```
smili     -lh
he.rolls.it-CPL
```
'he rolled up his petate or his blanket (i.e. if not specified, the prototypical object is implied)'

All these semantic effects occur, obviously, in many languages. Verbs like *nail* or *blink* have very specific semantic selection. Verbs like *shred, slice, chop* give precise information on the shape of the resulting object. Transitive verbs like *eat* imply an edible object when employed in their absolute use. What is specific about Totonac is that all of this is codified morphologically, hence it is more productive, more transparent and more a general principle of the organization of the vocabulary, rather than an isolated peculiarity of a certain lexical item or of a very differentiated semantic field. Totonac affords an interesting case to revisit the topic of shape in grammar.

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Seated and Settled: Tzotzil Verbs of the Body[1]

1. Prelude: Prayers of the body

The curer, an ancient woman with striking white hair and sparse, jutting teeth, tells me to turn around in my chair. My aching back now faces toward her. Lifting the *incensario* and blowing on its glowing charcoal so that the *copal* smoke wafts across me, she begins to pray, invoking saints and ancestral deities on my behalf.

(1)[2]

...

```
16  k'el -be  -k  -on tal   //        20  lilij     -em la   //
    look-BEN-PL-1A DIR (coming)           fall_apart-PF QUOT
    Watch over him for me                 It seems to have fallen apart

17  il -be  -k  -on tal               21  kokoj  -em la
    see-BEN-PL-1A DIR (coming)            fall_off-PF QUOT
    Look after him for me.                It seems to have fallen to pieces

18  ti          y -ut  s -pat  -e //  22  tz'ul ti          y -ok   -e  //
    ART (remote) 3E-inside 3E-back -CL    slip ART (remote) 3E-foot, leg-CL
    The inside of his back                His leg has slipped

19  ti          y -ut  xokon-e        23  tz'ul ti          s -k'ob  -e
    ART (remote) 3E-inside side  -CL      slip ART (remote) 3E-arm, hand-CL
    The inside of his side.               His hand has slipped.
```

In the paired couplets of Tzotzil ritual language, combining body-parts, plant metaphors, and other bodily images, she describes my ailment – a strained back caused by hauling timber. It is located inside my body ("inside his back // inside his side"); I have suffered a strain ("fallen apart // fallen of" – as leaves off a tree); and my "leg" // my "hand" have "slipped".

Now, with a further, more subtle, coporal image, she summons God to my aid:

(2)

...

```
25  va'an a -ba  tal         -uk  tot //  26  tek'an a -ba  tal        -uk  k -ajval
    stand 2E-self DIR (coming) -SUBJ father   step  2E-self DIR (coming)-SUBJ 1E-lord
    Stand yourself erect here, father        Stand yourself firm here, my Lord.
```

---

[1] This essay is drawn partly from a paper presented at the workshop, "The Conceptualization of Space in Mesoamerican Languages," organized by Lourdes de León, at the Cognitive Anthropology Research Group at the Max Planck Institute for Psycholinguistics, Nijmegen. December 3, 1991. I am indebted to John Lucy for comments, and to Balthasar Bickel for both terminological and substantive suggestions.

[2] Curing ceremony recorded Nabenchauk, Chiapas, Mexico, 11 January 1991

Her paired imperative implores the deity, "father, my Lord", to step forward and take responsibility for her patient. The verbal root *va'* 'standing erect' combines with the transitivizing suffix *-an* and a 2nd person reflexive pronoun, lit. 'stand yourself up'. The root *tek'* 'standing firm, rooted (as of a tree)' undergoes similar morphological treatment, to yield 'stand yourself firmly'.

The scene shifts. A wedding party has arrived at the groom's house, fresh from the church. Elegant in a heavy black woolen robe, the wedding godfather greets the ritual advisor of the groom's family at the doorway. Bowing to each other, the two men break into simultaneous prayer.

{3}[3]

1 r;	tal	a -chotan un //
	come (AUX) 2E-seat CL //	
	You have come to seat	

2   tal   a -vutz'an un
come (AUX) 2E-bend CL
You have come to settle

3 w;   i -0 -lok' xa   talel   l -av -alab -e //
CP-3A-exit already coming (DIR) ART-2E-child-CL //
Your child has come out

4   l -a -nich'nab-e
Art-2E-child -CL
Your offspring (has come out).

5   ta   j -chotan-tik //
ICP 1E-seat -PL //
We shall seat

6   ta   j -vutz'an-tik
ICP 1E-bend -PL
We shall settle them.

As the bride and groom are about to embark on their married life, the elders prepare to install them formally in the house where this life will begin. Entry consists, again in the symbols of paired corporal imagery, of seating the groom on a chair and his bride on the ground by his side: seated and settled. The root *chot* 'seated' combines with the same transitivizer *-an* we met earlier, to produce *chotan* 'seat, cause to be sitting.' The root *vutz'* 'bend down' is similarly rendered causative, thus 'bend (someone or something) down' – a reference to the conventional way a Zinacantec woman should sit, with knees bent, on the ground.

Two final vignettes. A repentant drunkard kneels before the image of a saint, begging for forgiveness.

{4}[4]

k'usi y-epal   ʼun, j-tot,
what 3E-amount CL 1E-father
For how long, My Father

patal-on   yulel,
prostrate-1A arriving (DIR)
do I arrive, bowing low

k'usi y-epal   ʼun, k-ajval,
what 3E-amount CL 1E-lord
for how long, My Lord

ta   yo   l-a-tz'el-ik,
PREP humble ART-2E-side-PL
beside Thee

kejel-on   yulel,
kneeling-1A arriving (DIR)
do I arrive, kneeling

ta   yo   l-av-ichon-ik.
PREP humble ART-2E-front-PL
before Thee?

The man characterizes his presence before the Saints in terms of his position. From the root *kej* 'kneeling' he produces a stative adjective, *kejel* 'in a kneeling position,' inflected for first person with the absolutive suffix *-on*; thus, 'I am kneeling'. Similarly, from the root *pat* 'prostrate, lying or leaning forward on one's belly or arms'[5] he derives *patal-on* 'I am prostrate.'

Another patient, upon finishing a major curing ceremony, prays as he retires to his bed for an obligatory three days of confinement.

