# Spatial Reference in Kilivila: The Tinkertoy Matching Games—A Case Study\*

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#### 1 Introduction

"Imagine yourself suddenly transported on to a coral atoll in the Pacific" (Malinowski 1936: 300). Let us assume further that you are confronted by someone from the Cognitive Anthropology Research Group who was asked to elicit some speech data using the kit the members of this group developed for their 'space' research program (Levinson 1992). What would you do if this researcher asked you to describe to someone you cannot see how to build the object presented in Figure 1?

In this paper I would like to present what my informants on the Trobriand Islands did in exactly such a situation. However, before I describe and discuss how the Trobriand Islanders structured these descriptions and what verbal means and strategies they used in such a matching game situation, I would first like to briefly introduce the Trobriand Islanders and their language and then to describe the session and the task given for this matching game.

# 2 Kilivila and its Speakers

Kilivila, the language of the Trobriand Islanders, is one of 40 Austronesian languages spoken in the Milne Bay Province of Papua New Guinea. It is an agglutinative language with a general word order of VOS (Senft 1986). It is classified as a member of the 'Papuan Tip Cluster' and the Kilivila language family (Ross 1988:25). The Kilivila language family includes

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<sup>\*</sup> This paper is based on 22 months of field research on the Trobriand Islands in 1982-83, 1989, and 1992. I want to thank the German Research Society and the Max-Planck-Society-especially the Cognitive Anthropology Research Group at the MPI for Psycholinguistics and its director Stephen C. Levinson-for their support in realising my field research. I also want to thank the National and Provincial Governments in Papua New Guinea and the Institute for PNG Studies for their assistence with, and permission for, my research projects. I express my great gratitude to the people of the Trobriand Islands, especially to the inhabitants of Tauwema; I thank them for their hospitality, friendship, and patient cooperation.

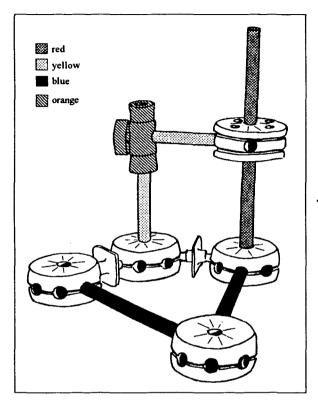


FIGURE 1: THE TINKERTOY FIGURE

the languages Budibud (about 160 speakers), Muyuw (about 3,100 speakers) and Kilivila (about 25,000 speakers).

The Trobriand Islanders have become famous, even outside of anthropology, because of the ethnographic masterpieces on their culture published by the famous anthropologist Bronislaw Malinowski, who did field research there between 1916 and 1920. The Trobrianders belong to the ethnic group called 'Northern Massim'. They are gardeners, practicing slash-and-burn cultivation of the bush; their most important crop is yams (*Dioscorea alata*). Moreover, they are also famous for being excellent canoe builders, carvers, and navigators, especially in connection with the ritualized 'Kula' trade, an exchange of shell valuables that covers a wide area of the Melanesian part of the Pacific (Malinowski 1922; Weiner 1976, 1988). The society is matrilineal but virilocal, and socially stratified into four hierarchically ordered clans: the Malasi, Lukuba, Lukwasisiga, and Lukulabuta clans.

# 3 The Tinkertoy Matching Game on the Trobriands

Tinkertoy is an American game that is advertised as 'the easy building system for...people with big imaginations'. The builder set includes wooden spools and rods, square panels, plastic connector pieces, bases, wheels, caps, swivels, and a little figure called the 'Tinkertoy character'. With this system one can build constructions in three-dimensional space.

The members of the Cognitive Anthropology Research Group built eight constructions and photographed them. Fourteen photographs, some of which show the same object shot from two different angles, are part of the elicitation set.

There are two types of constructions: representational and non-representational. Each has different advantages. Representational constructions give a clear goal in construction and speakers may have readily available (body-)part terms for reference. This should make the task of describing the construction easier for most people. However, the representational constructions are fairly complex. Non-representational constructions are more likely to make the informants rely on 'abstract' descriptions which may involve concepts such as angles and planes. This task is typically an 'unnatural' task and may be quite challenging for many speakers.

Using this game as a device to elicit data on spatial reference in Kilivila, I proceeded as follows. Like all the matching games, this one involved two informants, a 'director' who described the construction and a 'matcher' who built the construction. The informants were separated by a pandanus mat that made it impossible for them to see each other. Thus, the director could not see what the matcher did. The informants were sitting at a place close to the church at the edge of the village looking into the same direction, north-west. I let the informants play the game in two ways. Sometimes, following the general outline given by the Cognitive Anthropology Research Group, I gave the director the photograph(s) of a construction to describe as exactly as possible. In other cases I gave the director the actual Tinkertoy configuration, which I built on the basis of the respective photo(s), and asked the director to for a detailed description of the configuration. The matcher was always encouraged to ask the director for further particulars if in doubt as to what to do.

During the exploratory phase of my field research in Tauwema village on Kaile'una Island in 1992 I did these games with eight male informants; I could not motivate girls and women to participate in this test. In the following case-study I report on how Keda'ila (approximately 25 years of age, Malasi clan) described the Tinkertoy configuration shown in Figure 1 to Moyadi (approximately 27 years of age, Malasi clan).

#### 4 What the Informants Did

In this section of the paper I would like to do two things: First, I will briefly describe how the two informants constructed the non-representational Tinkertoy configuration. Then I will describe what verbal means the director and the matcher used to achieve their respective aims, that is to describe and to actually build the configuration. The actual text of the interaction between the director and matcher is given in the Appendix.

# 4.1 How the informants built the configuration

In this section I will describe the order in which the director had the matcher build the configuration. The actual terms used in this summary are not necessarily the terms the director used. Thus, when I use terms like 'left' and 'right' or 'centre' or 'wheel with five holes', this does not necessarily reflect the actual directions used in building the configuration. These directions simply reflect the order in which the director had the matcher build the configuration.

The director started his description with a wheel and told the matcher to put two blue sticks in two adjacent holes on the tread of the wheel. Then he told the matcher to put the ends of the two blue sticks into the holes of the treads of two other wheels, and to connect a third wheel with these two wheels using the white plastic connector pieces. Next he told the matcher to put a yellow stick into the hole in the middle of the wheel in the centre and then to put a big red stick into the hole in the middle of the wheel that is to the right from the matcher's point of view if the wheel with the blue sticks is pointing towards him. After this the matcher was told to put the orange plastic piece with a hole in its middle on top of the yellow stick in the centre and to put another yellow stick horizontally through the hole in the centre of this orange plastic piece. Then the director asked the matcher to put a wheel with five holes through it onto the red stick so that it is centered on the stick. The centre hole of this wheel is bigger in diameter than the diameter of the stick and thus is moveable on this stick. Next the matcher was told to put a yellow stick through the hole in the orange plastic piece and into one of the holes on the tread of the moveable wheel Finally, the matcher was told to put a small round orange plastic cap at the end of the horizontal yellow stick that protruded through the hole in the middle of the orange plastic piece on top of the vertical yellow stick.

This description may be used as an example of linguistic means that could be used in English to describe this configuration. In the next section I would like to describe the linguistic means in Kilivila the informants used in their interaction during this matching game.

# 4.2 Means of spatial reference used in the matching game

Before I analyse the actual linguistic means the informants used in this game I want to make two comments of a more general nature. First, the informants observed the material they were playing with very carefully with respect to any intrinsic features. For example, in the game session I am discussing, the director not only specifies that a wheel has to be laid down, he also refers the star-like pattern on one of the sides of the wheel pointing out that this side will be up. I will refer back to this observation below. Second, playing this matching game requires verbal interaction between the director and the matcher. Either the director asks the matcher for some feedback or the matcher himself provides the director with information about what he has already done. On the basis of this feedback, the director can modify, correct or confirm the matcher's actions. The matcher can also ask for confirmation or correction of what he just has done.

