# Categorical Restrictions of Positional Verbs in Teotitlán del Valle Zapotec 

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## 1 Introduction

This paper presents a preliminary descriptive analysis of Teotitlán del Valle Zapotec ${ }^{1}$ (hereafter TdVZ) positional verbs and proposes that TdVZ positional verb restrictions can be typologically categorized into three groups. Previous studies of Zapotec positional verbs recognize two categories. The TdVZ verbs under discussion are: $z u^{l} u^{2} b$ (sit), $z u^{2} u^{l}$ (stand), zub (be on, lie; literally, mount), naga'a (lie), rii (piled, crowded together), nall (hang), and zè̀èbih (float).

Zapotec is an Oto-manguean language and is spoken throughout the state of Oaxaca, México. Its basic word order is VSO. The TdVZ variant is spoken in Teotitlán del Valle, a village located approximately 15 miles ( 24 kilometers) east of Oaxaca City in the foothills of the Sierra Juárez Mountains.

According to the Instituto Nacional de Estadística Geografía y Informática (INEGI) census report in 2005, Teotitlán del Valle has a population of approximately 5,600 , about two-thirds of which speak "some indigenous language." TdVZ is considered endangered. A majority of children no longer learn Zapotec as a first language and Spanish is generally enforced in the public school system. However, the community has demonstrated interest in language revitalization efforts and documentation of the language is in progress. ${ }^{2}$

Similar to other varieties of Zapotec, TdVZ requires a speaker to select one of several non-copular positional verbs when describing the location of an object. Verb selection is based on the postural orientation and sometimes the shape of an object and/or its relationship to a surface. Talmy (2000) defines these as Figure and Ground, respectively:

The Figure is a moving or conceptually movable entity whose path, site, orientation is conceived as a variable, the particular value of which is the relevant issue. The Ground is a reference entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure's path, site, or orientation is characterized (p. 312).

In accordance with previous discussions on Zapotec positional verbs (Brugman and Macaulay 1986; Lillehaugen 2006a; Lillehaugen \& Munro 2006; Galant 2006, forthcoming; Operstein 2002), the terms Figure and Ground will be employed throughout this paper, as well.

Animate Figures in TdVZ generally require positional verbs in line with the canonical concepts of "sitting," "standing," "lying," etc. However, this is not always the case with inanimate Figures. For example, in TdVZ, a tall, vertically oriented object such as a tree is not necessarily always described as "standing" in TdVZ.

In San Juan Yaee Zapotec (SJYZ) and San Andrés Yaá Zapotec (SAYZ), Galant (forthcoming; 2006, respectively) notes that stative positional verbs can be typologically categorized into two groups: verbs "that are associated with a Figure's posture" (2006: 3), for example, "lying," "standing," "sitting," and "hanging" (p. 3), and those that are not (forthcoming: 22; 2006: 3). Similarly, Operstein (2002) distinguishes between two types of positional verbs in Zaniza Zapotec (ZZ), the first of which focuses on "the object whose location is being described (=figure)," (pp. 60-1, Operstein's italics), specifically, "the position and, to some extent, the shape of the object" (p. 61), while the second category is primarily concerned with "the object in relation to which the location is being described (=ground)" (pp. 60-1, Operstein's italics), or how the Figure "relates to the supporting surface" (p. 62). In TdVZ, the variables of these two categories are not necessarily mutually exclusive. ${ }^{3}$

Several cases appear in TdVZ in which both the Figure's posture and its relationship to the Ground account for why one particular positional verb is chosen over another. For example, the TdVZ verb $z u^{l} u^{2} b$ (sit) requires that if a particular inanimate Figure has a vertically oriented stature (focus on Figure's posture), then the Figure's base must be situated in a surface (focus on Ground). ${ }^{4}$ If both of these conditions are not met, then a different positional verb must be used. In other cases, specific verbs appear to restrict either the Figure's physical orientation/shape or form, or the Figure-Ground relationship.

The present analysis for TdVZ positional verbs recognizes three separate categorical restrictions as opposed to two. They are defined as follows: ${ }^{5}$

1) Positional verbs with restrictions on the Figure's posture/shape and Figure-Ground relationship
2) Positional verbs with restrictions on the Figure's posture/shape
3) Positional verbs with restrictions on the Figure-Ground relationship

This paper will present a comparative analysis of the TdVZ positional verbs included in Table 1 below. This is a partial list of TdVZ positional verbs. The data elucidate how each of these verbs meets the criteria of one of the three categories above.