[3] Wedding greetings recorded in Nabenchauk, April 26, 1981.

[4] From Laughlin (1980), p. 253, with his translation.

[5] Laughlin (1975) lists the lexical form *pat* meaning 'back' – see fragment 1, line 18 – under this same root, following the apparent logic that when one is in a *patal* position one displays one's back. On formal grounds it is equally if not more plausible to posit two homonymous roots of the form *pat*, one Nominal with the meaning 'back' or the appropriate part-term, and the other Positional, denoting something prostrate or leaning forward.

{5}[6]

ch- i- puch'i,   ch- i- taʼi.
ICP-1A-lie_down ICP-1A-stretch_out
I lie down, I lie immobile.

The patient's ceremonial declaration again involves two roots which can denote bodily positions. The first, *puch'*, means 'lying down,' said of something like a human being or an animal that has distinct three-dimensionality (i.e., is not simply long and straight). The second root, *ta'*, means 'stretched out, sagging slightly,' said of something long, arranged horizontally, and also suggesting immobility. Both roots combine with the intransitivizing/inchoative suffix *-i*; thus, *chipuch'i* 'I come into a lying position.'

2. Conflation and confusion

The lexicon has often been taken to be the repository of confusion and anarchy in language, the land of the list, where almost anything goes. Still worse, when words are ripped from their ordinary homes and imported into the arcane world of ritual, their meanings, however tractable they may be in everyday life, may be expected to fly off into uncontrollable tropes. In the quoted instances of Tzotzil prayer, from Zinacantán, I have singled out eight verbal roots which start out, apparently, referring to bodily positions – standing, sitting, kneeling, and lying – and come to signify caring responsibility, domestic tranquility, abject humility, and confinement through illness.

Of course, the randomness of the lexicon is overrated. Syntax and lexical semantics alike have demonstrated "that the relationship between the meanings of verbs and their syntactic behavior is governed by quite general principles" (Levin 1991: 224)[7] – at least in English.[8] Trying to extend such principles to other languages, where the syntactic diagnostics are often radically different and the semantic classes justifiable only with caution, is both a dangerous and a worthwhile enterprise.[9] Partitioning the lexicon requires the strictest attention to details of formal types (often cryptotypes) and their interactions with semantic types. Clues about semantic relationships may also derive as much from (socio)linguistic oddities – the Dyirbal mother-in-law language (Dixon 1972), for example, or, in the present case, the semantic pairings of near synonyms in Tzotzil ritual couplets – as from demonstrable but anarchic lexical relations. The lamination of **different** partitionings of the lexicon, some based on grammatical reflexes, others on conventionalized associations of meaning, others on less orderly semantic intuitions, will presumably result in the desired tension and change in lexical systems that characterizes all languages.

The present essay is a small piece of an ongoing effort to describe the structure of the Tzotzil lexicon. Tzotzil, like its sister Mayan languages, has a large class of verbal roots, traditionally called "Positionals," formally defined by their distinctive stemforming possibilities. A subclass of these roots, including the eight we have met, have in addition what appear to be truly positional **meanings**. They denote characteristic arrangements of

[6] From Laughlin (1975).

[7] See references therein; also, e.g., Dixon (1991).

[8] Levin (1989) presents an extensive compilation of interdependencies between various patterns of verbal diathesis and candidate semantic classes of English verbs.

[9] See for example Croft (1990).

complex anatomies, typically bodies, often in relation to specific sorts of reference objects or Grounds.[10]

Their corresponding function in locative expressions (**locating** a Figure with respect to a Ground) has drawn recent attention.[11] However, the apparent locative specificity of a lexical stem derived from a Positional root seems merely to be a special result of a more general process by which a certain pragmatic effect is extracted from the full semantic portmanteau, the prototypical scence which the root conjurs. The ritual uses of Positional roots, cited in the prayers, illustrate a different but parallel process of extraction.

In this paper I shall concentrate on the incorporation of body imagery into the semantic portmanteaux of a subset of Tzotzil Positional roots. Indeed, bodies – of both humans and plants[12] – find their ways into a good many Tzotzil lexical roots. The body parts[13] are lexicalized, of course, and themselves figure in complex descriptions of parts and regions of other objects (DE LEÓN, this volume). They also appear in a variety of fixed compound expressions, such as *pak'-chikin*, literally 'patch ear.' i.e., 'deaf.' However, there are also roots with **conflated** body parts (TALMY 1985), like English *kick* with a conflated foot as instrument, or which select body parts as arguments, like English *addled* (said only of eggs and brains, as QUINE's formulation has it). Thus, for example, the verb *kuch* 'carry' implies that the object is carried on one's back, with or without a tumpline. This contrasts with a verb like *pet* 'embrace, carry' which requires that the object be held in front of the body in the hands and arms. (See Figure 1.) Similarly, the transitive verbs *mutz'* and *vik'* mean 'close' and 'open', but they can be used only (and always) for closing and opening the **eyes**.

If the body is a universally available prototypical model (or domain) not only for parts/wholes and shapes (FRIEDRICH 1970, 1971) but also for actions (as well, perhaps, as for actors and minds), then its lexical ramifications should go further. Why shouldn't languages lexicalize the characteristic stances, motions, and (social) uses of the body?[14] The

Tzotzil carrying verbs cited clearly show lexical attention to how Tzotzil speakers use their bodies, and how those bodies interact with objects in the world – facts that a child will presumably learn concurrently with (perhaps before) learning the (body)parts themselves.[15]

The notional positional core of formally Positional roots in Tzotzil seems to encode salient, canonical "positions" of complex anatomies, of which the human body seems exemplary. After looking at some of the relevant formal facts, I will turn to precisely this notionally defined subset.
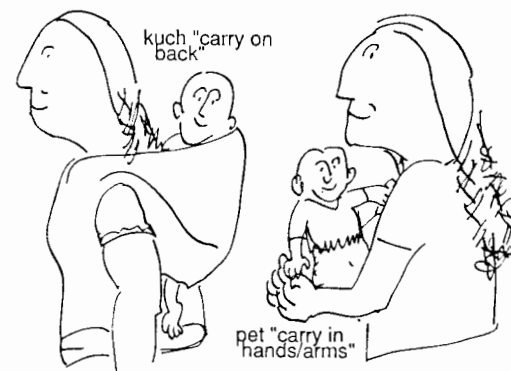

Figure 1:
Two ways to "carry" something

3. Positional morphology

Positional roots may be formally distinguished from other Tzotzil roots by their derivational possibilities. Here is the rough procedure.