Turning now to the linguistic means used by the informants, the first area I will discuss is that of the complex system of numeral classifiers or 'Classificatory Particles' (CPs) as Malinowski (1920) called them. This is clearly one of the most important and extraordinary means of reference in Kilivila

The system of numeral classifiers is an important means of word formation involving all but one of the demonstrative pronouns, one form of numerical interrogative pronouns/adverbs, two classes of adjectives, and numerals. These word classes must be in concord with the class of the noun they refer to. This concord is secured by the CPs that are infixed or prefixed to the respective word frame or word stem. I have described these processes of word formation and syntactic aspects of constituents with CPs in detail elsewhere (Senft 1985:374-379, 1986, 1991a), therefore I do not want to go into more detail here other than mentioning that up till now 177 (numeral) classifier types have been documented. For present purposes it suffices to finish this brief descriptive and very general account with the presentation of two sentences with representatives of all of the four word classes involved in the system of noun classification (see Senft 1991a:133). In the examples (-)ke(-), the CP, is in bold:

Kevila waga lekotasi?
ke-vila waga le-kota-si
CPwood-how.many canoe 3.PST-arrive-PL

'How many canoes arrived?'

```
Keyu waga makesina kemanabweta ke-yu waga ma-ke-si-na ke-manabweta CPwood-two canoe DEM-CPwood-PL-DEM CPwood-beautiful (lekotasi).

le-kota-si
3.PST-arrive-PL

'These two beautiful canoes (arrived).'
```

In these sentences the speakers refer to 'canoes'; therefore they have to indicate the noun class of 'canoe' with (-)ke(-), the CP for 'wood, wooden things', in the interrogative pronoun, the numeral, the demonstrative pronoun, and the adjective.

After this brief excursus let us return to the Tinkertoy matching game. Here the informants use the following CPs:

- -kwe- and its variant -kwa-, the general CP for inanimate referents, to refer to the wheels and to the small orange cap,
- -pwanana- and its variants -pwonina-, -pwona- and -pona-, the quality-describing CP for '(punctured) holes' as referents, to refer to the holes in the wheels and in the plastic parts,
- -utu-, the quantity-indicating CP for 'parts, small particles' as referents, to refer to the small orange plastic Tinkertoy parts,
- -ke-, the CP for 'wooden things, rigid/long objects' as referents, to refer to the wooden sticks,
- -pila- and its variant -pa-, the quantity-indicating CP for 'parts, pieces' as referents, to refer not only to a wheel, but also-in their function as numeral constituting morphemes that count portions of a subdivided whole-to form ordinal numbers,
- -kabulu- and its variant -kabula-, the place and shape indicating CP for 'protuberances' as referents, to refer to the end of the horizontal yellow stick that protrudes through the hole of the orange plastic piece on top of the vertical yellow stick.

These CPs also serve the function of focusing devices. With them the informants have a verbal means for fast and unequivocal reference to parts of the non-representational spatial configuration. The following is an example from my transcription of this session that illustrates the use of the CPs -kwe-, -kabula-, and -ke-.

```
K:
                                       kwebweyani, ka.
           kwau manakwa
   ...е
           ku-kau ma-na-kwa
                                       kwe-bwevani ka
       and 2-take DEM-DEM-CPthing CPthing-red ok
      "...and take this red thing (= the orange cap), ok."
M:
    \boldsymbol{F}
      'Yes'
K:
    Makabulana
                               okuvasuva
                                                 kebweyanila
     ma-kabula-na
                               o-ku-vasuva
                                                 ke-bwevani-la
     DEM-CPprotruding-DEM LV-2-put.through CPwood/rigid-red-EMP
                                kevanaku
                                                   ake e
      makena
      ma-ke-na
                                ke-vanaku
                                                   ake e
      DEM-CPwood/rigid-DEM CPwood/rigid-long oh ch
      makenaga
                                     kai kekwinini
                                                              okuvisuvi
      ma-ke-na-ga
                                     kai ke-kwinini
                                                              o-ku-visuvi
      DEM-CPwood/rigid-DEM-EMP stick CPwood/rigid-yellow LV-2-put.through
      'This protruding (end of the stick which) you put through (it), this red long
      (stick)-oh, eh (wait a minute) this stick, (the) yellow (one) you put (it) through
      (the hole of the orange plastic part),'
\mathbf{M} \cdot \mathbf{E}
      'Yes'
K:
     omatala kuvisuvi
                           manakwa
                                                kwebweyani biya
     omatala ku-visuvi
                           ma-na-kwa
                                                kwe-bwevani bi-va
     in.front 2-put.through DEM-DEM-CPthing CPthing-red 3.FUT-go.to
      ikanava.
      i-kanava
```

and) it rests there.'

The informants also have to use these CPs as a means of reference when they discuss the exact position of the blue sticks and the white plastic connector pieces in the respective wheels. In this

'You put this red (cap) through at the front (of the stick), it will go to (the stick

3.-lie down

inserted into the matching holes on the tread on the wheels.

In the brief excerpt of the transcription above the informants also use other means of reference, of course. First, they make extensive use of colour terms. I will not go into more detail

case they just count the number of holes that have to be left empty till the next piece has to be

here; interested readers may refer to Senft (1987). Second, in this brief transcription we find motion verbs, positional verbal expressions, and a preposition. I will first briefly present the directional and positional verbal expressions the informants used in this matching game;

With regard to positionals, the informants use the following verbal expressions during this matching game:

-kanakela-'to lie (down) on someone/something' -kanava-'to lie down, to lie off (the way)' -kanubilahala-'to lie down at right angles' -kanukwenu-'to lie down' -kanuvadulu-'to lie together, to lie close to one another' 'to lie down' -kenu--kibilibali-'to hold (something./someone) sideways'

'to hold (something./someone) straight' -yomilivali-

-seli-'to place, to put' -tomalaula-'to stand upright' -towa-'to stand (away)' -tovelu-'to stand apart' -visasu-'to join, to connect' -vitau-'to set up, to put up'

'to stick (in)' -wavai-

With regard to motion verbs, we observe the use of the following expressions:

'to come' -ma-'to come to' -mwa--la-'to go' -loki-'to go to'

-va-'to go to, to accompany'

-dademi-'to fall down' 'to follow' -ekuliwa-

-katukwevivila-'to turn (round, around)'

-kivili-'to turn' -lola-'to walk'

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-meki-
-seboda-
-suki-
'to move to and fro and up and down, to meet'
'to encircle, to close a circle'
-to go off to, to take the road to'
-veki-
'to follow, to go to, to meet'
```

Kilivila seems to have an immensely rich vocabulary of positional and motion verbs. However, at the moment I will not, and cannot, attempt to delve into this vast field without sound semantic analyses of my data.

With regard to prepositions, we find *omatala* 'in front of, before', in the excerpt above. The informants also used three other prepositions during this matching game:

otinava	'below, under, on the ground'		
olakeva	'above, up, over, on top of		
oluvala	'in the middle of, between'		

Of these four prepositions, *omatala* is the most interesting since it is apparently the result of grammaticalisation processes. In this case, the preposition is based on the body part *mata-* 'eye'. This same body-part term, *matala* is also used metaphorically as a noun to refer to a particular object, as illustrated in the following question the matcher asked the director.

```
M: Matala makena kai ambeya, yokwa?
mata-la ma-ke-na kai ambeya e-mwa yokwa
eye-his/her DEM-CPwood/rigid-DEM stick where 3-come.to you

'The tip of this stick where (is it), does it come to you?'
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In this last sentence the matcher asks for some information about a certain direction. To indicate directions or locations, Trobriand Islanders have three options. First, they can specify the goal or location with a proper noun specifying a person or place, in which case they do not use any preposition whatsoever. Second, they can specify the goal or location as a specific place, but without a place or proper name, in which case they use the preposition o. This preposition gets a function that can be compared to that of a definite article, that is, the preposition incorporates a feature for definiteness for the governed noun-phrase. Third, they can refer to the goal or location with a general term, in which case they use the preposition va.

<sup>&</sup>lt;sup>1</sup> Kurylowicz (1965:52) defines the concept of 'grammaticalisation' as follows: '[Grammaticalisation]...consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status.'

<sup>&</sup>lt;sup>2</sup> During my last stay in the field in 1992 I realized that I always violated this rule, producing sentences like \*bala wa Losuia instead of bala Losuia. I also learned that my informants, who in general (almost) always corrected mistakes I make while speaking Kilivila, intentionally did not correct this mistake because it served them as a basis for a kind of nickname for me: I am, or was till then, mtona ela ekakaya \*va Bugei, 'the one who always goes to to [sic] the Bugei (i.e. the fresh water grotto close to Tauwema) to take his bath'.

If the goal or location is a body part the speakers seem to take it as something more specified and thus use the preposition o as in the second option.