Table 1: TdVZ positional verbs covered in this discussion ${ }^{6}$

| Positional verb categories | TdVZ <br> positional verb | Basic meaning |
| :--- | :--- | :--- |
|  |  |  |
| Restrictions on Figure's <br> posture/shape and Figure-Ground <br> relationship (§3.1) | $z u^{I} u^{2} b$ | sit |
|  | $z u^{2} u^{l}$ | stand |
|  | $z u b$ | be on, lie (lit. mount) |
| Restrictions on Figure's <br> posture/shape (§3.2) | naga'a | lie |
| Restrictions on Figure-Ground <br> relationship (§3.3) | nall | piled; crowded together |
|  | zè̀bih | hang |

## 2 Methodology

The data were elicited over the course of three weeks in Teotitlán del Valle from one consultant, Serafin Matias Gutierrez, a native speaker of TdVZ. A majority of the constructions were collected by means of Bowerman and Pederson's (1993) Topological Relations Pictures (indicated by "BP" in the data set). The series consists of approximately sixty scenarios depicting objects in varying relational positions (e.g., a cat sitting under a table, a boat floating on water, etc.). In other cases, the consultant described tangible items in prearranged locations or positions-for example, a water bottle lying on the ground-or he described the location of objects in our immediate surroundings. In a majority of cases, upon presentation of a locative scenario, I asked Mr. Gutierrez, "Where is the...?" usually utilizing the simple interrogative Zapotec question format "Kon..." followed by either the Spanish or English word for the Figure (e.g., Kon arbol, "Where is the tree?"), for which Mr. Gutierrez would then provide the Zapotec equivalent (Kon yaj). He would then supply an answer (Yax zul $u^{2} b$ kie daing, "The tree is (sits) on top of the mountain."). Finally, other constructions arose spontaneously (i.e., without question prompts or without staged locative scenarios).

## 3 The Data: TdVZ positional verbs

In this section, the series of examples first demonstrate how one verb is lexically defined and, secondly, how it semantically differs from other positional verbs. These semantic distinctions are based on animacy/inanimacy, posture, shape/form, and/or a Figure's relationship to its surroundings. Finally, the data exemplify how a given positional verb adheres to the conditions stated in one of three categories; positional verbs with restrictions on 1) the Figure's posture/shape and the Figure-Ground relationship, 2) the Figure's posture/shape, or 3) the Figure-Ground relationship.

### 3.1 Restrictions on the Figure's posture/shape and Figure-Ground relationship

The verbs discussed in this section restrict the Figure's physical orientation, shape or form in certain cases, as well as its relationship to the Ground. The group consists of $z u^{l} u^{2} b$ (sit), $z u^{2} u^{l}$ (stand), and $z u b$ (be on, lie; literally, mount).

### 3.1.1 $\mathbf{Z u}^{1} \mathbf{u}^{2} \mathbf{b}$ sit

$Z u^{1} u^{2} b$ occurs with both inanimate and animate Figures. When used with animate Figures, it adheres to the canonical notions of sitting.
(1) Nguuxe'eng=ree $\quad \mathbf{z u}^{1} \mathbf{u}^{2} \mathbf{b}$-ang loo zhi-axzhili-ang. ${ }^{7}$ girl=PROX ${ }^{8} \quad$ NEUT.sit-3SG face/on ${ }^{9} \quad$ POSS-chair-3SG
The girl is sitting in her chair.
(2) $\mathrm{Zhil}^{1} \mathrm{i}^{2} \mathbf{t} \quad \mathbf{z u}^{1} \mathbf{u}^{2} \mathbf{b}$ loo la'adid. (BP) ${ }^{10}$
cat NEUT.sit face/on rug
The cat is sitting on the rug.

