Semantic Mapping of the Dative Suffix in Marathi:
A Cross-dialectal Comparison

SAMPADA DESHPANDE
SONAL KULKARNI-JOSHI

Abstract

This paper aims to use asemantic map model to describe the multifunctionality of the dative suffix across dialects of Marathi. We assume here a view of a case system as a semantic /cognitive space (Fillmore 1968, Croft 1991, Haspelmath 2000) and of a particular case as a contiguous region inthis semantic/cognitive space.

Keywords: dative, dialectal, marathi, semantics, suffix.

Introduction

This paper aims to use asemantic map model to describe the multifunctionality of the dative suffix across dialects of Marathi. We assume here a view of a case system as a semantic/cognitive space (Fillmore 1968, Croft 1991, Haspelmath 2000) and of a particular case as a contiguous region inthis semantic/cognitive space.

Multifunctionality and Semantic Mapping

Grammatical structure is known to be highly variable both across languages and within languages (Croft & Poole 2004). Grammatical morphemes in language have multiple, abstract and general meanings. This is referred to as the 'problem of multifunctionality in grammar' (Haspelmath 2000). 'Multifunctionality' is defined by Haspelmath (2000) as the 'existence of multiple senses or uses of a linguistic unit.' He states that multifunctionality is present more prominently in case of function words and affixal categories than in the case of content words. He thus groups the function words and affixes together as 'grammatical morphemes' ('grams').

An illustration: The preposition 'to' in English (Haspelmath 2000):
a. Goethe went **to** Leipzig as a student.   (direction)
b. Eve gave the apple **to** Adam.   (recipient)
c. This seems outrageous **to** me.   (experiencer)
d. I left the party early **to** get home in time.   (purpose)

Given the difficulty in objectively observing the semantic substance of language, it has been proposed that the relations among the multiple functions of grammatical morphemes can be represented in terms of 'semantic maps'. A semantic map is a geometrical representation of functions in 'conceptual/semantic space' which are linked by connecting lines and thus constitute a network. The configuration of functions

shown by such maps is claimed to be universal. Specifically for the representation of functions of the dative, Haspelmath proposes the following structuring of the semantic space:
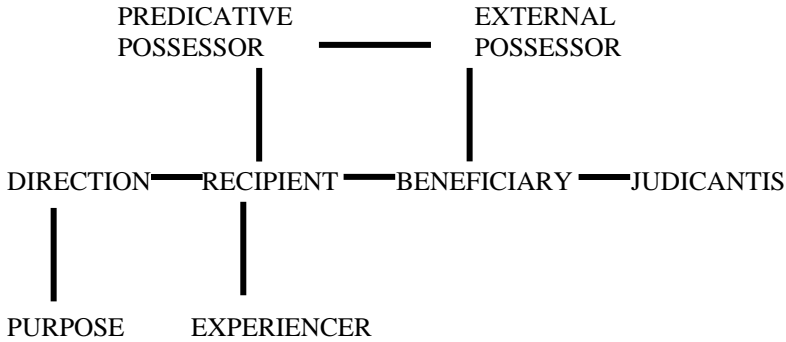
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PREDICATIVE              EXTERNAL
POSSESSOR  ━━━━━━━        POSSESSOR
    │                        │
    │                        │
    │                        │
DIRECTION━━RECIPIENT━━━BENEFICIARY━━JUDICANTIS
    │          │
    │          │
    │          │
PURPOSE    EXPERIENCER
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Figure. 1. Semantic map of typical dative functions in English.

The term semantic map is used in Kemmer (1993:201), Stassen (1997:578), Auwera and Plungian (1998). Croft (2000) uses the terms conceptual space (the universal arrangement of functions)as he distinguishes it from semantic map (the boundaries of particular elements in particular languages). Anderson (1986) uses the term mental map while Kortmann (1997: 177,210) employs the term cognitive map, as it's believed that, 'the universal configuration of functions on the map directly corresponds to the cognitive structuring of meaning.' Haspelmath (1997) introduces the term implicational mapto highlight the fact that semantic maps express implicational universals.

