

SPATIAL REFERENCES IN NGAJU DAYAK

(Spoken in Central Kalimantan)

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ABSTRACT

*This paper discusses about spatial references in Ngaju Dayak. This language is spoken by 890,000 speakers (ISO 639-3 nij) along the Kapuas, Kahayan, Katingan, and Mentaya Rivers in Central Kalimantan, Indonesia (Ethnologue 2014). For the Dayaks, a well-defined reference frame to show directions is “river”, since there are 11 rivers flowing across Central Kalimantan. This paper aims at identifying on what partial reference frame used by the Dayaks to describe the directions in the geographical environments. Here the concern is on static and dynamic concepts of primary reference object (Figure) and secondary reference object (Ground), Talmy (1975,1983). Corresponding to the phenomena, the qualitative analysis was carried out on the corpus-based data. The counter parts and non-counter parts of spatial references are used to refer to the directional points of references. From the discussion, it can be shown that directional terms used by the Dayaks for spatial reference are complex. Either static or dynamic terms may be used to describe directional and spatial relation with the topography; with the primary reference object (figure) and the secondary reference object (ground). Verbs, prepositions and other directional points indicate motion along the path, toward a goal, away from a source, motion across, position across, or relative to another location, almost all with reference to rivers. Where the sun rises **pambelum** can be used figuratively for ‘life’; where the sun sets **pambelep**, can be used figuratively for ‘death’.*

Key words: *spatial reference, primary, secondary reference, static, dynamic*

1 INTRODUCTION

On earth, people have a well-defined reference frame to show directions. Some use east as the opposite direction of the west, north to the south, up and down, and some use the particles mountains, rivers, rocks, trees and so forth to refer to spatial directions. This paper discusses about spatial references in Ngaju Dayak. This language is spoken by 890,000 speakers (ISO 639-3 nij, in Ethnologue 2014, www.ethnologue.com) along the Kapuas, Kahayan, Katingan, and Mentaya Rivers in Central Kalimantan, Indonesia. For the Dayaks, a well-defined reference frame to show directions is river, since there are 11 rivers flowing across Central Kalimantan.¹

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A river plays a very important role in their lives, in which they do their daily activities such as bathing, washing, selling/buying and fishing, especially for those who are living along the river bank. Since the activities are basically done in the river, it is used as the most common point of reference. The other vital role of a river is for transportation. When they would like to go to some other villages or towns, they would use the directional terms *murik* ‘go upstream, and *masuk* ‘go downstream’ as the counter part.

The sun is the other point of reference to show spatial direction for the Dayaks. Instead of saying; “walk to the direction where the sun rises” they would say; *mananjung akan hila pambelum* ‘walk to the direction of life’ and as the counter part, they would say; *mananjung akan hila pambelep* ‘walk to the direction of death’.

In showing directions of where objects or areas are located, the Dayaks also use geographical areas and other entities as their points of references. A traditional house of the Dayaks *Betang* is built up of wood with pillars as the foundation, stairs as the reference to show *muhun ka penda/ngiwa* ‘descend to the river’, and *mandai akan hunjun/ngambu* ‘ascend to the river/land’ as the counter part, are the terms used to show where one is to go. Geographically, they would say *ka ngawa* ‘downward river’ if it is in an area, and *ka ngaju* is the opposite direction.

This paper aims at identifying on what partial reference frame is used by the Dayaks to describe the direction in the geographical environments. Here the concern is not only on the static and dynamic concepts of spatial reference frames, but also on the concepts of primary reference object (Figure) and secondary reference object (Ground), Talmy (1975, 1983). It can be illustrated as follows;

