Investigating grammatical coding patterns using video elicitation

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Introduction

• EuroBabel project (Alor-Pantar languages: origins and theoretical impact)
  – Surrey: Patterns of argument marking, particularly pronominal indexing
  – Leiden: Extended documentation (numeral systems, demonstratives and language of space)
  – Fairbanks: Historical reconstruction
The Alor-Pantar languages

Map 1. The islands Alor and Pantar in eastern Indonesia
Sample

Map 2. The Alor-Pantar languages
Introduction

• None of the AP languages have morphological case marking
• BUT: all AP languages have verbs that index one argument with a prefix
Interest of the AP languages

• They show considerable within-group variation as to what the relevant semantic parameters or conditions are which govern the indexation patterns
Conditions on pronominal indexing

• E.g. Teiwa (Pantar)
• Syntactic alignment (of the ‘accusative’ type)
  – S and A are expressed with a free pronoun
  – Indexing of P’s is associated with animacy (Klamer 2010: 171)

• Marking of only the object/undergoer on the verb is rare, occurring in only 7% of the languages from the WALS sample (Siewierska 2013)
Teiwa indexing: intransitives

(1) Teiwa (Klamer 2010: 169)

A   her
3SG  climb
‘He climbs up.’

(2) Teiwa (Klamer 2010: 388)

[…] bui   una’   esan ta   taxaa.
[…] betelnut also place TOP fall_down
‘… as well as the betelnut fell down.’
Teiwa indexing: transitives

(3) Teiwa (Klamer 2010: 159)
_Name ha’an n-oqai g-unba._
Sir 2SG 1SG-child 3SG-meet
‘Sir, did you see (lit. meet) my child?’

(4) Teiwa (Response to video clip C18_pull_log_29, SP3)
_Bif eqar kopang nuk tei baq kiri._
child female small one tree log pull
‘A little girl is pulling a log.’
Conditions on pronominal indexing

• E.g. Abui (Alor)
• Semantic alignment system (Mithun 1991; Donohue and Wichmann 2008)
  – More agent-like arguments (actor) are coded with a free pronoun or NP and *no* prefix
  – More patient-like arguments (undergoer) are coded with a prefix
Conditions on pronominal indexing

- Volitionality is an important determinant of pronominal marking on verbs with one argument
Abui indexing: volitionality

(5) Abui (Kratochvíl 2007: 15)

Na laak.
1SG leave
‘I go away.’

(6) Abui (Kratochvíl 2007: 15)

No-laak.
1SG.REC-leave
‘I (am forced to) retreat.’
VIDEO CLIP DESIGN
Aim of our video clips

• Explore the role of various semantic conditions on pronominal indexing across AP languages using a fixed set of non-linguistic stimuli
• Data from clip descriptions allow a more precise comparison of the patterns across languages than standard elicitation
• 42 short video elicitation stimuli (Fedden, Brown, Corbett and Baerman, n.d.; Fedden and Brown 2014)
Video clip design

• Design inspired by the video elicitation tools developed by the MPI for Psycholinguistics in Nijmegen
  – Cut&Break (Bohnemeyer, Bowerman and Brown 2001)
  – Put (Bowerman, Gullberg, Majid and Narasimhan 2004)
  – Reciprocals (Evans, Levinson, Enfield, Gaby and Majid 2004)
Video clip design

- Test the role of conditions which have been identified either for semantic alignment (Abui) or for their salience in marking grammatical relations such as objects (Teiwa)
- Animacy, as evidenced in the nominative-accusative language Teiwa (Klamer 2010: 171; Klamer and Kratochvíl 2006)
Video clip design

- Arkadiev (2008) identifies four different semantic notions that govern semantic alignment system in the languages of the world:
  - Stative/dynamic: Loma (SW Mande language from Liberia and Guinea)
  - Telicity: Georgian (Kartvelian, S Caucasus)
  - Volitionality: Bats and Tabassaran (Nakh-Dagestanian, N Caucasus)
  - Affectedness: Central Pomo (Pomoan, California)
Five factors

