A progressive motion verb puzzle in Valley Zapotec

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Round-trip properties of deictic motion verbs

Kuiper & Merrifield (1975): Diuxi Mixtec

Speck & Pickett (1976): Texmelucan Zapotec

Claim: deictic motion verbs (`come' and `go') express round-trip paths.

Evidence: progressive-marked `come' and `go' can be used even once the destination has been reached, as long as the subject has not returned to the origin.

Round-trip properties of deictic motion verbs

> **Evidence:** progressive-marked `come' and `go' can be used even once the destination has been reached, as long as the subject has not returned to the origin.

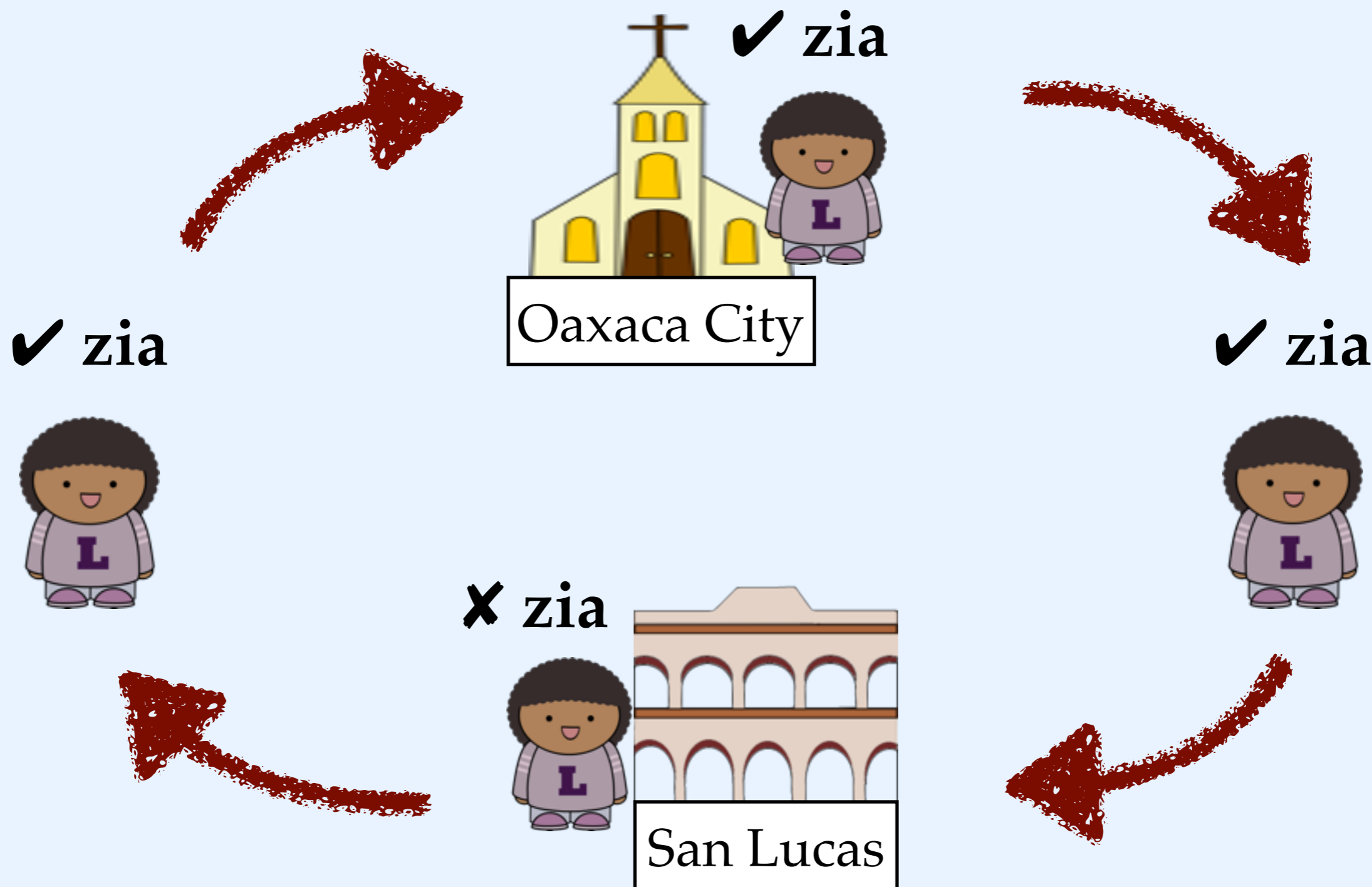This is true in San Lucas Quiaviní Zapotec (SLQZ):

Ndua z-e Brook.
Oaxaca ZPROG-go Brook
`**Brook went to Oaxaca.**'

Comment: She may be on her way, in Oaxaca, or on her way back, but she hasn't returned to San Lucas.