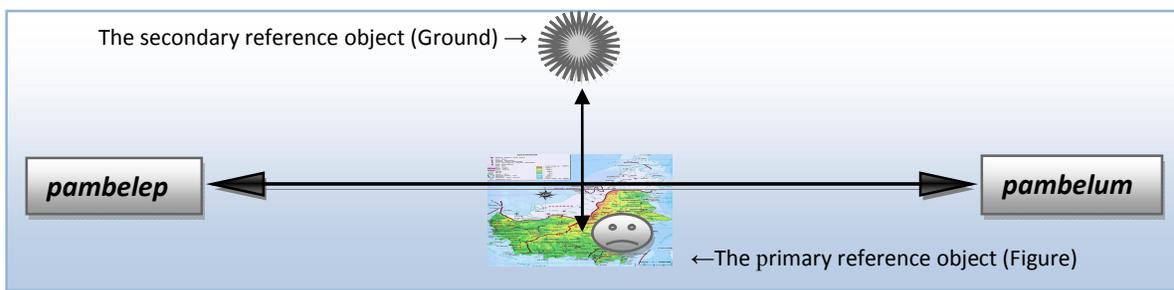


Figure 1

The orbit or position of the sun in the sky is used to provide spatial references. The sun is the secondary reference object (ground) which is unmovable (static) and the earth or ego is the

primary reference object that is moveable (dynamic). The terms involve *pambelum* ‘life’ refers to the direction where the sun rises and *pambelep* ‘death’ refers to where the sun sets. Corresponding to the phenomena, the qualitative analysis would be carried out on the corpus-based data.

II SPATIAL REFERENCE FRAMES IN NGAJU DAYAK

Since river is a vital means of transportation and plays a very important role for the Dayaks, they use it to show the spatial reference wherever they go. The Dayaks do not have the terms north or south. Instead, the common ground spatial object used is ‘river’ that is to describe directional and spatial relations with the topography with the primary reference object and the secondary reference object. The terms can be seen in the following;



Figure 2

2.1. Counter Parts of Spatial References

To have an overview on the spatial references used in showing directions, the counter parts and non-counter parts of spatial references are commonly used dealing with river as the following:

**a. *murik* ‘upstream’ vs *masuk* ‘downstream’
(dynamic: along a path)**

(1)a. *Ewen nah handak murik andau jewu.*

3PL PART MOD upstream day tomorrow
‘They are going upstream tomorrow.’

b. *Ewen handak murik akan Palangkaraya jewu.*

3PL MOD upstream PREP Palangkaraya tomorrow
‘They are going up(stream) to Palangkaraya tomorrow.’

(2)a. **Pea ketun masuk tinai?**
when 2PL downstream again
'When do you go down(stream) again?'

b. **Pea ketun masuk ka ngawa?**
when 2PL downstream PREP downwards
'When do you go down(stream)?'

As can be seen in (1a), the verb *murik* 'go upstream' is used to show about the action of the figure indicates motion along the path which is dynamic, about where the ego is to go to. Implicitly, from the verb *murik*, it is known that the figure is going to *ngaju* 'upward' as the secondary spatial reference eventhough the destination (ground) is not mentioned. In (1b) the destination Palangkaraya is mentioned to make it clear to what definite place the figure is going upward. The verb *murik* or *masuk* implicitly contains meaning of showing directional movement along the path or upstream/downstream. In (2a) the term *masuk* 'go downward' is used to show that the figure would go downstream, or *ka ngawa* 'to downstream'. *Ngawa* or *ngaju* are as the objects of a preposition *ka/akan* 'to' usually used to indicate a goal either at short or long destinations, while *masuk* and *murik* are verbs showing long destinations. If the destination *lewu-n bakei* is mentioned as in (2b), then it would be clear that the figure has a definite place to go downward.

b. ***ngaju* 'upward' vs *ngawa* 'downward'**
(static: location, goal)

(3) ***Manggau lauk hila ngaju hakabeken dengan hila ngawa kanateke.***
look.for fish part upward different PREP part downward sometimes
'Fishing upward is sometimes different from fishing downward.'

(4)a ***Aku handak ka ngawa ma-mili behas.***
1SG MOD PREP downward AF-buy rice
'I am going downward (to a location) to buy rice.'

b. ***Ie dia ulih undur tuntang mules akan hila ngawa awi danum***
3TG NEG MOD go.back CONJ turn.back PREP part downward because water
paham dehes.
very current
'He could not reverse and turn back downward because the current flowed
very quickly.'

