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Locational Postpositions in Khakas: A Cognitive Perspective

1. Introduction

When learning a new language, native speakers of English frequently filter their understanding of the target language through English. This is particularly true with translating lexical items, where the danger lies in the target language providing mere synonyms of words from the learner's native tongue, and thereby creating a one to one correspondence between a given word in said language and an English word. Any language learned in such a manner, however, is doomed to be little more than a revenant, merely aping the rich conceptualization inherent to every tongue. This difference is evident in Khakas postpositions.

All languages must contend with the concept of spatial relationships and how to convey them. Often this work is done through the use of adpositions. In English, we have static prepositions marking such spatial relations such as *in*, *on*, *behind*, *above* which state the relationship in terms of position relative to an object, as well as concepts such as Contact, Distance, and so forth. Other English prepositions encode information of a more dynamic nature, such as *across*, *through*, and *into*. Each of these entails movement along a distinct trajectory or pathway, and thus each may be reduced to a stick figure illustration of that simple movement. The primary means of encoding such spatial relations in Khakas is the use of the five postpositions examined below, which relate to trajectory oriented *image schemas*. This prompts the questions: what function(s) do each serve, and what image schemas do they activate, and in turn, what insights into Khakas culture do they provide? Or to rephrase it, what additional information do they give, above and beyond *over* and *through*? In the following, through an analysis of examples drawn from Khakas language newspapers, I will delineate the different image schemas activated for each postposition, and explain the distribution of image schemas amongst the five postpositions.

2. Background

Cognitive linguistics starts from the premise that the nature of our bodies restricts the way we can experience the world around us (see Johnson, 1987; Lakoff & Johnson, 1999; Gibbs, 2005; Johnson, 2007; Johnson, 2017). Beginning in infancy, our initial experiences allow us to develop simple concepts of spatial relations. In turn, our concepts provide basic structures which can then be combined to form more complex concepts, and which are the basis for the linguistic prompts we know as words. These simple concepts of spatial relations constitute an *image schema*. An image schema, as defined by Mark Johnson, “is a dynamic pattern that functions somewhat like the abstract structure of an image, and thereby connects up a vast range of different experiences that manifest this same recurring structure.” (Johnson, 1987, p. 2) He furthermore adds that “the schema proper is not a concrete rich image or mental picture; rather, it is a more abstract pattern that can be manifested in rich images, perceptions, and events.” (*ibid*) As complexity increases, a single word can assume additional but related meanings – a feature known as polysemy.

2.1. Embodiment

A substantial body of work has grown around the concept of embodiment (Johnson, 1987. Lakoff & Johnson, 1999. Gibbs, 2005. Johnson, 2007. Johnson, 2017). The central idea is that onwards from our birth we interact with the world through our bodies, and the resulting experiences, particularly in regards to repeating phenomena, shape the concepts that allow for thought. Language is built upon aggregates of concepts, and fine-tuned through further experience. These processes are not confined to a single module of the brain, but rather incorporate most neural circuitry (Lakoff and Johnson, 1999). Furthermore, embodiment dispenses with the Cartesian separation of the body and the mind. This is in sharp contrast to previous theories, which regarded language as modular and genetically unique to humans, or posited a preexisting internal language, “mentalese” if you will, which is then translated into the local language to which one first encounters (*ibid*). Contemporary neuroscience supports the theory of embodiment. Thus as former pastoralist nomads, the Khakas people’s experience with space/time may differ from that of more sedentary Europeans, and this difference may be encoded in their language.

2.2. Image Schemas

As experience accretes to the body/mind, spatial and temporal relations develop which may be encoded as an image schema. An image schema is a barebones diagrammed concept of a spatial experience, which evokes a particular phenomenon or series of phenomena, as elaborated in Lakoff (1987), Johnson (1987), and Gibbs & Colston (1995). For example, a line segment with points at the beginning and terminus, coupled with an arrow showing the direction of movement might represent the simple concept of movement along a pathway. Image schemas can then be further elaborated or blended with others to model complex spatial. Initially there may be a one to one correspondence between a given word and the image schema it prompts, but over time similar concepts and their attendant image schemas may aggregate to the same word, giving that word multiple but related senses. These may involve similar spatial relations, but often include leaps into the abstract, as *through* functions in *they went through the tunnel* and *they were through with the project*. Both examples encode a transition from point A to a point B, but each describes a different experience. This results in polysemy - related meanings designated by the same word.

2.3. Polysemy

Briefly stated, polysemy refers to the different but related senses of a given word (Lakoff, 1987. Tyler & Evens, 2001. Tyler & Evens, 2003). For example, *our side won the match* and *she painted the side of the house* display two different meanings of *side*, not only in terms of abstract vs. concrete, but also in the image schemas they activate – a division of opposing units (teams) and one surface of an object respectively. Thus a native speaker will understand these different senses because they have learned the image schemas concurrently, and understand what Wittgenstein would term the family resemblances between the two usages, which is to say that sense of relatedness which allows us to conceptualize blackjack, checkers, baseball, and computer games as games (Wittgenstein, 2009). The polysemy inherent to a given word will form a network of senses, with a primary sense in the center, and branches on which hang clusters of similar senses. But while image schemas are fairly universal, their distribution and activation by lexical items is culturally specific. Such is the case with Khakas.

