



Image schematic analysis of Bangla postpositions

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ABSTRACT. Spatial relationships are fundamental in shaping our interactions with the physical world. They also play a significant role in our construal of abstract ideas in terms of space. In order to understand this transfer of ideas from concrete to abstract space, image schematic approach is applied to analyze role of adpositions in a number of languages. This paper attempts to analyze conceptualization of postpositions in Bangla using image schematic approach. In Bangla, nominal postpositions are derived by suffixing locative suffix *-e/* with the noun. However, this suffix is also used as an independent postpositional marker in Bangla. Therefore, this paper attempts to understand image schema of this locative suffix in different contexts. The basic image schema of this locative suffix is observed to be that of container schema. However, functional component of this containment relation varies across different contexts. Further, two spatial postpositions of Bangla are analyzed indicating that locative suffix *-e/* primarily carries the sense of space in these two nominal postpositions of space. This analysis helps to understand how meanings of these nouns interact with meaning of locative suffix to form nominal postpositions using image-schema. These differences in meanings have resulted in their different distributional and usage patterns.

Keywords: image schema; Bangla; locative suffix; postposition; container.

Análise esquemática de imagem de posposições de Bangla

RESUMO. Relacionamentos espaciais são fundamentais para estabelecer nossas interações com o mundo físico. Eles também desempenham um papel significativo em nossa conceção de ideias abstratas em termos de espaço. A fim de compreender essa transferência de ideias do espaço concreto para o abstrato, a abordagem esquemática da imagem é aplicada para analisar o papel das aposições em várias línguas. Este artigo tenta analisar o conceito de posposições em Bângala usando a abordagem esquemática da imagem. Em Bângala, posposições nominais são derivadas colocando-se o sufixo locativo *-e/* com o substantivo. No entanto, este sufixo também é usado como um marcador posicional independente em Bângala. Portanto, este trabalho tenta entender o esquema de imagem deste sufixo locativo em contextos diferentes. O esquema básico de imagem deste sufixo locativo é observado como sendo do esquema contêiner. No entanto, o componente funcional dessa relação de contenção varia em contextos diferentes. Além disso, duas posposições espaciais de Bângala são analisadas indicando que o sufixo locativo *-e/* transporta primariamente o senso de espaço nessas duas posposições nominais do espaço. Essa análise ajuda a entender como os significados desses substantivos interagem com o significado do sufixo locativo para formar posposições nominais usando o esquema de imagem. Essas diferenças nos significados resultaram em seus diferentes padrões de distribuição e uso.

Palavras-chave: esquema de imagem; Bângala; sufixo locativo; posposição; recipiente.

Introduction

Image schema is an important conceptual structure in the Cognitive Semantics literature. One of the basic ideas of image schema is that language use is a reflection of our mental representations arising from our constant interaction with the world in terms of sensory experiences (Johnson, 1987; Saeed, 2003). This paper attempts to analyze two selected nominal postpositions denoting physical space and a locative suffix of Bangla (Chatterji, 1926; Dash 2015) using image schematic approach in order to understand their underlying mental

representations. The concept of trajector-landmark organization (Evans, 2007) plays a pivotal role in understanding image schema of these postpositions. Trajector refers to the entity that has a prominent role on a particular spatial scene whereas landmark refers to the entity that is relegated to the background due to lesser dominance on the spatial scene.

The paper is divided into five sections. The first section gives an introduction to the work in general and discusses the specific questions related to Bangla postpositions that are attempted to be resolved in

this paper. The second section discusses image schema of the locative suffix. The third and fourth sections discuss how the locative suffix interacts with both the nouns resulting in image schemas of two nominal postpositions. Finally, the fifth section concludes with observations made in the previous sections.

