# Slope-based geocentric descriptions in Chiapas Zoque: linguistic resources and patterns of use

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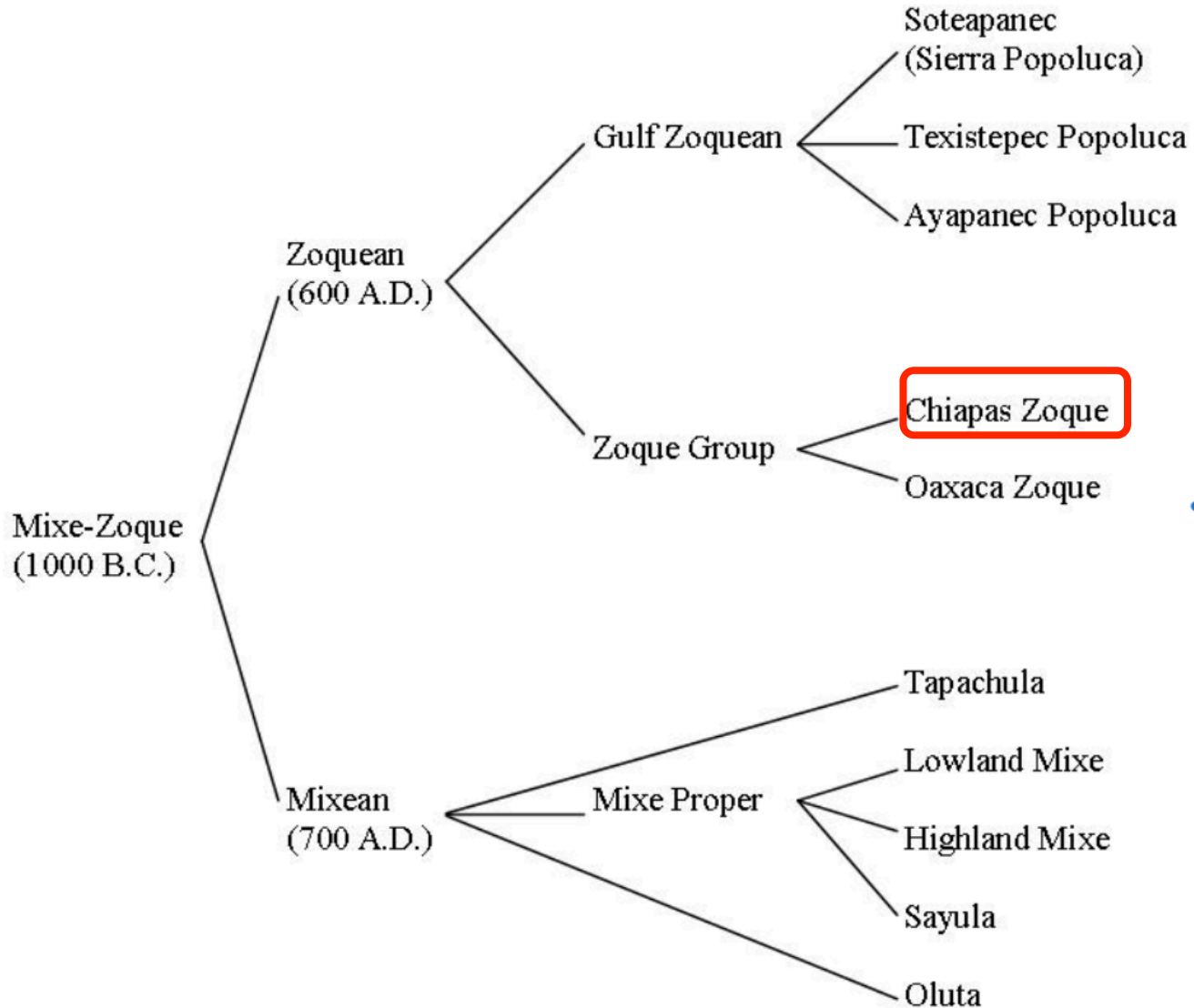The University of Manchester

