Time and Space I

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Coding locations

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(2)   Where is Mary? — *Mary*   is **in**   her room.

                           Figure   spatial marker Ground
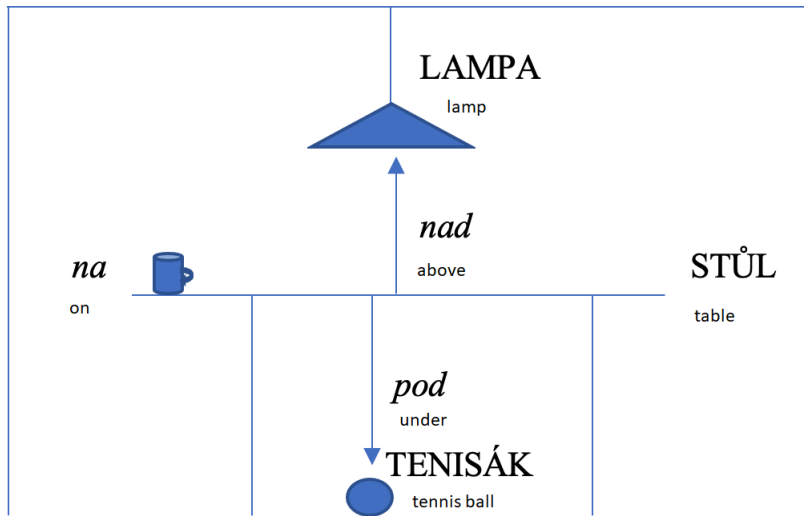
LAMPA

lamp

nad

above

na

on

STŮL

table

pod

under

TENISÁK

tennis ball

Czech prepositions

(3)   Spatial markers – some basic distinctions

      a.   directional: k, z,   s,   do,   od,   přes, ...
                               to from off into away from over

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How to tell locatives and directionals apart

(4) Compatibility with different verbs

    a.   Dej ten kabát { do skříně / *ve skříni }
           put the coat   into wardrobe   in   wardrobe

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(5) Cross-linguistic variation

    a. He jumped in the lake (locative and directional)

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    a.   He jumped in the lake (locative and directional)

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(6) There are markers like this in Czech

    a. Dej ten kabát vedle   bundy
       put the coat   next to jacket

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▶ The point: motion can be coded in the spatial marker or in the verb.

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    a.   directional: k, z,   s, do, od,   přes, …
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(7) Spatial markers – some basic distinctions

   a. directional: k, z, s, do, od, přes, …
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   b. location: u, v, na, po, nad, pod, před, za, …
      at in on on above under in front of behind

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(8) Case marking the ground

    genitive: u   aut-a
                   by   the car

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genitive:	u	aut-a
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instrumental:	nad/pod/před/za	aut-em
	above/under/in front of/behind	the car

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    ▶ start at Ground, search in a particular direction

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▶ Two basic ways of finding the Figure:
    ▶ start at Ground, search in a particular direction
    ▶ start at Ground, look around in no particular direction, but in the general proximity of the object

Intrinsic frame of reference (in front of the car)

Relative frame of reference
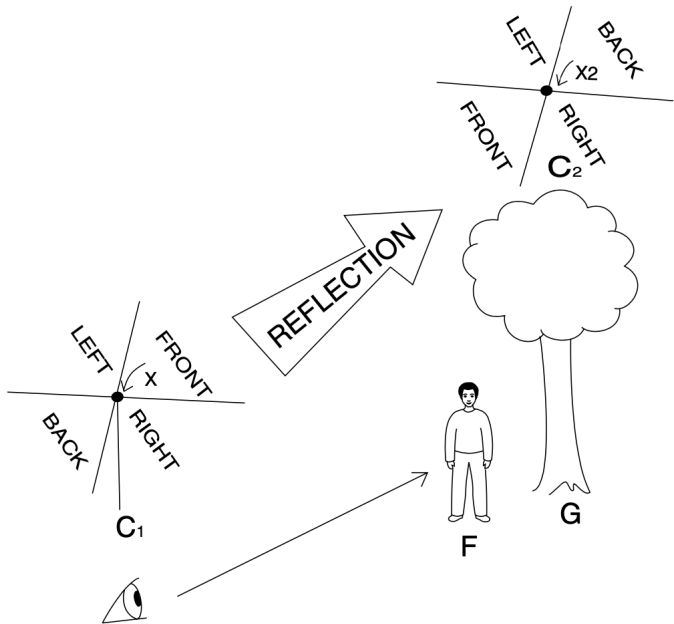
Absolute frame of reference
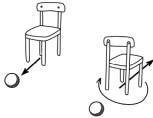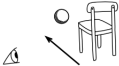