Choice of image schematic approach for the analysis

One of the extensive works of image schemas can be seen in the field of adpositions in different languages (Cervel, 1999; Lee, 2001; Nesset, 2004). In the linguistic literature, 'adposition' is a general term for prepositions and postpositions. It refers to a word that combines with a noun phrase to indicate the grammatical and semantic relationships of the noun phrase to the verb phrase (Dryer, 2005). The term 'postposition' refers to the word that follows the noun phrase to indicate these relationships. Postposition is a common feature across different language families in India. Bangla, being an Indo-Aryan language, is no exception to such feature. Although Bangla is spoken both in the state of West Bengal in India and in Bangladesh with dialectal variations, this paper focuses on the variety of Bangla as spoken in India.

In Bangla, the postpositions are categorized into nominal, verbal and non-derived postpositions (Dash, 2015). This paper deals with two nominal postpositions, namely /*jongge*/ 'with' and /*upore*/ 'over, above, on'. Although the primary sense of these postpositions is that of physical space, depending on the context these postpositions can also indicate a metaphoric extension of this physical space to mental space which is beyond the scope of this paper. It is important to mention here that /*jongge*/ has a dialectal variation, /*at^he*/. According to Chatterji (2014), /*jongge*/ is a more prevalent form in the literature of West Bengal, a state in present India whereas /*at^he*/ is predominant in speech and poetry of earlier East Bengal, present Bangladesh. However, he has commented that the increasing use of /*at^he*/ in West Bengal owes its influence to East Bengal speech. Although the postposition /*opore*/ is considered to be colloquial form of /*upore*/, this paper takes into account the standard form - /*upore*/ - for analysis. The next section discusses the origin of the locative suffix /-e/ in Bangla (Chatterji, 1926) and the related image schema.

Image schema of the locative suffix -e/

The locative suffix -e/ can be traced back to the Old Indo-Aryan reconstructed form <*-a-dhi> which is not found in Sanskrit but is attested from

Middle Indo-Aryan (Pali) <-dhi> and from Greek <-thi> which was used in the sense of 'by, along with' mostly in locative, ablative and instrumental cases in Greek and other Indo-European languages (Chatterji, 1926). There is also another likely source of this locative suffix which is from the Old Indo-Aryan locative singular affix <-asmin> and was preserved as <-ahi> in Early Maithili as locative form and as /-e/ in Old Bengali, Middle Bengali and New Bengali (Chatterji, 1926). This -e/ suffix is termed as oblique because it indicates cases like instrumental, locative, accusative and dative and is considered to have no independent meaning of its own (Chatterji, 2014). According to Chatterji (1926), this affix has probably transferred from locative sense to instrumental, accusative, and dative senses later.

This paper attempts to show that this locative suffix -e/ as used in its present form in Bangla can be considered to be a spatio-relational morpheme on the basis of its historical derivation from the two sources. In terms of spatial-geometrical configuration, the locative suffix -e/ is used in the sense of containment. This is because when this suffix is compounded with the noun base to form nominal postpositions, it gives a sense of containment and therefore indicates a bounded landmark (LM). Thus, the locative suffix -e/ can be best understood as a conceptualization of the container schema (Johnson, 1987; Evans & Green, 2006) which is illustrated in the following Figure 1.

This schema shows the geometrical structure of the bounded LM in terms of two salient structures – an interior and an exterior. It is in the interior region of LM that the TR, indicated by a shaded sphere, is located. The functional relation between LM and TR as indicated by the locative suffix -e/ can be explained using six different clusters as given by Tyler and Evans (2003). A few examples from Bangla are used to explain this locative suffix -e/ in the light of containment at both structural and functional levels as shown below Table 1.

In example (1), the speaker has been conceptualized as TR as well as the experiencer and the market as LM. The marketplace is conceptualized as an enclosed area. Therefore, there is a sense of containment in this utterance. Considering the functional realm, it is the location cluster that is focused in this utterance. This is because the location of the speaker is dependent on the location of the market. In other words, the speaker is indicating his or her present location which implies that the speaker remains in the interior of the market for the current period. Hence, the In Situ Sense (Tyler & Evans, 2003) of the

location cluster is evoked as the functional relation using this locative suffix. This can be explained in the following Figure 2.