# Central aim

*To unpick the relationship between,*

1.  The considerable difference in the usage of slope-based (SB) locative statements across different scales

2.  The inability to form fully specified slope-based locative statements using the linguistic resources available to CZ speakers

# Outline

- **Introduction** (language, fieldwork location, SB descriptions in CZ)
- **Usage patterns** (different scales)
- **Linguistic resources & conceptual structure**
- **Discussion**
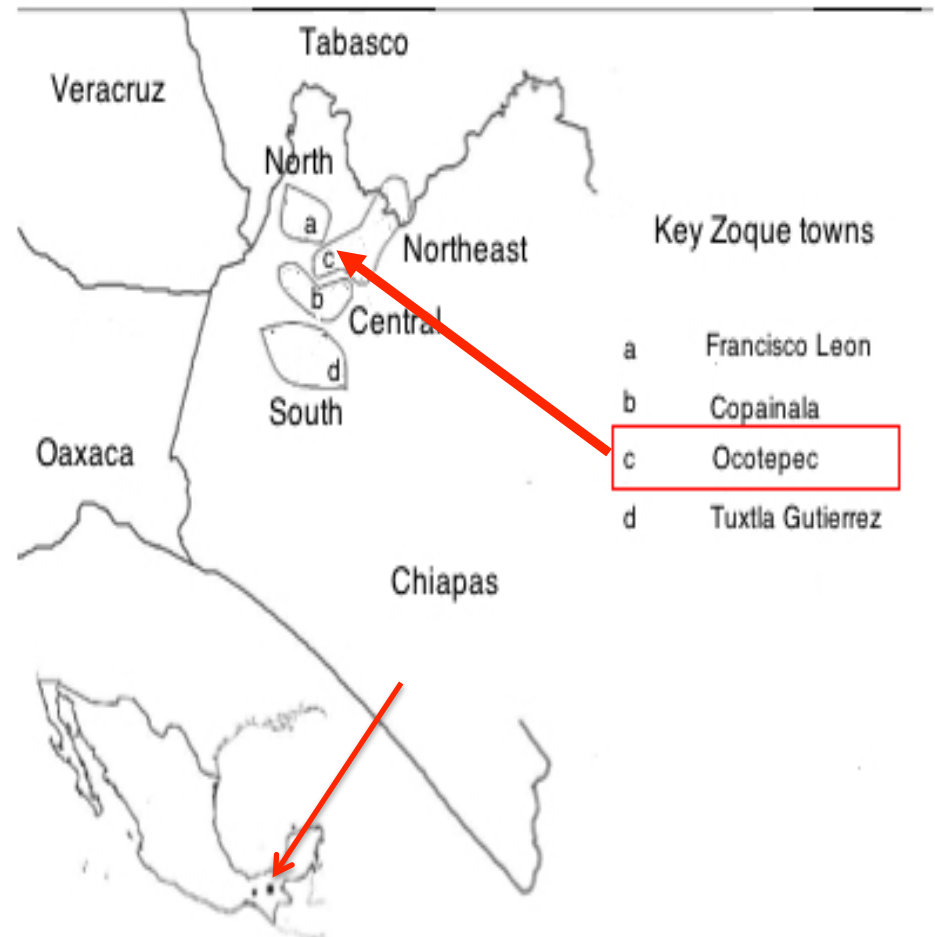- **Summary**

# Chiapas Zoque



(Adapted from Zavala, 2000)

# Fieldwork (2013-present)

- Conducted in Ocotepec town, Chiapas

- Population of municipio ~ 11,000

- 99% of whom speak CZ

- 64% bilingual

Data taken from Mexican Census (2010)



(Adapted from Zavala, 2011)

# **Town Geography**

- Situated in steep-sided valley

- Dominant slope from south to north

- Town slopes down at edges

- Many smaller slopes along many different orientations in the village itself.