2.4. Adpositions & Cognitive Linguistics

The first significant examination of the English word *over* from a cognitive linguistics perspective, is based on the work of Claudia Brugman, and refined by Brugman and George Lakoff (1987). Their analysis shows that polysemous uses of *over* are not arbitrary, but rather linked through image schema relations. The authors expanded on their granular analysis (Brugman & Lakoff, 2006), arguing that a “network mode of storage is cognitively real” and “allows for a maximum of shared, and otherwise related, information between the senses”, which is to say that the network of related senses within a given category leads to more efficient comprehension. Furthermore, the authors state that these relations between the senses are “principled, systematic, and recurrent”. While the significance of Brugman and Lakoff’s work cannot be overstated, it results in an unwieldy and overly nuanced collection of senses.

Several attempts have been made to reel in this rampant polysemy, including the neuropsychological approach of Paul Deane (2005), which places emphasis on a central prototype and a correlating image schema, arguing that the polysemous meanings are more closely related than previously determined. Deane substitutes kinetic image sequences for image schemas, essentially breaking down the latter into its components or stages in their relation to the landmark and trajector, clusters of which may then be used to determine prototypes. These components can be likened to a toy set of bricks, representing Trajectors and Landmarks, which can be assembled to represent a given concept. However, this just rearranges the problem.

Andrea Tyler and Vyvyan Evens (2001. 2003.) provide the strongest solution to the problem thus far. Again by analyzing the preposition *over*, and other English prepositions, the authors recast the prototypical and central meaning as the proto-scene, or primary sense. The proto-scene is posited as interacting with other cognitive principals to create other senses and forming a motivated network. As to what qualifies as an individual sense, the authors provide two terse criteria:

First, for a sense to count as distinct, it must contain additional meaning not apparent in any other senses associated with a particular form, that is, a distinct sense must involve non-spatial meaning or a different configuration between the TR an LM than found in the proto-scene. Second, there must be instances of the sense that are context independent, that is, in which the distinct sense could not be inferred from another sense and the context in which it occurs. (Tyler & Evens 2003, p 42-43).

Note that in the above, TR signifies the trajector, an object that moves in relation to a fixed object, the landmark (LM).

In the following, this last principle may be applied with less rigor as the validity of a given item may not be determined on the basis of one or two instances.

Tyler and Evens (2003) additionally provide guidelines for determining the primary sense. Drawing on the work of Roland Langacker, they suggest that, while no one piece of evidence may justify the bestowing of primary sense on a given sense, a convergence of linguistic and empirical evidence may highlight the primacy of a given sense. The criteria Tyler and Evens suggest: “(1)earliest attested meaning, (2)predominance in the semantic network, (3) use in composite forms (Langacker, 1987), (4) relations to other spatial particles, and (5) grammatical predictions (Langacker, 1987).” (Tyler & Evens, 2003). It is worth stating that Tyler and Evens acknowledge that in some instances, the researcher’s subjective intuition plays a factor in teasing out a distinct sense. In contrast to Brugman and Lakoff, Tyler and Evans delineate just fifteen distinct senses of *over* (*ibid*).

In regards to an analysis of Khakas postpositions in terms of polysemy, the work of Ebru Türker (2013) is particularly germane, in that she examines the Korean language, which some linguists posit as related to the Altaic languages. She discusses the related Korean postpositions *ey* and *eyse* by means of their various senses, beginning with the central sense and expanding outward. Türker’s work provides a simple model for comparing similar postpositions by means of polysemy and radial networks. Furthermore, her examples of polysemy networks offer the closest parallels to Khakas in terms of language families.

2.5.The Khakas Language

Khakas is a Turkic language indigenous to southern Siberia, and now primarily spoken in the Republic of Khakassia. Khakas is an agglutinative, SOV language in the Altaic branch of the Uralic-Altaic language family. The Khakas people have historically been nomadic pastoralists until forced assimilation by Russian colonists. They are culturally and linguistically related to the Tuvan people and Altaian people whose own republics border Khakassia on the south and west respectively. Very little information on Khakas is available in English, the notable exception is the idiosyncratic short descriptive text *Xakas* by Gregory Anderson (1998). It should be noted that the Khakas people comprise only approximately 11% of the population within their eponymous republic, and the UNESCO *Atlas of the World's Languages in Danger* (2010) lists Khakas as definitely endangered, with just 52,217 native speakers.