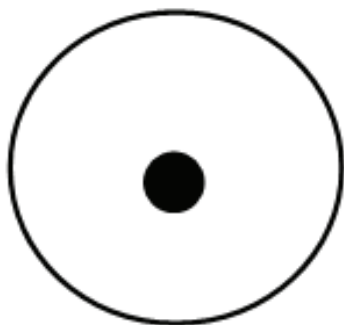


Figure 1. Conceptualization of /-e/ locative suffix.

Table 1. Examples illustrating suffixation of /-e/ in Bangla.

(1)	/ami I.NOM	b[<u>dʒar</u> -e bazar-LOC	[tʃʰ-i/ be.PRS-1
		'I am in Burrabazar.'	
(2)	/baba Father.NOM	b[<u>dʒar</u> -e bazar-LOC	[tʃʰ-e/ be.PRS-3
		'Father is at Burrabazar.'	
(3)	/baba Father.NOM	b[<u>dʒar</u> -e bazar-LOC	ga-e-tʃʰ-e/ go-PRS.PRF-3
		'Father has gone to Burrabazar.'	
(4)	/pakʰi-ta bird.NOM-DEF	[tʃʰ-e tree-LOC	bof-e sit-CPM
		[tʃʰ-e/ be.PRS-3	
		'The bird is sitting on the tree'	

Here, the square represents the enclosed marketplace and the shaded sphere represents the speaker. The locative suffix *-e/* indicates the location of the person within this enclosed space. In this way, the container schema is evoked. Next, in example (2), again the spatial-geometrical configuration of the marketplace is a clear evidence of the containment sense. In the functional relation, the focus of this utterance is on 'vantage point is exterior' cluster. Here, the speaker is the experiencer whereas father is conceptualized as TR. Therefore, the speaker is outside LM at the moment of the particular utterance which implies that the father is no longer in the perceptual field of the speaker. In other words, the boundedness of the market has obstructed the speaker's view of his/her father. However, this obstruction can be a physical reality or a metaphorical construction. When the speaker is physically just outside the marketplace, the locative suffix indicates physical disappearance. However, the same suffix indicates disappearance in a metaphorical sense when the speaker is far away from the market. This can be explained in the following Figure 3.

Here, the eye represents the speaker who is the experiencer and, therefore, the vantage point. The

shaded sphere represents the father. The locative suffix *-e/* indicates the location of the father within the enclosed marketplace. In this way, the container schema is evoked. In example (3), the structural salience of the marketplace gives rise to container schema. However, in the functional relation, there is a difference with previous examples. Here, use of locative suffix indicates movement of the father (TR) towards the market (LM) rather than the location of TR within the LM. In modern English, there are two different prepositions to indicate these differences – 'in' corresponding to location sense and 'into' corresponding to movement sense. The image schema of 'into' is shown below Figure 4.

This schema shows TR (represented by the shaded sphere) moving towards the bounded LM (represented by the square). But in Old English, there was only one preposition 'in' and even German has preserved both these senses through one preposition (Tyler & Evans, 2003). This is what Chatterji (1926) had probably suggested when he mentioned about the first source of origin of the locative suffix as used in the sense of 'by, along with'. Although the meaning that he had given conformed to the instrumental sense, the sense of movement can be observed to be common to the preposition in Old English and modern German as well as to the suffix in New Bengali. In this use of the locative suffix, the father has the final goal of being in the marketplace. This movement towards the salient space is considered as one of the aspects of our interaction with the bounded LM (Tyler & Evans, 2003). This is explained in the following Figure 5.

Here, the shaded sphere represents the father who moves with the goal of being enclosed within the marketplace represented by the square. Example (4) is similar to example (1) where the structural relation is that of containment while the functional relation is that of the location cluster with a focus on the In Situ Sense. In this example, the bird is conceptualized as TR and the tree as LM.