Haspelmath (2000) explains the conceptual understanding of the semantic maps thus, 'multifunctionality of a gram occurs only when the various functions of the gram are similar.' Thus, this phenomenon of similarity of functions is represented in semantic maps via closeness of nodes in a representational space, which metaphorically can be thought of as mapping the possibilities of meaning, or semantic/conceptual space. He further observes that semantic maps facilitate cross-linguistic comparability.

Alternative proposals for the use of semantic mapping as a methodology and as an explanatory tool have been made byvan der Auwera (2008) and Luraghi (2016); these scholars demonstrate that semantic mapping can also be used to represent synchronic as well as diachronic aspects of multifunctionality.

Semantics of the Dative Case

The present study assumes a perspective on grammatical relationsin which verbal semantics is central to case assignment (Fillmore 1968, 1971, Givon 1984). Case roles are semantic roles assigned to the noun phrases/ arguments of the predicate.Case assignment is accounted for in terms of spatial metaphors: space and path are considered central in

theorising about case (c.f. cognitivists such as Ray Jackendoff). Semantic features such as animacy, agency, affectedness, control, specificity too have been used in cognitive accounts of case. Case is thus viewed as a connected semantic system and cases are defined as connected regions of a semantic/ cognitive space, relating agiven case to a structured set of semantic properties (Grimm 2010). The region of a case can be established by determining the semantic properties associated with that case's canonical use for marking a grammatical relation.

The dative case is largely associated with the grammatical function of indirect objectsin ditransitive verbs, where ditransitive verbs are taken to be those three-place verbs including a theme-like argument and a recipient-like argument (Haspelmath 2005). The canonical use of the dative is to mark a recipient/goal, but, as is well known, one to one mapping between case form and semantic function(s) is not found cross-linguistically. Thus the dative may be used to mark subjects and objects whose semantics are the same as the semantics of the primary grammatical function of the dative case. This results in polysemy of the dative.

In his discussion of the extensions of the uses (i.e. non-canonical uses of the dative), Grimm (2010) proposes that 'caused possession' is the semantic feature underlying the extended functions of the dative. He further observes that abstract, semantic similarity between recipients and experiencers explains the use of the dative cross-linguistically to mark both these roles. 'Cognitive possession' is proposed as an explanation for extension of the marker of recipient role to marking subject of psychological verbs (e.g. mahitəsŋe 'to know', oļəkhŋe 'to recognise' etc. in Marathi), object of verbs of perception (e.g. pahŋe 'to see', ghabərŋe ' to fear'). The extended roles marked by the dative in Marathi can be assumed to share a semantic commonality, that of 'change of actual or cognitive possession'. Thus these roles can be represented by overlapping regions in the semantic space. Butt and Ahmed's (2010) study investigates the combined roles of semantic features and spatial concepts in case linking in Hindi-Urdu. Theme or patient role marked by the accusative and possessor or goal marked by the dative in Old Marathi have undergone syncretism[1] in medieval Marathi (Deo et al 2016): This development too can be understood in terms of semantic relations which are cognitively close to each other.

Multifunctionality of the Dative in Standard Marathi
Examples 1 to 11, list the multiple semantic functions of the dative marker (-la) in the standard dialect of Marathi.

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[1] Syncretism refers to the diachronic merging of cases and the synchronic polysemy of case endings/adpositions.

1. mi tya-la pustak di-l-ə   [Recipient]
   I-NOM him-DAT book-ACC give-PFV-3SN
   'I gave him a book.'

2. mi paɳ-ja-la ge-le   [Purpose]
   I-NOM water-OBL-DAT go-PFV-3SF
   'I went to (fill) water.'

3. tya-la don mulə ahet   [Predicative Possessor]
   him-DAT two sons-NOM be-PRS
   'He has two sons.'

4. ti kal mumbəi-la ge-li   [Goal]
   she-NOM yesterday Mumbai-DAT go-PFV-3SF
   'She went to Mumbai yesterday.'

5. ti mumbəi-la rah-te   [Location-Physical]
   She Mumbai-DAT stay-IPFV-3SF
   'She stays in Mumbai.'

6. to daha-la gʰər-I ge-la   [Location-Abstract]
   He ten o'clock-DAT home-LOC go-PFV-3SM
   'He went home at 10 o'clock.'