Round-trip behavior of motion verbs

✔ **zia**

Oaxaca City

✔ **zia**

✔ **zia**

✗ **zia**

San Lucas

Round-trip properties of deictic motion verbs

Round-trip Claim:
deictic motion verbs have round-trip interpretations because the lexical semantics of the verbs express round-trip paths.

My Claim:
round-trip interpretations of deictic motion verbs arise through an interaction with the special z-progressive aspect marker.

San Lucas Quiaviní Zapotec

❖ Western Tlacolula Valley Zapotec language (Otomanguean)

❖ Spoken in the village of San Lucas Quiaviní in Oaxaca, Mexico

❖ Endangered and underdocumented (Pérez Báez 2016)

❖ Data presented comes from fieldwork with eight speakers in the village of San Lucas in 2016 and 2017, as well as textual sources such as Munro et al. (2006), Munro & Lopez (1999), and online writings of SLQZ speakers (Lillehaugen 2016) where cited.

SLQZ Syntax

aspect	(morph)	root	subj. clitic
r-	ied	-tau	=a
HAB	VEN	eat	=1s

`I habitually come and eat'

SLQZ Aspect Inventory (Munro et. al 2006)

Morpheme	Gloss	Description
b- / m- / w-	PERF	perfective
ca- / cal- /can-	PROG	progressive
g- / ny- / y-	IRR	irrealis
n-	ST	neutral/stative
r-	HAB	habitual
s- /z-	DEF	definite future
z-	ZPROG	progressive for motion

The z-progressive aspect

SLQZ deictic motion verbs can't take the normal ca- progressive aspect; instead they use z-.

Lee (2006) calls it non-future definite and analyzes it as a positive polarity item.

Munro (2007) calls it incompletive and presents evidence that it is not the same as the definite future z- aspect.

SLQZ motion verbs

3 deictic motion verbs in SLQZ:

- ❖ *ried* `come'
- ❖ *ria* `go'
- ❖ *ria* `go home'

Perspectival anchors

Deictic motion verbs describe motion relative to the location of a **perspective-holder** or **anchor**.

Speaker-anchored: Sarah is coming to see me.

Listener-anchored: I will come over around noon.

Attitude-holder-anchored: John thought that Sarah was coming to see him last week.

Context: John is in NY, the speaker and addressee are in LA.

Perspectival anchors

Perspectives are also time-indexed:

Utterance-time-anchored: Come here, please!

Event-time-anchored: When I got to the cafe last night, it was packed, but by the time Wilma came, it was nearly empty.

Context: the speaker is in her office talking to her officemate.

Perspectival anchors

Not all of these attested perspectival anchors license ried 'come' in SLQZ:

R-rilo   **Jwany a**   **bets=ëng**   **a**

HAB-think Juan   **already brother=3s**   **already**

z-e/*ied-gan   **laëng**

ZPROG-go/*come-visit   **3s**

John thinks that his brother is on the way to visit him.

Context: speaker and listener are not in the same place as John.

Destination implication

The destination of motion does not need to be the location of the perspective-holder, so long as the motion is towards the perspective-holder.

R-inydyag=a ai nih r-to ze z-ied
HAB-hear=1s 3s.dist REL HAB-sell corn ZPROG-come
lo=ën
to=1p

`I hear the man who sells corn coming towards us.´
Context: the man is coming towards us, but not to us—he'll continue on his route after passing us.

Semantics of deictic motion verbs

Semantics for *ria* `go':

$[[\text{ia Jwany}]]^{w,c} = \lambda e. \exists\, p,z,y\,.\, Motion(e)\ \&\ Path(p,e)\ \&\ Origin(p,y)\ \&\ Dest(p,z)\ \&\ Patient(J,e)$

Semantics for *ried* `come':

$[[\text{ied Jwany}]]^{w,c} =$

(a) $\lambda e. \exists\, p,z,y\,.\, Motion(e)\ \&\ Path(p,e)\ \&\ Origin(p,y)\ \&\ Dest(p,z)\ \&\ Patient(J,e)$

(b) J is moving towards the perspective-holder

Round-trip behavior of SLQZ motion verbs

Aëng   z-e   ladi per daru

3s   ZPROG-go   side but then

gy-i=ëng

FUT-come=3s

`He went to the US but he's coming back.´

Judgment: felicitous if the subject is on the way to the US, already arrived, or on his way back.