3.Methodology

The assembled data contains 29 examples of the postpositions in question, the first 25 of which were culled from the pages of *Khakas Chiri*, the weekly Khakas language newspaper. The final four additional sentences were provided by a native speaker. It should be noted that the newspaper examples make use of the literary variant of the language, a somewhat artificial creation derived from blending the two dominant dialects at the time of its genesis; Kachin and Sagai. The remaining four examples are in the Sagai dialect, and were solicited by primarily non-verbal means, through the use of pictures, to avoid conceptual contamination by another language (Russian).

Furthermore, every effort has been made to remove English biases from the tools of analysis to allow the Khakas postpositions to tell their own tale. As trajectories seem to be the unifying principle amongst the postpositions in question, no meaning is projected on them within the glosses, rather they should be seen as simple lines of force. Instead they are indicated by the neutral PSTP.TR. in the glosses. However, a choice did have to be made in the free translations, often where more than one English term seemed appropriate. All glosses/translations are by the author.

Finally, Tyler & Evan’s (2001,2003) criteria are used as a guiding principal for determining the various senses of a given word, but subjective judgements have also played a role. This, of course, raises the danger of contamination by English language specific conceptualizations, but every effort has been made to minimalize this. As a safeguard to integrity, my native informants have kindly given their own opinion as to the viability of a given sense. This has been the deciding criteria.

4.Analysis

The following examines the Khakas spatial postpositions *pastyra*, *kizïre*, *azyra*, *tobyra*, and *ötïre*. Before diving into each individual Khakas postposition an overview of the process should prove beneficial. Each example provides the original Khakas sentence, a gloss, and a potentially deceptive free translation. It should be noted that example numbers refer to the data collection as a whole. To demonstrate this, the following item (1), taken from the newspaper *Khakas Chiri*, clearly illustrates the trajectorial differences at work in Khakas postpositions – it also contains the potential pitfalls related to an English bias:

Аннаң андар	парчам.	Пөзік тағлар	азыра ,	чалбах суғлар
Annang andar	parcham.	Pöziĭk taghlar	azyra ,	chalbax sughlar
From	to:there	go.PRS.1.SG. high	PSTP.TR ,	wide river.PL

кизіре, халын тайғалар **тобыра**.

kizïre, халын taighalar **tobyra**.

PSTP.TR, thick taiga.PL **PSTP.TR**.

I wander. Over high mountains, across wide rivers, through thick taiga (forest).

The free translation in example 1 shows how easy it is to assign a one for one relation between Khakas and English, as I have done. Still, there is a certain interchangeability in the English terms: *through the mountains*, *across the taiga*, etc., although this may trigger slightly different image schemas. The same basic principle is inherent to Khakas, although the inventory of image schemas differs. Each of the following postpositions activates a *source*, *path*, *goal* image schema, showing movement from a beginning point to an end point, and following a specific route. However, each image schema profiles a given feature while minimizing others, or adds

additional elements, or both. With that in mind, we turn to an elaboration of each individual postposition.

4.1.Pastyra

There are 9 instances of *pastyra* in the data, which can loosely be translated as *through*, and is related to the verb root *pastyr*, which has the following meanings: 1. to go by stepping/striding 2. To press in, to crush/squeeze (inwards) 3. To compel, to make someone/something do something. Overall, *pastyra* can be characterized as being concerned with transmission of a substance or concept through a conduit/pathway. The initial and terminating points are given emphasis over the pathway itself. Interestingly, only one example (2) is used in describing a concrete action:

Анаң, телевизор көріп, чірчеденң трубкачах **пастыра** хайдағ- да
Anang, televizor körip, chırchedeng trubkazhax **pastyra** xaidagh – da
Then, television watch.V, tea:cup.ABL tube.DIM(straw) **PSTP.TR** some:kind:of

сок ізіп одырча.
sok ĭzıp odyrcha.
juice drink.V sit.PRS.3.SG

Then, watching television, sipping juice **through** a straw from a cup.

We can call this the **trajectory sense**. See Figure 1.

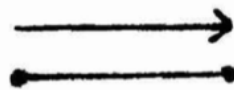


Figure 1.

In this instance, the image schema indexes a straight pathway from a beginning point to a terminus. In other words, it is the movement from the *source* to the *goal* that is profiled, the trajectory acting as a conduit between the starting and ending points. Contact with the pathway does not seem to be a factor, and the trajectory is perceived as a straight line. Despite

the paucity of concrete instances of *pastyra*, and the absence of historical records, it would seem most likely that this is the central meaning or protoscene for the term. Given the lack of historical information and no compound words incorporating *pastyra*, there is little to go on in making this designation via Tyler and Evens' criteria. Thus, this conclusion is in part derived from an examination of the more abstract senses, as well as the fact that concepts begin as embodied, and therefore concrete.