The following examples from the transcription of this matching game illustrate two of these rules. In Keda'ila's first two statements the preposition o is used because the goal is a specific place, while in his last statement no preposition is used because the goal is specified with a proper noun.<sup>3</sup>

```
K: Kwetala
                                      laodila
                  wili
                          ela
                  wili
                          e-la
                                      laodila
     kwe-tala
                                0
     CPthing-one wheel 3.-go Prep bush
      'One wheel goes (points) to the bush.'
M:
    \boldsymbol{E}
      'Yes'
K:
     \boldsymbol{E}
          kwetolu
                                            bwalita.
                         wili
                                 ela
          kwe-tolu
                         wili
                                 e-la o
                                            bwalita
     and CPthing-three wheel 3-go Prep sea
      'And wheel number three goes (points) to the sea.'
M:
     E
      'Yes'
K:
                                    Tuyabwau ela,
     E
          mpana
                                    Tuvabwau e-la
          m-pa-na
     and DEM-CPpart/piece-DEM Tuyabwau 3-go
      'And this piece goes (points) to the Tuyabwau (the name of the fresh water
      well where the men usually take a bath in the afternoon)'
```

The way the director checks the correct position of the three wheels illustrates the way the Trobriand Islanders use landmarks and place names as a means to clarify the direction and orientation of objects (as well as (living) beings, as documented by data I gathered using other

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Bala va bagula.
ba-la va bagula
1.FUT-go to garden
'I will go to the garden.'
Gidageda o lopola sena gaga.
gidageda o lopo-la sena gaga
pain in stomach-her/his very bad
'Pain in one's stomach is very bad/A stomach ache is very bad.'
```

<sup>&</sup>lt;sup>3</sup> For the sake of completeness I would like to give examples from my other Kilivila data corpus to illustrate the other two options. In the first example the preposition va is used because the goal is bagula, the general, unspecified expression for 'garden' while in the second example the preposition o is used because the goal is a body part.

methods of elicitation). To describe the orientation of the objects used in the matching game as unequivocally as possible, my informants used expressions like 'the eyes look to (in the direction of) the village', 'its front goes to (in the direction of) the Bugei (the name of the fresh water grotto in the bush where boys, men, and girls go for a bath)', 'its back goes to the church', 'its right hand points to the house of the missionary / to X's house'. Most of the Trobriand Islanders' place names are proper nouns, but there are also some names that are more descriptive like vadom (= va dom) 'to where it is sandy' and vanuma (= va numa) 'to where it is rocky'.

I would like to emphasize, however, that this means of spatial reference is not at all comparable to cardinal point orientation systems. Although, being excellent sailors, the Trobriand Islanders do have expressions for cardinal point directions (most of which are names for winds or currents), I never observed the use of cardinal point expressions in my informants' elicited reactions to the stimuli I used. Instead, the informants used expressions like okakata 'at/to/on the left (hand side)' and okikivama 'at/to/on the right (hand side)' in their descriptions of the spatial configurations they were asked to describe. The expressions kikivama 'left' and kakata 'right' were also used whenever the informants could find some intrinsic features that allowed a clear front and back to be assigned to an object. This, in turn, had severe consequences with respect to the perspective the informants used. The Trobriand Islanders seem to be quite consistent with respect to their perspective. They use deictic perspective, that is, perspective dependent on the observer/speaker, unless the object (including people) they refer to has intrinsic features that allow the assignment of a clear front and back. If the referent has such intrinsic features, they use intrinsic perspective, that is, perspective independent of the observer/speaker.

Finally, in a kind of apercu, I would like to draw attention to two phrases produced during the matching game that identify this session as one in which Trobriand Islanders were involved. First, the director once refers to the hole in the wheel in which the matcher has to put a stick as ... makala la kabowaiyaiyu..., '...like the place close to the growing yams where one puts a stake into the ground for the tendril of the plant to creep.' This simile is a nice piece of evidence that the data presented here are produced by the gardeners that have become famous because of their 'Coral Gardens and their Magic' (Malinowski 1935).

The second phrase is when Keda'ila referred to the hole in the middle of one of the wheels with pwananela oluvala' the hole in the middle', and then sang this line in the rhythmic pattern that is quite typical for the verses that go with string figures. As we have already documented elsewhere (Senft and Senft 1986, Senft 1991b), the Trobriand Islanders enjoy every opportunity where they can break taboos verbally. The general and sociological taboos Malinowski (1929) listed and described are still valid for all Trobriand Islanders. To secure its members' observation of the taboos that are especially important for its social construction the Trobriand society

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has developed so-called 'safety valve customs' (Heymer 1977:187) that allow its members to imagine the ignorance of taboos—in a fictitious way, of course. The Kilivila metalanguage even provides a name for a special register, or 'situational-intentional variety' as I call it (Senft 1986:124ff, 1991b), that allows the speakers to talk about something 'one does not talk about' otherwise. This register is called *Biga Sopa* 'Joking or Lying Language/Indirect Language.' We first discussed this register in more detail (Senft and Senft 1986) in connection with the string figures ('cat's cradle') we collected in 1983. With reference to the quite 'obscene' verses that accompany these string figure games, we mentioned that there were some more figures and verses our informants were too 'shy' to play and recite for us. The phrase *pwananela oluvala* is the name of one of these string figures. This time I managed to convince another young man to play the respective string figure for me and to give me the verses that accompany it. The verses run as follows (Kwikwiya and Kebilabala are girl's and boy's names, respectively):

Kebilabala girigiri yanı girigiri bogi vakeke Kwikwiya som Kwikwiya with.you Kebilabala it.goes day it.goes kwatukoimeee mwaga sibum sigi lidedetutu kweokwa. their asses their hips move to and fro you turn over your canoe it is empty E bwadagu kuvisuvi yamam pwananela oluvala mweta my.brother you.put.in your.hand the.hole in.the.middle string Yes silibwe kaikem silibwe yamam silitutina. mweta mwetayarayara string string, moving, to, and, fro cut, cut your, leg cut, cut your, hand cut, it, off<sup>5</sup>

I would like to take this observation-together with the laughter and the hilarious mood with which the informants played this matching game-as an indication that the Trobriand Islanders enjoyed playing these matching games despite the fact that they obviously constituted a rather 'unnatural' task.

# 5 Summary

I would like to summarize the observations presented in this case-study as follows.

<sup>&</sup>lt;sup>4</sup> The Trobriand Islanders distinguish a number of registers that are used in special situations and to pursue (a) certain intention(s). Therefore I call these registers 'situational-intentional varieties'. In biga sopa (biga 'language', sopa 'joke, lie, trick, something one does not really mean'), the speaker uses the vagueness and ambiguity inherent in language as a stylistic means to avoid possible distress, confrontation and too aggressive directness in certain speech situations. It also opens room and space where behaviour can be tried out playfully without any fear of possible social sanctions because the speaker can always recede from what he has said by labelling it as sopa, that is, something he did not really mean to say.

<sup>&</sup>lt;sup>3</sup> To make sure that I really got the meaning of this song, my informants told me to read 'ejaculate' for 'turn over the canoe', 'penis' for 'string', and 'stop sexual intercourse' for 'cut it off'. The cuts mentioned in the last line of this song refer to scratches with which lovers on the Trobriands mark each others' skin. The marks are called *kimali*.

- Although the Tinkertoy matching game constitutes a rather unnatural task, the informants not only enjoyed playing this game, they also did extremely well in the describing and matching task.
- 2) The informants did the task highly interactively, collaborating with each other.
- 3) One of the more language specific means for spatial reference is certainly the complex system of Classificatory Particles. The CPs are an important and necessary means of word formation for one form of an interrogative pronoun/adverb, adjectives, demonstratives and numerals. Since the CPs are understood as indices for typical features or qualities of their respective referents they allow for fast and unequivocal reference to the objects used in the spatial configurations.
- 4) In order to make their reference unequivocal, the informants also use color terms in their description of the spatial constructions.
- 5) Kilivila seems to be quite rich with respect to its lexical inventory of motion verbs and positional verbal expressions. However, since I cannot as of yet present sound semantic analyses of my data, I cannot delve into this vast and interesting field.
- Body-part terms are used both as locatives as grammaticalised prepositions and metaphorically.
- 7) To indicate directions and locations, the Trobriand Islanders seem to follow the following rules with respect to the use of the prepositions o and va:
  - To refer to the goal or location with a proper noun specifying a person or place, they do not use any preposition whatsoever.
  - To refer to the goal or location as a specific place, they use the preposition o which incorporates a feature for definiteness for the governed noun phrase.
  - To refer to the goal or location with its most general term, they use the preposition va. If the goal is a body part, the speakers seem to take it as something more specified and thus use the preposition o.
- 8) The Trobriand Islanders use the Kilivila expressions for 'left' and 'right'; they also refer to landmarks and place names in their spatial descriptions. However, they do not use a cardinal system of orientation in everyday, ordinary speech situations, although they can use expressions for winds and currents when they do want to refer to the cardinal points.
- 9) Trobriand Islanders seem to be quite consistent with respect to their perspective. They use deictic perspective, that is, observer/speaker dependent perspective, unless the object or person they refer to has intrinsic features that allow a clear front and back to be assigned. In this case, they use intrinsic perspective, that is, observer/speaker independent perspective.

10) Although the matching game asks for rather abstract descriptions of abstract configurations, the informants manage nevertheless to liven their descriptions with culture specific expressions, allusions and innuendos. They mark these matching games as having been played by Trobriand Islanders, indeed.

#### References

- Bowden, John. 1991. Behind the preposition: Grammaticalisation of locatives in Oceanic languages. MA thesis, University of Auckland.
- Heine, Bernd, Ulrike Claudi and Friederike Hünnemeyer. 1991. Grammaticalization: A conceptual framework. Chicago: University of Chicago Press.
- Heymer, Armin. 1977. Vocabulaire Ethologique Allemand Anglais Français. Berlin: Paul Parey, Paris: Presses Universitaires de France.
- Humboldt, Wilhelm von. [1822] 1963. Über das Entstehen der grammatischen Formen, und ihren Einfluss auf die Ideenentwicklung. In Wilhelm von Humboldt. Werke in fünf Bänden, ed. Andreas Flitner and Klaus Giel. Vol. III, 31-63. Schriften zur Sprachphilosophie. Stuttgart: J.G. Cotta'sche Buchhandlung.
- Kurylowicz, Jerzy. 1965. The evolution of grammatical categories. *Diogenes* 51:55-71.
- Levinson, Stephen C. 1992. Primer for the field investigation of spatial description and conception. *Pragmatics* 2: 5-47.
- Malinowski, Bronislaw. 1920. Classificatory particles in the language of Kiriwina. Bulletin of the School of Oriental Studies, London Institution, Vol. 1, Part IV: 33-78.
- [1922] 1978. Argonauts of the Western Pacific. An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea. London: Routledge and Kegan Paul.
- \_\_\_\_\_. [1929] 1968. The sexual life of savages in Northwestern Melanesia. London: Routledge and Kegan Paul
- \_\_\_\_\_. 1935. Coral gardens and their magic. London: Allen & Unwin.
- 1936. The problem of meaning in primitive languages. In The Meaning of Meaning, ed. C. K. Ogden and I. A. Richards. Supplement I, 296-336. London: Kegan Paul Trench, Trubner.
- Meillet, Antoine. [1912] 1948. L'évolution des formes grammaticales. In *Linguistique Historique et Linguistique Générale*, 130-48. Paris: Klincksieck.
- Ross, Malcolm D. 1988. Proto Oceanic and the Austronesian languages of Western Melanesia.

  Pacific Linguistics C-98. Canberra: Australian National University.
- Senft, Barbara and Gunter Senft. 1986. Ninikula-Fadenspiele auf den Trobriand Inseln, Papua Neuguinea. Untersuchungen zum Spiele-Repertoire unter besonderer Berücksichtigung der Spielbegleitenden Texte. Baessler Archiv, Beiträge zur Vöklerkunde NF 34, Heft 1: 93-235.
- Senft, Gunter. 1985. Klassifikationspartikel im Kilivila-Glossen zu ihrer morphologischen Rolle, ihrem Inventar und ihrer Funktion in Satz und Diskurs. Linguistische Berichte 99:373-93.
- \_\_\_\_\_.1986. Kilivila: The language of the Trobriand Islanders. Mouton Grammar Library 3. Berlin: Mouton de Gruyter.
- . 1987. Kilivila color terms. Studies in Language 11:315-346.

. 1991a. Network models to describe the Kilivila classifier system. Oceanic Linguistics
30:131-155.
. 199lb. Prolegomena to the pragmatics of 'situational-intentional' varieties in Kilivila language.
In Levels of Linguistic Adaptation: Selected Papers from the 1987 International Pragmatics
Conference, Volume II, ed Jef Verschueren, 235-48. Amsterdam: John Benjamins.
Traugott, Elizabeth C. and Bernd Heine, eds. 1991. Approaches to grammaticalization. Amsterdam:
John Benjamins.
Weiner, Annette B. 1976. Women of value, men of renown: New perspectives in Trobriand exchange.
Austin: University of Texas Press.
. 1988. The Trobrianders of Papua New Guinea. New York: Holt, Rinchart and Winston.

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Cognitive Anthropology Research Group Max-Planck-Institute for Psycholinguistics PB 310 NL-5600 AH Nijmegen THENETHERLANDS

# **Appendix**

Tinkertoy elicitation - Tape TT3 (video) 25:54:00 - 21.08.1992

Keda'ila (K) and Moyadi (M) build the construction documented in photographs 4 and 5; however, the example given is the 'real' configuration and not the two pictures showing it. K is the director; M is the matcher.