Round-trip behavior of *zia*
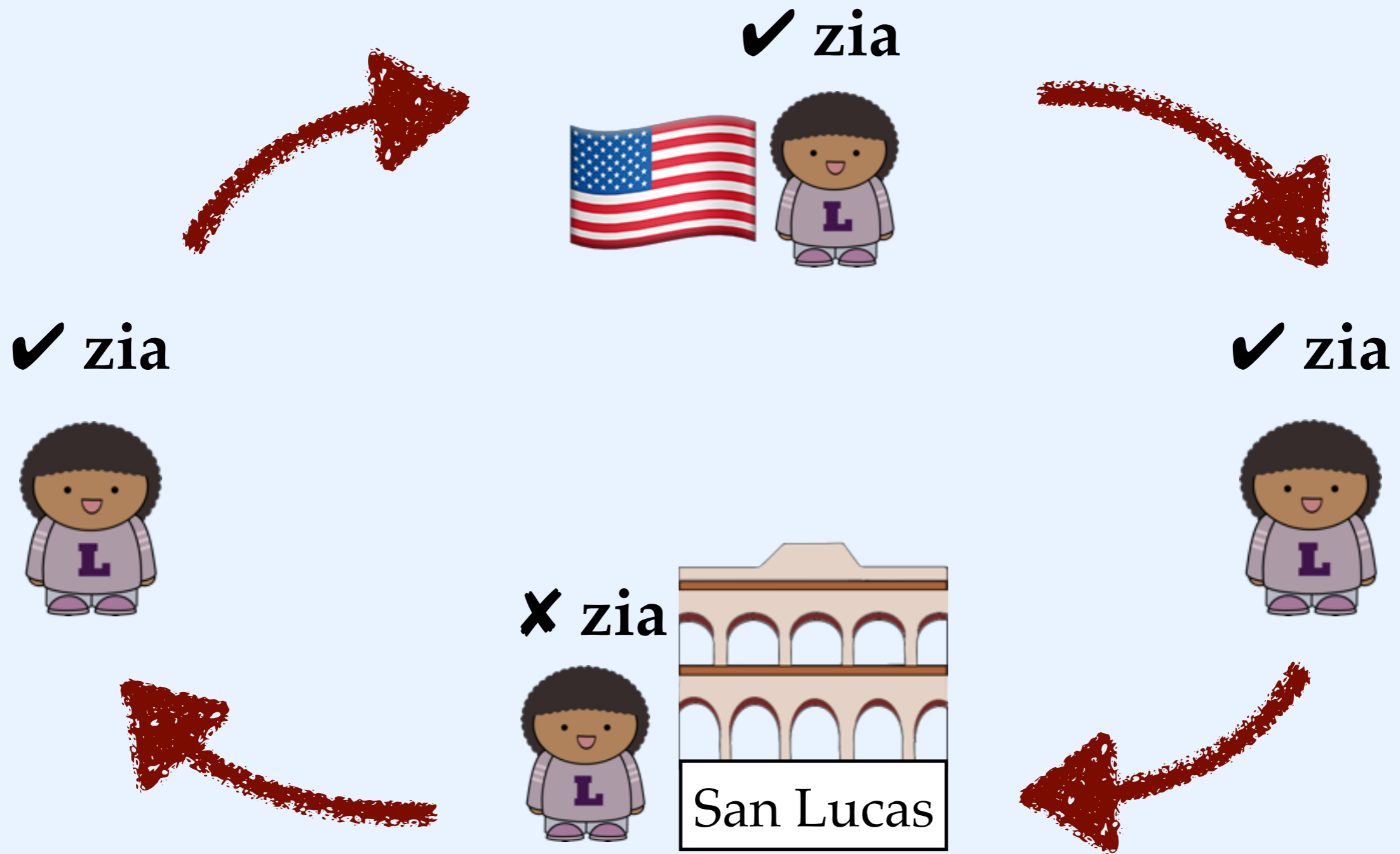
Round-trip behavior of SLQZ motion verbs

A	Brook	z-e	Bac
already	Brook	ZPROG-go	Tlacolula
asy	wxiny	gy-icy=ëng	
later	evening	FUT-return=3s	

`Brook went to Tlacolula and is returning tonight.'

Context: Brook left in the morning for Tlacolula and is returning that same day.

Round-trip behavior of SLQZ motion verbs

Speaker judgments about *ried* 'come' are less clear:

# A	Bed	n-u	re'	z-ied-gan
already	Pedro	ST-be	here	ZPROG-VEN-visit

danoën

1p

Intended: `Pedro is already here and he is coming to visit us.'

Context: Pedro has traveled from Oaxaca City to San Lucas.