In terms of inanimate objects, $z u^{l} u^{2} b$ appeared with Figures which have considerable height or are longer than they are wide and must be vertically oriented relative to the Ground. ${ }^{11}$ Examples (3)-(5) below are cases in which the Figures are vertically oriented in their natural states. If the Figures in (3)-(5) are not in their natural vertical postures, then a different positional verb is required (cf. §3.1.3 and §3.2.1). The data sample also strongly suggests that an inanimate Figure's roots or base must be located in the earth or another surface in order for it to occur with $z u^{l} u^{2} b$, indicating a further restriction on the Figure-Ground relationship, as exemplified in the examples below:
(3) Yu'u $\mathbf{z u}^{1} \mathbf{u}^{\mathbf{2}} \mathbf{b}$ loo liu. (BP)
house NEUT.sit face/on ground
The house is sitting on the ground (with its foundation in the earth).
(4) Yaj $\mathbf{z u}^{1} \mathbf{u}^{2} \mathbf{b}$ kue'e yu'u-dau. (BP)
tree NEUT.sit side/beside house-holy
The tree is sitting beside the church (with its roots in the earth).
(5) Daing $\mathbf{z u}^{1} \mathbf{u}^{2} \mathbf{b}$ rè'è kud zèèbih zaa. (BP)
mountain NEUT.sit over.there where NEUT.float cloud
The mountain sits under the cloud.
In (3)-(5) above, the house, tree and mountain are Figures which, in their natural states, have a clear vertical orientation (i.e., all objects have an obvious right-side-up) and bases which are located in the Ground; houses stand erect with their roofs on top and typically with their foundations in the soil, trees generally grow vertically with their roots in the earth, and mountains, similarly, project upward from the terrestrial ground in which their bases are established. In all cases, the Figures must be described as "sitting." If either their posture or location in the Ground is altered, then a different verb must be used. (cf. §3.1.2 and §3.1.3).

The Figures in (6) and (7) below exhibit a direct relational configuration between the Figures' postures and their Grounds. Relative to their respective Ground surfaces, the Figures are in vertical positions, while their bases are located in Ground.
(6) X-keh'ehz-ang $\quad \mathbf{z u}^{1} \mathbf{u}^{2} \mathbf{b} \quad$ ru'u-ang. (BP)

POSS-cigarette-3SG NEUT.sit mouth-3SG
The cigarette is in his mouth.
(7) $\mathbf{Z u}^{1} \mathbf{u}^{\mathbf{2}} \mathbf{b}$ getxih loo nia. ${ }^{12}$

NEUT.sit thorn face/on hand
I have a thorn in (the palm) of my hand. ${ }^{13}$

In (6), the surface of the man's face plays the role of Ground, not the surface of the earth as in (3)-(5). In relation to the man's face, the cigarette stands vertically (i.e., the cigarette's posture in relation to the earth's surface is irrelevant). Regardless of which
direction the man is facing-whether he is looking upwards towards the sky, down towards the earth, sideways or straight ahead - the cigarette would maintain a vertical (i.e., perpendicular) orientation relative to the surface of the man's face. This meets the restriction that the Figure (the cigarette) stands in a vertical orientation in relation to its Ground (the man's face). This example also meets the second restriction for this verbthat the Figure's base is located in the Ground. In this case, the man's lips envelope the end of the cigarette. Similarly, the thorn in (7) holds a vertical posture in relation to its Ground-the surface of the palm of a hand-regardless of the hand's directionality, while the thorn's tip is pierced into the hand's surface.

### 3.1.2 $\mathbf{Z u}^{2} \mathbf{u}^{1}$ stand

In cases where $z u^{2} u^{I}$ occurs with pedate animates, the Figures assume the canonical "standing" posture as in (8) and (9) below.
(8) Nguuxe'eng=ree $\mathbf{z u}^{2} \mathbf{u}^{1} \quad$ kue'e yaj-zhi ${ }^{1}{ }^{2}{ }^{2} 1 i h$. (BP)
girl=PROX NEUT.stand side/beside chair
The girl is standing beside the chair.
(9) $\mathbf{Z u}^{\mathbf{2}} \mathbf{u}^{\mathbf{1}}$ bekuh loo mezh.

NEUT.stand dog face/on table
The dog is standing on the table.
$Z u^{2} u^{l}$ also occurs with inanimate Figures which have metaphorical legs/feet as with the table in (10), shown standing on its four legs.
(10) La'a mezh kut zèèbih xitxa'a. (BP)
(?) ${ }^{14}$ table NEUT.stand where NEUT.float light
The table is (standing) where the light is.
$Z u^{2} u^{l}$ places a further restriction on inanimate Figures like those in (11) and (12) below in that they must be vertically oriented, as with $z u^{l} u^{2} b$ (sit) in (3) and (4) (§3.1.1). If the Figure is not vertical, then a different verb must be used (cf. (25) and (26), §3.2.1). In direct contrast to $z u^{I} u^{2} b$, however, the inanimate Figure's base or metaphorical foot cannot be located in the Ground (i.e., the Figure and Ground must be distinctly separate from one another). If this condition is not met, then $z u^{2} u^{l}$ is judged infelicitous.
(11) Yu'u de huget $\mathbf{z u}^{2} \mathbf{u}^{1}$ loo liu.
house of play NEUT.stand face/on ground
The toy-house is (standing) on the ground.
(12) Yaj $\mathbf{z u}^{2} \mathbf{u}^{1}$ kue'e yuu-dau.
arbol NEUT.stand side/beside house-holy
The tree is (standing) beside the church (in a pot). ${ }^{15}$