```
K: Wili,

'(A) wheel,'

M: E

'Yes.'

K: wili mna kwetala,
wili mna kwe-tala
wheel hm CPthing-one
'a wheel, hm, one (wheel),'

M: E

'Yes.'
```

```
K:
          kwau
                   kuseli...
          ku-kau ku-seli
     ves 2.-take 2.-put
      'yes, take (it and) put (it)...'
```

M: Ke kwetarokwa wala? ke kwe-tarokwa wala ah CPthing-one only

'Ah, one (wheel) only?'

K: kwetarokwa kuseli igau... kwe-tarokwa ku-seli igau CPthing-one 2.-put then 'one (wheel), put (it down and) then...'

makala esakaula? Bavitauwa ba-vitauwa makala e-sakaula 3.-run 1.FUT-set.up like

'I will set it up as if it runs...?'

K: Gala.

'No.'

M: Taga...

'But...'

K: Bikenu pwananela pwanatarokwa bikanakela, Bi-kenu pwanane-la pwana-tarokwa bi-kanakela 3.FUT-lie.down hole-its CPhole-one 3.FUT-lie.on 'It will lie down, it will lie on its one hole,'

M: M bogwa.

'Hm, ok.'

beya gala ginigini. beya gala ginigini here no ornament

'(where) there (is) no ornament.'

M: E