Round-trip behavior of SLQZ motion verbs

Speaker judgments about *ried* 'come' are less clear:

Z-ied   Gye'eihlly   laanih
ZPROG-come   Mike   party
`Mike came/is coming to the party.'

Reported judgment (Lee 2006): He's either on his way, or has just arrived but not yet started participating in the party

Round-trip behavior of *zied*
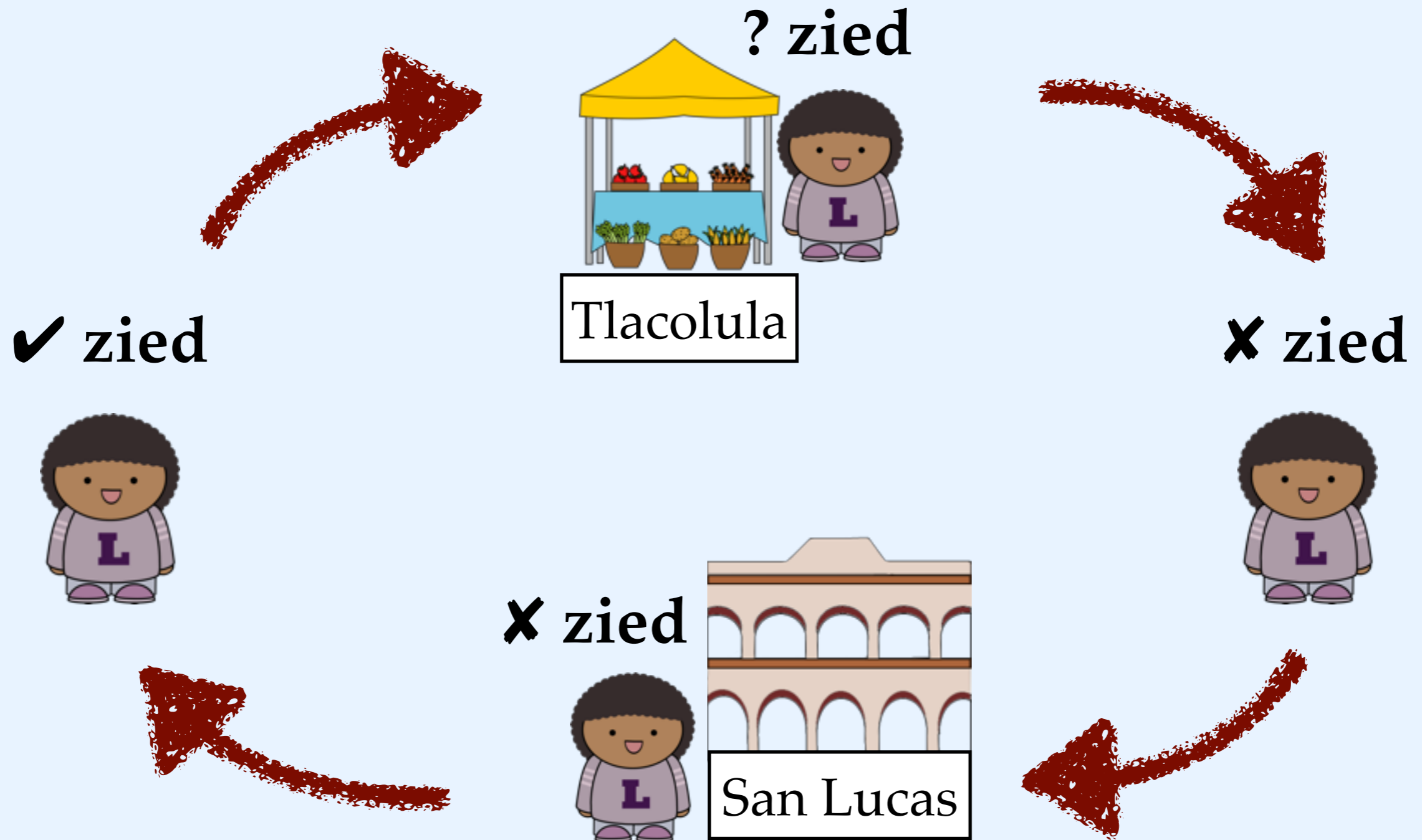
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SLQZ motion verbs are not round-trip

There is no round-trip implication in other aspects:

gw-e xtadmam=a ladi lo 1983.
PERF-go grandfather=1s side in 1983

`My grandfather went to the US in 1983.ʹ

Context: he died there without ever returning.

SLQZ motion verbs are not round-trip

There is no round-trip implication in other aspects:

gw-a=a   Bac   a's   chiru   gwa=a
PERF-go=1s Tlacolula then and   PERF-go=1s
Ndua
Oaxaca.City

`I went to Tlacolula, then I went to Oaxaca City.'