7. tya-la ti dzəmin miɭa-li   [Beneficiary]
   he-OBL-DAT that-F land get-PFV-3SF
   'He got that land.'

8. ti-la tʰəndi wadz-te   [Experiencer]
   she-DAT cold ring-IPFV-3SF
   'She feels cold.'

9. to sap-a-la gʰabar-to   [Source-Abstract]
   he snake-OBL-DAT fear-IPFV-3SM
   'He is afraid of snakes.'

10. ti ʈopi pənnas-la ge-li   [Exchange]
    that-F cap fifty-DAT go-PFV-3SF
    'That cap was sold for fifty rupees.'

11. tja dzʰaɖ-a-la modz-lə nahi   [Theme]
    that-OBL tree-OBL-DAT count-PFV-3 SN-NEG
    'That tree is not counted.'

Aims of the Paper

This paper aims to use a semantic map model to describe the multifunctionality of the dative suffix in dialects of Marathi. We will present a synchronic, cross-dialectal comparison of the functions of the dative in Marathi. Specifically the study will address the following questions;

i. Which are the markers of the dativeacross representative village varieties of Marathi?

ii. (a) Which are the semantic functions fulfilled by the dative markers in the dialects / varieties of Marathi?

  (b) How is each attested functionof the dative located within the conceptual space for a given regional variety?

Hypothesis: We hypothesise that the semantic mapping of the intra-lingual/dialectal variants of Marathi will not differ from that of the standard dialect of Marathi.

Methodology
The data for this study were collected in the course of an on-going dialect survey of Marathi, belonging to the south-western group of New Indo-Aryan, at the Deccan College, Pune. The data collection procedure for the survey combines spontaneous speech, narratives, conversations, and some specific morphosyntactic questionnaires. Data were collected in village communities from men and womenbelonging to three age groups (18-30, 31-54, 55 and older). These include the speech varieties of Malwan (Sindhudurg), Sangameshwar (Ratnagiri), Chandgad (Kolhapur), Ahirani (Dhule), Udgir (Latur), Akkalkot (Solapur), and Standard Marathi.

In analysing our dialectal data, we will adopt Haspelmath's (2000) Framework and for its representation in the form of semantic maps, we will integrate the methods of Haspelmath (2000) (representing the connected functions through connecting lines) and Auwera (2017) (representing the connected functions through categorised areas in boxes). Following Haspelmath (2000), the semantic map for dative in Marathi would include semantic functions only if we identify at least one pair of dialects/ varieties that differ with respect to this function.

Data and Analysis
Data analysed here is based on tokens of dative drawn from interview data; personal narratives and narratives of traditional Marathi stories. The average length of each interview was 35 minutes.

	District	Sampling point	Tokens *n*
1	Solapur	Akkalkot	38
2	Latur	Udgir	39
3	Nasik	Trimbakeshwar	17
4	Sindhudurg	Malwan	46
5	Ratnagiri	Sangameshwar	36
6	Kolhapur	Chandgad	36
7	Dhule	Dhule	39

Table 1. Sampling points and number of Tokens analysed

Table 2 provides an comparison of the case markers and their semantic functions across representative regional varieties of Marathi.

District	Speech Variety	No. of tokens analysed	Recipient	Beneficiary	Experiencer	Goal	Location (Physical)	Location (Abstract)	Theme	Percept	Predicative possessor	Purpose	Sociation	Exchange
---	Std. Marathi	---	-la	-la	-la	-la	-la	-la	-la	-la	-la	-la	NA	-la
Solapur	Akkalkot	38	-la	-la	-la	N A	-la	-la	N A	-la	-la	-la	NA	-la
Latur	Udgir	39	-la	-la	-la	-la	-la	NA	-la	-la	NA	-la	NA	NA
Nasik	Triambakeshwar	17	l/la	NA	-la	N A	-la	-la	NA	NA	-la	NA	NA	NA
Sindhu - durg	Malwan	46	-k, -ka	-ka	-k, -ka	-k, -la	-k	-k	-k, ka, -la	-k	-ka	-k	-k	NA
Kolhapur	Chandgad	36	-s, -sni, -/-snə, -l/-la	-s, -la	-s, -la, -snə	-s, -la	-s, -la	-s, -la	-s, -la	-s, -la	-dz, -la	-s, -l/la	NA	-s, -la
Ratnagiri	Sangameshwar	36	-ka, -la	-ka, -la	-ka, -la	N A	-ka, -la. -ʃl	-ka, -la	N A	NA	-ka, -la	NA	NA	NA
Dhule	Ahirani	39	-sle, -le, -la	-le	-sle, -le, -l/la, -ne/-na	-le	-le, -la	-le, -l/-la	-le, -ne	-le	-le	-le	NA	-le