When compared to (3) and (4), examples (11) and (12) demonstrate the differing semantic restrictions of $z u^{l} u^{2} b$ (§3.1.1) and $z u^{2} u^{1}$. The toy-house in (11) and potted tree in (12) have foundations which are distinctly separate from the Ground (i.e., the Ground does not envelope the Figures' bases to any degree). In contrast, the foundations of the house and tree in (3) and (4) above are embedded in the earth. This suggests that $z u^{l} u^{2} b$ requires an inanimate structure's base to be in the Ground, whereas $z u^{2} u^{1}$ requires that it not be. ${ }^{16}$

### 3.1.3 Zub be on, lie (lit. mount)

In most cases, Mr. Gutierrez translated zub into Spanish as estar en (to be on). However, he also stated that the closest literal translation into Spanish would be montar (to mount) (e.g., a person or object mounting an elevated surface structure). In accordance with this translation, zub does not permit a Figure of any type-animate or inanimate - to have direct contact with the terrestrial ground. ${ }^{17}$

Zub appeared on one occasion with an animate Figure, therefore no solid conclusions can be determined or exemplified at this time regarding restrictions of animacy. Additionally, zub occurred with a snake-a non-pedate animate. This Figure cannot be viewed as exemplary of how animates of varying forms (e.g., quadrupeds, bipeds, etc.) might behave with this verb.
(13) Bel zub kia trunk. (BP)
snake NEUT.is.on.(lit. mount) head/on.top trunk
The snake is (coiled up) on top of the tree stump.
However, a discussion with Mr. Gutierrez regarding (13) suggests that an animate Figure's form must be taken into consideration. If the coiled up snake in (13) grew legs, or if a dog, cat, or bird were in sitting position on top of the tree stump or on another elevated surface such as a chair, then $z u^{l} u^{2} b$ (sit) must be used. Similarly, example (9) above (cf. §3.1.2) depicts a scenario in which a dog stands in vertical orientation on a surface elevated from the terrestrial ground; in this case, $z u^{2} u^{1}$ is required, whereas $z u b$ would be judged inappropriate in this context.

Zub places different restrictions on inanimate Figures of varying forms. If the inanimate Figure has feet or legs, literally or by metaphorical extension, it must be horizontal, conforming in these cases to notions of "lying." This is the case with the house in (14) and the tree in (15) below. Because the foundations of both houses and trees are typically located in the earth, they are regarded as having a metaphorical foot. Such Figures must be in horizontal position. Non-pedate inanimate Figures (e.g., a book, a bar of soap, etc.) are construed differently as later examples will demonstrate. Additionally, inanimate Figures such as those in (14) and (15) below cannot have contact with the earth's surface, suggesting a restriction on the Figure-Ground relationship.
(14) Yu'u zub kia yu'u.
house NEUT.lie (lit. mount) head/on.top house The house is (horizontal) on top of the house.
(15) Yaj zub kia yu'u.
tree NEUT.lie (lit. mount) head/on.top house
The tree is (horizontal) on top of the house.
Example (14) describes a hypothetical situation in which there is an earthquake, one house is uprooted from the ground and thrown on top of another house, landing in a horizontal posture on its side. Similarly, a storm may have uprooted the tree in (15) and caused it to land horizontally on top of the house's roof. In order to further confirm the postural restriction on $z u b$, drawings were presented to Mr. Gutierrez in which the house and tree in (14) and (15) were standing erect. In both cases, Mr. Gutierrez said that the verb would need to change from $z u b$ to $z u^{2} u^{l}$ (stand). This supports the hypothesis that $z u b$ places a postural restriction on the Figure. Additionally, if the house and tree were lying horizontally but in direct contact with the earth, then $z u b$ can no longer be used, as examples (25) and (26) in the next section (§3.2.1) corroborate.