In (3) the preposition *hila* in *hila ngaju* and *ngawa* is indicating location showing the ground as the primary references either for long or short distances, it all depends on where the fish can be found or caught. In (4a) the term *akan/ka ngaju* refers to the position of the market as a goal that is located in an area/village, and it is usually used to show spatial site for short destination. In (4b) the movable figure primary reference is at the static position indicated by the presence of the preposition *hung* that is *hung ngawa* ‘at upward’. The term *ngawa* ‘downward’ is the ground object reference where the ego is supposed to be.

**c. *ngambu* ‘away from’ vs *ngiwa* ‘toward (river)’
(dynamic: path toward or away from river)**

(5)a. *Bapa-e ka ngambu manggau uei.*

father-POS PREP away.from look.for rattan

‘His father went upland (forest, away from river) to look for rattan.’

b. *Te oloh manunda nantekas tali pisi akan ngambu.*

DET people pull.up suddenly line fishing PREP away

‘People pulled up suddenly the fishing line upwards (away from the water).’

(6). *Kawan anak uluh nanture akan ngambu metuh ewen gite pungau*

group children look PREP away when 3PL see bird.pungau

tarawang dengan kelep.

fly PREP turtle

‘A group of children looked at the sky (away from river), then they saw a *pungau* (sea bird) fly with a turtle.’

As shown in (5a), the figure object *bapa-e* ‘his father’ went *ka ngambu* ‘up land’ preceded by a preposition showing goal where the rattan as the reference object could be found in a forest. In (5b) the preposition *akan* ‘to’ is used to refer to the spatial destination where the fishing line is pulled up as a path toward the air. In (6), *ngambu* refers to up sky which is away from the river, that is dynamic and in this context *ngambu* can be replaced by *hunjun* ‘above’ for both terms express the same meaning.

(7) *Amun ewen mantehau bara ngiwa, ela sama sinde ikau*

if 3PL call PREP toward NOT at.all 2SG

hamauh bele ikau manjatu.

say in.order 2SG fall.down

‘If they call you from below (down the river), please don’t say anything so that you don’t fall down.’

(8)a *Eter muhun ka ngiwa masib danum.*

NAME go.down PREP toward take water
'Eter went down to the river to take water.'

In (7) the reference *ngiwa* 'down land/below' does not refer to the position towards the river but refer to down land. *Ngambu* and *ngiwa* in (8a) are not only used to refer to static Ground references but also dynamic Ground references.

(8)b *Eter muhun ka ngiwa ka batang danum.*

NAME go.down PREP down PREP trunk water
'Eter went down river to take water.'

In (8b), *ngiwa* 'down' refers to *batang danum* 'trunk of river' means the 'main river' is the goal reference, where the ego went towards to.

**d. *tumbang* 'river mouth' vs *hulu* 'headwaters'
(static: location, goal)**

(9) *Ampie bara huran oloh Dayak manggau lauk into tumbang atawa hulu*

seem since ago people Dayak look.for fish PREP river.mouth or headwaters
'From along ago, the Dayaks have looked for fish at the mouth or the riversor at the headwaters.'

(10) *Ewen manggau lauk sampai ka tumbang.*

3PL look.for fish PREP PREP river.mouth
'They look for fish all the way to the mouth of the river.'

(11) *Atun palauk ije baya tau iawi hila hulu bewei.*

there fish REL only MOD do part headwater only
'There is a way of catching fish that can only be done at the headwaters.'

In (9) the spatial reference *tumbang* 'the river mouth' and *hulu* 'head waters' are the locative secondary reference objects where *olah Dayak* 'the Dayaks' are served as egos (Figure object), and *into tumbang* and *hulu* are the static reference objects. The other example can be seen in (10), and the preposition *sampai ka* 'up to' refers to the destination *tumbang* where the ego went to as the goal of spatial reference object. In (11), *palauk* 'look for fish' is the activity performed for catching specific kind of fish upstream only, the spatial reference *hulu* refers to a specific place as the locative Ground object. It shows that the figure object that is not mentioned has made the movement, going from *tumbang* 'the river end' to *hulu* 'head waters'.