# Nature of SB directions - conceptual

- Anchored by ``most prominent'' slope in location of figure and ground -> geomorphic

- Freely used on flat surfaces

# Nature of SB descriptions - formal

- Terminology borrowed from vertical direction
  - Verbal roots: *kiʔm* `ascend' and *mɘʔn `descend'*
  - Adverbs: *kɘhsi/kɘhsmɘ `above' (RN:top=LOC)*

    *kɘʔmɘ/kɘʔji `below' (RN:bottom=LOC)*

(1)　　kɘʔmɘ nɘ　　j-ʔɘʔm-mɘʔn-u　　　　teʔ　poʔks-tɘk
　　　　below  PROG 3A-look-descend-DEP.II DET sit-INSTR
　　　　*'The chair is looking down (downhill)'*

# PATTERNS OF USE

# Scales and domains

- Scales
  - Manipulable e.g. balls, chairs, cups
  - Non-manipulable (town) e.g. houses, cars, people

- Types of statement
  - Projective locative: specifies a search region for a figure using an FoR
  - Orientational: *aligns a facet of figure with an external direction*

# Pattern of use - town

- SB descriptions used frequently in *all* domains -> narratives, public space descriptions, route descriptions etc
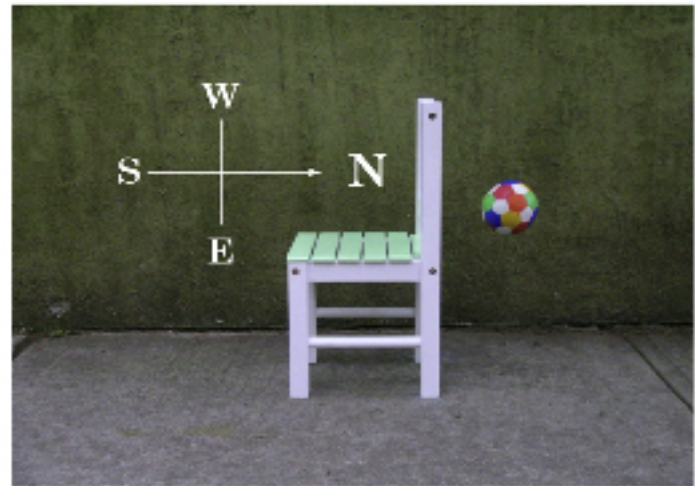
**Location**

(2)     teʔ  *kaɾo*  ø-ʔit-u       kəhsmə
        DET truck 3B-EXIST-CP above
        *'The truck is above (further up the hill)'*

**Orientation**

(3)     teʔ  *kaɾo*  ø-ken-kiʔm-u       kəhsi
        DET truck 3B-look-ascend-CP above
        *'The truck is facing up (the slope)'*