These restrictions also apply to deceased persons, which thus are inanimate:
(16) Lang zub loo ladih nii na-ga'a loo liu.

3SG NEUT.lie (lit. mount) face/on woven.rug that NEUT-lie face/on ground S/he is (dead) on a tapestry, which is on the ground.

Again, in (16) above an inanimate pedate Figure is in a horizontal position, without direct contact with the terrestrial ground. If the person were alive and therefore animate, $z u b$ could not be used (cf. (22), §3.2.1.). Additionally, this usage is euphemistic. Using $z u b$ to describe the location of a person implicitly conveys that the person is deceased. ${ }^{18}$

Comparable to the Figures in (17)-(21), zub requires inanimate Figures such as books, pencils, bottles, etc. without a clear metaphorical leg or foot, to be located on an elevated surface. However, in these cases, the verb does not appear to restrict the shape, form or physical posture of Figures lacking metaphorical feet.
(17) Libr zub loo rrepis. (BP)
book NEUT.is.on.(lit. mounts) face/on shelf
The book is on the shelf.
(18) Lapih zub loo eskritorih. (BP)
pencil NEUT.is.on.(lit. mounts) face/on desk
The pencil is on the desk.
(19) Nis zub loo mezh.
water NEUT.is.on.(lit. mounts) face/on table
The (bottle of) water is on the table.
(20) La'adih zub loo mezh. (BP)

Tablecloth NEUT.is.on.(lit. mounts) face/on table
The tablecloth is on the table.
(21)

| La bixtilih zub | loo | nis. |
| :--- | :--- | :--- |
| (?) ${ }^{19}$ soap | NEUT.is.on.(lit. mounts) | face/on | water

Examples (17)-(21) above demonstrate that the Figures can be tall, long, short, wide, or flat, where form and shape do not appear to play a role in determining whether zub can or cannot be used. Furthermore, when the posture of the book, pencil and water bottle in (17)-(19) respectively were altered, this was judged irrelevant. $Z u b$ is considered appropriate whether these Figures are upright, horizontal, upside-down, etc. This suggests $z u b$ restricts only the Figure's relationship to the Ground in such circumstances.

### 3.2 Positional verbs with restrictions on the Figure's posture/shape

This collection of verbs restricts a Figure's orientation, and in some cases, its shape and form. The Figure-Ground relationship is irrelevant in determining verb choice within this category. This verb group is comprised of naga'a (lie), and rii (piled, crowded together).

### 3.2.1 Naga'a (na-ga'a) ${ }^{20}$ lie

Naga'a appeared with animate and inanimate Figures that are vertically oriented and generally taller than they are wide. These objects "lie" if they are in horizontal position. In some contexts, either naga'a or zub (be on, lie; lit. mount) can occur. Naga'a differs from $z u b$ (§3.1.3), however, in that it does not require the Figure to be elevated from the terrestrial ground, whereas zub (§3.1.3) does.
(22) Na-ga'a zhana' loo lung.

NEUT-lie my.mother face/on bed My mother is lying in bed.
(23) Os-e'eng ni ri-gid-ang na-ga'a loo x-lu'un-om. bear-DIM that HAB-play-3SG NEUT-lie face/on POSS-bed-3SG:ANIM The little bear that you play with is lying down on his bed.

In example (22), animacy is not imperative. The Figure could be alive or deceased. Compare this with zub in (16) above. In the latter case, the person must be deceased, and therefore inanimate. In contrast, naga'a only requires that the person lie horizontally.

Examples (24)-(27) below demonstrate that naga'a does not restrict the Figure's relationship to the Ground. Note especially (24) and (25).
(24) Yu'u na-ga'a kia yu'u.
house NEUT-lie head/on.top house
The house is lying on top of the house. ${ }^{21}$
(25) Na-ga'a yu'u loo liu.

NEUT-lie house face/on ground
The house is lying on the ground.
(26) Na-ga'a yaj loo nèèz.

NEUT-lie tree face/on street
The tree is lying in the street.
(27) Na-ga'a nis loo nèèz.

NEUT-lie water face/on street
The bottle of water is lying in the street.
In (24) the house lies on its side, elevated on top of another house, whereas the house in (25) lies horizontally in direct contact with the earth. The Figures in (26) and (27) lie in contact with the terrestrial ground. ${ }^{22}$ The only requirement is that the Figures are in a horizontal posture. Example (24) represents a scenario in which either naga'a or zub can be used. (cf. (14), §3.1.3.) If the speaker wanted to convey, specifically, that the house is elevated from the earth, then $z u b$ must be used as in (14) above.