In relation to this locative suffix, it is interesting to note that there is also another postpositional suffix *[-te/]* which is added to the nouns ending in the vowels *[-i, -u, -o/]*. This suffix *[-te/]*, as used in New Bengali, can be traced to the locative *<-ta>* in Old Bengali where it was compounded with the noun base and can be further traced from the word *<-antah>* meaning 'within' (Chatterji, 1926). Therefore, from its historical derivation, this postpositional suffix can be conceptualized based on the container schema. However, unlike the previous locative suffix *-e/* where different aspects of containment are foregrounded in different

utterances, for this suffix *-/te/* only the interior structure of the bounded LM is foregrounded in every utterance. This can be explained using following examples from Bangla, according Table 2.

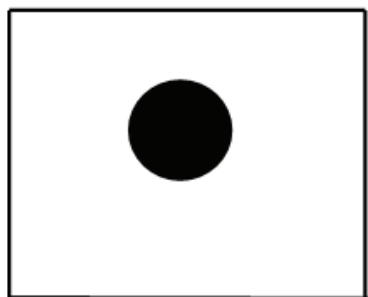


Figure 2. Illustration of 'in the market'.

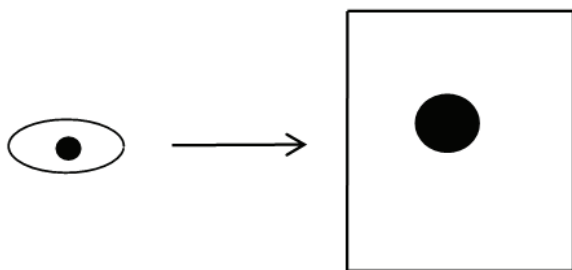


Figure 3. Illustration of 'at the market'.

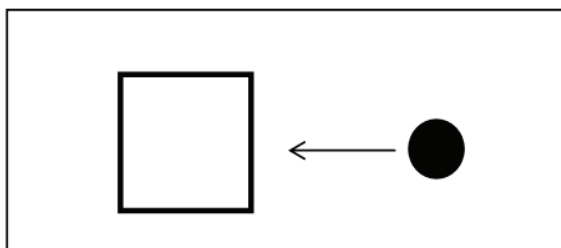


Figure 4. Image schema of 'into' (adapted from Tyler & Evans, 2003).

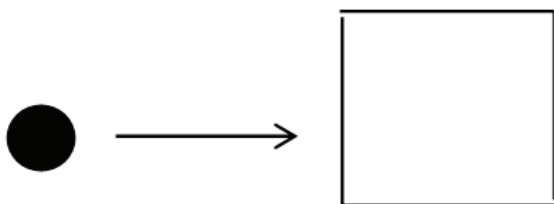


Figure 5. Illustration of 'into the market'.

In example (5), the noun */almari/* ends with *-/i/* and therefore, *-/te/* is used as the postpositional suffix. Now, from the spatial-geometrical configuration, the shirt which is conceptualized as TR is placed inside the almirah which is conceptualized as the bounded LM. In terms of the functional aspect, the focus is on the location cluster, particularly the In Situ Sense. Next, in example (6), the utterance is a clear evidence of the

kitten being within the well, thus giving rise to container schema. Thus, the kitten is conceptualized as TR and the well as LM. In the functional realm, the focus is on the location cluster, particularly the In Situ Sense. Finally, in example (7), when a person takes a dip in the river, clearly movement of the person is restricted within the river which is conceptualized as the bounded LM. This gives rise to container schema. In the functional domain, again there is focus on location cluster, particularly the In Situ Sense.

Image schema of */jonge/*

The postposition */jonge/* can be divided into the word */jongo/* derived from the Sanskrit word */sṅg/* (Chatterji, 1926) meaning 'sticking, clinging to, touch, contact with' etc. (Monier-Williams, 1899) which exists as a noun in Bangla and the locative suffix *-/e/*. Thus, the noun */jongo/* in Bangla can be defined as contact between two entities. It can be conceptualized based on the contact schema (Evans & Green, 2006) which is shown below Figure 6.