In the following figure, the stairs are used to refer to the term *muhun* ‘descend’ that the directional movement must be *ka penda* ‘down’ and *mandai* ‘ascend’ must be *ka hunjun* ‘up’.



Figure 3 *lanting* ‘rafts/floating houses’

**e. *muhun* ‘descend’ vs *mandai* ‘ascend’
(dynamic: along a vertical path)**

(12) *Kawan bakei te muhun bara taruk kayu mihup akan sungei.*
group monkey DET descend PREP tree wood drink PREP river
‘A group of monkeys descended from the trees to drink at the river.’

A tree is also used as a spatial reference to show the movement of the ego that is dynamic along a vertical path that is descending; *muhun* ‘go down’ or ascending; *mandai* ‘go up’. In (12), the directional verb *mandai* ‘ascend’ is used to refer to the movement of the figure object *kawan bakei* showing source ‘tree’ as locative object, and went to *sungei* ‘river’ is as the static reference object. In (13),(14) the preposition *ka* is showing *huma* as the static goal.

(13) *Limbah mandui hung sungei, ie mandai ka ngambu.*
after bath PREP river 3SG ascend PREP up land
‘After bathing at the river, he ascended upland.’

**f. *hunjun* ‘on/above’ vs *penda* ‘under/below’
(static: location)**

(14) *Meto je hung hunjun petak iete bawui, bajang, bahuang.*
animal REL PREP above land that pig deer bear
‘Animals that are on land are pigs, deer, bears.’

(15) *Ie hundi manggau pisi-e je nihau hung penda huma.*
3TG go.around look.for fishing.rod-POS REL loose DET below house
‘He went round and round looking for his ring that was lost under the house.’

(16) *Ie malabuh akangku ka penda baya ije kabawak bua ih.*
 3SG throw.down PREP-POS PREP below only NUM seed fruit PART
 ‘He threw down for me only one fruit.’

In (14), *hunjun* ‘up’ refers to a spatial reference for land or ground, especially for living things; animals and plants. *Petak* is the secondary reference as the locative ground object (static). In (15), *penda* ‘under’ is used to refer to something in which the ground object is the primary reference *huma*, and in (16) *penda* ‘down’ refers to something which is below.

**g. upo-e ‘base’ vs lawi-e ‘tip’
 (static: location)**

(17) *Bakei te manangkajuk akan lawi-n kayu.*
 monkey DET leap.up PREP tip-POS tree
 ‘The monkey leapt up to the outer branches of a tree.’

(18) *Tewu je hila lawi-e aka-m tuntang hila upo-e akang-ku.*
 sugar.cane REL PREP tip Prep-POS CONJ PREP base PREP-POS
 ‘The sugar cane at the tip is for you and the base is for me.’

In (17), the figure object *bakei* served as the ego leapt up to the object reference *lawi-n kayu* as a static reference. In (18) the sugar cane is the figure and *lawi-e* and *upo-e* are the reference objects showing static location.

2.2 Non-Counter Parts of Spatial References

A geographical area that shows a spatial direction is one of the references. *Tapakan* ‘the end point of/limit’ is used to refer to an area either to the direction of being at *ngaju* or *ngawa*, as can be seen in the following.

**a. tapakan ‘limit’
 (static: location)**

(19)a. *Pasar te hung tapakan lewu kanih.*
 market DET PREP limit village there
 ‘The market is at the end limit of the village.’

b. *Ela ketun manyuru tapakan jalan te*
 NOT 2PL walk.through limit road DET
 ‘Don’t walk pass the end of that road.’