Two branches extend from the central meaning. Most likely there are more outside the scope of the data. The first extends the linear pathway into the abstract, as in example 3:

Ол	пос	чиріне	тоозылбас-парбас	хынызын, чонына
Ol	pos	chirine	toozylbas-parbas	хунузун, chonyна
He/she	oneself	land.DAT	endless	love.POS., people.POS.DAT

паарсазын	пасхан	тоғыстары	пастыра	читірген.
paarsazyn	pasxan	toghystary	pastyra	chitirgen.
affection.POS	write.PST(ADJ)	work.PL.POS	PSTP.TR	bring:to.PST

His endless love for his own land, affection for his people he passed on **through** written works.

Here, in the **abstract trajectory sense** (see figure 2), the writer's works act as the pathway to convey his affection for his people. Notice that the schema retains the primary Source, Path, Goal structure of the central sense. This metaphorical extension operates by means of the conduit metaphor which conceives of communication functioning like a parcel through the post, in that meaning is packed into words, which are sent through the conduit to the receiver who in turn unpacks/understands them. That conduit can be seen as a straight line, *ergo* the author's communication is direct.

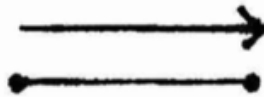


Figure 2.

The next sense in the network becomes more diffuse, as in the following example (4):

Їдөк орта сағыс хакас тіліне культура **пастыра** үгредерге.

Їdök orta saghys Khakas tĩĩne cultura **pastyra** ügrederge.

Also correct idea Khakas tongue.GEN.? culture **PSTP.TR** study.INF.

Also, the right idea is to study the Khakas language **through** culture.

Here the conduit remains, but now the trajectory widens in order to travel across the expansive domain of culture – the weft of language across the warp of culture. It can be called the **diffused trajectory sense, provisional** (see figure 3). While the image schema has a single source, multiple paths are added, which lead to multiple manifestations of the diffused goal. Alternatively, it could be argued that this image schema should take the form of a winding path, but this loses the idea of culture being saturated with language. It might be objected that this sense, and a few of the following, violate Tyler and Evens' principle which states that a sense must potentially be context independent, but given the paucity of the data this is difficult to determine (2003).

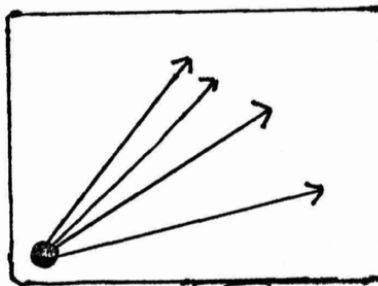


Figure 3

That configuration is then extended to create a network with connecting nodes – a single *source* develops multiple *paths* leading to multiple *goals*, as in the above, but each *goal* can

become a *source* for subsequent *goals* to create a network. I would argue that this is the sense evoked by the use of *pastyra* in conjunction with the internet, as in example 5:

Амды үгретчилерге паза үgrençилерге Интернет **пастыра** писательнің
 Amdy ügretchilerge paza ügrençilerge Internet **pastyra** pisatelning
 Now teacher.PL.DAT and student.PL.DAT internet **PSTP.TR** writer.GEN

тоғызынаң чағын танызып аларға чарир.
 toghyzynang chaghyn tanyzyp alargha charir.

work.POS.INST near become:acquanted:with.V take.INF may.

Now teachers and students may become acquainted with the writer's works **through** the internet.

This may be called the *network trajectory sense, provisional* (see Figure 4).

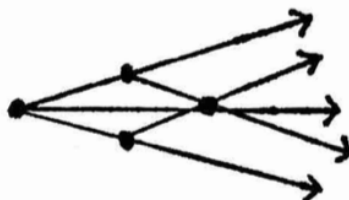


Figure 4.

In this sense the TR is funneled through multiple intersecting paths across the LM. Also of interest is this particular example veers toward the concrete as the internet is an actual infrastructure.

The radial structure for *pastyra* may be seen in figure 5.

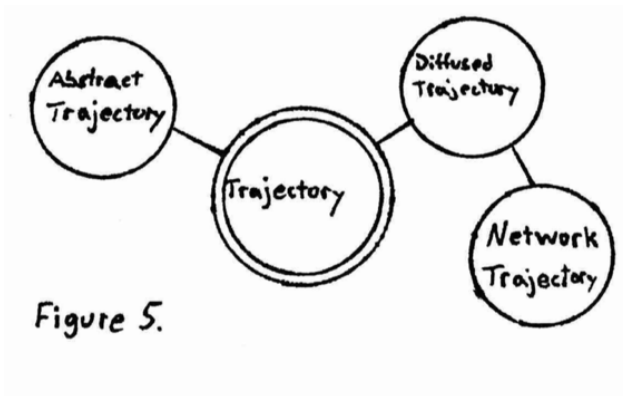


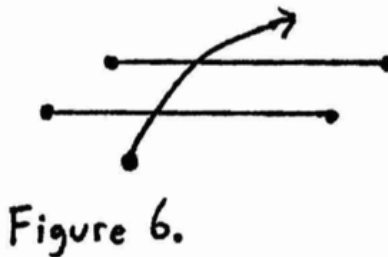
Figure 5.