Here, the two spheres indicate two entities and the straight line is conceptualized as a point of contact between these two entities. Now, when the locative suffix *-/e/* is added to the noun */jongo/*, the point of coincidence is conceptualized as a bounded LM within which the TR is located. This is because the movement of TR with respect to the other entity is constrained by the contact between the two entities. In other words, the focus is on the In Situ Sense of location cluster because the location of TR is determined with surety in a particular location which is the point of contact with the other entity. Although such a conceptualization involves a non-canonical bounded LM in terms of configurational component, the functional component involves a sense of containment. This is explained in the following Figure 7.

Here, the dotted sphere represents the contact which is conceptualized as the bounded LM and the sphere enclosed within this LM as the TR. This postposition can be explained with a few examples from Bangla, according Table 3.

In example (8), money is conceptualized as the TR which is constrained by the physical contact with the hearer and, therefore, this contact is conceptualized as LM. Similarly, in example (9), there is physical contact between fish and rice as being part of the same meal for the hearer. Hence, the boundary of fish (TR) is limited by the contact that it has with rice (LM). Next example (10) is an instance of mental space where the conceptualizations of LM and TR and their related manifestations are more of metaphorical. Here, the speaker conceptualizes himself/herself as TR and the

contact of mental space with father as being the LM. This is because when the speaker moves along with his/her father; his/her movement is constrained by the fact that they are moving together. Thus, the location of the speaker is determined with surety as being bounded by the proximity that s/he shares with father. Thus, the contact itself functions as an enclosed entity. Thus, in all these utterances the locative suffix *-e/* leads to the conceptualization of the noun */ʃəŋgo/* as a bounded LM when used as the nominal postposition */ʃəŋge/*.

Table 2. Examples illustrating suffixation of *-ta/* in Bangla.

	/dʒama-ta	almari-te	atʃ-e/		
(5)	shirt.NOM-DEF	almirah-LOC	be.PRS-3		
	‘The shirt is in the almirah.’				
	/biʀaltʰana-ta	kuo-te	por-e	gæ-tʃ-e/	
(6)	kitten.NOM-DEF	well-LOC	fall-CPM	go-PRS.PRF-3	
	‘The kitten has fallen into the well.’				
	/ram	noʃi-te	dub	di-te	gæ-tʃ-e/
(7)	Ram	river-LOC	dip	give-IPFV PTCP	go-PRS.PRF-3
	‘Ram went to take a dip in the river’				

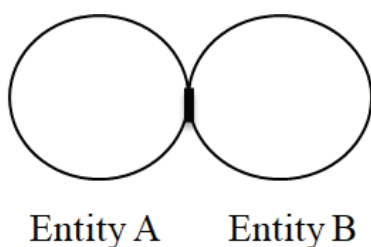


Figure 6. Conceptualization of */ʃəŋgo/*.

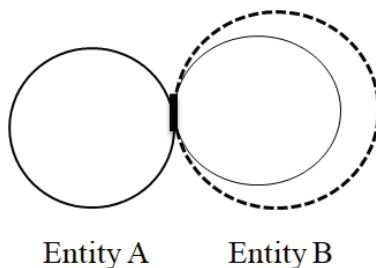


Figure 7. Conceptualization of contact as a bounded LM.

Table 3. Examples illustrating suffixation of *-e/* to the postposition */ʃəŋgo/* in Bangla.

	<i>/ʃoma-r</i>	<i>ʃəŋg-e</i>	<i>ei</i>	<i>ʃaka-ta</i>	<i>rakʰ-o/</i>
(8)	you-GEN	company-LOC	this	money-DEF	keep-2
	‘Keep this money with you.’				
	<i>/bʰat-er</i>	<i>ʃəŋg-e</i>	<i>ar-ek-ta</i>	<i>maʃʰ</i>	<i>neb-e/</i>
(9)	rice-GEN	company-LOC	more-one-DEF	fish	take-2
	‘Will you take one more fish with rice?’				
	<i>/ami</i>	<i>baba-er</i>	<i>ʃəŋg-e</i>	<i>dʒa-b-o/</i>	
(10)	I	father-GEN	company-LOC	go-FUT-1	
	‘I will go with father’				