First, we define as predicates those words which bear absolutive inflection. Of these, 'stative' predicates do not accept aspectual inflection, whereas 'verbal' predicates are obligatory marked with one of four 'aspects' – 'completive,' 'incompletive,' resultative,' and 'neutral' (HAVILAND 1981). 'Transitive' verbs bear both ergative and absolutive inflection; 'intransitive' verbs only absolutive.

Now to classify a root one looks to see what sort of predicate stem, if any, can be produced from it. If the bare root can serve as a transitive verb stem, call it a T(ransitive) root. Such a bare T root will almost always yield a (perhaps, somewhat defective) unaccusative intransitive verb stem as well.[16] If a root is not, by this criterion, Transitive, but it does yield a bare intransitive verb stem, then call it I(ntransitive). I roots typically also produce transitive causative stems by suffixing -*es*. A(djective) and, indeed, N(oun) roots, otherwise ignored here, produce stative stems directly.

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[10] The Tzotzil verbs in this notional group thus correspond roughly to two interrelated classes in LEVIN (1989), namely class 32.10 "Verbs of spatial configuration" (a subclass of class 32, "Verbs of existence and location"), and class 35 "Verbs of assuming a position." In the latter group, LEVIN lists as English examples: bend, crouch, flop, kneel, lean, lie, perch, plop, rise, sit, slouch, slump, sprawl, squat, stand, stoop, straddle, ... in the sense of "to assume the spatial configuration specific to the verb" (LEVIN 1989: 119). Verbs from corresponding subclasses in languages ranging from Dutch to Guugu Yimidhirr (HAVILAND 1979c) typically provide etymons for words which serve copular functions. See BICKEL (1992) for a slightly different case.

[11] See SMITH-STARK (1981), LEVINSON (1991), BROWN (1992).

[12] See LAUGHLIN and BREEDLOVE (in press) for examples of the application of plant "body parts" to human bodies, as well as the more familiar reverse extension. LAUGHLIN (1988c) paints a characteristically sparkling word picture of the anatomies of a number of Zinacantec creatures, via Tzotzil roots.

[13] LEVINSON (1992) proposes that the corresponding Tzeltal words represent not **body** parts, but just canonical **parts**, assigned – on analogy with the theory of vision – at an early stage in assessing the identity and rough geometry of any object. On such an account, the apparent primacy of the specific bodily reading is an accidental consequence of the prototypical availability of the body as a salient segmentable whole.

[14] And of course they do. English categories in LEVIN's 1989 report include such members as drink, eat, graze, chew, gnaw, gobble, devour ("Ingesting verbs" in several subtypes), belch, blush, burp, cough, flush, hiccup, breathe, cough, drool, exhale, perspire, etc. ("Verbs of bodily processes"), blink, shrug ("Verbs of gestures/signs involving body parts"), bow, curtsey, salute ("Verbs describing signs made with the whole body"), sleep, doze, snooze ("Verbs of types of sleeping"), and so on. The classic study of Tzeltal eating verbs (BERLIN 1967), which select for

both the consistency and the place in Tzeltal cuisine of the food ingested, shows how the semantics of even such persuasively universal bodily actions as eating can be complicated in language or culture specific ways.

[15] LAUGHLIN (1975) glosses the verb *tz'it* as "clean with second joint of forefinger/inside of gourd or bowl" – something I only learned to do in order to clean my bowl after drinking *atole* in Zinacantán.

[16] See AISSEN (1987).

These criteria leave a large class of CVC roots which can produce predicates only in affixed form. These are the P(ositional) roots. (Here and throughout I use a capital P, and the capitalized word "Positional" to denote roots which meet **formal** criteria for this root type; when I speak of "position" with a small "p" I intend to invoke a notional rather than a formal category.) In Tzotzil there are three characteristic derived forms for P roots, all of which we have met already in Zinacantec prayer: a stative predicate adjective produced by suffixing *-Vl* (where *V* repeats the root vowel); an intransitive stem, which denotes the transition into a state, with the suffix *-i*; and a transitive causative with the suffix *-an*. Thus, under the root *chot* LAUGHLIN (1975) includes the following entries:

{6}

chotol, aj, seated, sitting   *choti*, iv, sit down, be settled
chotan, tv, set down /child, bag/install, mount /cannon/

To represent the morphological profiles of roots in what follows, I notate these forms by small letters **a** (for *-Vl* adjective), **i** (for derived inchoative in *-i*) and **n** (for derived causative in *-an*), suffixed to a capital **P** [for Positional]; thus, *chot*, which shows all three forms, would receive the formula **Pain**, to be read as "root which produces Positional type derived adjective, intransitive, and causative stems."

Verbal roots which are neither T nor I can be classified as P if they yield such forms, giving a neat tripartite formal division that corresponds rather nicely to a notional trichotomy of verbal roots into what Croft (1990) calls 'causative', 'inchoative', and 'stative'.

The different root classes are not totally disjoint formally. There are derivational patterns characteristic of P roots, but also not uncommon with I and T roots. Among these are what LAUGHLIN calls "affective" verbs which convey an emotively charged description, appropriate to colorful narrative, or, for example, to scolding.

{7}

chotchon, av, sitting unable to stand   *chotlajet*, av, sitting unable to stand (drunk)
chötlij, av, falling suddenly on one's butt

There are also derived verbs denoting rapid or unexpected movement.

{8}

chotk'ij, iv, sit down unexpectedly   *chotk'in*, tv, push into sitting position

Although I have illustrated these forms with the P root *chot*, they can also commonly be found with T and occasionally I roots as well.