4.2.Kizire

In contrast to *pastyra*, *kizire* does emphasize the *path*, rather than the movement from the *source* to the *goal*. Not surprisingly, it is related to the verb root *kizir*, which has the single concrete meaning of *to cross*. Furthermore, the line segment constituting the path is conceived as being fundamentally different compared to what precedes and follows it. The *path* is a bounded region of space. As it is the pathway which profiled, that which moves along the pathway is spatially distinct, even when there is direct contact. Thus the contour of the pathway becomes highlighted and takes precedence over the TR, while the LM acts as a boundary which distinguishes the Source from the Goal. This is in the next example (6):

СуҒ	кизире	паза халған.
Sugh	kizire	paза xalghan.
River	PSTP.TR and	stay.PST.3.SG
He/she went across the river and stayed.		

This usage, as with 1 above, constitute the protoscene for this postposition. As is the case with *pastyra*, there is no historical evidence available to justify or nullify this claim. Neither are there any compounds words of which it forms a part. However, the correlation between this adposition and the verb root suggest this is the central meaning. We may call it the *pathway sense* (see Figure 6).



In both examples, neither the starting point or terminus is explicitly mentioned – it is the pathway which is essential. The pathway is further highlighted in the first sense of the first branch, as in the following (7):

Чол **кизіре** тартылған чаламаны кизер үлүс Виктор
 Chol **kizire** tartylghan chalamany kizer ülüs Victor
 Road **PSTP.TR** tightly:stretched.PST ribbon cut.GER portion/lot/fate Victor

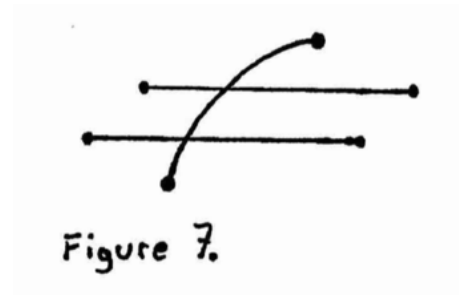
Зиминге пирілген.

Ziminge pirilgen.

Zimin allotted/given:out.REF.PST

The honor of cutting the ribbon stretched out **across** the road was given to Victor Zimin.

Here the trajectory is seemingly frozen, or rather the TR's movement has occurred in the past when the ribbon was actually put in place. The TR creates the Path. What is important is that the pathway is now static, and any implied motion is fictive. It is no longer a pathway as such, but rather a thing, yet it entirely fills up a potential pathway. Thus we may call it the **pathway as object sense** (see figure 7).



The pathway, in the next branch, becomes semi-abstract in that it is the speaker's line of vision which forms the trajectory. Hence (8):

Көрзем, сах ол туста ырах ниместе чииттер чол **кизіре**

Körzem, sax ol tusta yrah nimeste chitter chol **kizire**

See.COND.1 time 3.SG.PN time.LOC far not.DAT youth.PL road **PSTP.TR**

хайдар-да мазңырап парирлар.

xaidar-da mazngyrap parirlar.

to:somewhere hurry.V go.FUT.3.PL

At this very moment I see young people not far off **across** the road, going somewhere in a hurry.

Here the dynamic sense of the central meaning, movement along a pathway, takes the form of the speaker's gaze, which provides the movement¹. The speaker's gaze (TR) travels the path towards the goal, which is on the opposite side of the road (LM), creating the **abstract pathway sense** (see figure 8). Here the TR as gaze is active, and what is seen (the Goal) is emphasized.

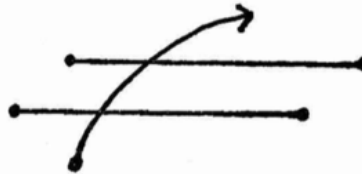


Figure 8.

This semi-abstract trajectory of vision can be applied to the second branch as well, as in the following (25):

Пу кўннерде Катанов аалдаң тоғыр чол кизіре хыра тоғыстары
Pu künnerde Katanov aaldang toghyr chol kizire хыра toghystary
This day.PL.LOC Katanov village.ABL opposite road PSTP.TR plough work.PL.POS

парча.

parcha.

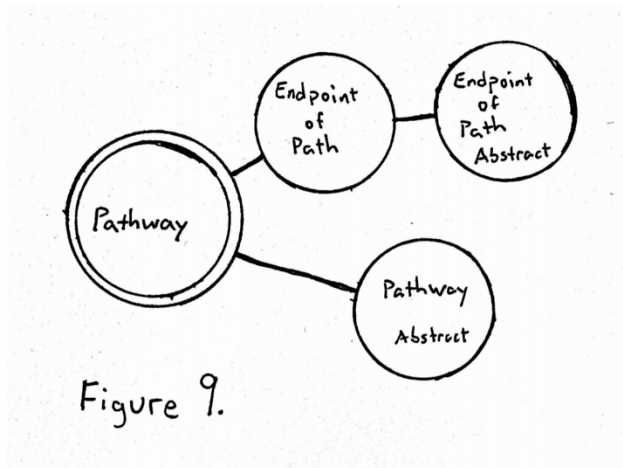
is.PRS.1.SG.

