Transitivity harmony in Panoan and elsewhere

Roberto Zariquiey Biondi

(Pontificia Universidad Católica del Perú)

Diversity linguistics: Retrospect and Prospect
MPI-EVA
Leipzig, May 1th-3th, 2015

Transitivity-related phenomena in Panoan

- Panoan languages are well-known because of their complex transitivity systems.
- Verbs are lexically transitive or intransitive and the transitivity class of verbs is encoded at multiple sites within the clause.
- Valenzuela (2003, 2011, 2014): Transitivity harmony /transitivity agreement. Loos (1999): transitivity concord.
- These processes include two different phenomena:
  - **Allomorphic/suppletive alternations based on transitivity**, i.e. morphemes that change their form according to the transitivity class of a verb.
  - **(proper) Transitivity harmony**, i.e. two predicates in a multi-predicate construction must match their transitivity with each other in order to be combined.

This talk

- Similar phenomena are found in languages of different families and different regions of the world.
- This talk, first, illustrates **allomorphic/suppletive alternations based on transitivity** and **transitivity harmony**, showing their differences and their relations.
- Then, it attempts to offer a cross-linguistic study of transitivity harmony constructions, postulating some parameters of variation.
- The database includes 27 languages.

Table 1: Languages exhibiting indirect transitivity marking included in this paper

Language	Language Family	reference
Shipibo-konibo	Panoan	Valenzuela (2003, 2005, 2010, 2011, 2013, 2014)
Kakataibo	Panoan	Zariquiey (2011) and unpublished data
Chakobo	Panoan	Prost (1962)
Matses	Panoan	Fleck (2003)
Yaminawa	Panoan	Faust and Loos (2002)
Kapanawa	Panon	Loos (1999: 239)
Ese Ejja	Takanan	Vuillermet (2012)
Cavineña	Takanan	Guillaume (2008)
Tariana	Arawak	Aikhenvald (2006a)
Japanese	Japonic	Kageyama (1993), Matsumoto (1998), Hidaka (2011)
Bangla	Indo-Aryan	Dasgupta (1977)
Nepali	Indo-Aryan	Pokharel (1991)
Dulong/Rawang	Tibeto-Burman	LaPolla (2000, 2008, 2011)
Dumi	Tibeto-Burman	Van Driem (1993)
Kambaata	Afro Asiatic, Cushitic	Treis (2008, 2012)
Wolaitta	Afro Asiatic, Omotic	Azeb and Dimmendaal (2006)
Wambaya	West Barkly	Nordlinger (1998)
Kaytetye	Pama–Nyungan	Koch (1984)
Wargamay	Pama-Nyungan	Ixon (1981)
Wanggangurru	Pama-Nyungan	Hercus (1994)
Warrungu	Pama-Nyungan	Tsunoda (1988)
Saliba Logea	Austronesian	Margetts (1999, 2005, 2011)
Lewo	Austronesian	Early (1993)
Namakir	Austronesian	Sperlich (1993)
Paamese	Austronesian	Crowley (1987, 2002)
Hatam	Papuan	Staden and Reesink (2008), Reesink (1999)

Part I: Preliminary illustration

Allomorphic/suppletive alternation based on transitivity

(1) Chakobo (Zingg 1998:10; also quoted in Valenzuela 2011)

    (a) *jaba-**tsi**-ki*
        run-now(INTR)-IMPF
        'I am running now.'

    (b) *pi-**tsa**-wë*
        eat-now(TRAN)-IMPF
        'Eat now!'

Allomorphic/suppletive alternation based on transitivity

(2) Dulong/Rawang (LaPolla 2000: 293)

(a) *ang*   *wa-apm-i*
3SG   say-one.day.to.one.year.ago-3.PAST(INTR)
'He said something'

(b) *a:ng-i*   *wa-apm-a*
3SG-AGT   do-one.day.to.one.year.ago-3.PAST(TRAN)
'He did something'

Transitivity harmony

(3) Kakataibo (Zariquiey 2011)

'uxi	kana	**pëukutin**
'ux-**i**	kana	pëu-**ukut**-i-n
sleep-S/A>S(SE)	NAR.1sg	begin-REF-IMPF-1/2p

'I begin to sleep.'

pikin	kana	**pëuin**
pi-**kin**	kana	pëu-i-n
eat-S/A>A(SE)	NAR.1sg	begin-IMPF-1/2p

'I begin to eat.'