• (1) Number of participants: 1 vs. 2
• (2) Volitionality: Volitional vs. Non-volitional
• (3) Telicity: Telic vs. Atelic
• (4) Animacy: Animate vs. Inanimate
• (5) Dynamicity: Stative vs. Dynamic
Possibility space

- Systematic variation of all values
- Animacy only varies for S or P, i.e. the single argument of 1-participant predicates and for the second argument of 2-participant verbs.
- Volitionality only varies with respect to the first argument of 1- or 2-participant predicates
$2^5 = 32$ logical possibilities

- Elimination of logically incompatible values
- Combination of [-Animate] and [+Volitional] and the combination of [+Telic] and [-Dynamic]

- No volitional inanimates or telic states
Minus 7, minus 4 cases

• For one-participant verbs there are 4 telic states and 3 additional volitional inanimates (the fourth case with the combination “volitional inanimate” is also a telic state)
• For two-participant verbs, only four cases have to be eliminated (4 telic states)
• Volitionality and animacy are coded for different participants, a combination of these is no problem
21 cases (32-7-4= 21)

• For each remaining cell (i.e. combination of values) we selected two predicates which illustrate this specific combination of values (= a total of 42 clips)
• One for a core set, one for a peripheral set
• Clips in each set were randomized and then fixed in that order to be presented to speakers
Choosing suitable verbs/events

• Four ranked criteria
• Appropriateness: Is the event possibly inappropriate to show? Although practicality issue come in as well, this gets rid of *‘give birth’*, *‘vomit’*, *‘die’*
Choosing suitable verbs/events

• Centrality: Is the event a clear exponent of a particular value combination? For instance, ‘run towards somebody’ is a more central candidate for a telic 2-participant event than the semelfactive event ‘hit somebody’ (which some would categorize as atelic) (cf. Comrie 1976)
Choosing suitable verbs/events

- Degree of cognacy: How many cognates or groups of cognates does a verb have within AP?
  - E.g. ‘lie down’ is in our cognate list, whereas ‘sit down’ is not
  - ‘laugh’ shows two groups of cognates (one with 7 languages and another with 3), while ‘dance’ shows 3 groups of cognates (one group with 3 languages and 2 groups with 2 languages each)
Choosing suitable verbs/events