Unsurprisingly, the apparent neatness of the tripartite verbal root division is, on closer inspection, an illusion. Most verbal roots exhibit either defective or overexuberant derivational paradigms, not falling cleanly into any of the categories I, T, or P.[17] In the small subset of verbal roots I consider in this essay, several combined types are represented, as shown in Figure 2. Here I will concentrate on only the best or least ambiguous exemplars of the P root pattern, in order to display the expressive character so encoded. The derivational processes in which the clearest member roots of each class participate are largely disjoint, and it seems not unreasonable to search for a deeper semantic motivation for the

[17] I treat some of these complications, not detailed in the present essay, in HAVILAND (1992a).

resulting classes, so that certain concepts can be predicted to be realized by certain classes of roots. The derivational pattern appears to provide a schematic semantic template for certain sorts of predication.

Stem type	Transitive	Intrans	Stative
Root type:			
A,N	various	various	-0
T	-0	-0	-oj
I	-es	-0	-em
P	(-an)	(-i)	-Vl
P_T	-0/-an	-i	-Vl
P_I	-an	-0/-i	-Vl
P+T	-0/-an	-0/-i	-Vl

Figure 2:
Root types and diagnostics

4. Complex anatomies

To arrive at what I call "true positionals," I begin with the subset of roots which display more or less pure Positional morphology (with neither transitive nor intransitive verbal features). These P roots can be subdivided on the basis of both further morphological patterns, and also following the logic of the underlying predicates.

Some P roots denote logically one-place predicates, usually having to do with shape or substance. Others are two-place relational predicates, frequently involving the collocation of a figure with a ground. Still others presuppose a more complex set of conditions on their logical arguments. Of these last, what I have been calling "true" positionals relate a figural argument to some further ground; but they specify as well a fuller overall configuration or anatomy for the figure, typically, a whole body whose parts must be appropriately arranged. Thus, a root like *chot* 'seated' can only be predicated of an entity which is placed in a certain relationship to a supporting ground, and which has the appropriate anatomy (in Tzotzil, a certain sort of 'bottom'[18]) to allow it to sit. Quite unsurprisingly, a canonical figure here turns out to be, indeed, the human body. Applying such a notional criterion to partition out a subclass of P roots that specify the configuration or arrangement of complex whole's segmentable parts yields a group of some 50 "positional Positional roots", listed and further grouped in the Appendix.[19]

[18] LEVINSON (1992) proposes, indeed, that the same principles (however they are to be characterized) which allow Tzeltal speakers to assign parts to complex wholes also allow the assignment of positional labels (via Positional roots which in Tzeltal are similar to neighboring Tzotzil) to the dispositions of those wholes.

[19] Numbers following roots in the Appendix and throughout the text follow the root numbering system, to denote putative homonyms, in LAUGHLIN (1975).

One can find limited formal evidence for the legitimacy of such a subclass of roots. For example there is a derived nominal form with the suffix *-l-eb(al)*[20] characteristic of P roots whose meaning relates to the positions of complex anatomies. Example {9} shows some sample nominals of this sort, drawn from LAUGHLIN (1975), beginning with words that correspond to the eight roots we met in the introductory prayers, and continuing with a few more "sitting" roots.

{9}

va?ebal, object that person stands on, place where one stands to get a good view

tek'lebal, Ritual speech, shaman praying; shrine

chotlebal, seat

vutz'lebal, Ritual speech; place where one kneels

kejlebal, kneeling place, sitting place of woman /old straw mat/

patleb, nest of setting hen

ta?ebal, Ritual speech, shaman referring to patients bed; place where one lies face up.

juch'lebal, seat /where woman sits constantly, doing nothing/

ju?ebal, place where drunk sits

lubleb, place where hen habitually lays her eggs

luchleb, perch

puch'lebal, place where one sleeps

naklebal, mat where woman sits

The suffix *-l-eb(al)* denotes, on a P root *X*, a "place where one customarily *X*s, or where one frequently is in position *X*." Based on such a nominal is a further derived transitive stem, using the additional usitative suffix *-in*, and meaning "use as something to *X* on." Thus, the verb *chotlebin* means "sit on, use as something to sit on". Though LAUGHLIN (1975) does not accord this word its own entry, he gives examples like the following, again with roots we have already met.

{10}

puch'lebin, lie on

kejlebin, kneel on

patlebin, lie face down on

va'lebin, stand with forepaws on person (dog), stand on object to improve one's view

Tzotzil morphology thus apparently accords at least some special treatment to a subclass of roots whose meanings involve body positions.

LAUGHLIN's dictionary shows a total of only three dozen or so *-l-eb(al)* forms, and even fewer verbs in *-lebin*, though other coinages are clearly possible. Nominal forms in *-l-eb(al)* are also possible with roots from other than the pure P class when they allow a stative adjective in *-Vl*. (I will ignore such non-P forms here.) Thus the formal criteria in question represent an **intersection** between independent formal classes: on the one hand, root type, and on the other a derivational possibilty that crosscuts several root types, but that also partitions each into those roots that permit the derivation and those that do not. Further collocational or selectional restrictions on forms derived from these "body position" roots remain to be investigated in detail – a project that will require a skilled native Tzotzil lexicographer.[21]

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[20] The suffix is transparently derived from the stative adjective form in *-Vl* plus a more general locative/temporal nominalizer *-Vb(Vl)*. The extra *-al* suffix has to do with possession classes, not relevant to the present discussion.

[21] LAUGHLIN's current project, a writer/theatre group called *Sna Jtz'ibajom* 'House of the Writer', is likely to produce such a scholar given time and adequates resources.

5. Partitioning verbs of the body

All competent speakers of Tzotzil must be able to manage the complex semantics and morphology of these positional roots. Indeed, a large part of fluent and idiomatic speech in Zinacantán is tied to the selection of just the **right** word to capture the nuances of position for even the most prosaic objects, let alone socially charged objects like human bodies. Limiting myself to a subset of the Tzotzil roots for "sitting", I will explore two devices for specifying such nuances.

The first device involves comparing the formal possibilities for derivation for different groups of roots and their concomitant logical or expressive potentials. As described, a P root ideally produces three diagnostic stem forms. However, the "sitting" roots display both defective and augmented patterns. There is a sequence from most morphologically restricted to most developed.