Table 2. Semantic functions of Dative across dialects.

'NA' in the table suggests that the particular semantic function was not marked by the dative suffix in the available data.

Semantic Mapping
We now use the method described in methodology section to represent configurations of functions of the dative on a semantic map.
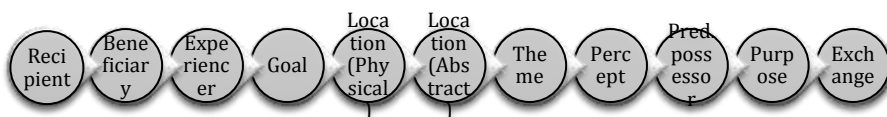
1. Marathi (Standard)

Figure 3. Semantic Map for Dative in Standard Marathi

2. Akkalkot (Solapur)

Figure 4. Semantic Map for Dative in Akkalkot Marathi
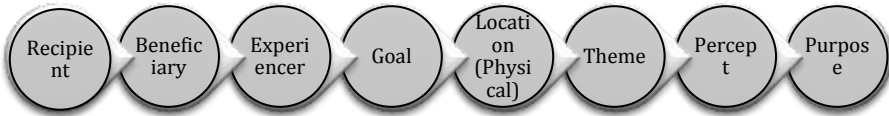
3. Udgir (Latur)

Figure. 5. Semantic Map for Dative in the Udgir Marathi
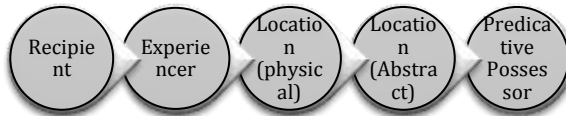
4. Trimbakeshwar (Nasik)

Figure 6. Semantic Map for Dative in Trimbakeshwar Marathi

The dative form /–la/ uniformly marks eleven, nine, eight and five of the attested functions of the dative in the standard variety, Akkalkot (Solapur), Udgir (Latur) and Triambakeshwar (Nashik) varieties of Marathi respectively (Fig. 3, 4, 5, 6). Thus, each of these functions is equally contiguous to each other conceptually. Hence the semantic maps of the standard, Akkalkot, Udgir, and Triambakeshwar varieties of Marathi have a representation in a box.
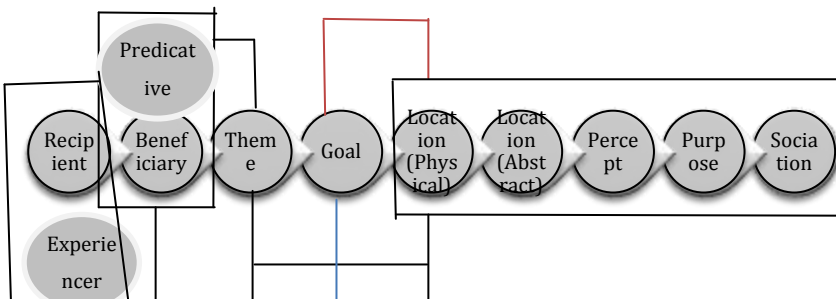
5. Malwan (Sindhudurg)

