THE CASE OF RESTRICTED LOCATIVES
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1. INTRODUCTION: THE PUZZLE

The locative case in Latin only appears with names of towns, cities, small islands and a few common nouns (1b) including *domus/domī* ‘home’, *rus/ruri* ‘countryside’ and *humus/humi* ‘ground’ (henceforth, *L*-nouns). All other toponyms and common nouns require a preposition

(1) a. *iacĕre humĭ* lie.INF ground.LOC
    to lie on the ground

b. *Mĭlitēs Albae cŏnstitĕrunt in urbe opportūnā.*
    soldiers Alba.LOC halted in city.ABL convenient.ABL
    The soldiers halted at Alba, a conveniently situated town.

(2) a. *Pompeius in Thessaliam pervenit.*
    Pompey in Thessaly.ACC arrived
    *Pompey arrived in Thessaly.*

b. *Me potius in Hispania fuisse tum quam Formiis!*
    I.ACC able in Spain.ABL be.PERF.INF then than Formiae.LOC
    To think of my having been in Spain at that time rather than at Formiae!

Cannot be a morphological restriction on the distribution of the locative case suffix (which is syncretic with other cells in the paradigm anyway): exactly the same set of lexical items uses bare *accusative* case-marking for *allative* and bare *ablative* case-marking for the *source*:

NB: The directional accusative can appear also with some country names (Woodcock 1959:4-6). No explanation yet

(3) a. *Missī lēgātī Athēnās sunt.*
    sent.PL envoy.ACC Athens.ACC are
    Envoys were sent to Athens.

b. *Innumerābĭlĕs (philosophī) numquam domum revertĕrunt.*
    innumerable philosophers never home.ACC returned
    Innumerable philosophers never returned home

(4) a. *(Verrēs) omnia domō ēius abstulit.*
    Verres everything house.ABL his took.away
    Verres took everything away from his house.

b. *Dolābella Dēlō proficīscitur.*
    Dolabella Delos.ABL depart
    Dolabella sets out from Delos.

And it is not the case that the use of a preposition is excluded:

(5) a. *ut a Mutīna discederet* Latin sources, via Allen et al.
    so.that from Modena.ABL retire.SBJ
    that he should retire from Modena (which he was besieging)

b. *ad Alesiam proficiscuntur* to Alesia.ACC advance.3PL
    they set out for Alesia

Intuition: only *L*-nouns can make use of accusative and ablative cases to function as sources or goals
This is not an isolated case: lexical-semantic restrictions on the availability of locative cases are very common cross-linguistically.

2. **The Core of the Solution: The Semantics of Loci**

Many different technical approaches to the semantics of spatial prepositions (Bierwisch 1988, Wunderlich 1991, Zwarts and Winter 2000, Kracht 2002, Bateman et al. 2010, etc.). All agree: locative prepositions operate with loci (regions, sets of points, sets of vectors, etc.)

We minimally need the semantic type for loci and a function to map an entity to its locus

Wunderlich 1991: the eigenspace of an entity is the region that it occupies (obtained by the application of the primitive function EIGEN).

A preposition applies to a locus (e.g., a set of points) and returns another locus

\[
\text{the TV EIGEN ([the TV]) above (EIGEN ([the TV]))}
\]

All this is a simplification. Prepositions can introduce additional restrictions (e.g., on requires contact rather than orientation) and may relate not to the object itself but only to its (relevant) boundaries (cf. Matushansky and Zwarts 2017). But for our present purposes this is good enough.

Creary, Gawron and Nerbonne 1989 (building on Jackendoff 1983, cf. Larson 1987): just as NP arguments can be pronominalized, quantified over and give rise to ACD, so can locatives:

\[
\text{(7) a. Bill sang everywhere Mary sang/did.} \\
\text{b. Al lives on the Ohio, and Ed works there.}
\]

The core outcome is: there is a semantic domain that deals with loci and their relationships to each other

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If an NP already denotes a locus, the (locative) preposition is not necessary

- **L-nouns in Latin denote loci**, which is why they do not need a preposition (or an external theta-role, cf. Emonds 1987, Barrie and Yoo 2017)
  - L-nouns form a closed class: only those that denote loci
  - L-demonstratives (e.g., here, there) receive a natural explanation

Alternatives:
  - Kayne 2005: English locative adverbials should be derived from a complex structure (this here PLACE).
  - Collins 2008 (cf. Katz and Postal 1964): null preposition with L-demonstratives, thus accounting for their bare uses, same for the bare use of home and the light locative place (see also Larson 1985)

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**Tie-breaker: L-pronouns** (cf. the French clitics en and y), which are morphologically simplex

3. **The Bigger Picture**

The hypothesis that some nouns can denote in the locative domain explains multiple puzzles in a number of languages that do not restrict their locatives in precisely the same ways.

In Russian, the true locative case is only available for demonstratives, simplex wh-words and their existential derivatives, and the universal quantifier, as well as the noun dom ‘home’: here is also the so-called locative II, which is restricted to location-denoting nouns of the second (consonantal) declension. As this is a case assigned by a preposition, the matter seems to be subtly different here
The locative preposition *te* in Modern Dutch is used only in highly formal register with city names and with the noun *huis* ‘home’ (Broekhuis 2013:88, minor variation exists):

(10) a. Jan vestigt zich te Amsterdam.
    