The **minimal** possibility for a P root is to permit only the stative adjective form in *-Vl* with no full verb stems (in my notation, **Pa**). This morphological limitation suggests that the denoted position is by nature unconscious, or involuntary. It admits neither a causative transitive verb in *-an* which would denote an action which produces the positions as a result, nor an intransitive in *-i* which would suggest a transition into the position involving some sort of control or intention, as when something moves by its own agency. The root *koy*1 has just such a limited morphological profile, allowing only adjectival forms (along with non-diagnostic affective verb forms). It denotes a sitting position, with one's legs drawn up – the way a dog normally "sits," or perhaps a child sitting up in a tree. A woman sitting this way would be immodestly exposed (and, indeed, the root can also be used to describe a house with its frame exposed, e.g., a wattle and daub construction which has not yet been packed with mud). The morphological limitations of the root suggest appropriately the **unintentional** nature of such a position.

Next, some P roots exhibit only the stative adjective and the causative, with no inchoative (**Pan**). The position here is morphologically represented as a potential result of **external** action. For example, the root *ju*1 occurs as an adjective meaning 'seated on ground and unable to stand' (as of a drunk). It also produces a causative stem with *-an* which, significantly, only occurs as a reflexive. This is what a drunk person might do to himself: sit down on the ground and refuse to stand up again.[22]

The full set of three diagnostic forms (**Pain**) allows the expression of a range of involvement by an agent: the root can denote neutral position only (**a** form); or it can portray the position as a result of an external cause (**n** form), or as a result of self agency (**i** form). A good "sitting" root of this type is *tzun*1. As an adjective it means 'sitting still, or huddled, or at home.' It suggests the image of an elderly or sick person sitting by the door, or perhaps a rabbit crouched down hiding. As a causative, it can be appropriately used by a wedding godfather as he describes how he will install a bride and groom in their new house. (The imagery of the couplet *chotol* 'seated' // *vutz'ul* 'on bended knee' emphasizes the stability of both bride and groom's commitment to their new marriage. The root *tzun* in such a context emphasizes that the new couple will **stay at home**, that is, center

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[22] The root *ju*'1 is the single case in the group of sitting roots considered here that might arguably be assigned instead to the T rather than the P category. The root produces a transitive stem which means 'mash (with one's hand)' – typically used with something soft which releases a juice (medicinal herbs, a hot chile, even a bug you squash on your leg); the imagery of the positional use is thus reminiscent of the imagery in the American expression "smashed (i.e., very drunk)."

their activities around it.) By a metonymic trope, the transitive stem can also be used to describe, in deprecatory terms, **building** one's house -- thereby emphasizing its smallness, its suitability as a mere shelter, and so on. Finally, the intransitive stem *tzuni-* can mean both 'sit' and 'reside, stay at home,' again with a slightly deprecatory tone.[23]

Some P roots also have augmented morphological possibilities. For example, a limited number of roots allow a further intransitive stem form with the suffix *-Vj* (notated *Aj*). The common meaning of such forms, given a P root *X*, is something like "characteristic human movement in or involving position *X*". The stem **kejuj-** (from the root *kej* 'kneeling') means to "genuflect" – something one does **while kneeling.** From the root *xok'* 'seated on one's haunches, crouching' comes the verb *xok'ij-* 'to duck walk, to move around squatting.' From the root *tzub2* 'crouched low, immobile' can be produced a verb *tzubij-* which means 'crawl' or 'move in a crouch,' as when something tries to squeeze under a low barrier.

Additional derived verb stems ar also possible on some P roots. Verb stems formed with the suffix *-[k'/p']Vj*[24] (notated **V**) frequently suggest sudden or unforseen motion or change of position into or out of position *X*. Verb stems with *-tzVj* (also notated **V**) denote other special positional transformations, often metaphorical. The unmarked sitting root, *chot*, produces a stem *chotp'ij* 'sit down unexpectedly, fall on one's bottom.' The intransitive stem *chottzaj-* denotes gradually slipping into a seated position, suggesting perhaps a stiff old man who takes a long time to ease himself onto a low Zinacantec chair. The verb *kejtzaj-*, from *kej* 'kneeling,' can mean 'fall to one's knees.' It can also be used to describe a corn plant that, broken by wind, grows crooked, first horizontally and then gradually upright again, as if on bended knee.

There is one last formal complication. Many P roots allow a few forms (notated **T**) otherwise characteristic only of Transitive roots. Since by fiat I have limited the present discussion to roots which basically conform without complication to the P pattern, the intrusion of such additional stem formations with the roots under consideration is limited. In each case, however, the exceptional stem forms suggest an evolution of the meaning of the root. For example, the root *luch*1 produces a full set of positional forms with the basic meaning 'perched' – a notion that combines two elements: first, that the Figure is seated or otherwise supported on an elevated Ground; and second, that the Figure is smallish and unattached, that it figures as a mere protrusion against the Ground. Although there is no unaffixed transitive stem, exceptionally the root does allow a derived intransitive stem with the suffix *-van*, which is ordinarily only suffixed to a transitive stem *Y* to mean '*Y* persons.' *Luchvan-* means 'toss someone into the air' (for example, a bucking horse or a bull), or 'carry someone perched,'[25] thus exploiting the full image of the positional configuration implied by the root, but extending it to an action which affects its (human) Patient.

The root *len* 'sitting chubbily or stubbornly immobile' provides a different sort of

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[23] In a story about a Chamula man who was given only a tiny piece of land for his house, one of LAUGHLIN'S (1977) storytellers remarks *itzuni ti prove kulo'tik une* 'our poor Chamula settled down to live (there)'.

[24] There is a catalytic element *k'* or *p'* attached to the root, followed by a *-Vj* suffix for an intransitive stem or a *-Vn* suffix for an intransitive stem. The vowel *V* here disharmonizes with the root vowel on the dimension front/back.

[25] In retelling a scene from a children's book in which a deer lifts a boy up and carries him on its antlers, a Tzotzil speaker uses the phrase *chluchvan muyele* 'he lifts him up, perched'.

example. In addition to the normal P root forms, the root also allows a ditransitive stem *-lenbe*, where the ditransitivizing suffix *-be* implies the involvement of a third Beneficiary argument (in addition to Agent and Patient) in the action. Predicating the adjective *lenel* of something means that it is sitting directly on the ground, not budging; it may be a drunk man, or an intransigent, crying child. The ditransitive verb *-lenbe* means to give something to someone so as to cause him to be *lenel*, thus too much food or liquor, or perhaps a beating. Thus,

{11}

i- j- len-   be utel
CP-1E-seated_immobile-BEN scolding
I scolded him (and left him dumbfounded, seated on the ground).