Figure 7. Semantic Map for Dative in Malwan Marathi

In Malwan variety of Marathi, dative form /-k/ marks five functions uniformly. Thus, each of these functions is equally contiguous to each other conceptually. Hence these are arranged in a box in the semantic mapfor the Malwan speech variety. The function 'goal' is marked by the dative form /la/ in addition to /-k/; this is represented with a line connecting the functions in the box; hence, it is represented bythe densely shaded area in contact with the box of functions. The function 'theme' is marked by the dative form /–ka/ in addition to /–k/ and /-la/. Thus, it is connected to the function 'goal' and the box of the functions with connecting lines. The functions 'beneficiary' and 'predicative possessor' are marked by the dative form /-ka/ and thus are more contiguous to each other which is represented through the box that connects the function 'theme'. Similarly, the functions 'recipient' and 'experiencer' which are marked by the dative forms /-k/ and /-ka/ are more contiguous to each other thus again represented in a box that is connected to the box of 'predicative possessor' and 'beneficiary', 'functions 'theme', 'goal' and the box of 'location (physical) (abstract), 'percept', 'possessor' and 'sociation'.
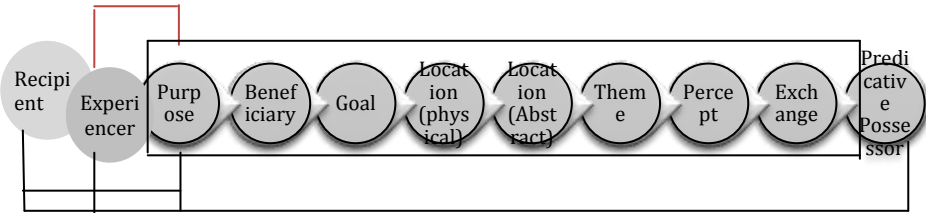
6.   Chandgad(Kolhapur)

Figure 8. Semantic Map for Dative in Chandgad Marathi

In Chandgad variety of Marathi, dative form /-s/ and /-la/ marks 9 functions uniformly. Thus, their semantic map is represented in a box. The function experiencer is marked additionally by /-snə/ along with /-s/ and /-la/. Thus, it is connected to the box of functions through a line. Similarly, the function of recipient is represented /-s/, /-sni/ or /-snə/ and /-l/ or /-la/. As it is marked by majority of the forms of the dative present in this variety, it is represented to be in contact with all the rest of the functions through connecting lines. The function predicative possessor is marked additionally by /-dz/ along with /-la/ (which is common to all other functions). Thus, it is connected to thr rest of the functions via connecting lines.
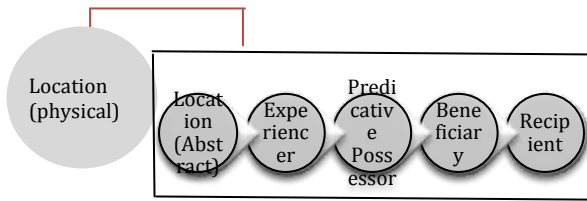
7.   Sangameshwar (Ratnagiri)

Figure 9. Semantic Map for Dative in the Sangameshwar Marathi

In Sangameshwar variety of Marathi, the dative forms /-la/ and /-ka/ mark five functions uniformly. Thus, each of these functions is equally contiguous to each other conceptually; these are represented in a box in the semantic map. The function 'location (physical)' is represented additionally by /-ʃi/ along with /-la/ and /-ka/.Thus, it is represented to be in contact with the rest of the functions through aconnecting line and is shaded densely to depict that it is marked by all the forms of the dative in this variety.
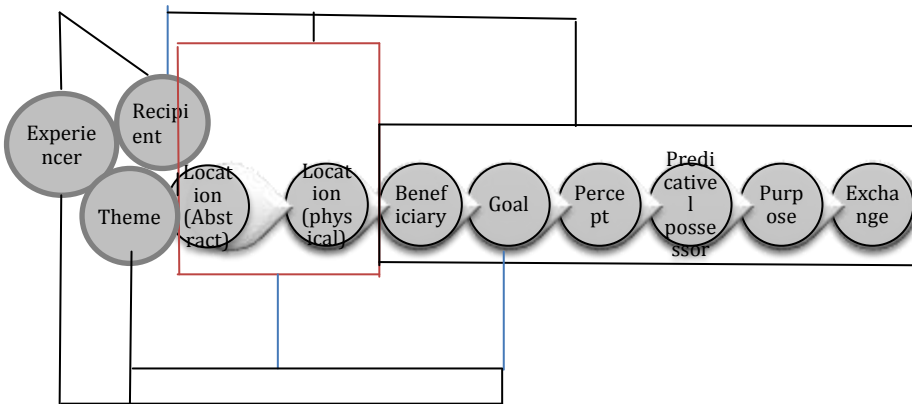
8.   Ahirani (Dhule)