# Manipulable-scale

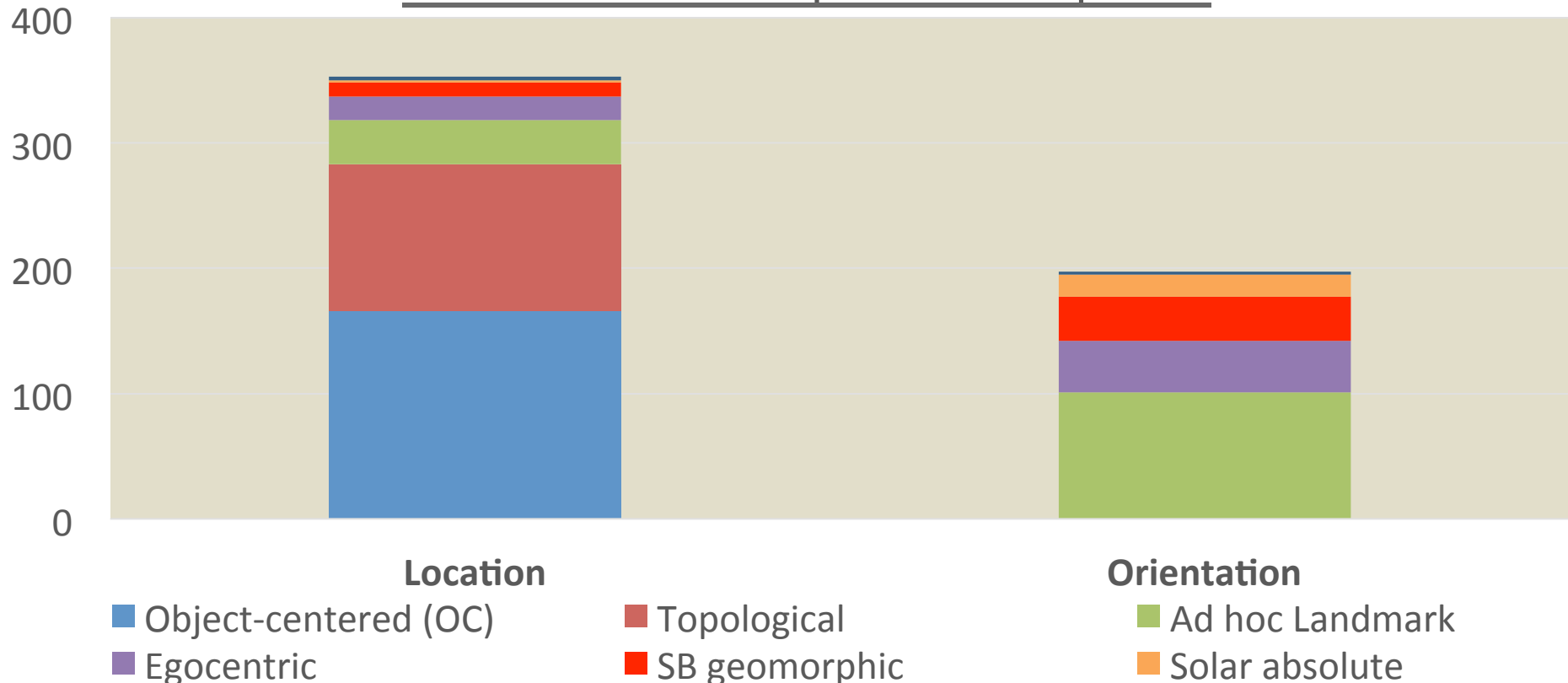- The Ball and Chair communicative task (B&C; Bohnemeyer, 2008)





- 10 participants (6 men, 4 women), aged: 18-50
- All runs conducted in same location –> bottom of a small hill

# Manipulable-scale – location, orientation

- Slope-based descriptions were used in:
  - 3% of locative statements
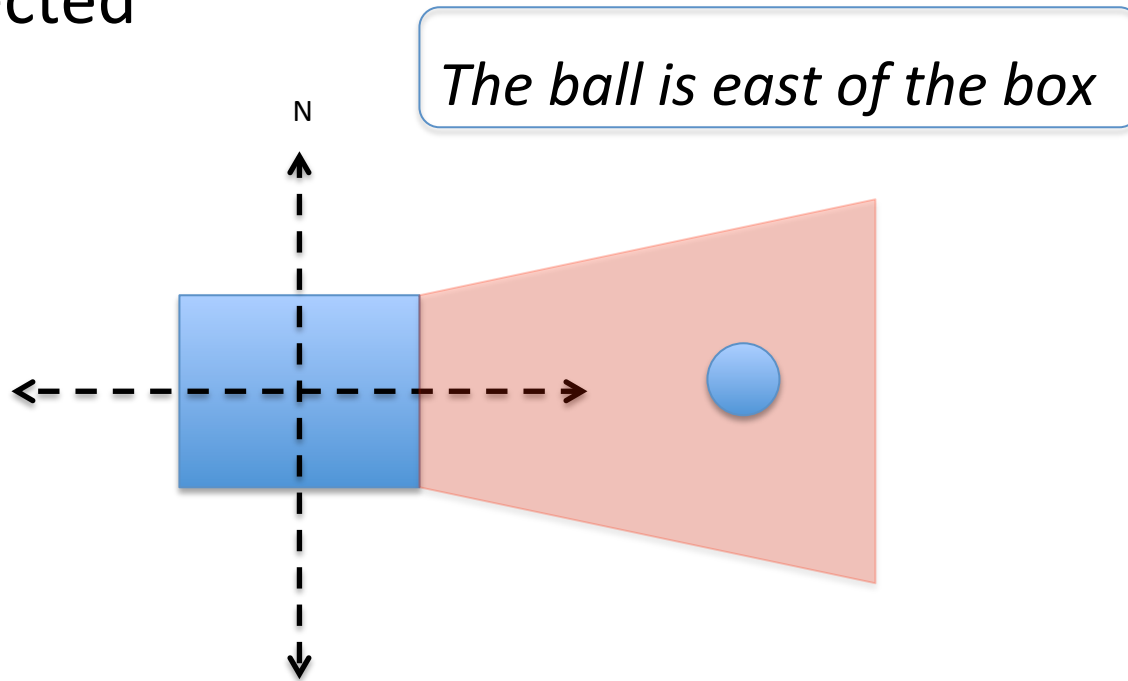  - 18% of orientational statements

