probable:	In 1844	Year-some-PAST	Thama'edad [1844]
	I wrote more notes	I write-PAST more-writing-some	a zhomano'ad ded'zhomana'ed
	And	And	ub
	I had some ideas-about proof.	I have-PAST [ideas-about]-some proof	a vo'ad iga'ed dozha .
from that period to the present day I have steadily pursued the same object.	During 1844 to today	Year-some-PAST-during	Thama'edadazh [21]
	I have had more ideas-about proof,	I have-PAST more-[ideas-about]-some proof	a vo'ad dediga'ed dozha ,
	And	And	ub
	I have written more notes.	I write-PAST more-writing-some	a zhomano'ad ded'zhomana'ed .
[In Mandubza you cannot rely on dramatic cataphors, as Darwin does here. This has therefore been interpolated.]	I slowly-came-to a decision	I slowly-[arrive-at]-PAST decision	A zad'bo'ad goviga
	That	That	ug
	I must publish this.	I must-big-write this	a mud'ded'zhomano bada .

Original	Transliteration	Transposition	Translation
I hope that I may be excused for entering on these personal details,[2]	I ask you	I [speak-to]-[all-of-you]	A mano e'e
	That	That	ug
	You excuse me	[all-of-you] make [a-better-version-of]-me	e'e do godeda
	That	That	ug
	I speak-of myself.	I [speak-to] me	a mano a .
as I give them to show that I have not been hasty in coming to a decision.	Because	Because	ubug
	You must see the idea-about me	[all-of-you] must-see idea-about I	e'e mud'zho iga a
	I have not hastily shown proof.	I not-hastily-show-PAST proof	a zen'zob'dozho'ad dozha
My work is now nearly finished;	My work is ending itself.	Work-my end work.	Doza'a go doza.
but as it will take me two or three more years to complete it, and as my health is far from strong, I have been urged to publish this Abstract.	During three years	Year-some-FUTURE-during	Thama'edobazh [3]
	It will end itself.	It end-FUTURE it.	i go'ob i .
	I am not well,	I be [a-worse-version-of]-me.	A mo gogada .
	They say-to me	They speak-to me	I'i mano a
	That	That	ug
	I must publish this;	I must-big-write this	a mud'ded'zhomano bada ;
I have more especially been induced to do this, as Mr. Wallace, who is now studying the natural history of the Malay archipelago, has arrived at almost exactly the same general conclusions that I have on the origin of species.	And	And	ub
	I must publish this	I must-big-write this	a mud'ded'zhomano bada
	Because	Because	ubug
	Mr Wallace has-the-same ideas-about proof.	Mister Wallace [makes-the-same] [ideas-about]-some proof.	Miza Vanaz dano iga'ed dozha.
	He studies nature	He [nature-studies] forest	I nad'mano nada
	In Malaya.	Malaya-[contains-forest]	Manava'av.

Notes to translation

[1] See Number system of Mandubza.

[2] This phatic construct is particularly difficult to express in Mandubzan. It is considered a sign to madness to apologise for an action that nobody has asked an apology for.

Conclusion

This has been a short introduction to Mandubzan, and there is still much more to be discovered. While the features of the language are not themselves unusual, their geographic location, and the distance they have moved from their source language, indicate that the identification of language clades by comparative analysis may be somewhat less reliable than we have believed to date. Mandubza promises to be important not just as a newly-identified language, but in terms of what it can tell us about grammaticalization processes in language.