### 3.2.2 Rii ${ }^{23}$ piled, crowded together

The positional verb rii requires two or more Figures to be located in relative proximity to one another, spread out (touching or not touching), or in a heap, placing focus on the form of the collection of Figures. The verb primarily stipulates that the Figures are part of a collection or group of objects. ${ }^{24}$ The items can be found on several different Ground surfaces (e.g., on an elevated surface, in contact with the earth, under water, etc.), suggesting that the Figure's relationship to the Ground is irrelevant.
(28) La mingit rii mantuing loo mezh.
$(?)^{25}$ seeds HAB.piled mound face/on table
The seeds are in a mound on the table.
(29) Rii gu'ung nie daing.

HAB.crowded.together bulls foot/below mountain
A bunch of bulls are at the foot of the mountain.
(30) Rii gie loo liu.

HAB.piled rocks face/on ground
There are rocks piled on the ground.
(31) $\mathbf{R i}$

HAB.crowded.together cars side/beside street
There are cars along the street.
(32) Rii medih zhaa nis.

HAB.piled money buttocks/under water
There is money in (lit. under) the (pool) of water.

The Figures in (28)-(32) can all clearly be viewed as a collection or amassed group of objects. The mound of seeds in (28) is located on an elevated surface, whereas the Figures in (29)-(31) are not. The pile of coins in (32) is located at the bottom of a pool, submerged under water.

Example (33) below demonstrates that rii can also occur with a pair of Figures.

| (33) | Rii | beeku | kon |
| :--- | :--- | :--- | :--- |
| HAB.crowded.together | dog | with | cat |
| HABre is a dog and a cat. |  |  |  |

The dog and cat in (33) are shown sitting in close proximity to one another, indicating that rii requires a Figure to appear-at a minimum - as part of a pair of objects.

Rii also occurs with non-count Figures which inherently form a mass:
(34) Gii rii kud $\mathrm{zu}^{1} \mathbf{u}^{2} b \quad$ gule'eng=ree. (BP)
fire HAB.piled where NEUT.sit boy=PROX
The fire is next to where the boy is sitting.
(35) Rii nis loo nezh.

HAB.piled water face/on street
The water is in the street (in a puddle).
If the water in (35) were running down the street like a river, then rii could not be used. This suggests that the Figure must exist as a relatively static rather than dynamic mass.

### 3.3 Positional verbs with restrictions on the Figure-Ground relationship

In the last group of positional verbs, the Figure's relationship to the Ground accounts for why one positional verb must be used over another, irrespective of the Figure's orientation, shape or form. This category includes nall (hang) and zè̀ebih (float).

### 3.3.1 Nall hang

Nall requires that the Figure hang freely, to some degree, from the Ground by means of a string or some other hanging device and that the Figures have the potential for some amount of mobility. In the data set, nall only appeared with inanimate Figures. ${ }^{26}$
(36) Barkoh nall-eng zhaa yu'u.
ship NEUT.hang-3SG buttocks/under house
The (toy) ship is hanging from the ceiling (lit. under the house).
(37) Kuadr nall tex pader. (BP)

Painting NEUT.hang chest/on.vertical.surface wall
The painting is hanging on the wall.
(38) La'adix nall loo du. (BP)
ropa NEUT.hang face/on clothesline
The clothes are hanging on the clothesline.
(39) Xih-itxa-na nall loo xih-biga'-a. (BP)

POSS-saint-1SG NEUT.hang face/on POSS-necklace.chain-1SG
My saint pendant hangs from my necklace.
(40) Xih-le's-ang nall loo ganzhih. (BP)

POSS-cobija-3SG NEUT.hang face/on hook.
His cobija ${ }^{27}$ is hanging on the hook (on the wall).
The toy-ship (36) and painting (37) both hang from visible strings. The clothes in (38) hang from a clothesline. The necklace pendant in (39) hangs from a chain, while the cobija in (40) hangs on the wall by means of a hook. All Figures have the potential to "swing" from the Grounds to which they are attached.