Context: Speaker traveled from San Lucas to Tlacolula and then directly to Oaxaca.

SLQZ motion verbs are not round-trip

There is no round-trip implication in other aspects:

b-yal=a de US a nai
PERF-come=1s from US already yesterday

`I came from the US yesterday.'

Context: the speaker arrived in Oaxaca for the first time the day before.

SLQZ motion verbs are not round-trip

There is no round-trip implication in other aspects:

Ladi ch-a=a   zhi.
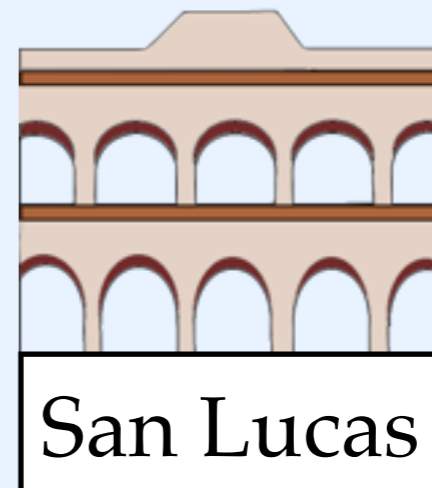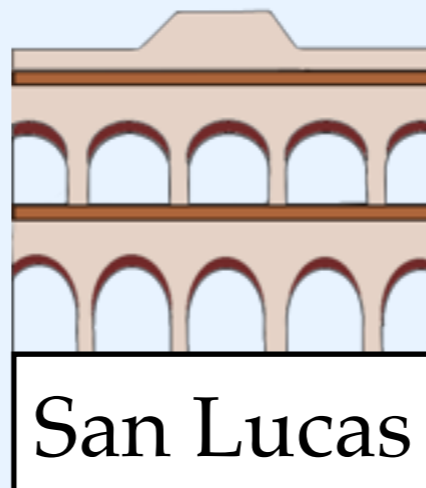**side   IRR-go=1s day**

`I'm going to the US tomorrow.'
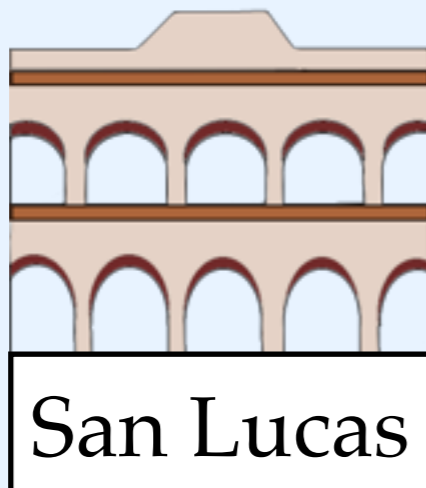
A gual   gy-i=u.
MOD   IRR-go=2s

`It's time for you to go.'

SLQZ motion verbs are not round-trip

✔ bia

✔ gia

✔ bied

San Lucas · San Lucas · San Lucas
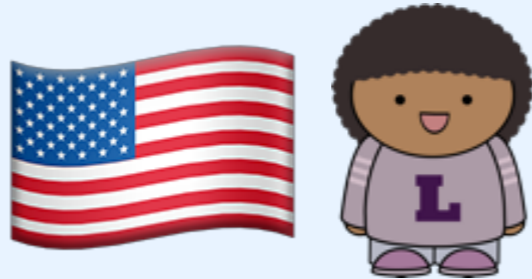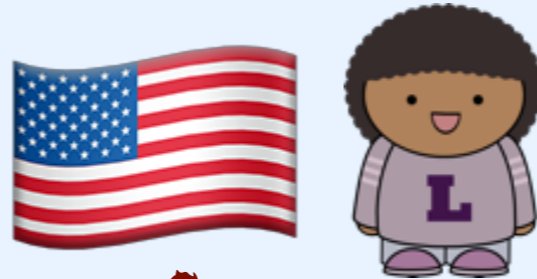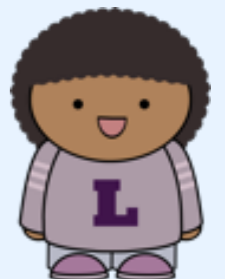
The semantics of the z-progressive

The z-progressive isn't an ordinary progressive marker: it requires that a result state of the predicate holds at Topic Time.

$[[ZPROG]]^{w,c} =$
$[\lambda P_{<\epsilon,t>}: [\ \lambda t'_i : \exists e,s.\ Cause(e,s) \& t \subseteq T(s) \& P(e)]]$

A function from predicates of type <e,t> to predicates of type <i,t> for which there is an event e of which the predicate holds and a state s holding at Topic Time that is caused by e

The semantics of the z-progressive

The z-progressive requires that a result state of the predicate holds at Topic Time.