In (19a), *tapakan* refers to a spatial reference in which the ground object is *lewu* ‘village’ that could refer to either one of the two end points of the village, and *pasar* ‘market’, describes the area that is static as the ground object. The ego *keton* ‘you’ in (b) is the figure object, it describes static reference *tapakan jalan* and it does not move through physical space. In this context *tapaka-n* can not be replaced by *lawi-n*.

b. *tambuan* ‘over, above’

(20) *Ewen lime te lulang luli tarawang tambuan lewu te.*
 3PL NUM DET back-forth fly over village DET
 ‘The five of them flew back-and-forth over the village.’

(21) *Matanandau jadi hung tambuan takuluk.*
 sun Perf PREP over head
 ‘The sun has been overhead.’

In (20) the directional preposition *tambuan* ‘over’ refers to *lewu* ‘village’ that is a static reference object, but in (21) *takuluk* ‘head’ is the movable reference object.

A bridge is one of the references used to refer to an action of moving from one spatial location to the other side, especially across the river and path.

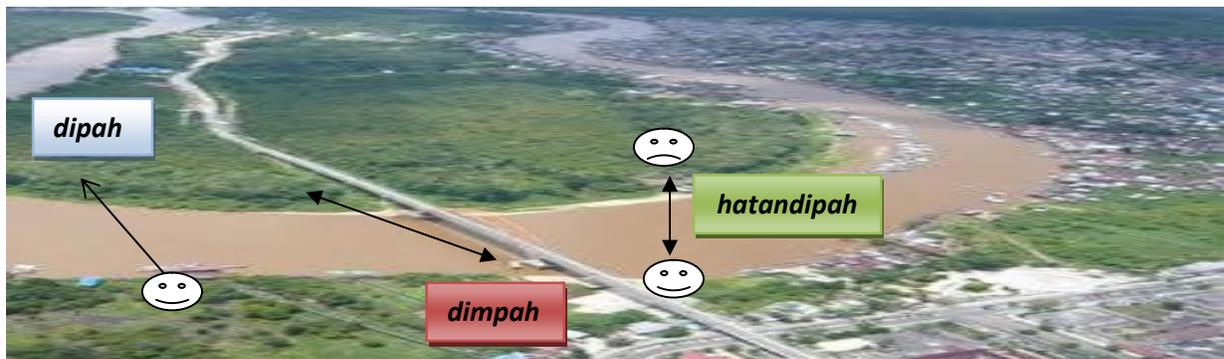


Figure 4

**c. *dimpah* ‘cross the river/street; get to the opposite side’
 (dynamic: toward goal, perpendicular to river)**

(22) *Eter dimpah akan lewu sila mahalau jambatan je panjang te*
 NAME across PREP village side through bridge REL long DET
 ‘Eter went across that long bridge to the village on the opposite side.’

(23) *Ie palus harikas buli dimpah akan lewu-e.*

3TG then directly go.back across PREP village-POS

'Then he immediately went back across (the river/street) to his village.'

In (22), it is shown that *dimpah* is the process of moving from one side to the other side of the river toward the goal which is perpendicular to river. The figure object *Eter* moves to the other side of the bridge to the secondary reference object *lewu* 'village.' In (23), the verb *dimpah* expresses dynamic process of moving from one side to the other as the spatial reference object.

**d. *tandipah/ ha-tandipah* 'opposite each other'
(static: reciprocal location across)**

The other term is *tandipah/hatandipah* 'at the opposite side', used to refer to two objects at the opposite side of the river or path usually for two villages or houses. The two objects are located face to face in reciprocal location across, as can be seen in the following.

(24) *Huma-n ikei hung lewu hatandipah dengan huma-e.*

house-POS 1PL Ecl PREP village opposite PREP house-POS

'Our house in the village is at the opposite side of his.'

(25) *Lewu-n ikei hatandipah*

village-POS 1PL Ecl opposite

'Our villages face each other.'

(26) *Jatun ati kamangat ah tandipah oloh je balaku dohop*

NEG exist nice PART opposite people REL ask.for help

'It was not nice to face people who ask for help.'