```
K: Bikanakela beva tunutunu bima
                                            olakeva.
    Bi-kanakela beva tunutunu bi-ma
                                            olakeva
    3.FUT-lie on here dot
                                3.FUT-come up
      'It will lie on (the ground and) here (the) dot will be up.'
M: Bogwa.
      'OK.'
K: Bogwa, makesita
                                  kai
                                        kehwahwau
                                                       kevu.
    Bogwa ma-ke-si-ta
                                  kai
                                        ke-bwabwau
                                                       ke-vu
    OK
           DEM-CPwood-PL-DEM stick CPwood-black CPwood-two
     'OK, these two blue sticks,'
M:
   E
     'Yes.'
K:
    kevu
                  kai
                        kebwabwau.
    ke-yu
                  kai
                        ke-bwabwau
    CPwood-two stick CPwood-black
     '(the) two blue sticks,'
M: E
     'Yes.'
K:
        makesina.
                               Makesita
                                                      ka kuyosi (you hold)
        ma-ke-si-na
                               ma-ke-si-ta
                                                      ka ku-vosi
    yes DEM-CPwood-PL-DEM DEM-CPwood-PL-DEM see 2.-hold
     makwena
                         makwena
                                            wili.
     ma-kwe-na
                         ma-kwe-na
                                            wili
     DEM-CPthing-DEM DEM-CPthing-DEM wheel
      'yes, these these (sticks), see, you hold this this wheel,'
M·
   F.
     'Yes.'
K:
        mpanaga
                                esuki
                                         emwa
                                                 o kwadeva o
                                                                hwalita
                                         e-mwa o kwadeva o
         m-pa-na-ga
                                e-suki
                                                                bwalita
    and DEM-CPpart-DEM-EMP 3.-go.off 3-go.to to beach
     'and this (part here), it goes off, it goes to (the) beach, to (the) sea.'
```

M: E.

Pwanana mpwonasita K: pwonatala pwonayu edanuvadulusi. pwanana m-pwona-si-ta pwona-tala pwona-yu e-kanuvadulu-si DEM-CPhole-PL-DEM CPhole-one CPhole-two 3-lie.together-PL hole pwonavuwa kuwai keta matala bila o la... ku-wai ke-ta mata-la bi-la o la... pwona-yu-wa CPhole-two-only 2-hit CPwood-one eye-its 3.FUT-go to bu... keyuwa matasi bimwa o bwalita taga ka... ke-vu-wa mata-si bi-mwa o bwalita taga ka CPwood-two-only eye-their 3.FUT-come.to to sea but see keta matala bisuki bimwa makala o o ke-ta mata-la bi-suki makala o o bi-mwa CPwood-one eye-its 3.FUT-go.off 3.FUT-come.to like to to Nunulia. keta matala bisuki himwa beya Nunulia ke-ta mata-la bi-suki hi-mwa beya Nunulia.tree CPwood-one eye-its 3.FUT-go.off 3.FUT-come.to here Topiesi taga gala beya Topiesi beya Moketubasi. Topiesi taga gala beya Topiesi beya Moketubasi Topiesi or not here Topiesi here Moketubasi 'These holes, one (hole), two (holes), they lie together, the two (holes), put in

'These holes, one (hole), two (holes), they lie together, the two (holes), put in (the sticks) one tip will point to (the) bu...two tips, (one) it will point to (the) sea, but see... one tip will go off, it will come to, like, to to (the) Nunulia tree, and one (stick), its tip will go off, it will come to (where) Topiesi (lives), or not here (where) Topiesi (lives), here (where) Moketubasi (lives).'

KetabimabeyaMoketubasiketabimwake-tabi-mabeyaMoketubasike-tabi-mwaCPwood-one3.FUT-come hereMoketubasiCPwood-one3.FUT-come.to

beya mtone... Mogudaya. beya m-to-ne Mogudaya here DEM-CPman-DEM Mogudaya

'One stick will come here (to where) Moketubasi (lives and) one (stick) will come to (where) this (one), Mogudaya, (lives).'

M: E bogwa bogwa lakamdi. Bogeokwa.
E bogwa bogwa la-kamdi bogwa-e-vokwa
Yes OK OK l.PST-fix already-3-finish
'Yes, OK, OK, I fixed it. Its finished already.'

K: Pwanina pwanana mpwanasita oluvala pwanayu wala, pwanina pwanana m-pwana-si-ta oluvala pwana-yu wala hole hole DEM-CPhole-PL-DEM in.middle CPhole-two only '(A) hole, (another) hole, these (holes) in the middle two (holes) only,'

M: Bogwa.

'OK.'

K: kusepituki.

ku-sepituki

2-put.together

'put (them) together.'

M: Bogwa.

'OK.'

K: M kwau kwetala, m ku-kau kwe-tala hm 2-take CPthing-one 'Hm, take one (wheel),'

M: E

'Yes.'

K: kwau kwetala kuma kubabi omatala...
ku-kau kwe-tala ku-ma ku-babi omatala
2-take CPthing-one 2-come 2-poke in front of
'take one (wheel) come (and) poke it in front of...'

M: ... omatala sola? omatala so-la in.front.of friend-its

"...in front of its counterpart?"

K: ... oma... omatala makesita kebwabwau ka, wili oma... omatala ma-ke-si-ta ke-bwabwau ka wili in.f... in.front.of DEM-CPwood-PL-DEM CPwood-black see wheel

kwetala

kwe-tala

**CPthing-one** 

"...in f...in front of these black (sticks), see, one wheel"

# (<a little boy farts - everyone is laughing and Keda'ila comments>

Kuseli bulagala paka.

ku-seli bulagala paka

2-end news ceremony

'Finish your news ceremony.'

# <Then the informants continue the matching game>)

M: Ke bogwa makala bakibilibali.

ke bogwa makala ba-kibilibali

oh OK like 1.FUT-hold.sideways

'Oh, OK, like (this), I will hold it sideways.'

K: bogwa makala kukibilibali...

bogwa makala ku-kibilibali

yes OK like 2.-hold.sideways

Yes, OK, like (this), hold it sideways...

# (<Now Moyadi comments on the little boy's misbehavior>

M: A bwada bogina popu...

a bwada bogina pupu

'Ah brother, (this) bad smell (of) shit...')

K: Ke bogwa kukibilibali? ke bogwa ku-bilibali

so already 2-hold.sideways

'So you are holding (it) sideways already?'

M: E.

'Yes.'

la kabokenu? Makala manakwa lalukwem okuseli makala ma-na-kwa la-lukwe-m o-ku-seli la kabokenu DEM-DEM-CPthing 1.PST-tell-you LV-2-put its place.to.lie.down like

'Like I told you to put this (wheel) in its place (where it has to lie)?'

 $\boldsymbol{E}$ bogwala makala. M·

> Ebogwa-la makala

yes already-EMP like

'Yes, (its) already (done) like (you said).'

K: E taga ginigini bikanakela.
E taga ginigini bi-kanakela
yes but ornament 3.FUT-lie.on
'Yes, but it will lie on (the ornament).'

M: Bogwa.

'OK'

K: M kweyuvela kula kuwai m mna kabuluyuvela
m kwe-yu-vela ku-la ku-wai m mna kabulu-yu-vela
hm CPthing-two-EMP 2-go 2-hit hm hm CPprotruding-two-EMP

keyuvelakaiomatalamakalawalakabokanukwenumakalake-yu-velakaiomatalamakala-walakabokanukwenumakalaCPwood-two-EMP stickin.front.oflike-onlyitsplace.to.lie.downlike

la kabowaiyaiyu bukuwai...

la kaboaiyaiyu buku-wai its place.for.stake 2.FUT-hit