FoRs in horizontal-plane descriptions

# LINGUISTIC RESOURCES

# Conceptual structure - location

- *Requires* a **ground** off which a spatial ``search region'' is projected

*The ball is east of the box*

N

- External directions -> need way of associating direction with a ground object

# Locative statements – grounds

– Postpositions kəʔmə & kəhsi -> vertical direction only

(3)    teʔ   poʔks-tək=kəhsi      ø-ʔit-u         *pelota*
       DET  sit-INSTR=on.top.of  3B-EXIST-CP  ball
       *'The ball is on top of the chair'*

– Relational nouns -> vertical absolute, OC and relative frames

(4)    teʔ=ʔis        j-kəhs=i              ø-pots-nej-u                    tumə *pelota*
       3.PRO=GEN  3PSR-RN:top=LOC  3B-to.be.thrown-ASSUMP-CP  one    ball
       *'A ball has been thrown on its (the chair's) top'*

# Slope-based locative statements

- Not possible to explicitly state ground object using *only* SB directions

(1)    teʔ  *kaɾo*  ø-ʔit-u     kəhsmə

      DET  truck  3B-EXIST-CP  above

      *'The truck is above (further up the hill)'*

(6)    j-tseʔŋna=ʔomo=pə=teʔ      jəʔmə  kəhsmə …

      3PSR-side.region=in=REL=PRED  here    above

      *'It is at its (the chair's) side, above (uphill from) here'*

# DISCUSSION

# Discussion - relationship

- **Manipulable scale** -> relationship between linguistic resources and usage patterns

- **Non-manipulable** -> no relationship between linguistic resources and usage patterns

- Difference due typical precision required and contexts given

# Discussion – manipulable scale

**Context:** precision requires ability to state arbitrary ground

**Historically**

– Dispreference for external directions -> no development of linguistic resources from object-centered descriptions

**Synchronically -> dispreference**

– Ineffective strategy for stating location on a manipulable scale, particularly in B&C context

– Historical dispreference

# Discussion - town

- Ground = deictic or town centre

(5)　jəʔki kəʔji ni-tiʔjə=naʔak　ha　j-ʔit-ə　　　　jəʔki
　　　here below no-thing=CONTR CNEG 3B.D-EXIST-DEP.I here
　　　*'Here below there wasn't anything'*

- Conventionalisation ->
  - Negates under-specification
  - Frequent use does not require development of additional linguistic resources

# Summary

- The linguistic resources of CZ do not allow for fully specified, slope-based locative statements

- This is related to a historical dispreference for such descriptions on a manipulable scale

- Synchronically -> strong dispreference

- No such relationship exists on the scale of the town due to the existance of conventional grounds -> relatively high frequency of use