In these days, **across** the road, opposite from Katanov village, the work of ploughing goes on.

As ploughing is a progressive process, carried on over at least several days, this sense stems from the static sense of the first branch. The speaker is not continuously in sight of the work done, and the sense becomes locational. In a sense, the pathway participates with the figure in relationship to the ground. Thus we have the **endpoint of path sense** (as in figure 7, but

¹ It should be noted that one of the three native speakers reviewing my analysis stated that in this instance the postposition acted like a verb, giving the alternative reading of *young people crossing the road*. I am provisionally maintaining the above as the following sense strengthens this reading.

abstract). It should be noted that the trajectory of *kizire* adheres more or less to a straight line. The radial network may be seen in figure 9.



4.3. Azyra

Azyra, on the other hand is concerned with the contour of the trajectory, particularly in terms of height, and the causes of said contours. Thus *azyra* is used when the LM has a certain degree of verticality. *Azyra* is related to the verb root *azyra*, which means both to carry/transfer and to separate/disconnect. The fact that the direction along the trajectory is subordinate to the trajectory itself, as the acts of transferring and separating, helps prove the protoscene given below. In addition, the verb root *azyra* means to eat, an act involving a distinct vertical trajectory. Thus the sense in the next example (9) is the strongest candidate for the central meaning:

Халғаннарнын	ойраттар	Сойан тағлары	азыра
Xalghannaryn	oirattar	Soyan taghlary	azyra
RemainingPL.GEN	Oirat.PL	Sayan Mountain.PL.POS	PSTP.TR

чалға	сүр	парыбыстыр.
chalgha	sür	parybystyr.
low:wage:hired:labor.DAT form go.CNT.PST.US		

The remaining Oirats were taken as slaves **over** the Sayan mountains.

The incline, apex, and decline of the pathway comprise the primary features of *azyra*. Movement and verticality are profiled, contact with the path itself is not. In terms of the

figure/ground relationship, the ground must exhibit a vertical contour which peaks between the beginning and end points. We might call this the *vertical trajectory sense* (see figure 10).



Figure 10.

The emphasis shifts to what necessitates that contour, in terms of an obstacle, in the first branch, and the following example (10) illustrates its first node:

Олғаннар сиден **азыра** атых парыбысханнар.

Olghannar ciden **azyra** atyx parybysxannar.

Child.PL fence **PSTP.TR** horselike go.PROG.PST.3.PL

The children jumped **over** the fence.

Here the fence is conceived as an obstacle to be overcome, much to the children's delight. The nature of the obstacle demands a peaked trajectory. Here the children's jumps constitute the TR and the fence is the LM, which acts as both boundary and obstacle. This then is the *obstacle sense, provisional* (see figure 11). This sense is provisional due to lack of data. However, should Khakas allow for metaphorical expressions such as "get over it", presumably it would be grounded in this sense.



Figure 11.

One other sense stems from the obstacle sense, to create a purely abstract usage, as in (11):

Ачырғастығ, че чарғы чарадиинаң **азыра** алтап полбассың.

Achyrgastygh, che charghy charadiinang **azyra** altap polbassyng

Annoying, but court decision.ABL **PSTP.TR** step:over.V be.NEG.2.SG

It's frustrating, but **through** the court decision (it) cannot be **overcome**. Here the image schema adopts that of a vertical obstacle, but in the abstract (the court decision), hence the **abstract obstacle sense** (see figure 12). This use is an extension the previous concrete senses, indexing both the length of the path (here perceived temporally) and the LM as obstacle. The contours of this trajectory resemble more the mountain pathway schema, given the nature of the courts, with the time involved in judicial processes spatialized.

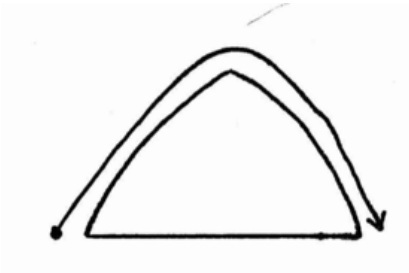


Figure 12.

For the radial network of *azyra*, see figure 13.