'Hm, a second wheel, you go (and) put in, hm, hm, (the) two protruding sticks in front of-like (what is)-its place to lie down, like its place close to the growing yams where one puts a stake into the ground for the tendril of the plant to creep you will put it in...'

M: E bogwa.

'Yes, OK.'

K: Bogwa.

'OK.'

M: E

'Yes.'

K: E e kweta tuvela wili, e e kwe-ta tuvela wili and and CPthing-one again wheel

'And, and again a wheel,'

M: E

K: oluvala kuseli. oluvala ku-seli in.middle 2-put 'put it in the middle.'

M: Ke manakwa pwanana budubadu?

ke ma-na-kwa pwanana budubadu

ah DEM-DEM-CPthing hole many

'Ah, this (wheel) with the many holes?'

K: Gala manakwesi wala.
gala ma-na-kwe-si wala
not DEM-DEM-CPthing-PL only
'No, only these (normal wheels).'

M: Ke oluvala kena? ke oluvala kena ah in.middle or

'Ah, in the middle, is it?'

K: Kwetala kweyu oluvalesiga beya esasa gala ka'ila. kwe-tala kwe-yu oluvale-si-ga beya e-sasa gala ka'ila. CPthing-one CPthing-two in middle-they-EMP here 3-space no stick 'One (wheel), two (wheels)—(and) in the middle of them here (there) is space, (but) no stick.'

M: E.

'Yes.'

K: E kuseli igau. e ku-seli igau yes 2-put then

'Yes, put it (down there) then.'

M: Bogwa makala si kabokanukwenu?
bogwa makala si kabokanukwenu
already like their place.to.lie.down

'(Is it) already like their place (in the construction)?'

K: Makalawa si kabokanukwenu.

makala-wa si kabokanukwenu
like-only their place.to.lie.down

'(It is) already like (that), (its) their place.'

M: E bogwa laseli.

e bogwa la-seli yes already 1.PST-put

'Yes, I already put them (down).'

K: Bogwa kuseli. Kwau keta kepwakau makesina bogwa ku-seli ku-kau ke-ta ke-pwakau ma-ke-si-na already 2-put 2-take CPrigid-one CPrigid-white DEM-CPrigid-PL-DEM kekekita, ke-kekita

CPrigid-small

'OK, you put (them down). (Now) take one white (thing) (from) these small (things).'

M: E

'Yes.'

K: e kuwai biloki manakwa wili... bivisasuwa. E e ku-wai bi-loki ma-na-kwa wili bi-visasu-wa e bu buku-wai bi-tovelu and 2-put 3.FUT-go.to DEM-DEM-CPthing wheel 3.FUT-join-only and

bu... bukuwai bitovelu.

bu... buku-wai bi-tovelu2.FUT 2.FUT-hit 3.FUT-stand.apart

'and put (it so that) it will go to this wheel... it will join (them). And you put it (together), it'll stand apart.'

M: O.

'Oh '

K: Bukuwai mna o pwanana, buku-wai mna o pwanana 2.FUT-hit hm in hole 'You will put (it) hm in (a) hole. M: E

'Yes.'

K: makena kebwabwau okuwai ake!
ma-ke-na ke-pwakau o-ku-wai ake
DEM-CPrigid-DEM CPrigid-white LV-2-hit right
'this white (rigid piece), put (it in), right!'

M: E

'Yes.'

K: E pwoninatala bukuligemwa bukumwekiga pwoninatala e pwonina-tala buku-ligemwa buku-mweki-ga pwonina-tala and CPhole-one 2.FUT-forget 2.FUT-meet-EMP CPhole-one

bikanamwapwoninayuvelamponanabukuwai.bi-kanamwapwonina-yu-velam-pona-nabuku-wai3.FUT-leave.outCPhole-two-EMPDEM-CPhole-DEM2.FUT-hit

Makena kepwakau bukuwai. ma-ke-na ke-pwakau buku-wai DEM-CPrigid-DEM CPrigid-white 2.FUT-hit

'And one hole, you will forget it (and) you will come to one hole, it will be left out, the second (hole) this (hole) you'll put (it in). This white (thing), you'll put (it in).'

M: E ke bababi manakwa wili, ke.
e ke ba-babi ma-na-kwa wili ah
yes so 1.FUT-poke DEM-DEM-CPthing wheel ah
'Yes, so I will poke (it into) this wheel, ah.'

K: O so, gala manakwa wili igau kukwau kusemwa.
o so gala ma-na-kwa wili igau ku-kwau ku-semwa
oh friend not DEM-DEM-CPthing wheel then 2-take 2-put.aside
'Oh my friend, not this wheel, later, take it (and) put it aside.'

M: Bogwa lasemwa omakava.
bogwa la-semwa omakava
already 1.PST-put.aside outside
'I already took it off and away.'

K: M manakwa okuseli oluvala.
m ma-na-kwa o-ku-seli oluvala
hm DEM-DEM-CP-thing LV-2.put in.middle
'Hm, this (wheel), put (it) in the middle.'

M: E

'Yes.'

K: E kwau igau kusemwa.

e ku-kau igau ku-semwa
yes 2-take then 2.put.aside

'Yes, take (it and) then put (it) aside.'

M: Bogwa lasemwa.

bogwa la-semwa already 1.PST-put.aside 'I already put (it) aside).'

K: E makenaga kepupwakau
e ma-ke-na-ga ke-pupwakau
and DEM-CPrigid-DEM-EMP CPrigid-white
'And this white'

M: *E* 

'Yes.'

K: kekekita kwau kuwai igau, ka, makena kepwakau ke-kekita ku-kau ku-wai igau ka ma-ke-na ke-pwakau CPrigid-small 2-take 2-hit then see DEM-CPrigid-DEM CPrigid-white okuwai manakwesi.

o-ku-wai ma-na-kwe-si

LV-2-hit DEM-DEM-CPthing-PL

'small (thing), take (it and) put (it in) then, see, this white (thing) put it (into) these (wheels).'

M: M e kwetala baligemwa kewtala bawai?

m e kwe-tala ba-ligemwa kwe-tala ba-wai

hm and CPthing-one 1.FUT-forget CPthing-one 1-FUT-hit

'Hm, and I will leave out one (hole and) I'll put it in the other?'

K: E kutakaka kuma kugisi kwetala kuligemwa e ku-takaka ku-ma ku-gisi kwe-tala ku-ligemwa and 2-look.carefully 2-come 2-see CPthing-one 2-forget kwevuvela kuma kuwai manakwa kwebw

kweyuvelakumakuwaimanakwakwepwakau,kwe-yu-velaku-maku-waima-na-kwakwe-pwakauCPthing-two-EMP2-come2-hitDEM-DEM-CPthingCPthing-white'And look carefully, come (and) see one (hole), leave it out, the second (hole) you come (to), put (in) this white (thing).'

M: E bogwa.

'Yes, OK.'

K: manakwa kwepwakau.  $\boldsymbol{E}$ kwau manakwa wili ma-na-kwa kwe-pwakau e ku-kau ma-na-kwa wili DEM-DEM-CPthing CPthing-white and 2-take DEM-DEM-CPthing wheel kuwai. lalukwem okusela gala okuligemwa. o-ku-sela gala o-ku-ligemwa ku-wai la-lukwe-m 2.PST-tell-vou LV-2-put not LV-2-forget 'this white (thing). And take this wheel (and) put (it in), I told you to put (it in and) not to forget (it).'

M: E bogwa.

'Yes, OK.'

K: Bogwa, e kwau ketala kepwakau kuwai.
bogwa e ku-kau ke-tala ke-pwakau ku-wai
OK and 2-take CPrigid-one CPrigid-white 2-hit
'OK, and take one (of the) white (things and) put it in.'

M: Ambe bawai?

ambe ba-wai

where 1.FUT-hit

'Where will I put it in?'

K: Kuwai piliyuvela pilivuvela hila ivo biloki ku-wai pili-yu-vela pili-yu-vela hi-la i-vo... bi-loki CPpart-two-EMP CPpart-two-EMP 3.FUT-go 3-ho... 3.FUT-go.to 2-hit sola ivosi... Bogwa kuwai makala e kuwai, iga bikatukwevivila so-la i-vosi bogwa ku-wai makala e ku-wai iga bi-katukwevivila friend-its 3-hold already 2-hit like ves 2-hit then 3.FUT-turn.around bila ikikola mna kwevuvela. bi-la i-kikola mna kwe-vu-vela 3.FUT-go 3-hold.on hm CPthing-two-EMP 'Put it in the second (part, in) the second part, it will go, it ho... it'll go to its counterpart to hold it... You put it in already like this, yes, you put it in, then

it'll turn around, it'll go and hold, hm, the second (wheel).'

M: Makala sola?

makala so-la

like friend-its

'Like (a) counterpart?'

K:  $\boldsymbol{E}$ makala sola beva okuwai, bikau bila kwevivila makala so-la beva o-ku-wai bi-kau kwe-vivila hi-la ves like friend-its here LV-2-hit 3.FUT-take CPthing-shining 3.FUT-go iwayai beya. Makala okuwai manakwena ala bububula i-wayai beya makala o-ku-wai ma-na-kwe-na ala bububula LV-2-hit DEM-DEM-CPthing-DEM its 3-stick here like shape makala, bukuwai manakwa makala e ala bububula. Bila makala e makala buku-wai ma-na-kwa ala bububula bi-la like ves like 2.FUT-hit DEM-DEM-CPthing its shape 3.FUT-go bikikola boda kwetala... bi-kikola boda kwe-tala 3.FUT-hold group CPthing-one