### 3.3.2 Zèèbih float

Zèèbih occurs with both floating and hanging Figures. In the latter case, zèèbih overlaps with scenarios in which one can also use nall. It differs from nall in that it does not require the Figures to "float" or "hang" by means of a hanging mechanism (i.e., hanging devices are optional). Similar to nall, however, all Figures have the potential for mobility. Zèèbih appeared only with inanimate Figures during elicitation.
(41) Zaa zèèbih zhaa giiba. (BP)
cloud NEUT.float buttocks/under sky
The cloud is floating in (lit. "under") the sky.
(42) Barkoh zèèbih loo nis. (BP)
ship NEUT.float face/on water
The ship is on the water.
(43) La bixtilih zèèbih loo nis.
(? $)^{28}$ soap NEUT.float face/on water
The soap is floating on the water.
The cloud (41) floats freely in the air, and the ship (42) and bar of soap (43) float on top of the water's surface. ${ }^{29}$ Nall (hang) (§3.3.1) could not transpire with these Figures since they are not suspended by a hanging mechanism.

In contrast, the Figures in (44)-(46) below can occur with either zèèbih or nall. Compare these with examples (36)-(38) above.
(44) Bot zè̀èbih.
boat NEUT.float.
The boat hangs (from the ceiling).
(45) Kuadr zèèbih tex pader. (BP)
painting NEUT.float chest/on.vertical.surface wall
The painting is hanging on the wall.
(46) La'adix zèèbih loo du. (BP)
clothes NEUT.float face/on clothesline
The clothes are hanging on the clothesline.
The data suggest that the only condition that TdVZ places on zèèbih is that the Figures have the potential for varying amounts of mobility, whereas nall requires both this characteristic as well as the attachment of the Figure to the Ground by means of a hanging mechanism. For example, the cloud in (41) could glide across the sky, while the ship and bar of soap in (42) and (43), respectively, could float across the water. The suspended toy-boat in (44) has the potential to swing from the ceiling. The painting in (45) hangs on the wall by a visible string. If one were to push the painting, it would swing back and forth along the wall. Finally, the clothes on the clothesline in (46) could "swing" if the wind were to blow.

## 6 Summary

This preliminary description provides evidence that, typologically, TdVZ positional verbs can be categorized in three manners: 1) positional verbs with restrictions on the posture/shape of the Figure as well as its configuration with the Ground, 2) verbs which restrict the Figure's posture/shape, and finally 3), those positional verbs that primarily focus on the Figure-Ground relationship. The main goal of this discussion has been to provide a foundation for further investigation of TdVZ positional verbs which had not yet been described or documented and to contribute to the ongoing typological explorations and characterizations of Zapotec.