$[[ZPROG]]^{w,c} =$

$[\lambda P_{<\varepsilon,t>} : [\ \lambda t'_i : \exists e,s.Cause(e,s) \& t \subseteq T(s) \& P(e)]]$

Captures the fact that the z-progressive can be used even when the event it modifies is no longer under way.
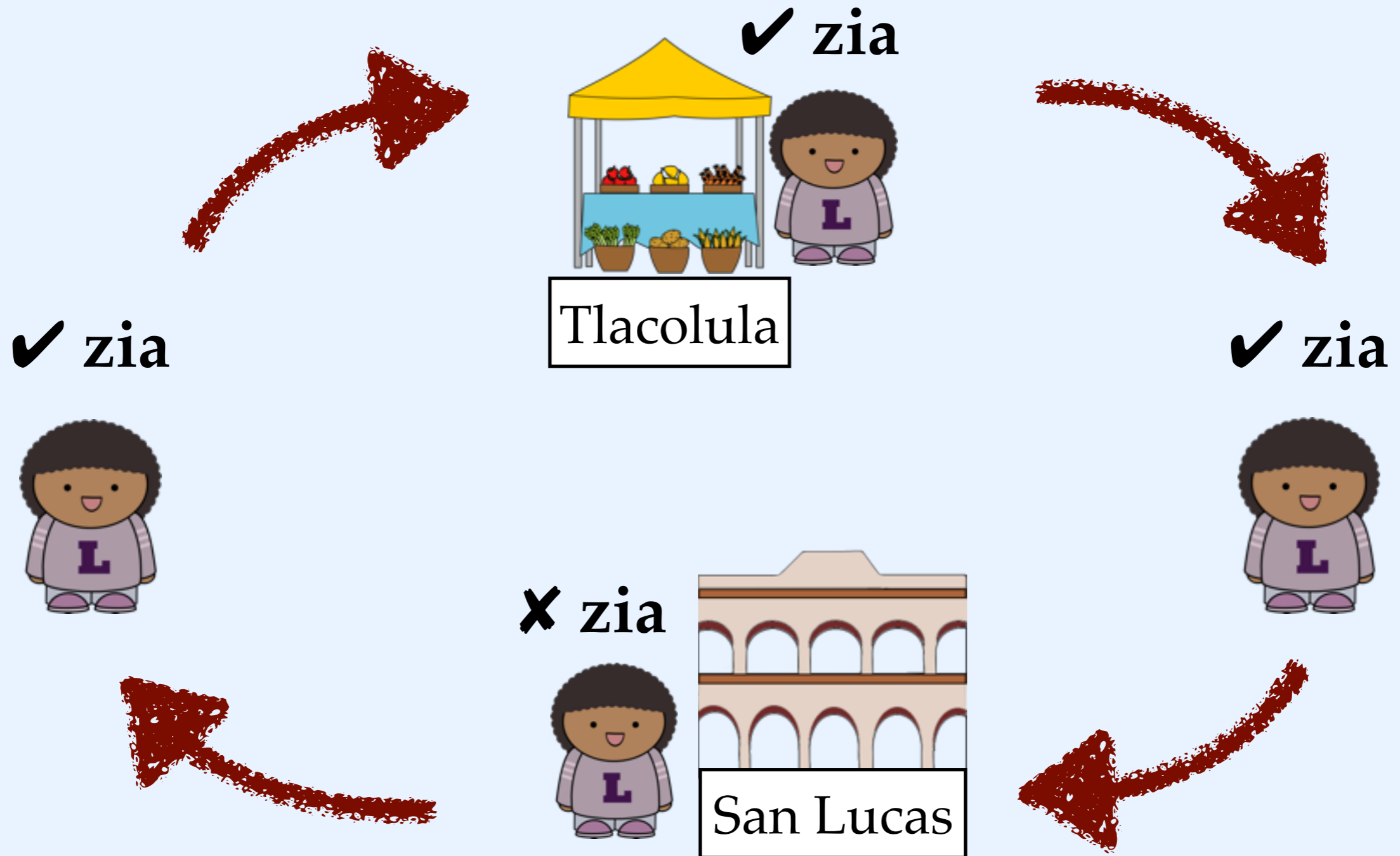
The semantics of zia

$[[\text{ia Jwany}]]^{w,c} = \lambda e : \exists\, p, z, y\,.\, Motion(e)\, \&\, Path(p,e)\, \&\, Origin(p,y)\, \&\, Dest(p,z)\, \&\, Patient(J,e)$