Transitivity harmony
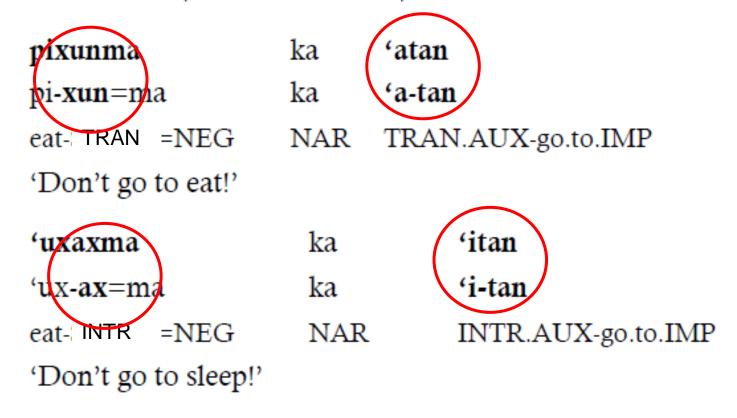
(4) Kambaata (Treis 2008: 6)

    (a) *orooqq-i*   *fajj-ee'u*
        leave-3MASC.PERF.CONVB   go   away-3MASC.PERF
        'He left (i.e. he will not return).'

    (b) *íchch*   *kamm-ee'u*
        eat.3MASC.PERFCONVB   remove-3MASC.PERF
        'He has eaten (it) up.'

From the database…

- Both transitivity harmony and Allomorphic/suppletive alternation based on transitivity are attested in the world's languages.

- However, they are widespread phenomena only in Panoan.

- Allomorphic/suppletive variation based on transitivity is by large more frequent than transitivity harmony.

- And…

They can appear in the same construction

(5) Kakataibo (Zariquiey 2011)

pixunma	ka	**'atan**
pi-**xun**=ma	ka	**'a-tan**
eat-TRAN =NEG	NAR	TRAN.AUX-go.to.IMP
'Don't go to eat!'		

'uxaxma	ka	**'itan**
'ux-**ax**=ma	ka	**'i-tan**
eat-INTR =NEG	NAR	INTR.AUX-go.to.IMP
'Don't go to sleep!'		

They may be diachonically related

(6)

kwanxun	kana	upíokin		'ën	'atsa
kwan-xun	kana	upit-o-kin		'ë=n	'atsa
go-S/A>AS	NAR.1sg	good-FACT-S/A>A(SE)		1sg=A	manioc.ABS

pibëtsinin(***pi-kwatsin-**)

pi-**bëtsin**-i-n

eat-coming.TRAN-IMPF-1/2p

'Having gone, I am eating manioc beautifully while coming.'

kwanx	kana	upiti	'ëx
kwan-ax	kana	upit-i	'ë-x
go-S/A>S	NAR.1sg	good-S/A>A(SE)	1sg-S

tankwantsinin(***tan-bëtsin-**)

tan-**kwantsin**-i-n

rest-coming.INTR-IMPF-1/2p

'Having gone, I am resting beautifully while coming.'

Part II: Some parameters of cross-linguistic variation in transitivity harmony

Parameter 1: Integration or clause union

(7) Kakataibo (Zariquiey 2011)

(a) 'ux-i   kana   'ë=n   xubu-nu   pëu-**ukut**-i-n
    sleep-S/A>S(SE)   NAR.1sg   1sg=GEN   house-LOC   begin-REF-IMPF-1/2
    'I begin to sleep.'

(b) *pi-kin*   kana   'ë=n   xubu-nu   pëu-i-n
    eat-S/A>A(SE)   NAR.1sg   1sg=GEN   house-LOC   begin-IMPF-1/2p
    'I begin to eat.'

(8) Ese 'Ejja (Vuillermet 2012: 419)

Majoya=se   **nekya-'okya-ka-a**ni
then=IINCL.ABS   stand(TRAN)-put.down-3A-sit/PRES
neki-'oke-ki-ani
stand-go.down-GO.TO.DO-sit/PRES
'Then they make us go down (lit. in a standing position), we go down (off the truck which took us to the main city) (lit. in a standing position).'

Parameter 1: Integration or clause union

- Transitivity harmony is found in both poorly integrated and deeply integrated multiverb constructions.