[^0]${ }^{3}$ Lillehaugen (2006a) alludes to a third category of positional verbs in Tlacolula Valley Zapotec. She notes that positional verbs place "restrictions...on the Figure and/or the locative relationship between the Figure and Ground" (p. 280, my italics). Her study does not aim to present the data in terms of distinct categories (i.e., the study is not proposing a typology), but her statement notes that an overlapping juncture exists among the restrictions of Focus on the Figure and Focus on the Figure-Ground relationship.
${ }^{4}$ See discussion in §3.1.1 on the positional verb $z u^{l} u^{2} b$ for examples.
${ }^{5}$ These categories are comprised of generalizations that appear most salient in the data sample. Exceptions to these rules do occur and will be addressed.
${ }^{6}$ This is a non-exhaustive list of TdVZ positional verbs.
${ }^{7}$ When an answer was provided in response to a locative question prompt (i.e., "Where is the...?"), word order always appeared as SVO.
${ }^{8}$ Abbreviations used in this paper: 1/2/3 SG/PL first/second/third person singular/plural, - morpheme boundary, = clitic boundary, ( ) parenthetical information, ? undetermined status, ANIM animate, INANIM inanimate, HAB habitual, NEUT neutral, INT intensifier, DIM diminutive, POSS possessive, PROX proximate, O object, S subject.
${ }^{9}$ There is a debate as to whether or not body-part words have fully grammaticized as prepositions or if they are nouns with extended metaphorical locative functions. (For an overview of the issues, see Lillehaugen 2006a, CH. 2. For further readings, see Lillehaugen 2003, 2004a, 2006b; Lillehaugen and Munro 2006; MacLaury 1989.) This paper will not commit to one view or another for the time being. All TdVZ body-part words are glossed with both the body-part term and its corresponding locative meaning.
${ }^{10}$ BP indicates constructions which were elicited by means of Bowerman and Pederson's (1993) Topological Relations Pictures.
${ }^{11}$ No examples appeared in which postural orientation was ambiguous, for example, with regular, symmetrical Figures such as cubes, spheres, etc. Such Figures need to be considered in the future.
${ }^{12}$ In cases where the location of a Figure was described without a question prompt, word order appeared as VSO.
${ }^{13}$ Similarly, $z u^{l} u^{2} b$ would occur if a nail, stick, or pencil were stabbed into the palm of a hand enough so that the Figure was standing upright, relative to the hand's surface.
${ }^{14} L a ' a$ (sometimes $l a$ ) only occurred in sentence-initial position. It was sometimes translated as the Spanish articles, la or el. However, at other times it was translated as an abbreviated version of the third-person inanimate TdVZ pronoun laing. Lillehaugen (2006a) cites Munro and Lopez as suggesting that la'a cognates express focus (pp. 4243). However, Lillehaugen's own findings regarding the SLQZ cognate, làa' were inconclusive (p. 44). Further investigation is needed to explain the function of TdVZ la'a in the context of locative constructions.
${ }^{15}$ A discussion with Mr. Gutierrez suggests that if the tree's roots have been removed from their natural environment, the earth, then the tree is viewed as "standing" on top of the Ground (i.e., the pot is not viewed as an alternate Ground in which the tree's roots exist, at least in this specific instance).
${ }^{16}$ Operstein (2002) noted a similar distinction in ZZ (pp. 61-2) between Figures with and without visible basis with the ZZ verbs $z u b$ (sit) and zu (stand), respectively (pp. 61-2). Both positionals fall under the category, "Positional verbs focusing on the figure" (pp. 61-2) in her discussion.
${ }^{17}$ Galant (2006; forthcoming, respectively) noted a similar distinction with particular Zapotec positional verbs in both SAYZ (pp. 5, 11, 13) and SJYZ (pp. 10, 21), where Figures must be located in relatively elevated or non-elevated Ground surfaces.
${ }^{18}$ More data is needed to determine if this euphemistic usage would apply to all animates. ${ }^{19}$ See footnote 14.
${ }^{20}$ The form of this verb differs morphologically from those already discussed. During elicitation, Mr. Gutierrez translated na- as estar (to be), and -ga'a as acostar (to lie) in Spanish, indicating that $n a$-, at least psychologically, is a prefix for Mr. Gutierrez. Lillehaugen (2006a) compared Tlacolula de Matamoros Zapotec (TMZ) niga'ah to its cognates in San Lucas Quiaviní Zapotec (SLQZ), nàa'tga'ah and na'ga'ah, "'is lying down, is (located) in a lying position' which are identified as neutral forms of ràa'tga'ah 'lies down, gets into a lying position'" (Lillehaugen citing Munro and Lopez, 299). For the moment, this interpretation shall be applied to the TdVZ, naga'a, as well, where naga'a is the neutral form of the verb "lie," with the prefix na-marking neutrality.
${ }^{21}$ See discussion of example (14) for a detailed description of the scenario.
${ }^{22}$ Most of the streets in Teotitlán are unpaved, so most likely the consultant was envisioning a dirt road in this scenario.
${ }^{23}$ Lillehaugen (2006a: 310) tentatively suggests that TMZ rii is in habitual aspect rather than in neutral form. This is based on a dictionary entry by Munro and Lopez, et al. wherein mbih is listed as the neutral form of this positional verb. For the time being, I will employ Lillehaugen's tentative analysis of this verb.
${ }^{24}$ Similarly, Lillehaugen (2006a: 310) found that the TMZ rii cannot occur with a single countable Figure.
${ }^{25}$ See footnote 14.
${ }^{26}$ Galant (forthcoming) found the SJYZ cognate naala in conjunction with a person hanging upside down from a tree (p. 16).
${ }^{27}$ A thick piece of cloth worn over the body as a covering, such as a shawl or coat.
${ }^{28}$ See footnote 14.
${ }^{29}$ This scenario also occurs with $z u b$ (cf. example (21), §3.1.3). If the speaker wants to emphasize that the bar of soap is elevated from the earth, then the speaker will use zub. Alternately, the speaker can focus on the soap's floating behavior on top the water's surface by using zèèbih as in (43). The different descriptive foci are encoded in the verb the speaker chooses to use.

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[^0]:    ## Notes

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    ${ }^{2}$ Several community members and San Francisco State University are currently collaborating on the Teotitlán del Valle Community Language Archive Project, a documentation effort headed by Dr. Troi Carleton.