- Practicality: Is the event easy to film? (‘run’ rather than ‘fly’)
<table>
<thead>
<tr>
<th>Part</th>
<th>Vol</th>
<th>Tel</th>
<th>Anim</th>
<th>Stat</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>1 sit down</td>
<td>Person sitting down.</td>
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<td>2 stand up</td>
<td>Person standing up.</td>
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<td>3 stand</td>
<td>Person standing.</td>
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<td>4 lie</td>
<td>Person lying on the ground.</td>
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<td>5 dance</td>
<td>People dancing.</td>
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<td>6 run</td>
<td>Person running.</td>
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<td></td>
<td>-</td>
<td>+</td>
<td>+</td>
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<td>7 wake up</td>
<td>Person waking up suddenly.</td>
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<td>8 fall asleep</td>
<td>Person sitting, falling asleep.</td>
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<td></td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>9 fill up</td>
<td>Glass being filled from bottle.</td>
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<td>10 go out</td>
<td>Flame goes out.</td>
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<td>+</td>
<td>+</td>
<td>11 sleep</td>
<td>Person sleeping.</td>
</tr>
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<td></td>
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<td></td>
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<td></td>
<td>12 be tall</td>
<td>Two people, tall and short</td>
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<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>13 laugh</td>
<td>Person laughing.</td>
</tr>
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<td></td>
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<td></td>
<td>14 fall</td>
<td>Person slipping and falling.</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>15 be big</td>
<td>One big and two small stones.</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>16 be long</td>
<td>One long, three short logs.</td>
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<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>17 fall</td>
<td>Coconut falling.</td>
</tr>
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<td></td>
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<td></td>
<td>18 burn</td>
<td>Burning house.</td>
</tr>
<tr>
<td>Part</td>
<td>Vol</td>
<td>Tel</td>
<td>Anim</td>
<td>Stat</td>
<td>Event</td>
<td>Description</td>
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<tr>
<td>2 2</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>19 wake s.o. up</td>
<td>Person waking another person up.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>20 run to s.o.</td>
<td>Child running longer distance to parent.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>21 eat s.o.</td>
<td>Child eating a banana.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>22 wash s.o.</td>
<td>Person washing plate.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>23 lean on s.o.</td>
<td>Child leaning on parent.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>24 hold s.o.</td>
<td>Person holding child.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>25 pull s.o.</td>
<td>A pulling B.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>26 smell s.o.</td>
<td>A sniffing at B, makes disgusted face</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>27 lean on s.th</td>
<td>Person leaning on house.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>28 hold s.th</td>
<td>Person hugging a tree.</td>
</tr>
<tr>
<td>2 2</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>29 pull s.th</td>
<td>Child pulling a log.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>30 smell s.th</td>
<td>Person sniffing food, making disgusted face.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>31 fall onto s.o.</td>
<td>Banana drops on person’s stomach.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>32 step on s.o.</td>
<td>Child stepping on a lying person.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>33 step on s.th</td>
<td>Person stepping on a banana.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>34 fall onto s.th</td>
<td>Banana falling onto a log.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>35 be afraid of s.o.</td>
<td>Child afraid of snake.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>36 bend person</td>
<td>Rock bending someone’s back.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>37 hear s.o.</td>
<td>A hears B calling out and turns head</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>38 bump into s.o.</td>
<td>A bumping into B</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>39 bend s.th</td>
<td>Log lying on a plank and bending it.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>40 be afraid of s.th</td>
<td>Person afraid of an axe</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>41 hear s.th</td>
<td>A hears noise and turns head.</td>
</tr>
<tr>
<td>2 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>42 bump into s.th</td>
<td>Person walking into a tree.</td>
</tr>
</tbody>
</table>
General usability of the clips

• Videos clips designed for the cross-linguistic study of languages with argument indexing rather than case-marking
• BUT as the clips show relations between participants and an event they will be useful for case elicitation as well
SAMPLE CLIPS
Animate P
Inanimate P
Volitional S
Non-volitional S
1. Materials

- 42 video clips to be described by the consultants
- Short clips, most are between 5 and 10 seconds long
- Randomly ordered and afterwards been numbered from 01 to 42
2. Requirements

• Laptop with Windows Media Player (or indeed any player which handles MPEG-2 or 4 video files) or Quicktime (for Mac/Windows)
• With sound track (sometimes ambient noise, sometimes sound is essential to the event)
• Record responses on audio- and/or video-tape with an external microphone
3. Number of speakers

- 4-5 would be ideal to have a firm basis for analysis and cross-language comparison
- Meta-data for each speaker (age, sex, language used, etc.)
4. Procedure

- Audio- and/or video-tape
- You and your speaker sit in front of the laptop
- Instruct speaker
- Cue speaker after each clip, saying for example “What did the man/woman do?” OR “What happened?”
- Make sure the cue sentence is phrased in such a way that participants really describe any actor-less event without an actor
5. Problems and solutions

• What we are after is a description of the event depicted in the clip that includes a verb which roughly corresponds to English verb in the clip label

• Probe if that doesn’t happen

• E.g. description of a scene in which a man is “lying” on the ground as either “He is sleeping” or “There is a man on the ground”
5. Problems and solutions

• Or description of possible intentions the agent might have, like “He’s cleaning up” (for *wash plate*) or “She wants him to come to her” (for *pull person*)

• Or a very general description of a scene, like “There’s a man” (for *hear someone*)

• If a speaker uses a SVC make sure this is the most basic way of encoding the event
6. Further probing and elicitation

- Further probing might be helpful.
- This does not have to be done with every single speaker, especially not when in an “opportunistic setting”.