Image schema of */upore/*

The postposition */upore/* can be divided into the noun */upor/* derived from the Sanskrit word */upri/*

(Chatterji, 1926) meaning ‘over, above, upon, on’ (Monier-Williams, 1899) and the locative suffix *-e/*. This Sanskrit word is also related to the Anglo-Saxon origin of the English words like ‘above’ and ‘over’ (Tyler & Evans, 2003). Thus, the noun */upor/* in Bangla can be defined as the vertically upward direction. It can be conceptualized based on the verticality schema (Evans & Green, 2006) which is shown below Figure 8.

Here, the vertical axis indicates vertically upward direction. When the locative suffix *-e/* is added to the noun */upor/*, it locates one entity that is conceptualized as TR as vertically upwards as if from a base. The vertical axis and the base together are conceptualized as forming a bounded LM. This is because the movement of TR is constrained with respect to the base. In other words, the focus is on the In Situ Sense of location cluster because the location of TR is determined with surety in a particular location which is the vertically upward region. Such a conceptualization involves a considerable degree of abstraction. This is explained in the following Figure 9.

Here, the bold line indicates the surface which functions as the base and the shaded spheres indicate TR. The dotted line indicates the region of proximity of the base. Thus, in case of ‘over’ TR is within the proximal region of the base, i.e. within the potential reach of the base. Thus, this proximal region is conceptualized as the bounded LM that encloses TR when */upore/* is used in the sense of ‘over’. On the other hand, in case of ‘above’ the figure is outside the potential reach of the base. Thus, the boundary of the proximal region indicated by the dotted line and the region further upwards is conceptualized as the bounded LM within which TR is enclosed when */upore/* is used in the sense of ‘above’. The locative suffix *-e/* locates TR with reference to this proximal region of the base. However, TR-LM organization in the spatial scene dictates usage of */upor/* in terms of ‘above’ or ‘over’. This postposition can be explained with a few examples from Bangla, according to Table 4:

Figure 8. Conceptualization of */upor/*.

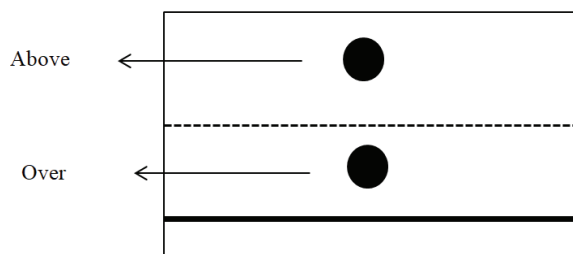


Figure 9. Location of TR vertically upwards from the base. Adapted from Tyler and Evans (2003).

Table 4. Examples illustrating suffixation of */-e/* to the postposition */upor/* in Bangla.

	<i>/ɔba-r</i>	<i>maɪʔa-r</i>	<i>upor-e</i>	<i>æk-ta</i>	<i>tʃʌd</i>	<i>ɖɔrkar/</i>
(11)	everyone-GEN	head-GEN	over-LOC	one-DEF	roof	need
	'Everyone needs a roof over the head.'					
	<i>/hɔtʰatʰi</i>	<i>ɖɛkʰ-l-am</i>	<i>maɪʔa-r</i>	<i>upor-e</i>		
	suddenly	see-PST-1	head-GEN	above-LOC		
(12)	<i>pakʰi-ta</i>	<i>gʰurpak</i>	<i>kʰe-tɛ</i>	<i>lag-l-o/</i>		
	bird-DEF	revolve	cat-IPFV PTCP	start-PST-3		
	'Suddenly I saw the bird had begun revolving above my head.'					
	<i>/ami</i>	<i>tak-er</i>	<i>upor-e</i>	<i>boi-ta</i>	<i>rekʰe-tʃʰi-i/</i>	
(13)	I	shelf-GEN	on-LOC	book-DEF	keep-PRS.PRF-1	
	'I have kept the book on the shelf.'					