$[[[\text{ZPROG}]]^{w,c} = \lambda P_{<\varepsilon,t>} : [\lambda t'_i : \exists e,s.\, Cause(e,s)\, \&\, t' \subseteq T(s)\, \&\, P(e)]]$

$[[[\text{zia Jwany}]]^{w,c} = \lambda t'_i : \exists e,s,p,z,y.\, Cause(e,s)\, \&\, t' \subseteq T(s)\, \&\, Motion(e)\, \&\, Path(p,e)\, \&\, Origin(p,y)\, \&\, Dest(p,z)\, \&\, Patient(J,e)]$

Round-trip behavior explained

✔ zia — Tlacolula

✔ zia

✔ zia

✘ zia — San Lucas

Round-trip behavior explained

Aëng z-e ladi per daru gy-i=ëng
3s ZPROG-go side but then FUT-come=3s

`He went to the US but he's coming back.'

Judgment: felicitous if the subject is on the way to the US, already arrived, or on his way back.

Predicted to be felicitous so long as the result-state of having left holds.
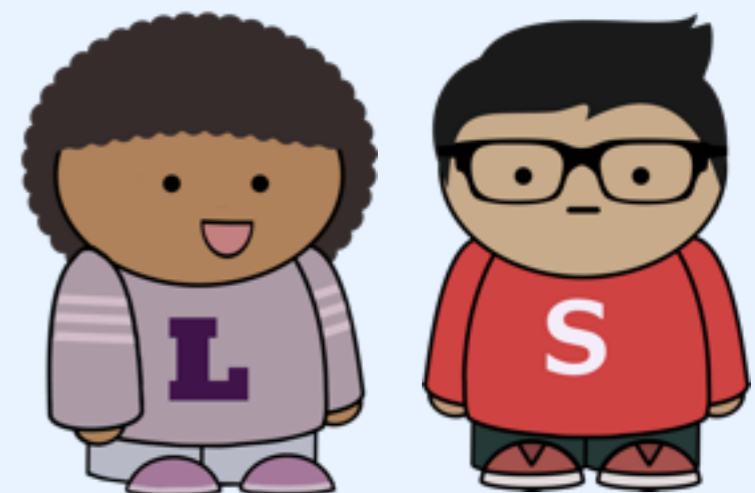
Round-trip behavior explained

De'ihzy   z-a=a

just.now ZPROG-go=1s

`I just left [the party].´

De'ihzy zaa

The semantics of zied

[[ied Jwany]]^{w,c} = *(a) λe. ∃p,z,y . Motion(e) & Path(p,e)*
& Origin(p,y) & Dest(p,z) & Patient(J,e)
(b) J is moving towards the perspective-holder

[[[ZPROG]]^{w,c} = *λP$_{<ε,t>}$: [λt'$_i$:∃e,s. Cause(e,s) & t' ⊆*
T(s) & P(e)]]

[[[zied Jwany]]^{w,c} = *(a) λt'$_i$:∃e,s,p,z,y. Cause(e,s) &*
t' ⊆ T(s) & Motion(e) & Path(p,e) & Origin(p,y)
& Dest(p,z) & Patient(J,e)]
(b) J is moving towards the perspective-holder