ABSOLUTE

"He's north of the house."

Rotations

Figure 2.6. Properties of the frames of reference under rotation

	Rotation of:		
	viewer	ground object	whole array
Intrinsic "ball in front of chair"	same description?	same description?	same description?
	yes	no	yes
Relative "ball to left of chair"	no	yes	no
Absolute "ball to north of chair"	yes	yes	no

back to Czech

(9)   Case marking the ground

genitive:	u	aut-a
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back to Czech

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- ▶ Two basic ways of finding the Figure:
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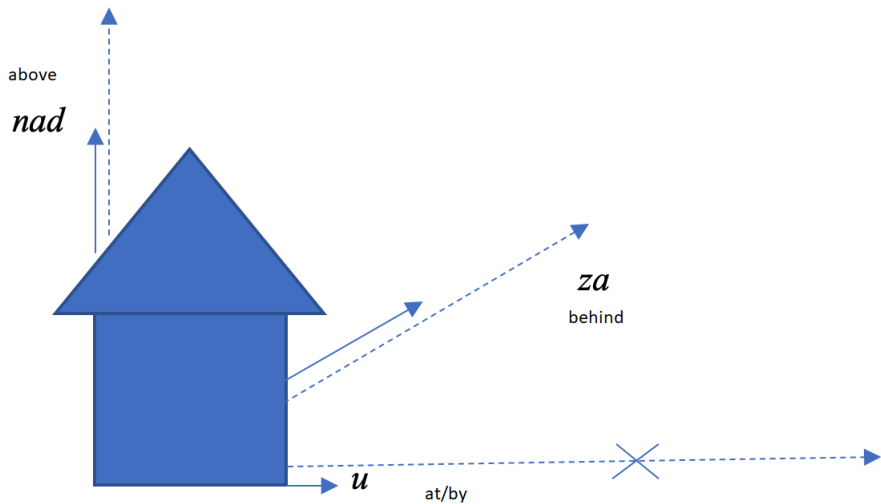- ▶ All and only prepositions with the instrumental require us to orient the ground

Interior (in)

attachment (on)

proximity (u)

projectivity

above

nad

za

behind

u

at/by

(10) Case marking the ground

genitive:	u	aut-a
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(11) a. dva metry nad/pod/před/za domem
      two meters above/under/inf.front.of/behind house
   b. *dva metry u/v/na hradu
      two meters at/in/on castle

(12)   Symmetry
   a.   A je u B
        A is at B
   b.   B je u A
        B is at A

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(13)   Asymmetry
   a.   A je v B
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  B is on A

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- b. B je u A
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- b. B je v A
  B is in A

(14) Asymmetry
- a. A je na B
  A is on B
- b. B je na A
  B is on A

▶ *u*: Ground is a point (1D)

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  a. A je u   B
     A is at B
  b. B je u   A
     B is at A

(13) Asymmetry
  a. A je v   B
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  b. B je v   A
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- ► *u*: Ground is a point (1D)
- ► *na*: Ground has surface (2D)

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- ▶ *u*: Ground is a point (1D)
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- Figure – something we are looking for
- Ground – a fixed reference point, we use it to locate the figure
- spatial marker – tells us how to find the figure relative to the ground
- projective spatial markers: orient the ground according to a set of coordinates, search in a particular direction
- non-projective spatial markers: interior, surface, proximity