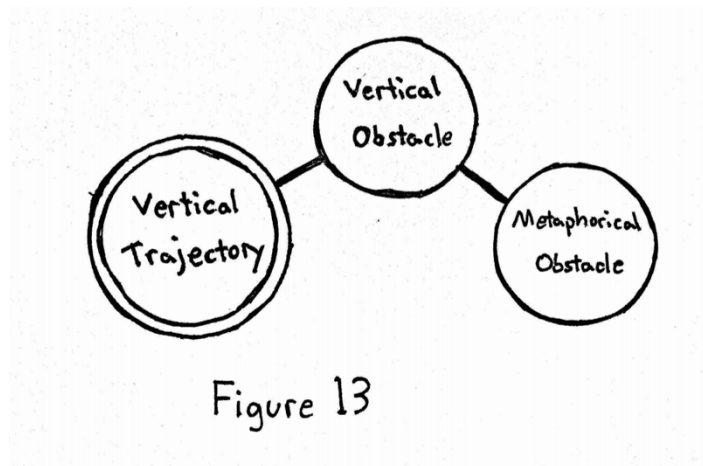


Figure 13

4.4. Tobbyra

Negotiating an obstacle defines the use of *tobbyra* as well, but *sans* peaked contour. The related verb root is *tobyr*, which means to pass through a dense landscape/substance such as tall grass or taiga. Thus in the concrete sense, the LM is a three dimensional mass noun, such as taiga in example 1 (above), or a snowstorm in the following (12):

Кирек полза сағба идібіс – арғыстарың сах андох халын

Kirek polza caghba idibis – arghystaryng sax andox xalyn

Necessary be.COND notify do.IMP – friend.PL.POS time such thick

пораан **тобыра** чиде түзерлер.

Poraan **tobyra** chide tüzerler.

snowstorm **PSTP.TR** reach go/come:down.FUT

If necessary let me know – in such times friends will go **through** thick snowstorms.

This is the central meaning for *tobyra*, which we may call the *penetrating a mass obstacle sense* (see figure 14), and which is confirmed by the verb root and in the absence of historical data. As the obstacle is conceived as a mass, the *path* now acts as a container holding that mass. It is important to remember that the goal itself is the overcoming of the obstacle on the pathway.

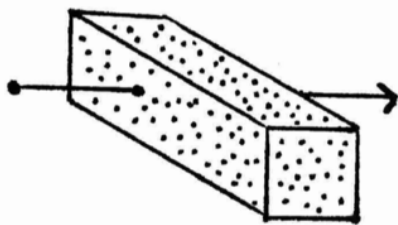


Figure 14.

If we apply the LIFE IS A JOURNEY metaphor, we come to the abstract sense of example 8, which shares the same image schema:

Паза прай чуртазым **тобыра** ол тузымзар хайда ачырғанып,

Paza prai chyrtazym **tobyra** ol tuzymzar xaida achyrghanyp,

And all life.POS.1.SG **PSTP.TR** 3.SG.PN time.1.SG.PL where regret,

хайда, тізең, хайхап көрчем.

xaida, tizeng, xaixap körchem.

where, but astonish.V see.PRS.1.SG.

And **through** all of my life I see it's in my times where regret is, where, rather astonishment is.

Life, so conceived, is filled with a mass of events, through which a traveler passes through from birth to death. The pathway is maintained, and profiled, with *tobyra*, when it incorporates a mass obstacle. For both senses the image schema is the same, only the deployment is changed. The radial structure is quite simple, and can be conceived without the aid of a figure.

4.5.Ötire

Analysis of *ötire* is limited as only two similar examples are to be found in the data. Both examples are related to boundaries, but unlike *azyra*, they are primarily concerned with the transition along the pathway between the two portions divided by the boundary. Thus:

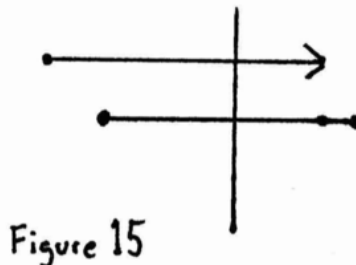
Közenek **ötipe** учуғыбысхан.

Közenek **ötire** uchyghybyshan.

Window **PSTP.TR** fly.PROG/PFV.PST.3.SG

He/she flew **through** the window.

Here the emphasis is on boundary between two segments on the path – the first segment includes the Source while the second contains the Goal. This we can call the **transitional sense** (see figure 15) as the movement must completely penetrate the barrier comprised of the boundary. The mass, or lack thereof, of the boundary (LM) is not important. It should be noted that the related verb root is *ötir*, meaning both *to leak/flow*, and *to pass from one place to another*. Both verb root meanings suggest this sense as the protoscene, regardless of a lack of competition. It seems reasonable to posit a metaphorical usage as well for *ötire*.