Figure 10. Semantic map for dative in Dhule (Ahirani) Marathi

In Dhule variety of Marathi (Ahirani), the dative form /-le/ marks 6 functions uniformly. Thus, their semantic map is represented in a box. The functions location (abstract) and location (physical) is marked by dative forms like /-le/ and /-l/ or/-la/ and are conceptually more near to each other, thus they are represented in a box. The function 'recipient' is marked additionally by /-sle/ along with /-le/ and /-la/ and the function 'theme' is marked additionally by /-ne/ along with /-le/ and both of them are in connected by a connecting line with each other and both are connected to the box of'location (physical), (abstract)' and the box of functions 'beneficiary', 'goal', 'percept', 'predicative possessor', 'purpose'

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and 'exchange' via connecting lines. Similarly, the function experiencer is marked by the dative forms of /-sle/, /-le/, /-l/ or /-la/ and /-ne/ or /-na/. As it is marked by all of the forms of the dative present in this variety, it is represented to be in contact with all the other functions through connecting lines.

Summary of Findings

This study used semantic mapping to explore intra-lingual, cross-dialectal polysemy in a grammatical morpheme using a limited number of tokens (*n* = 251). This study aimed to identify markers of dative functions in the regional varieties of Marathi. The following markers were identified: *–la, -s (-dz), -k, -ka,, -le (-l), -sle* marked on singular nouns and *–na*, *-sni (-snə)* on plural nouns. Besides marking the semantic role 'recipient' in all the regional varieties, the extended semantic functions of the dative included beneficiary, experiencer, predicative possessor, goal, location (physical and abstract), theme, percept (source), purpose, sociation and exchange/ transaction. Of these, the dative marked recipient, experiencer and beneficiary and location (physical and abstract) consistently in all the varieties except Trimbakeshwar (Nasik).

The semantic maps allowed us to depict the conceptual contiguity of the multiple functions listed for each variety/dialect of Marathi in the speakers' cognition.The functions that appear to be more contiguous to each other than the remaining functions across dialects are:

a) 'recipient' and 'experiencer'
b) 'location (physical)' and 'location (abstract)'

In each of the dialects of Malwan, Chandgad, Sangameshwar, and Dhule, the functions 'theme', 'recipient', 'location (physical)' and 'experiencer' respectively are marked with every dative form present in the respective regional variety.

It was hypothesised that the regional variants of a single language would not reveal significant variation in terms of the semantic maps representing the multifunctionality of the dative marker. Cross dialectal comparison revealed variation in the various morpho-phonological variants of the dative marker. More importantly for the present study, mapping of semantic functions revealed similarities and differences in the functions marked cross-dialectically. This analysis suggests that intra-lingual/ cross-dialectal variation can exist in the semantic mapping of case markers.

Based on the semantic mapping, our tentative hypothesis for further examination will bethat the semantic feature corresponding to dative objects in Marathi is [+change of possession] while that for dative subjects [+goal]. Grimm's (2011) 'lattice model' is based on the 'semantic properties' of the multiple functions of the dative instead of 'functions of the grammatical markers' upon which the 'semantic maps' are

constructed. The semantic maps are built inductively via cross-linguistic comparison while the lattice is built deductively based on the relations between the semantic properties. But as Grimm (2011) observes, both the approaches complement each other as semantic maps can be used to test the predictions of the lattice while the lattice would provide a semantic explanation to the contiguity of various functions represented in the semantic maps. Thus, based on this approach, an alternative hypothesis for further examination is that semantic properties that correspond to dative objects in Marathi are [motion, instigation, total/qualitative/existential persistence, sentience] while those for dative subjects are [sentience, instigation, qualitative/existential persistence, volition]. This hypothesis will be tested in future research.

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