    *Jan settles in Amsterdam.*

b. *Jan vestigt zich te Frankrijk/deze stad.*
    
    *Jan settles in France this city.*

The directional/locative *he* was productive in Biblical Hebrew (Hoefijzer 1981, Waltke and O’Connor 1990, Arnold and Choi 2003, Medill 2013), but is limited to a handful of location-denoting nouns in Modern Hebrew (Zewi 2013)

(11) ka-aseret alafim iš higiu le-latrun be-darkam yerušalayma Zewi 2013
    
    *Like ten thousands person arrived to Latrun in way.*

It turns out that locative cases frequently have restricted distribution:

(12) a. locative case restricted to L-nouns
    
    Latin; directional *he* in Modern Hebrew; Maltese: Borg 1987-1988; Itzaj Maya: Hofling 2000:219; also the Dutch *te*
    
    Russian, English: D + dom ‘home’, French: locative clitics

b. locative case-marking optional or absent for L-nouns
    
    Biblical Hebrew: Waltke and O’Connor 1990; Tswana: Creissels 2009; Western Armenian: Guekguezian 2011;
    

c. special locative case forms for L-nouns
    
    Hungarian (a handful of toponyms and a few common nouns): Rounds 2001:118; Agul, Archi, Avar, Lezgian, etc.: Daniel and Ganenkov 2009; Basque (de Rijk 2007:57)

d. locative cases & genitive only for L-nouns
    
    Bagvalal: Daniel and Ganenkov 2009, Diyari: Austin 2013:52

Lexically restricted locations and paths can explain these patterns:

(13) a. locative case-marking restricted to L-nouns
    
    only L-nouns denote loci (as in Latin)

b. locative case-marking optional or absent for L-nouns
    
    only L-nouns denote loci; for all others locative case- 
    
    marking indicates the presence of a null preposition 
    
    that assigns it

c. special locative case forms for L-nouns
    
    only L-nouns denote loci, as in (12/13a), and have it 
    
    marked with special morphology. For all others the 
    
    default locative case results from the presence of a 
    
    null preposition, as in (12/13b)

d. locative cases & genitive only for L-nouns
    
    L-nouns denote loci with no corresponding entity- 
    
    correlates
The complementary case-marking in languages like (12a) vs. (12b) shows that the locative-case label cannot correspond to the same structure across languages.

The pattern in (12c) is a combination of the two options in (12a) vs. (12b).

The pattern in (12d) is the source of the appositive genitive (the city of New York), shows that the unmarked transition (coercion) from a locus to the corresponding object denotation may be unavailable (no morpheme for \textit{EIGEN}^*)

The basic dichotomy between locus-denoting and object-denoting nouns translates into a split in function of other parameters of a given language.

### 4. Paths and Directionals

Bierwisch 1988, Koopman 2000, Tungseth 2003, Zwarts 2005, among others: directional PPs are more complex (semantically and syntactically)

Bierwisch 1988: directional prepositions are specified [+ dir]

Koopman 2000: for directional interpretation, a locative PP must be contained in the functional projection \textit{PathP}

Zwarts 2005: directional PPs contain a Path function, in addition to the location

\begin{equation}
\textit{PathP} \rightarrow \textit{Path}^0 \rightarrow \textit{PlaceP} \rightarrow \textit{Place}^0 \rightarrow \textit{NP} \rightarrow \textit{EIGEN} \rightarrow \textit{Roman empire}
\end{equation}


\begin{enumerate}
\item[(15)] a. \textit{Multos annos Gallia sub imperio Romano fuit.} \hspace{1cm}\textit{locative} \hspace{1cm} For many years Gaul was under Roman rule.
\item[(15)] b. \textit{Sub imperium Romanum Gallia cecedit.} \hspace{1cm}\textit{directional} \hspace{1cm} Gaul fell under the Roman rule.
\end{enumerate}

Reasonable assumption: the accusative of direction results from the presence of the allative \textit{Path}^0.

One technical option is that the case assigned by \textit{Path}^0 overrides that assigned by \textit{Place}^0 (cf. Pesetsky 2013), or that the two cases are combined (as in Matushansky 2008, 2010, 2012, but see also Svenonius 2003)

The same is true for the accusative used as allative with L-nouns:

\begin{enumerate}
\item[(16)] a. \textit{PathP} \rightarrow \textit{Path}^0 \rightarrow \textit{NP}^{\text{ACC}} \rightarrow \textit{domum} \hspace{1cm}\textit{in Roman empire}
\end{enumerate}

The ablative \textit{PathP} requires a stipulation: assuming that \textit{FROM} is covert (as shown by (4)), the overt preposition (\textit{ab, ex}) in ablative PPs results from \textit{Place-to-Path} movement:

\begin{enumerate}
\item[(17)] a. \textit{PathP} \rightarrow \textit{Path}^0 \rightarrow \textit{PlaceP} \rightarrow \textit{Place}^0 \rightarrow \textit{NP} \rightarrow \textit{in Roman empire}
\item[(17)] b. \textit{PathP} \rightarrow \textit{Path}^0 \rightarrow \textit{NP}^{\text{ABL}} \rightarrow \textit{domo} \hspace{1cm}\textit{in Roman empire}
\end{enumerate}
Issues:

- the source of the locative case
- the availability of overt prepositions

Radkevich 2010: for case, the morphological picture is actually more complex, including the features Distal, Motion, Orientation and Aspect:

(18) \[ \text{NP} \]

Radkevich’s picture (see also Mel'čuk 1994) is closer to that of Kracht 2002, distinguishing configuration and mode components in the locative (with the latter including the static mode, for non-directionals)

5. **The Source of the Locative Case**

If L-nouns denote in the spatial domain, they should not combine as NPs do

Non-restrictive modification does not remove the ability to function as a locative (meae domī ‘at my home’ (Plautus, *Aulularia* 432 via Calabrese 2008); proximae viciniae habitat ‘s/he lives nearby’ (Plautus, *Bacchidae* 2, 2, 27)), yet restrictive modification generally blocks the bare locative (cf. Donaldson 1860:314).

Conversely, locative PPs can function as modifiers of entities (NP-internally) or events (VP-internally):

(19) a. a house in New York
   b. to live/walk in New York

For the former case, direct composition is impossible; must shift from a locus (however it is defined) to a set of entities (type \(\langle e, t \rangle\)). A very reasonable assumption for the latter case as well

Hence EIGEN⁻: maps a locus to the set of entities (type \(\langle e, t \rangle\)) that are located at this locus:

(20) \[ \text{EIGEN}⁻ = \text{def} \, \lambda l : \lambda x . \text{EIGEN} (x) \subseteq l \]

EIGEN⁻ cannot be a lexical part of spatial prepositions, since spatial PPs can be augmented by directional prepositions and modified:

(21) a. [from [under the bed]]
   b. [[six feet] [behind the house]]

The measure phrase and the directional preposition do not combine with something of the type \(\langle e, t \rangle\), they need access to the spatial representation (e.g., a set of vectors, Zwarts and Winter 2000)

Which means that transition to the predicate type happens at a higher level than the modifier and can be accomplished by a functional head (the \(p^0\) of Svenonius 2003, cf. Kratzer 1996 for \(v^0\))

Svenonius 2003: the case assigned to the Ground is assigned by \(p^0 + p^0\) (or \(p^0\) alone), cf. \(v^0\)
We can now explain the locative cases in the locative/directional case alternation: more than one case can be used:

(22) a. Marina bežít v gorode. Marina runs in city.LOC  
   Marina is running in the city. 

   c. Marina sprjatala’ pod stolom. Marina hid under table.INS  
   Marina hid somewhere under the table. 

   b. Marina bežít v gorod. Marina runs in city.ACC  
   Marina is running to the city. 

   d. Marina sprjatala’ pod stol. Marina hid under table.ACC  
   Marina hid under the table. 

Proposal: the combination $p^0+\text{Place}^0$ assigns different cases in function of different Places

The case will be different (accusative) in case of the combination $\text{Path}^0+\text{Place}^0$

Reconciliation with the decomposition in Kracht 2002 and Radkevich 2010: directional PPs do not comprise the totality of locative tree (because directionals do not need to include the pP, a different mode of composition is expected)


6. CONCLUSION AND FURTHER QUESTIONS

A set of cross-linguistic generalizations about restrictions on preposition-less locative case argues for adopting locus denotations for some terminals in some languages

As our ontology at any rate requires loci, it is unsurprising that there should be terminals that denote loci

Loci naturally have entity-correlates:

(23) $\textit{EIGEN}^+: \text{maps a locus to the unique entity located at this locus } \lambda l . \, \textit{tx} . \, \textit{EIGEN} (x) = l$

Points of variation:

- whether a language has locus-denoting nouns at all
- whether each given locative case (form) indicates the presence of more structure (when corresponding to a hidden preposition) or less (when corresponding to the default case-marking on lexical loci)
- whether coercion to entities is available

(Potential) extensions:

- attested locative case syncretisms (Radkevich 2010): only directional/locative and ablative/locative (in Nivkh and Veps)
- the effect of modification (restrictive vs. non-restrictive)
- unmarked definite locatives (Rapa Nui (Kieviet 2017), Modern Greek (Ioannidou and Dikken 2009, Terzi 2010, Gehrke and Lekakou 2012), Western Armenian)
- Russian close apposition with toponyms (Matushansky 2013, in progress)
- temporal bare nominals (e.g., $\textit{Monday, next week}$; cf. also Bresnan and Grimshaw 1978, McCawley 1988)
- connection between $p^0$ and $\text{Pred}^0$
The issue of multiple case-assignment and multiple case-marking: which case wins?


### Bibliography (Jakobsonian) approach to case + the reflexive nature of case features

7. Bibliography


Guekguezian, Peter Ara. 2011. Bare locatives in Western Armenian. Ms., USC.


McCawley, James D. 1988. Adverbal NPs: Bare or clad in see-through garb? Language 64, pp. 583-590.