The following table summarizes the primary sense of each postposition, the nature of the LM, and the unique features which it profiles:

Postposition	Primary sense	LM	Profiles...
pastyra	trajectory	source/goal	movement along pathway
kizire	pathway	source/goal	static pathway
azyra	vertical trajectory	vertical obstacle	vertical obstacle and movement along pathway
tobyra	penetrating a mass obstacle	substance, mass noun	mass/density of obstacle
ötire	transition	source/goal	boundary separating source from goal

5. Discussion

As an until relatively recent nomadic people, it seems likely that the Khakas may have differing conceptions of space/time, but the scant data restricts exploration of this avenue of inquiry. Still, some elements stand out. Certainly more research is required. That said, the above examination leaves us far from empty handed, as the analysis of Khakas postpositions creates a space to test differing approaches as to what counts as a distinct sense of a given word². In considering methodology, it becomes apparent that even with minimal data the criteria outlined by Tyler and Evens is more agile in dealing with polysemy. Lakoff's criteria does not seem to differentiate between the LM and the TR in terms of salience. Consider the following to examples taken from *Women, Fire, and Dangerous Things* (421):

5.1. The bird flew over the wall – Schema 1.X.NC

5.2. The plane flew over the hill. – Schema 1.VX.NC

² However, before plunging into that matter, it is worth noting that my native Khakas speaking informants confirmed the accuracy of each sense provided for each postposition, as well as the attendant image schemas. While this seems to put things on the right track, a word of caution is appropriate here, as there are several potential areas of discrepancy. First off, three native speakers are not enough upon which to stake any claims. Furthermore, one informant is a Beltir dialect speaker and the examples, coming as they do from newspapers, are in the literary variant of Khakas, which was artificially created by combining elements of the Kachin and Sagai dialects. This informant is fluent in English, which bears the potential to contaminate the deployment of the various senses in question. The other informants are Sagai.

According to Lakoff, each of these two instances of *over* is justified as a unique sense within the network. The feature which differentiates the two being the *verticality* (V) of the hill, the components of *extension* (X) and *no contact* (NC) being the same. In a sentence such as *the cat jumped over the wall*, verticality is a key element, but it has no relevance in the two example sentences. By this logic, a plane making a flight from Oakland, CA. to New York City would swap out senses during the course of the flight in relation to the terrain below, regardless of maintaining a steady altitude throughout. It is thus not surprising that Brugman, as referenced by Lakoff, found close to one hundred different uses for *over* (Lakoff, 418).

This problem is addressed in Tyler and Evens (2003). The authors state that to count as a distinct sense must exhibit added meaning in terms of non-spatial relations or a configuration between the LM and TR distinct from the protoscene. Application of this principle greatly reduces the number of senses within a network. However, at times they apply their criteria in a somewhat draconian fashion. Thus Tyler and Evens consider the two following sentences as indexing the same sense/image schema:

5.3. The cat jumped over the wall.

5.4. The tree branch extended over the wall.

Tyler and Evens recognize that the motion of the cat suggests a distinct sense, but they reject it thusly:

However, we suggest that the conclusion that sentences [5.3.] and [5.4] represent two distinct senses is erroneous. Rather than representing spatial particles as carrying detailed information about each scene being described, we argue that they prompt for schematic conceptualizations (a proto-scene and other distinct senses instantiated in semantic memory) which are interpreted (or filled in) within the particular contexts in which they occur (recall our discussion of lexical forms being prompts for encyclopedic knowledge in chapter 1).(70)

The discussion referred to above quite rightly outlines how a speaker's own encyclopedic knowledge is drawn upon to enrich an otherwise impoverished word. With that in mind, a stronger argument can be made for such encyclopedic knowledge supporting motion as a salient feature.

Furthermore, Tyler and Evens' criteria in regards to the protoscene displays an inadvertent language bias as can be seen in terms of the use of compounds. Khakas, and presumably other languages, do not use postpositions to form compound words, in essence eliminating one of the five criteria for determining the central meaning when analyzing such languages. However, for Khakas and other languages verb roots may operate as an alternative test for determining the protoscene. In Khakas, verb roots are semantically very close to adpositions, in that a root can also function as a postposition and vice-versa. This is not so in English. Thus English may have *over* and *through*, but one cannot *over* or *through* something, that is to say use them as verbs. But they do work as verbs in compounded forms in English, as *to overcome* or *to breakthrough*. Clearly there is a relationship between compounds and verbs that plays out differently in different languages, something which can only be teased out through the analysis of languages such as Khakas.

However, in using Tyler and Evan's criteria we can certain distinguishing features in common amongst the postpositions examined. In both *azyra* and *tobyra*, the nature of the LM is highlighted, and indeed determines when these postpositions are used. With the exception of *kizire*, with its static pathway, all of the postpositions profile the movement of the TR. Contact between the TR and the pathway is not profiled and does not seem to be a relevant element.

6. Conclusion

While much work remains to be done, with the scanty data at hand it has still been possible to tease out polysemy in Khakas postpositions, and the barebones of the radial networks they inhabit. This in turn opens a small window onto the conceptual processes operating within Khakas, allowing for a comparison with other world languages and cultures. In practical terms, such findings may be utilized to facilitate the acquisition of English by Khakas students, bypassing the filter of Russian, and hopefully help English speaking students of Khakas. Acquiring ample data is the next step in this ongoing process.

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