Figure 3 illustrates how the different morphological profiles of P roots match up against schematic templates of action available in the stem forms for each sub-type.
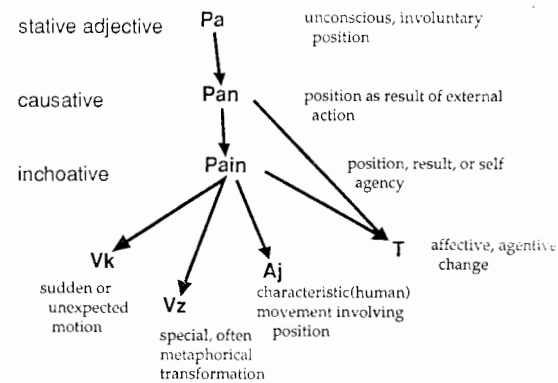

Figure 3: Morphological profiles and schematic position

Notional partitions

The listing in the Appendix suggests a second sort of possible partitioning of roots on the basis of notional semantic criteria. Semantic analyses take their character from the primitives they allow themselves, ranging from componential features to pseudo-natural metalanguages. One reason to pay special attention, in the analysis of Tzotzil verb roots, to those roots that denote configurations of the (human) body is that the body, in a partial sense, provides its own metalanguage. If the central problem of morphological coding of denotata in language is providing a digital partition of an analogue domain – breaking the variegated stream of experience into discrete items – the body provides several partial templates. It has a natural articulation, both kinetically and functionally, so that body parts segment at conceptual "joints" which are neither entirely predetermined by anatomy nor yet completely free. So, too, with the postures and attitudes of the body: human bodies are not rubber and wire models. They normally assume positions that are not only

physically possible, but natural, balanced, commodious, and socially useful. Given what human beings do with their bodies it is not surprising, following this logic, to find discrete postures like sitting, standing, and lying as lexicalized linguistic units.

Culturally variable assignment of meaning to these postures further limits their range, and colors their attribution. Thus, for example, the pairing of P roots in Zinacantec ritual couplets suggest that a least four canonical positions have specific symbolic associations: verticality (*va*) and firm rootedness (*tek'*) with responsibility; proneness (*puch'*) and being stretched out in a somewhat sagging way (*ta'*) with illness and confinement; a kneeling (*kej*) or prostrate (*pat*) position with humility and contrition; and being firmly seated on a base (*chot*) or on bended knee (*vutz'*) with social stability.

The elaboration through P roots of such a semantic domain thus gives a particularly tractable point of entry into the lexical style of a language like Tzotzil. Consider again the rough domain of sitting in the Appendix. (Standing and lying receive similar treatment.) I have assigned roots in each category to subgroups on the basis of semantic dimensions that combine anatomical specificities with apparent Zinacantec preoccupations, both conceptual and social.[26]

There are first roots which are primarily distinguished by the specific (body)part involved in supporting the body in a given position: supported on the "bottom" (*chot*), on the "knees" (*kej*), or on the "haunches" (*xok'*). If something has a "bottom" (in Tzotzil, *x-chak* 'its bottom'), and it rests stably on it, it can be said to be *chotol*. This is true not only of humans but also, for example, of bowls, cups, pots, and even of *metates* or grinding stones. The end of a *metate* a which one sits to grind on it is its *-chak* "bottom." When the stone is stored against at wall, supported on its "bottom" end, the *metate* can also said to be *chotol*. (See Figure 4 which also illustrates some other possible positional descriptors.)

Second, there is a surprisingly large class of roots which emphasize the (im)mobility of
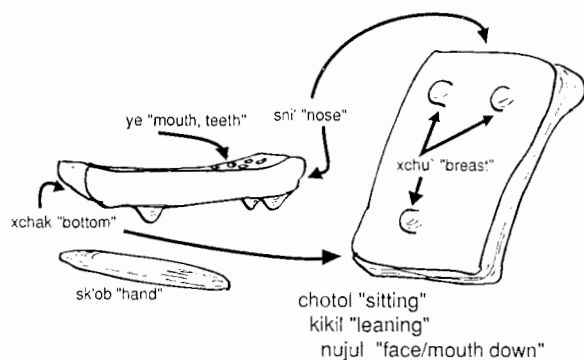

ye "mouth, teeth" sni' "nose"
xchu' "breast"
xchak "bottom"
sk'ob "hand"
chotol "sitting"
kikil "leaning"
nujul "face/mouth down"

Figure 4: A "seated" grinding stone

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[26] Notice that the structure of the ritual couplets exploits markedness relations. The first element of each pair is the semantically unmarked member, the root which denotes a more or less standard position, at least potentially unmarked for non-positional connotations. The second element is relatively more highly marked, either by virtue of denoting a more unusual position or by specifying additional features or dimensions of meaning beyond pure position. Thus, *chotol* 'seated' is contrasted with *vutz'ul* 'seated with bent knee'; *va'al* 'standing' is juxtaposed with *tek'el* 'standing firmly planted.'

the body so positioned, whether from weakness (*ju'1*), fear (*tzub2*), infirmity or drunkenness (*juch'2*).

Third, several roots emphasize oddities or marked deviations from standard positions: leaving one's legs immodestly exposed (*koy1*), or sticking out in odd ways (*tiv, petz*), or otherwise sitting incorrectly (*len, lub2*).

Fourth, roots may set special conditions not only on the anatomy of a Figure, but also on the Ground or reference domain against which the Figure and its parts are arranged. It may be a raised supporting surface (*lep*), or a precarious one (*luch1*), or perhaps a permanent "sitting" place, i.e., a place one resides (*nak*).

Finally, in addition to the roots which mark overall configurations of anatomies and grounds, other roots in this semantic class seem to depend especially on the disposition of specific anatomical parts: "bottoms" that protrude (*but*), "limbs" that dangle or bend (*chox, ke'3*), "heads" lowered or thrown back (*nij, net*), and so on. Indeed, many roots conventionally combine with specific body part words to form fixed compounds, usually derogatory: *yech xtivet yat ta ti' k'ok* 'literally, his penis is just squatting by the fire, i.e., he's lazy as a stick.' Other positional Positionals record departures from the canonical orientation of complex structured wholes: "bellies" or other protrusions or inner surfaces exposed (*jav2*), "mouths" or other cavities faced downwards (*nuj, tz'uk1*), and so on. There is no room for a full meal here, but the direction in which the Tzotzil lexicon has specialized should begin to be obvious from this initial appetizer.