- Transitivity harmony in poorly integrated constructions always implies transitivity harmony in more integrated ones.

Parameter 2: Strategy

- Selection (or "suppletion"): what we find is a pair of transitive/intransitive verbs/auxiliaries from which the construction selects one according to the transitivity of the controller (like in Kakataibo's prohibitive construction).

- Adjustment (or affixation): the controllee exhibits an overtly expressed transitivity changing device, such as a transitivity increasing or decreasing morpheme (like in Kakataibo's inchoative construction).

Parameter 3: Target

- Many two-verb transitivity harmony constructions may be understood as combining a more lexical predicate and a more functional one, similar to an auxiliary.

- The data strongly suggest that transitivity harmony disfavor marking on the lexical predicate.

Parameter 3: Target

(9) Wambaya (Nordlinger 1998:195)

    (a) *guruburr-ardi*   *ng-a*   *daguma*
          be.unconscious-CAUS   1SG.A-PAST   hit
          'I knocked him out (by hitting).'

    (b) *nawunawu*   *ngu-ngg-u*   *dirndiny-mi*
          stretch   1SG.A-REF/REC-FUT   straight-FACT
          'I will stretch my legs (by straightening them).'

Parameter 4: Paradigmatic distinctions

- Most languages exhibiting transitivity harmony follow a straightforward pattern based on a distinction between transitive/intransitive.

- However, there is one possible counterexample: Japanese, which also exhibits transitivity harmony and, according to Kageyama (1993), follows a different pattern: a three way-distinction between transitive, unergative and unaccusative.

Parameter 4: Paradigmatic distinctions

Table 2: Transitivity harmony principle in Japanese: possible verbal compounds (Kageyama 1993)

Type of compound	illustration
transitive + transitive	*kai-toru* 'buy-take' -toru 'wipe-take'
transitive + unergative	*mati-kamaeru* 'wait-gird', *sagasi-mawaru* 'search-about'
unergative + transitive	*naki-harasu* 'weep-one's.eye.out', *hohoemi-kaesu* 'smile-return'
unergative + unergative	*kake-oriru* 'run-down', *abare-mawaru* 'get.violent-about'
unaccusative + unaccusative	*kobore-otiru* 'spill-fall', *kuzure-otiru* 'collapse-fall'

Parameter 5: Obligatoriness

- Most constructions based on transitivity harmony are obligatory in the sense that the predicates in them must match their transitivity.

- A few potential instances of non-obligatory transitivity harmony, however, are found in the data.

Parameter 5: Obligatoriness

(10) Kakataibo (Zariquiey 2011: 600)

    (a) *'ux-i*   *kana*   *sënë-a-n*
         sleep-INTR   NAR.1sg   finish-PERF-1/2
         'I finished sleeping'.

    (b) **'ux-kin*   *kana*   *sënë-o-a-n*
         sleep-TRAN   NAR.1sg   finish-FACT-PERF-1/2
         *('I finished sleeping')

(11) Kakataibo (Zariquiey 2011: 600)

    (a) *pi-i*   *kana*   *sënë-a-n*
         eat-INTR   NAR.1SG   finish-PERF-1/2
         'I just finished eating.'

    (b) *pi-kin*   *kana*   *sënë-o-a-n*
         eat-TRAN   NAR.1sg   finish-FACT-PERF-1/2
         'I finished eating a long time ago.'

Parameter 6: Transitivity domain

- It seems to be the case that in most languages with transitivity harmony, we also find relatively fixed lexical transitivity classes and these lexical classes determine the behavior of transitivity harmony.

- But see the following examples of Tariana (Arawak):

Parameter 6: Transitivity domain

(12) Tariana (Aikhenvald 2006a: 186)

    (a) *di-ka*   *di-ruku-ita*
        3SG.FEM-see   3SG.FEM-go.down-CAUS

        'He looked down (at something)' or 'He looked (at something) making (something) go down'

    (b) *di-ka*   *di-ruku*
        3SG.FEM-see   3SG.FEM-go.down

        'He looked (intransitive) down' or 'He looked going down'

Conclusions

- Transitivity harmony and Allomorphic/suppletive variation based on transitivity are two types of indirect transitivity encoding found in the languages of the world.

- However, they are widespread phenomena only in Panoan.