Round-trip behavior explained
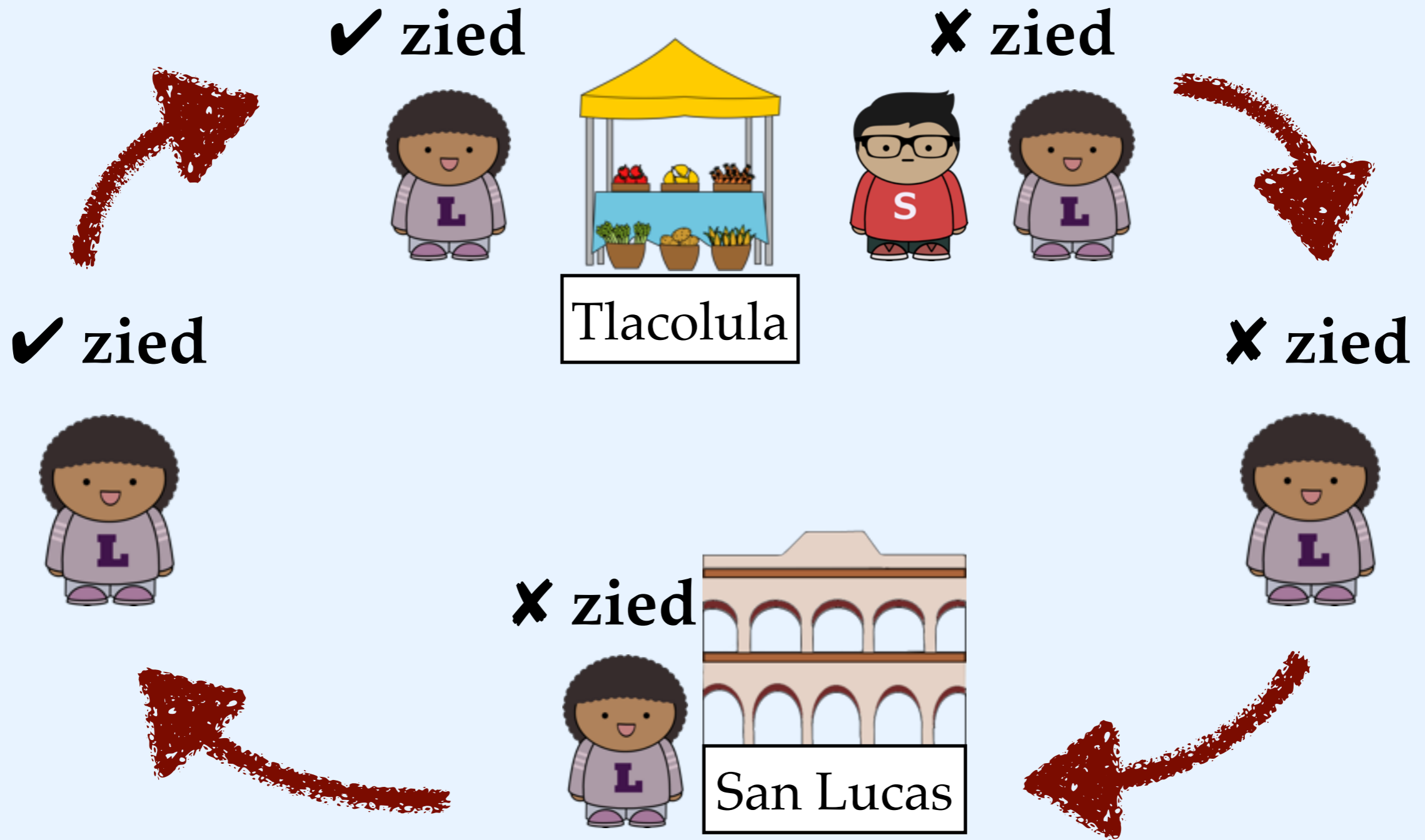
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Predicted to be felicitous until the subject has reached the perspective-holder's destination.

Round-trip behavior explained

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already Pedro ST-be here ZPROG-VEN-visit

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Intended: `Pedro is already here and he is coming to visit us.'

Context: Pedro has traveled from Oaxaca City to San Lucas.

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Change-of-state venitive constructions

The result-state semantics of the z-progressive aspect suggests an explanation for a special reading that arises with z-progressive-marked venitive constructions.

Venitive construction:

Rata   rsily   r-ied-tyug   Lia Petr gyia.
Every morning HAB-VEN-cut Miss Petra flowers
`Every morning Petra comes and cuts flowers.´

Change-of-state venitive constructions

Andative and venitive constructions usually entail actual motion, but z-progressive venitive constructions give rise to change-of-state readings.

 # Gu-ro=ëng.
  PERF.AND-grow=3s
Intended: `He went and grew up.´

Infelicitous because there is no motion

Ladi gu-ro=ëng.
side   PERF.AND-grow=3s
`He went and grew up in the States.´
 Felicitous because there is motion

Change-of-state andative constructions

Andative and venitive constructions usually entail actual motion, but z-progressive venitive constructions give rise to change-of-state readings.

Gu-ro=ëng.
  PERF.AND-grow=3s

Intended: `He went and grew up.´

Infelicitous because there is no motion

Uas   nguel z-ied-ro=ëng.
very fast   ZPROG-VEN-grow=3s

`He's growing up very fast!´

Felicitous despite lack of motion

Conclusion

❖ The SLQZ z-progressive aspect has a **result-state semantics**

❖ SLQZ deictic motion verbs **do not denote round-trip paths**

❖ Perhaps deictic motion verbs in other Otomanguean languages don't either!

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Xtyozën yuad!

Contexts of no return

M-na=a **z-e** **x-muly=a**
PERF-see=1s **ZPROG-go** **POSS-money=1s**
Pedro **ST-be** **here** **ZPROG-VEN-visit**

M-na=a **z-e** **rrelo** **xten=a**
PERF-see=1s **ZPROG-go** **watch** **POSS=1s**

`I saw my money go. I saw my watch go'

Context: the speaker is talking about being robbed during a border crossing several years ago. (Munro et. al 2006)