6. Coda: The conflated body

The Tzotzil verbal lexicon displays a certain virtuosic preoccupation with the body. There are, of course, body part expressions which figure in everything from locatives (DE LEÓN 1991b, this volume) to non-corporeal metaphors of human propensity and psychological state (HAVILAND n.d.). However, in numerical terms, the primary symptom is the very large set of verbal roots, more than one hundred in number, which appear to involve conflations of the body: its parts, its positions, its typical attitudes. Without elaborating its details, let me sketch a hypothetical process underlying such conflation.

If we begin with the body, probably the human body, nature itself provides certain templates for how it might to partitioned into the digital counters of linguistic code. I have argued that there at least two sorts interrelated template: the articulated parts of the body, and the overall configurations of its anatomy we might call bodily postures. In both cases there is also a pervasive and inescapable social anatomy: the uses and values attached to parts and postures. Parts, once digitized into lexical forms, can themselves be further abstracted, in ways now familiar from both the literature on grammaticalization (SVOROU 1986, HEINE 1989, BOWDEN 1991) and from other processes of semantic extension or contraction (FRIEDRICH 1969, 1970), to denote abstract shape, relative position, generalized geometric relations, and also abstract function. Something similar, I suggest, can be observed with postures. These too, if encoded in lexical form, are available for semantic migration, once again in several directions. In Tzotzil one observes that lexicalized bodily postures are also generalized positions, that is, part/whole relations and configurations not limited to bodies of a single type. By means of such relations one can also lexicalize shape and orientation. By a different route, one can extend these lexical elements to the states and actions of the bodies that adopt such positions, and from there to (social) character and propensity. I illustrate the conceptual anatomy here in Figure 5.
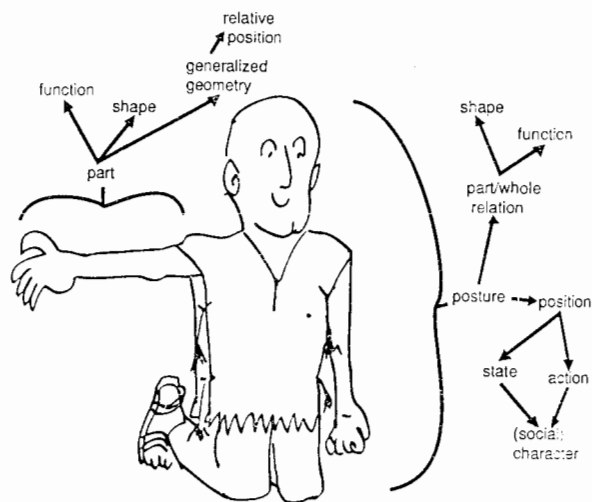
Figure 5: Lexical conflation of the body

The pattern of corporal incorporation into Tzotzil roots is clearly not fixed and immutable. The evidence from Colonial Tzotzil (Laughlin 1988), from other Tzotzil dialects, and, indeed, from neighboring Tzeltal (Berlin 1968, Brown 1992) suggests that both positional meanings and the encoding roots shift and swap from one Chiapas community to the next. For the root *chot* 'seated on the "bottom"' in modern Zinacantec Tzotzil, the Colonial friars list "crouched" as a gloss. Modern Tenejapa Tzeltal uses the same root to mean "canonical standing position for inanimate objects" (Brown 1992b) or "upright legged objects" (Berlin 1968). Considerable work remains to be done, even on the tiny lexical domain introduced here. to understand the systematic principles involved.

Moreover, delimiting the possible positional denotata of forms derived from these roots is merely the preliminary to serious work on situated meaning, whose pursuit takes us straight back to ethnography. I began with prayer, so let me end with politeness, exhortation, and scolding.

When a guest comes to a Zinacantec house, he is invariably invited to sit. "*Chotlan*, sit down," cries the host. proffering a chair and inviting his guest to relax. A self deprecating way for a Zinacantec to characterize what he is up to, in this society where life is work, is to say *li' tzunul ta jkux ko'on* 'Here I sit (idly) resting my heart.' Consider, finally what the wedding godfather says in exhortation to the new bride. once he has seated her in the house where she will live.

{12}[27]

57   mu-ja⁰-uk   xa   li   chotol ch-a-kom   ta   na-e
      NEG-it is-SBJ already ART seated ICP-2A-stay prep house-CL
      You won't just stay seated at home

[27] Godfather's exhortation. Nabenchauk. April 26, 1981.

58   mu-ja⁰-uk   xa   li⁰ xa   x-a-k'el   elav
      NEG-it is SBJ already here already ASP-2E-watch spectacle
      You won't just sit idly observing things

59   =yech xa   nox x-a-k'atin-e
      thus   already only ASP-2E-warm self-CL
      you won't just warm yourself for nothing.

60   bal   ti   chabchab ch-ba   a-kuch-ik   tal
      sufficient ART (remote) two-two ICP-go (AUX) 2E carry-PL coming
      It is sufficient that you haul back two (pieces of firewood) whenever. ...

61   =   k'u ora x-a-xokob -ik-e
          what hour ASP-2A-be free-PL-CL
      ...you have some spare time.

62   yu⁰nox
      because only
      because

63   s-talel   ti   ta   j-kuch-tik   si⁰e
      3E-coming that ICP 1E-carry-1PL firewood-CL
      it is normal for us to carry firewood.

64   s-talel   ti   ja' ch-i-ve⁰ -otik   o   ti
      3E-coming that !   ICP-1A -eat-1PL REL ART (remote)
      It is normal that we eat from our little....

65   = x-0-⁰elan   k-unen- kostumbretik vo⁰otik
      NT-3A-seem 1E-small-customs   we
      ... customs, that we have.

66   mu-ja⁰ -uk   yech chk k'u cha⁰al jkaxlan-etik
      NEG-it is-SBJ thus like what way   ladino-PL
      It is not like the Ladinos.