- Allomorphic/suppletive alternation based on transitivity is by large more frequent than transitivity harmony.

- In particular languages, they may appear in the same construction and they may be diachronically related.

- Although it is less widespread, transitivity harmony exhibits interesting patterns of cross-linguistic variation.

Conclusions

Table 3: Parameters of cross-linguistic variation in transitivity harmony-based constructions

Parameter	Type 1	Type 2
Integration	**Integrated**	Non-Integrated
Matching strategy	Adjustment	Selection
Harmony target (when applicable)	**Auxiliary**	Lexical verb
Paradigmatic distinctions	**Transitive/Intransitive**	Other
Obligatoriness	**Obligatory**	Non-Obligatory
transitivity domain	**Lexical**	Clausal

References

Aikhenvald, A. Y. (2006a). Serial verb constructions in tariana. In A. Y. Aikhenvald and R. Dixon (Eds.), *Serial Verb Constructions, A Cross-linguistic Typology*, pp. 178–201. Oxford: Oxford University Press.

Aikhenvald, A. Y. (2006b). Serial verb constructions in typological perspective. In A. Y. Aikhenvald and R. Dixon (Eds.), *Serial Verb Constructions: A Cross-linguistic Typology*, pp. 1–68. Oxford University Press.

Azeb, A. and G. J. Dimmendaal (2006). Verbal compounding in wolaitta. In A. Y. Aikhenvald and R. Dixon (Eds.), *Serial Verb Constructions: A Cross-linguistic Typology*, pp. 319–337. Oxford: Oxford University Press.

Bickel, B. (2011). Grammatical relations typology. In J. J. Song (Ed.), *The Oxford Handbook of Linguistic Typology*, pp. 399–444. Oxford: Oxford University Press.

Bradshaw, J. (1993). Subject relationships within serial verb constructions in numbami and jabêm. *Oceanic Linguistics 32*, 133–162.

Corbett, G. G. (1979). The agreement hierarchy. *Journal of Linguistics 15*, 203–224.

Corbett, G. G. (1987). The morphology/syntax interface: evidence from possessive adjectives in slavonic. *Language 63*, 299–345.

Crowley, T. (1987). Serial verb constructions in paamese. *Studies in Language 11* (1), 35–84.

Crowley, T. (2002). *Serial verb in Oceanic: a descriptive typology*. Oxford: Oxford University Press.

Dasgupta, P. (1977). The internal grammar of compounds verbs in bangla. *Indian Linguistics 38*, 68–85.

Dixon, R. (2010). *Basic linguistic theory*, Volume 2. Oxford: Oxford University Press.

Early, R. (1993). Nuclear layer serialisation in lewo. *Oceanic Linguistics 32*, 65–94.

Faust, N. and E. Loos (2002). *Gramática del Idioma Yaminahua*. Number 51 in Serie Lingüística Peruana. Lima: Instituto Lingüístico de Verano.

Fleck, D. W. (2003). *A Grammar of Matses*. Ph. D. thesis, Rice University.

Givón, T. (2009). Multiple routes to clause union: The diachrony of complex verb phrases. In T. Givon and M. Shibatani (Eds.), *Syntactic Complexity. Diachrony, acquisition, neuro-cognition, evolution*, Volume 1, pp. 81–118. Amsterdam: John Benjamins.

Guillaume, A. (2000). Directionals versus associated motions in cavineña. In A. Melby and A. Lommel (Eds.), *LACUS Forum XXVI: The Lexicon*, pp. 395–401. Fullerton (California):: Linguistic Association of Canada and the United States.

Guillaume, A. (2008). *A Grammar of Cavineña*. Berlin: Mouton de Gruyter.

Hercus, L. A. (1994). *A grammar of the Arabana-Wangkangurru Language. Lake Eyre Basin, South Australia*. Canberra: Pacific Linguistics.

Hidaka, T. (2011). *Word formation of Japanese V-V compounds*. Ph. D. thesis, Kobe Shoin Women's University.

Hock, P. E. (1977). The distribution of compound verb in the languages of north india and the question of its origin. *International Journal of Dravidian Linguistics 6*(2), 336–351.

Hopper, P. and S. Thompson (1980). Transitivity in grammar and discourse. *Language 56*, 251–299.