'Yes, like (a) counterpart there, you put it in, it'll take (this) shining (thing), it'll go and stick there. Put it in like (this), this (thing), its shape (is) like (this), yes like (this), you will put in this (thing), its shape. It'll go and hold one group (of the configuration)...'

# M: E bogwa.

'Yes, OK.'

K: Bogwa.

Μ· *M* 

'Hm.'

'OK'

K: Ke bogwa katukwevivila eseboda? ke bogwa katukwevivila e-seboda so already turning.point 3-encircle

'So it already encircles the turning point?'

M: Bogwa.

'Already (done).'

K: E e kai kekwinini, e e kai ke-kwinini and and stick CPwood-yellow

'And, and (a) vellow stick,'

M: M.

'Hm.'

K: kekwinini kai ketala kuwai manakwa oluvala... ke-kwinini kai ke-tala ku-wai ma-na-kwa oluvala CPwood-yellow stick CPwood-one 2-hit DEM-DEM-CPthing in.middle 'one yellow stick, put it into the middle of this (wheel).'

M: Pwananela oluvala?

pwanane-la oluvala hole-its in middle

------

'The hole in the middle?'

K: Pwananela oluvala (pwananela oluvale...), bogwa?
pwanane-la oluvala pwanane-la oluvale bogwa
hole-its in middle hole-its in middle OK

'The hole in the middle (<sings:> the hole in the middle...), OK?

M: E

K: E kebweyani kuweya mpana eveki manakwa
e ke-bweyani ku-weya m-pa-na e-veki ma-na-kwa
and CPwood-red 2-hit DEM-CPpart-DEM 3-go.to DEM-DEM-CPthing
evekeya Tuyabwau

e-vekeya Tuyabwau
3-follow Tuyabwau

'And you put the red (stick) into this (part) it goes to, this (wheel) follows (the

'And you put the red (stick) into this (part) it goes to, this (wheel) follows (the direction of) Tuyabwau [name of a well].'

M: Matala makena kai ambeya, emwa yokwa?
mata-la ma-ke-na kai ambeya e-mwa yokwa
eye-its DEM-CPwood-DEM stick where 3-come.to you

'The tip of this stick where (is it), does it come to you?'

K: Yegu kwetala wili ela o laodila, kwetolu wili ela o vegu kwe-tala wili e-la o laodila kwe-tolu wili e-la o CPthing-one wheel 3-go to bush CPthing-three wheel 3-go to bwalita. Kwau makala kuseli. bwalita ku-kau makala ku-seli sea 2-take like 2-put

'I [from my point of view], one wheel goes to (the) bush, (and) wheel number three goes to (the) sea. Take (this) and put (the stick) in (it) like this.'

M: E bogwa.

'Yes, OK.'

K: Bogwa makala okuseli? bogwa makala o-ku-seli already like LV-2-put

'You put (it) in like (this) already?'

M: E

'Yes.'

K: Kwetala wili ela o laodila.

kwe-tala wili e-la o laodila

CPthing-one wheel 3-go to bush

'One wheel goes to (the) bush.'

M: E

K: E kwetolu wili ela o bwalita.

e kwe-tolu wili e-la o bwalita

and CPthing-three wheel 3-go to sea

'And wheel number three goes to (the) sea.'

M: E.

'Yes.'

K: E mpana Tuyabwau ela,
e m-pa-na Tuyabwau e-la
and DEM-CPpart-DEM Tuyabwau 3-go
'And this piece that goes to (the) Tuyabwau (well),'

M: M.

'Hm.'

K: kwau makena kebweyani kuseli. ku-kau ma-ke-na ke-bweyani ku-seli 2-take DEM-CPwood-DEM CPwood-red 2-put 'take this red (stick and) put it in.'

M: Bogwa.

'OK.'

K: Bogwa kuvisilili ela itowa. bogwa ku-visilili e-la i-towa already 2-put.in 3-go 3-stand

'You put it in already, it goes (there) and stands (there).

M: Bogwawa. bogwa-wa already-only 'OK, OK.'

K: E kedigadegila makena,
e ke-digadegila ma-ke-na
and CPwood-yellow DEM-CPwood-DEM
'And this yellow (stick),'

M: E.

K: kwau ku... oluvalawa manakwa kuvisilili.
ku-kau ku- oluvala-wa ma-na-kwa ku-visilili
2-take 2- in.middle-only DEM-DEM-CPthing 2-put.in

'take it, pu... into the middle of this (wheel) you put it.'

M: Bogwa.

'OK.'

K: Bogwa.

'OK.'

M: E ketalaga kedigadegila esisu.
e ke-tala-ga ke-digadegila e-sisu
and CPwood-one-EMP CPwood-yellow 3-exist
'And there is another yellow (stick).'

K: E makena kedigadegila.
e ma-ke-na ke-digadegila
yes DEM-CPwood-DEM CPwood-yellow
'Yes, this yellow (stick).'

M: E

'Yes.'

K: Igau lapaisewa esisu. Kwau manakwa kwebweyani igau la-paisewa e-sisu ku-kau ma-na-kwa kwe-bweyani before 1.PST-work 3-exist 2-take DEM-DEM-CPthing CPthing-red

kwesisikwa

kwesisikwa

CPthing-thin

'I worked (it out) before, it's there. Take this red thin thing

M: E

'Yes.'

K: kedigadegila omatala kuwai.
ke-digadegila omatala ku-wai
CPwood-yellow on.top.of 2-hit
'and put in the yellow stick on top of it.'

M: Kee.

'Ah, ves.'

K: Kwevanaku.

kwe-vanaku

CPthing-new

'(The) new (thing).'

M: Oluvala manakwa pwananela?
oluvala ma-na-kwa pwanane-la
in.middle DEM-DEM-CPthing hole-its

'(In) this hole in the middle?'

'Yes, (in) this hole in the middle.'

i: Bekanubilabala?

bi-kanubilahala

3.FUT-lie.down.at.right.angles

'Will it lie down there at right angles?'

K: Gala, kuwai bitomalaula. Biekuliwa makena gala ku-wai bi-tomalaula bi-ekuliwa ma-ke-na

no 2-hit 3.FUT-stand.upright 3.FUT-follow DEM-CPwood-DEM

kai bitomalaula. Bogwa etomalaula.
kai bi-tomalaula bogwa e-tomalaula
stick 3.FUT-stand.upright already 3-stand.upright

'No, put it in, it'll stand upright. It'll follow this stick, it'll stand upright. It's standing upright already.'

M: E

'Yes.'

K: Ema mapwonanaga pwanana olu... kudoki e-ma ma-pwona-na-ga pwanana olu... ku-doki

3-come DEM-CPhole-DEM-EMP hole in.mid... 2-think

bikanubilabala?

bi-kanubilabala

3.FUT-lie.down.at.right.angles

'It comes into this hole, in the mid... you think it'll lie down at right angles?'

M: E bogwa.

'Yes, OK.'

K. Bukuvisuvi kwau manakwa wili pwanana m buku-visuvi ku-kau ma-na-kwa wili m pwanana 2.FUT-put.through and 2-take DEM-DEM-CPthing hm wheel hole budubadu.

budubadu

many

'You'll put it through and (now) take this, hm, wheel (with) many holes,'

M: E

'Yes.'

K: kebwevani kuvisuvi.

ke-bweyani ku-visuvi

CPwood-red 2-put.through

'(and) put it through (the) red (stick).'

Bikanubilabala? M:

bi-kanubilabala

3.FUT-lie.down at.right.angles

'Will it lie down there at right angles?'

K: Bikanu makala manakwesi kabukanukwenu. otinava si bi-kanu makala ma-na-kwe-si kabukanukwenu otinava si 3.FUT-lie like DEM-DEM-CPthing-PL below their place.to.lie.down 'It'll lie like these (wheels) below (on) their places.'

M. Ravisuvi bila otinava ba-visuvi bi-la otinava 1.FUT-put.through 3.FUT-go down

'I'll put it through (and) it'll go down.'

K: Gala.

'No.'

M: O... esa... esava.

> e-sa... e-sava

oh 3-have.pl... 3-have.too.much.play

'Oh, it has... it has too much play.'

K: Esaya.

e-saya

3-have.too.much.play

'It has too much play.'

M: E

'Yes.'

K: E kuvisuviwa biva otinava, iga isesaya

ku-visuvi-wa bi-va otinava iga i-se-saya

yes 2-put.through-only 3.FUT-go.to to.ground then 3-INT-have.too.much.play

e kwauga makena

kebweyani kegulini.

e ku-kau-ga ma-ke-na ke-bweyani ke-gulini yes 2-take-EMP DEM-CPwood-DEM CPwood-red CPwood-green