In (24), *huma-e* 'his house' is the reference object that is located *hung lewu* which is at the opposite side of the other house *huma-n ikei* 'our house' that is at the reciprocal location across. In (25), *lewu-n ikei* are the references for the two static objects, one is at the opposite side of the other. In (26), the object of a preposition *tandipah* 'face' refers to *oloh* 'people' as the dynamic figure object.

**e. *dipah* 'other side'
(static: goal)**

(27) *Ewen mambesei akan dipah sila.*

3PL row PREP other.side side

'They rowed to the other side of the river.'

(28) *Lewu-n ikei hung dipah sila kanih.*
village-POS 1PL-Ecl PREP other.side side there
'Our village is on the other side of the river there.'

(29) *Huma-ngku hung dipah jalan sila kanih bakehu.*
house-POS 1SG PREP other.side road side there burnt.down
'My house on the other side of the road was burnt down.'

From the examples,(27-29) it can be seen that *dipah sila* is a state of being at the other side that is not definitely at the opposite side in position, and it is only to refer to something that must be at any other side of the river or path which is static. *Sila kanih* 'at opposite side' is the ground object in which *dipah* as the spatial term encompasses the secondary object reference *huma-ngku* 'my house' as the ground object as a goal in (29).

f. *ha-sansila* 'beside, side by side'
(static: reciprocal location beside)

(30) *Lewu'e ha-sansila dengan lewun-n ikei.*
village-POS side.by.side PREP village-POS 2PL-Ecl
'His village is beside our village.'

In (30), the two villages *lewue* 'his village' and *lewun ikei* 'our village' are the static reference objects showing reciprocal location beside that are side by side, one village must be at downstream 'ngawa' and the other at *ngaju* 'upstream' side.

g. *benteng/bentuk* 'middle'
(static: location)

(31) *Hung benteng lewu hetuh tege huma betang je panjang tutu.*
PREP middle village here exist house Betang REL long too
'In the middle of the village here is a Betang house that is too long.'

(32) *Ikei mananjung hung bentuk jalan.*
1PL-Ecl walk PREP middle street
'We walked in the middle of the street.'

(33) *Tokep bentuk andau Oder buli huma pakasak pangina-e.*
near middle day NAME go home cook food-POS
'Almost mid-day Oder went home to cook his meal.'

In (31), the particular place *bentuk lewu* ‘the centre of the village’ is showing that the village is at the central position of a village, as the ground object, and *betang* is the static reference object. In this case, the position of the reference *benteng* can be substituted by *bentuk* ‘centre’ with different concept of meanings. In (32) *betuk* ‘middle’ refers to an area in which the location is not precisely in the middle, for example *benteng jalan* ‘on the middle of the way’. In (33) *bentuk andau* ‘mid-day’ is the reference object refers to the position of the sun which is over head, that led the figure object *Oder* to *huma* ‘house’ as the static reference object.

h. *saran* ‘edge/bank’
(location: part-whole)

(34) *Ie malihi indu-e hung saran tasik te*
 3TG leave mother-POS PREP edge sea DET
 ‘He left his mother at the edge of the sea (= shore/beach).’

(35) *Buhei te hatetei hung saran sungei.*
 snail DET form.row PART bank river
 ‘The snails formed rows at the river bank.’

The figure objects *ie* and *buhei* in (34,35) are moving to the object references either at the river banks *saran sungei* or *saran tasik* showing location as part-whole which are static.

i. *batang danum* ‘water trunk’
(static: location – goal/source)

(36) *indu-ngku genep andau mampukan hung batang danum.*
 mother-POS every day wash.clothes PREP trunk water
 ‘My mother every day washes clothes at the main river.’

(37) *Ie limbah mandui bara batang danum.*
 3SG after bath PREP trunk water
 ‘He has taken a bath from the main river.’

Batang danum in (36), is the static reference object as a goal of the figure *indu-ngku*, and in (37) *batang danum* is the source where the figure is from.