6. Further probing and elicitation

- Follow up on any alternative verbs which a speaker might have used in the description
- What is the exact meaning? What are the indexing patterns?
SOME THOUGHTS ON THE

AFFECTEDNESS STIMULI
Lessons learned from the AP video stimuli

• In general:
  – Fewer clips
  – Fewer factors
Lessons learned

• Make sure the stimuli are natural.
Inanimate P (first version)
Lessons learned

• Use clear events only, no obscure stuff
  – Some difficult factor combinations, e.g. [2 part, -vol, -tel, +an, +stat]
“Rock bends person”
Lessons learned

• Make sure participants can be easily identified
“Hear someone”
Lessons learned

• Make sure the number of participants is clear.
“Fill glass”
Lessons learned

• Make sure stimulus in experience events are realistic
“Afraid of snake”
“Afraid of axe”
Lessons learned

• Make sure the clip is technically OK.
“Wash plate”
Ideas for the Affectedness stimuli

- Change of state: *break, smash, bite, cut, clean, paint, delouse*
- Movement: *push, pull, shove, roll*
- Potential change of state: *hit, kick, poke*
- Consumption: *eat, drink*
- Unspecified for change (control cases): *see, laugh at, smell, follow, ponder, ogle* (Beavers 2011: 358)
CONCLUSION
Conclusion

• Video elicitation is a great way to obtain comparable data
• Obviates some of the difficulties and dangers of elicitation
  – Responses can be heavily biased towards the constructions of the metalanguage
  – What is the consultant making a judgment about? Are they accommodating the researcher?
the end
List of references


APPENDIX

TASK PARTICIPANTS
# Task participants

*Table 1. Basic metadata for task participants*

<table>
<thead>
<tr>
<th>Speaker code</th>
<th>Language</th>
<th>Age</th>
<th>Dialect</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>Western Pantar</td>
<td>Not discussed</td>
<td></td>
</tr>
<tr>
<td>SP2</td>
<td>Teiwa</td>
<td>31</td>
<td>Lebang</td>
</tr>
<tr>
<td>SP3</td>
<td>Teiwa</td>
<td>36</td>
<td>Lebang</td>
</tr>
<tr>
<td>SP4</td>
<td>Teiwa</td>
<td>48</td>
<td>Lebang</td>
</tr>
<tr>
<td>SP5</td>
<td>Adang</td>
<td>47</td>
<td>Kokar</td>
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<tr>
<td>SP6</td>
<td>Adang</td>
<td>37</td>
<td>Otfai</td>
</tr>
<tr>
<td>SP7</td>
<td>Adang</td>
<td>27</td>
<td>Tang’ala</td>
</tr>
<tr>
<td>SP8</td>
<td>Abui</td>
<td>~25</td>
<td>Takpala</td>
</tr>
<tr>
<td>SP9</td>
<td>Abui</td>
<td>~70</td>
<td>Takpala</td>
</tr>
<tr>
<td>SP10</td>
<td>Abui</td>
<td>~60</td>
<td>Takpala</td>
</tr>
<tr>
<td>SP11</td>
<td>Abui</td>
<td>~60</td>
<td>Takpala</td>
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<tr>
<td>SP12</td>
<td>Kamang</td>
<td>70+</td>
<td>Atoitaa</td>
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<tr>
<td>SP13</td>
<td>Kamang</td>
<td>~60</td>
<td>Sama</td>
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<tr>
<td>SP14</td>
<td>Kamang</td>
<td>~40</td>
<td>Maumang</td>
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<tr>
<td>SP15</td>
<td>Kamang</td>
<td>~60</td>
<td>Sama</td>
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