'Yes, put it through, it'll go to the ground, then-it has too much play, indeedyes, take this red, the green [means yellow] (stick).'

M: E

'Yes.'

K: Kwau makena

kegulini

kuvisuvi

mapwonana

ku-kau ma-ke-na ke-gulini ku-visuvi ma-pwona-na

2-take DEM-CPwood-DEM CPwood-green 2-put.through DEM-CPhole-DEM

ma'utuna utubweyani ake lalukwem okuseli,

ma-utu-na utu-bweyani ake la-lukwe-m o-ku-seli
DEM-CPpart-DEM CPpart-red oh 1.PST-tell-you LV-2-put

'Take this green [means yellow] stick (and) put it through this hole (of) this red part, oh, I told you to put it through,'

M: M.

'Hm.'

K: E mponanaga pwanana ka oluvala...

e m-pona-na-ga pwanana ka oluvala yes DEM-CPhole-DEM-EMP hole see in.middle

'Yes, this hole, see, in the middle...

M: E.

K: ake makena kebweyani pwananela oluvala, ake ma-ke-na ke-bweyani pwananela oluvala right DEM-CPrigid-DEM CPrigid-red hole in.middle 'right, this red rigid (thing with) the hole in the middle,'

M: Bogwa.

'OK.'

K: e kwau makena ke... kekwinini kuvisuvi
e ku-kau ma-ke-na ke ke-kwinini ku-visuvi
and 2-take DEM-CPwood-DEM CPwood CPwood-yellow 2-put.through
kai.
kai
stick

'and take this yellow (stick and) put (the) stick through (it).'

M: So, pwanana oluvala manakwa ka kebweyanila so pwanana oluvala ma-na-kwa ka ke-bweyani-la friend hole in.middle DEM-DEM-CPthing here CPrigid-red-EMP makena?

ma-ke-na
DEM-CPrigid-DEM

'My friend, (the) hole in the middle of this, here, this red rigid (part)?'

K: M.

'Hm'

M: Ambe bakivili bimwa?

ambe ba-kivili bi-mwa

where 1.FUT-turn 1.FUT-come.to

'Where will I turn (it), (where) will it come to?'

K: Bilo... biloki wili bilola makala Tuyabwau.
bi-lo... bi-loki wili bi-lola makala Tuyabwau
3.FUT-go... 3.FUT-go.to wheel 3.FUT-walk like Tuyabwau
'It will go... it will go to (the) wheel (and) it will walk as if (it'll go to)
Tuyabwau.

M:	Kabuluta	kai	makesiya	kaitukwa,
	kabulu-ta	kai	ma-ke-si-ya	kaitukwa
	CPprotruding-one	stick	DEM-CPwood-PL-DEM	walking.stick

kegulini makena layosi bavisuvi, ke-gulini ma-ke-na la-yosi ba-visuvi

CPwood-green DEM-CPwood-DEM 1.PST-hold 1.FUT-put.through

kabuluta ambeya bimwa ambe bimwa? kabulu-ta ambeya bi-mwa ambe bi-mwa

CPprotruding-one where 3.FUT-come.to where 3.FUT-come.to

'The one protruding stick of these walking sticks, this green [means yellow] (one) I held, I'll put (it) through the protruding one, where will it come to, where will it come to?

K: Bukuvasuva...

buku-vasuva

2.FUT-put.through

'Put (it) through...'

M: Kabuluta bila Tuyabwau. kabulu-ta bi-la Tuyabwau CPprotruding-one 3.FUT-go Tuyabwau

'(The) protruding one will go to Tuyabwau.'

K: ... bukuvasuvawa bila makala Tuyabwau.
buku-vasuva-wa bi-la makala Tuyabwau
2.FUT-put.through-only 3.FUT-go like Tuyabwau
iust put it through it'll go as if (it goes) to Tuyabwau

"...just put it through, it'll go as if (it goes) to Tuyabwau."

M: Ke kabuluta bila Tuyabwau? ke kabulu-ta bi-la Tuyabwau so CPprotruding-one 3.FUT-go Tuyabwau

'So the protruding one will go to Tuyabwau?'

K: M bukuvisuvi biloki manakwa wili, m buku-visuvi bi-loki ma-na-kwa wili hm 2.FUT-put.through 3.FUT-go.to DEM-DEM-CPthing wheel

okusuvi esesaya, okulivali. Bukuloya
o-ku-suvi e-se-saya o-ku-livali buku-loya
LV-2-put.through 3-INT-have.too.much.play LV-2-say 2.FUT-pull.up

bima o pwananela bukuvisuvi bika'ini,
bi-ma o pwanane-la buku-visuvi bi-ka'ini
3.FUT-come in hole-its 2.FUT-put.through 3.FUT-get.stuck
bikanamwa... Makena kai bogwa okuvisuvi?

bi-kanamwa ma-ke-na kai bogwa o-ku-visuvi

2 EUT forget DEM Chanad DEM stiels alreads LV 2 mut the

3.FUT-forget DEM-CPwood-DEM stick already LV-2-put.through

Manakwawiliokuvisuvielaekanukwenuotanava.ma-na-kwawilio-ku-visuvie-lae-kanukwenuotanavaDEM-DEM-CPthingwheelLV-2-put.through3.go3.lie.downbelow

'Hm, put it through, it'll go to this wheel, put it through, it has too much play, (as) you say, pull (the wheel) up, it'll come in its hole you will put it (and) it'll get stuck, it can be forgotten... This stick, did you put it through already? This wheel, put it through, it goes and lies down below.'

M: Ga bogwa.

'No. OK.'

 $\mathbf{K}$ E okuvisuvi makena kai. eva kuloyawa o-ku-visuvi ma-ke-na kai e-va ku-lova-wa ves LV-2-put.through DEM-CPwood-DEM stick 3-go.to 2-pull.up-only ambevala mapwonana magim kwau kuvisuvi. ambeva-la ma-pwonana-na magi-m ku-kau ku-visuvi where-EMP DEM-CPhole-DEM wish-your 2-take 2-put.through 'Yes, put through this stick, it goes to (it), just pull (the wheel) up (to) where this hole is (and) where you like it, take it (and) put (the stick) in(to a hole in

M: Bogwa.

'OK.'

the wheel).'

K: Bogwa.

'OK.'

M: Bogwala maponana lavisuvi.
bogwa-la ma-pona-na la-visuvi
already-EMP DEM-CPhole-DEM 1.PST-put.through

'OK, OK, I already put it into this hole.'

K: E bukuvisuvi bila bikaniemwa wala manakwa
e buku-visuvi bi-la bi-kaniemwa wala ma-na-kwa
yes 2.FUT-put.through 3.FUT-go 3.FUT-stay.with only DEM-DEM-CPthing
wili olakeva.
wili olakeva
wheel up

'Yes, you put it through, it'll go (in it), it'll stay only up with it, this wheel.'

M: E bogwa ekaniemwa.

e bogwa e-kaniemwa yes already 3-stay.with

'Yes, it stays (there) already.'

K: E bogwa, gala kudoki, e kwau manakwa kwebweyani, e bogwa gala ku-doki e ku-kau ma-na-kwa kwe-bweyani yes OK not 2.think and 2-take DEM-DEM-CPthing CPthing-red ka.

ka
OK

'Yes, OK, you didn't believe it, and (now) take this red (thing), OK.

M: E

'Yes.'

K: Makabulana okuvasuva kebweyanila ma-kabula-na o-ku-vasuva ke-bweyani-la DEM-CPprotruding-DEM LV-2-put.through CPwood-red-EMP

makena kevanaku ake e makenaga ma-ke-na ke-vanaku ake e ma-ke-na-ga

DEM-CPwood-DEM CPwood-long oh eh DEM-CPwood-DEM-EMP

kai kekwinini okuvisuvi, kai ke-kwinini o-ku-visuvi stick CPwood-vellow LV-2-put.through

'This protruding (end of the stick which) you put through (it), this red long (stick), oh, eh, (wait a minute) this stick, (the) yellow (one) you put (it) through (the hole of the orange plastic part),

M: E

K: omatala kuvisuvi manakwa kwebweyani biva omatala ku-visuvi ma-na-kwa kwe-bweyani bi-va in.front 2-put.through DEM-DEM-CPthing CPthing-red 3.FUT-go.to ikanava.

i-kanava

3-lie.down

'you put this red (cap) through at the front (of the stick), it will go to (the stick and) it rests there.'

M: Emwa beya o valu makala.
e-mwa beya o valu makala
3-come.to here to village like

'It'll come here to the village, like (this).'

K: E, bogwa okukwevisuvi?
e bogwa o-ku-kwe-visuvi
yes already LV-2-INT-put.through

'Yes, did you put it through already?'

M: Omatala?

'In front (of it)?'

K: Omatala kwau kuvisuvi biloki gala tuvela bidademi.
omatala ku-kau ku-visuvi bi-loki gala tuvela bi-dademi
in.front 2-take 2-put.through 3.FUT-go.to not again 3.FUT-fall.down
'In front of it, take (it), put (it) through, it'll go to (it), (and) it [the wheel] won't fall down again.'

(laughter)