Referring to figure 1, *matanandau* ‘sun’ is one of the spatial references used by the Dayaks to show about the concept of *pambelep* ‘death’ and *pambelum* ‘life’. It refers to the position of the sun served as the secondary object (ground) that does not undergo motion and

considered to be a static spatial object, and the primary reference object where the earth/ego is, considered to be the figure that is dynamic spatial reference object. The examples are illustrated in the following;

(38)a. **Tanjung ewen te bara tana aka-n hila-n matanandau.**
 walk 3PL DET PREP field PREP-AF part-AF sun
 ‘Their walk is from the field to the direction of the sun.’

b. **Huma betang te manaharep matanandau belep.**
 house betang DET face sun off
 ‘The betang house faces where the sun sets.’

In (38a) the position of the figure is described by the verb *tanjung* ‘walk’ showing the movement of the figure through what direction *ewen* ‘they’ are going to. *Matan-andau* ‘eye-day’ means ‘sun’ as the static reference object that can refer to either *pambelep* or *pambelum* as the ground object. Here the life-death term is based on the path of the sun as to encompass the direction. If the ego is to go to the direction of life, then s(he) should be from the opposite direction. In (38b), *huma betang te* ‘that betang house’ is the static-locative figure and *matanandau belep* ‘the sun off’ is the secondary reference object (ground). The other examples are described as follows;

(39)a. **Arah itah ngaliling bukit tuh iete bara hila pambelep ka hila pambelum.**
 direction 1PL-Icl go.round hill DET that from part sunset PREP part sunrise
 ‘Our direction to go round the hill is from sunset/death to sunrise/life.’

b. **Huma-n ikei je hung lewu sila te manaharep hila pambelum.**
 house-Poss 1PL-Ecl Rel PREP village next PART face part sunrise
 ‘Our house that is at the next village facing sunrise/life.’

In (39a), the figure *itah* ‘we-Icl’ is undergoing motion from *pambelep* ‘death’ to *pambelum* ‘life’ through *bukit* ‘hill’ as the other entity shown by the verb *ngaliling* ‘go round’, acted as the other secondary reference object as the static ground. The preposition *aka-n* or *ka* ‘to’ precedes another preposition *hila-n* ‘part’ as double prepositions that show the goal of what part of the direction the sun is, in this case, *hila* can not be omitted if it refers to the sun. In (39b) *huma-n ikei* ‘our house’ is the figure as the locative object and *lewu* ‘village’ is the static reference object denotes the state or condition expressed by the verb *manaharep* ‘face’ the ground object *pambelum* ‘life’ as the secondary reference. Figuratively, *pambelum* ‘life’ where the sun rises and *pambelep* ‘death’ where the sun sets are the terms used to show the entity of

where the position of the sun is. The term *pambelep* collocates only to the sun sets, while *pabelum* can refer to *pabelum ewen* ‘their life’. The term *belep* ‘off’ can refer to the light or; *sumbu belep* ‘the light is off’.

III CONCLUSION

Something that is quite simple can seem very complicated when someone is not already familiar with the terms of spatial reference frames. The important thing to be learnt from this paper is the directional names in the spatial reference objects used by the Dayaks. From the discussion, it is shown that either static or dynamic locative terms are used to describe the direction in the geographical environments in spatial relationship between the primary reference object (Figure) and the secondary reference object (Ground).

The most common points of references used are rivers and streams, in which they can be shown by the use of directional movement of spatial reference-verbs expressed by the following; *murik* ‘go upstream’, *masuk* ‘go downstream’, *muhun* ‘descend’, *mandai* ‘ascend’, *dimpah* ‘cross’. Some prepositions and other directional objects indicate motion across ‘*dimpah*’, position across ‘*dipah*’, along a path, toward a goal, away from a source and relative to another location, almost all with reference to rivers.

The other point of reference is sun. The only terms used to show the position of the sun as the secondary reference object (ground) are *pabelum* where the sun rises and *pambelep* where the sun sets. Both can be used figuratively for ‘life’ and ‘death’. In other words, pairs of opposite directions as the counter parts and one directional term as non-counter part of spatial references are used to show where either static or dynamic objects are located.

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