Appendix I: Mandubza to English Dictionary

Word	Type	English meaning	Notes
a	Pn	I, Me	First person singular
-a	N-m	My	noun possessive suffix
a'a	Pn	We, Us, My group	First person plural
-a'a	N-m	Our	noun possessive suffix
-ad	V-m	Past tense	Tense marker
-ad	N-m	This N existed but may no longer exist	Noun temporal suffix
-av	N-m	This N possesses the preceding N	Noun adpositional suffix
-az	V-m	Modality	Tense marker
-az	N-m	This N may never exist - a speculative object	Noun temporal suffix
-azh	N-m	This N contains the preceding N	Noun adpositional suffix
-azh	N-m	When used with time words (year, day, morning, etc): During	Noun adpositional suffix
bada	N	The thing that is close; Here, this place	
baza	N	The thing that is not on the island, the unlikely or unknown thing	
baz'mada	N	Shaman, Magician, Wise person	Lit. "unlikely person"
bima	N	Anything that floats and can support a human in the sea	
bo	V	To come, to arrive, to move towards, to begin	
boba	N	The thing that is out of sight but still on the island	
boda	N	The thing that is further away but still in sight	
dano	V	To make things equal	
ded-	N-m	A large version of the N; More N	Noun adjectival prefix
ded'zhomano	V	To publish	Lit. "big see speak-to"
dego	V	To be on a bima	
do	V	To make, produce, manufacture	
doza	N	Work, effort, pasttime	
dozha	N	Evidence, Proof	
dozho	V	To Show, Demonstrate, Reveal, prove	
dozo	V	To work on something	

Word	Type	English meaning	Notes
duba	N	One who listens	
dubo	V	To listen to	
e	Pn	You	Second person singular
-e	N-m	Your	noun possessive suffix
e'e	Pn	You	Second person plural
-e'e	N-m	Your	noun possessive suffix
-ed	N-m	More than two but not all; Some	Noun Count Suffix
-edi	N-m	All	Noun Count Suffix
-em	N-m	Two	Noun Count Suffix
-eni	N-m	None	Noun Count Suffix
gad-	N-m	A small version of the N; Less N	Noun adjectival prefix
geda	N	Origin, Source, First Occurrence	
go	V	To go, to leave, to move away, to end	
gobo	V	To return to	
goded-	N-m	A good, or better, version of the N	Noun adjectival prefix
goded'mana	N	A forgiven or excused person	
gogad-	N-m	A bad, or worse, version of the N	Noun adjectival prefix
goviga	N	Decision	
i	Pn	He, She, It, Him, Her	Third person singular
-i	Pn	His, her, its	noun possessive suffix
i'i	Pn	They, Them	Third person plural
-i'i	Pn	Their	noun possessive suffix
iga	N	Idea about	The Mandubza believe it is impossible to just think, you have to think about something.
mada	N	Person, an individual	
mana	N	One who speaks	
man'dub'za	N	The language, the people	This noun form did not exist before the philologists arrived, but it has since been adopted.
man'dub'zo	V	To converse, communicate, use language	Lit. "To do speaking and listening"
mano	V	To speak to	
mega	N	Animal, Type of animal, Species	
mo	V	To be	
mud-	V-m	To be forced to perform the V, to be driven to perform the V (must)	Verb prefix
nada	N	Forest	

Word	Type	English meaning	Notes
nad'mana	N	Naturalist	Lit. "Forest-speaker"
nad'mano	V	To study nature	
no	V	To get	
nono	V	To gather, to collect, to accumulate	
-ob	V-m	Future tense	Tense marker
-ob	N-m	This N may not exist now but it will in the future	Noun temporal suffix
thaba	N	Skill, ability, magical power	
thab'zan'mana	N	Geology	Lit. "The skill of the rock-speaker"
thama	N	Current Year, usually from Winter solstice to Winter solstice	
-u	V-m	Imperfection	Tense marker
ub	Conn	And	Links two equal constructs
-ub	N-m	This N pairs with the previous N	Noun associative suffix
ubug	Conn	Because	The second construct explains the first
ug	Conn	That (as conjunction)	Links a source with an outcome
vo	V	To own, possess, control, have	
zad-	V-m	To perform the V more slowly than usual	Verb prefix
zana	N	Rock, stone, earth	
zaniga	N	A fact, a truth, a certainty	
zhana	N	Location, place, not here	
zhi	Avb	Stand-alone question indicator	
zho	V	To see something	
zhomana	N	A written thing, an essay, a book, notes	
zhomano	V	To write something	
zo	V	To do, execute, perform something	
zob-	V-m	To perform the V more quickly than usual	Verb prefix
zen-	V-m	To not perform the action; Negator	Verb prefix

Key:

Avb = Adverbial

Conn = Connector between constructs

N = Noun

N-m = Noun modifier affix

Pn = Pronoun

V = Verb

V-m = Verb modifier affix

Word Count

Report (excluding appendices, including translation): 3048