In example (11), the roof is conceptualized as TR which is enclosed within the bounded LM as formed by the proximal region. The locative suffix indicates the location of the roof as vertically upwards with no physical contact with the person (third person referent). Interestingly, since the roof is within the proximal region of the person under any real circumstance the person can physically touch the roof, thus conceptualizing */upore/* 'over' in this instance. In example (12), the bird is conceptualized as TR which is enclosed within the bounded LM formed by the boundary of the proximal region and further vertical upward region. The locative suffix indicates the location of the bird as vertically upwards with no physical contact with the head. It is important to observe that the bird is outside the proximal region of the person because in the real world it is physically impossible for the person to touch the flying bird, thus conceptualizing */upore/* 'above' in this instance. In example (13), the book is conceptualized as TR which is enclosed within the bounded LM as formed by the proximal region. Although here the trajector has a physical contact with the landmark, the position of trajector is vertically upwards from the vantage point, thus giving the sense of 'on' in this instance. In all these utterances, the locative suffix *-e/* leads to a conceptualization of the noun */upor/* as a bounded LM when used as the nominal postposition */upore/*.

It is important to observe that although all these instances indicate the vertical location of TR with reference to the base, the different conceptualizations lead to differences in their distribution and usage patterns. While in examples (11) and (12) the immediate implication is that TR is located on a vertical axis, in example (13) TR is conceptualized as being located on a horizontal plane.

Scope and methodology

Since Bangla-speaking societies are dominant linguistic communities in the states of West Bengal and Tripura of India as well as of Bangladesh (owing to the history of partition and resulting migration), this paper focuses on the variety of Bangla as spoken in West Bengal which is considered to be the standard Bangla for official purposes. Specifically, the emphasis is on the region of Kolkata, the state capital, and neighboring regions of Asansol-Durgapur for collection and analysis of data. The paper has particularly taken up participant observation method to address the research question about image-schema of the locative suffix *-e/* both as an independent locative marker as well as when suffixed to two nominal postpositions of space. For data collection purpose, this paper has taken up purposive sampling method primarily for two reasons: i) since the research question and objectives were pre-determined this method has proved to be effective, ii) due to existing constraints in terms of time and resources available like location and culture, this method has suited the particular needs of the research study. The focus group for this paper has included male and female Bangla speakers in two age groups of 25-30 and 45-50. Since the former group represents the new emerging generation and the latter group the generation in transition from current to older phase, daily conversations among members of these two groups fairly encompasses the conceptualization of the locative suffix *-e/* in Bangla. It is important to mention here that the examples that have been included in this paper as part of qualitative data have been taken from everyday examples as observed and heard in daily social contexts since a proper structured corpus of Bangla data is unavailable for research purpose.

Conclusion

In this paper, an attempt is made to describe the locative suffix *-e/* in Bangla in terms of image schema. The basic image schema of this suffix is analyzed to be container schema. Although the

configurational component is found to be uniform across different usages, the functional component focuses on different aspects of this containment relation as evident from these usages. A further attempt is made to chalk out the differences in conceptualizations of two nominal postpositions in Bangla on the basis of their differences in meanings as analyzed from their sources in Sanskrit. While affixation of the locative suffix *-e/* to the noun */fonggo/* resulting in nominal postposition */fongge/* changes conceptualization of contact from a point of coincidence to a bounded LM, the nominal postposition */upore/* resulting from affixation of *-e/* to */upor/* leads to the conceptualization in terms of a vertical axis or a horizontal plane largely depending on the nature of trajector involved in context. In conclusion, it is the locative suffix *-e/* that essentially carries the sense of space for these two nominal postpositions of space - */fongge/* and */upore/* - for suffixation of *-e/* changes the concept of contact or direction respectively to that of a space (landmark) to locate the entities (trajector).

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