67   ja⁰xa   ta   j-chan-tik   jun xa   k-o⁰on   chotol-otik
      ! already ICP 1E-learn-1PL one already 1E-heart seated-1PL
      that we can learn to be happy just sitting around.

The godfather has seated the bride, but she is **not** to remain seated. She must arise early. carry the firewood by which she warms herself and cooks for her husband. She must follow Zinacantec customs: unlike the non-Indian Spanish speaking *ladinos*, comments the godfather with high Positional irony, **we** could never learn to be content just *chotol* 'seated.'

The root *chot* starts out denoting the position in which one arranges a body – one's own. or that of one's grinding stone – to sit resting on its "bottom". In the ritual language of the wedding. the root *chot* and its couplet mate *vutz'* evoke the very image of domestic stability. Here, by contrast. the seated position evoked by the root smacks of idleness. Such an expressive range. characteristic of *chot* and more than one hundred sixty other verb roots of bodily positions. shows the complex relation between action, social life. and the body crystallized in the Tzotzil lexicon.

Abbreviations in glosses

1	1st person	ICP	incompletive aspect
2	2nd person	iv	intransitive verb stem
3	3rd person	NEG	negative
A	absolutive cross-index	NT	neutral aspect

aj	adjective stem
ART	article
AUX	auxiliary
av	"affective" verb stem
BEN	benefactive, ditransitive suffix
CL	clitic
CP	completive aspect
DIR	directional clitic
E	ergative/possessive prefix

PF	perfect/resultative suffix
PL	plural
PREP	generalized preposition
PT	particle
QUOT	quotative (evidential) clitic
REL	generalized relator clitic
SBJ	subjunctive affix
SUBJ	subjunctive suffix
tv	transitive verb stem

Appendix: Zinacantec Tzotzil P roots with "positional meanings"

The following list contains roots with clear P(ositional) type morphological profiles, which in stative adjective form (with a -*Vl* suffix) mean "complex anatomy in such and such position." The root numbering system follows LAUGHLIN (1975), and the glosses are drawn both from LAUGHLIN and from my own fieldwork. Note that many roots which fall into these notional categories do not appear here because they do not fall unambiguously into the P class on formal grounds. Assignment to notional subcategories is partly arbitrary. For the verbs in the first section, "sitting," I also show the derivational root profile (in boldface), using the notation described in the text.

Sitting

1. Supporting anatomy

chot [**Pain V**], seated, sitting on "bottom"
jetz [**Pain V**], cross-legged, sitting with legs tucked under, flat to the ground
kej [**Pain Aj V**], kneeling
xok' [**Pain Aj V**], sitting on one's haunches, "hunkered"

2. mobility or immobility

tzub2 [**Pain Aj V**], crouching (cat, rabbit, person), immobile
tzum1 [**Pain**], sitting huddled, idle
juʔ [**T Pan**], seated on ground and unable to stand, sitting idly or feebly
juch'2 [**T Ii Pain V**], sitting unwilling to stand

3. Peculiarities of position

koy1 [**Pa**], sitting close to ground with legs spread apart, up
tiv [**Pain**], squatting (person), crouching (cat, rabbit), standing with bent limbs sticking upwards
lub 2 [**Pain**], setting (hen), crouched (cat, rabbit, person), low to the ground, flattened
len [**T Pain**], seated with "bottom" on the ground
petz [**T Pain V**], sitting cross-legged or with legs tucked under, anchored or rooted to the ground

4. Special configuration of "Ground"

lep [**T Pain**], seated on something elevated above the ground
luch1 [**T Pain V**], perched, protuberant (blister), on something elevated
nak [**T Pain V**], residing, dwelling, at home, seated permanently

Standing

1. Supporting anatomy

va , standing (people, pot), standing vertically, bipedally?
kot, standing (animal, furniture, machine, car, arch), on all fours, with horizontal 'back' upwards

2. mobility or immobility

vech, standing (scarecrow, person), standing unsteadily
vich2, solitary (hair, corn plant, tree), defoliated

3. Peculiarities of position

lot', huddled with arms pressed to body (person), crouched
xik'2, standing erect (person, hair, penis), with stiff limbs
kuj, bent over

4. Special configuration of "Ground"

noch', clinging to vertical surface
nux, standing close to surface (insect, snail, lizard), floating, swimming
tek', standing (plant, tree, vine, grass, etc.), planted firmly

Lying

1. Supporting anatomy

puch', lying down (person, mammal, tree trunk)
metz, lying down longish (wood, sugarcane, knife, scissors, pencil)

2. mobility or immobility

tutz', lying (corpse during wake, dog lying on stomach), prostrate (like ogn snake)
vub, lying on side (fat pig, drunk), fat and unable to get up

3. Peculiarities of position

ʔech, lying on back (drunk) or side, unable to get up
pat, sitting bowed over, lying face down, setting (hen),
taʔ, lying stretched out, immobile /face up, on side/

Specific (body) part

1. "bottom"

but, squatting or lying with rear sticking out, lying on
tob2, lying on side (cow, drunk, pot, water jug),

2. Legs, lower limbs

chav, standing on long legs (crab, daddy longlegs, harp),
chex, lying on ground (leafy branches), lying (palm frond),
chox, dangling (legs)
keʔ, with one leg bent at knee (person, mule)
lit', standing on tip of hoof or with heel of one foot

3. "head"

chim, with bowed head
chin1, sitting /in sun/, standing with lowered head (cow),
hut', crouched with head bowed (person, cat, rabbit),
net, tilted (head of person with tumpline who turns to),
nij, with head bowed, obedient (girl), lowered (eyelids)
tz'ij, drooping listlessly /sick/, bending over thinking

4. "belly" etc.

ven, standing with protruding tummy (child, puppy)

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Orientation

1. Relevant to inherent or normal orientation

jav2, face up, on one's back, interior surface exposed
tz'e, on one's side, leaning (sitting person), cocking
nuj, face down (drunk), upside down (pot), right side up, interior surface or opening face down
tz'uk1, upside down, with head down (fallen drunk)

2. Relative to Ground

k'at1, lying across, hanging over, crosswise
kik2, leaning against (standing person, tree, firewood), non vertical

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