Hyslop, C. (2001). *The Lolovoli dialect of the North-east Ambae language, Vanuatu*. Camberra: Pacific Linguistics.

ixon, R. (1981). **Wargamay**. In B. Dixon, R.M.W. Blake (Ed.), *The handbook of Australian languages*, Volume II, pp. 1–144. Amsterdam/Philadelphia: John Benjamins.

Kageyama, T. (1993). *Tunpoo to go-keisei*. Hitsuji Shobou.

Kittilä, S. (2002). *Transitivity: towards a comprehensive typology*. Publications in General Linguistics. Turku: University of Turku.

Kittilä, S. (2011). Transitivity typology. In J. J. Song (Ed.), *The Oxford Handbook of Linguistic Typology*, pp. 346–367. Oxford: Oxford University Press.

Koch, H. (1984). The category of associated motion in kaytej. *Language in Central Australia 1*, 23–34.

LaPolla, Randy In: 2000a, p. . (2000). Valency-changing derivations in dulong/rawang. In R. Dixon and A. Y. Aikhenvald (Eds.), *Changing Valency. Case Studies in transitivity*, pp. 282–311. Cambridge: Cambridge University Press.

LaPolla, R. (2008). Transitivity harmony in the rawang language of northern myanmar. Paper presented at the meeting of the ALS, University of Sydney 2-4 July.

Margetts, A. (1999). *Valence and transitivity in Saliba, an Oceanic language of Papua New Guinea*. Number 12 in MPI series in psycholinguistics. Nijmegen: Max Planck Institute for Psycholinguistics.

Margetts, A. (2005). Positional slots in saliba complex verbs. *Oceanic Linguistics 44*(1), 65–89.

Margetts, A. (2011). Transitivity in saliba-logea. *Studies in Language 35*(3), 650–675.

Matsumoto, Y. (1998). Nihongo no goiteki-hukugoo-doosi ni okeru doosi no kumiawase. *Gengo Kenkyu 114*, 37–83.

Næss, Å. (2007). *Prototypical transitivity*. Number 72 in Typological Studies in Language. Amsterdam: John Benjamins.

Nichols, Johanna, D. A. P. and . Jonathan Barnes.) Linguistic Typology 8:2.149-211 (2004). Transitivizing and detransitivizing languages. *Linguistic Typology 8*(2), 149–211.

Nordlinger, R. (1998). *A Grammar of Wambaya*. Camberra: Pacific Linguistics.

Pokharel, M. (1991). Compound verbs in nepali. *Contribution to Nepalese Studies 18*(2), 149–173.

Prost, G. (1962). Signaling of transitive and intransitive in chacobo (pano). *International Journal of American Linguistics 28*(2), 108–118.

Reesink, G. P. (1999). *A Grammar of Hatam, Bird's Head Peninsula, Irian Jaya*. Australian National University.

Sperlich, W. B. (1993). Serial verb construction in namakir of central vanuatu. *Oceanic Linguistics 32*, 95–110.

Staden, M. and G. Reesink (2008). Serial verb constructions in a linguistic area. In G. Senft (Ed.), *Serial verb constructions in Austronesian and Papuan languages,*, pp. 17–54. Camberra: Pacific Linguistics.

Steele, S. Word order variation: a typological study. In C. A. F. Greenberg, Joseph and E. Moravcsik (Eds.), *Universal of Human Language*, Volume IV: Syntax, pp. 585–623. Stanford: Stanford University Press.

Treis, I. (2008). Converbs and switch-reference in kambaata. Seminar 28 May 2008, Research Centre for Linguistic Typology (RCLT), LaTrobe University.

Treis, I. (2012). Switch-reference and omotic-cushitic language contact in southwest ethiopia. *Journal of Language Contact 5*, 80–116.

Tsunoda, T. (1988). Antipassives in warrungu and other australian languages. In M. Shibatani (Ed.), *Passive and voice*, pp. 595–649. Amsterdam/Philadelphia: John Benjamins.

Valenzuela, P. (2003). *Transitivity in Shipibo-Konibo Grammar*. Ph. D. thesis, University of Oregon.

Valenzuela, P. (2005). Participant-oriented adjuncts in panoan. In P. H. Nikolaus and E. Schultze-Berndt (Eds.), *Secondary predication and adverbial modification: The typology of depictives*, Oxford Typology Series, pp. 259–298. Oxford: Oxford University Press.

Valenzuela, P. (2010). Ergativity in shipibo-konibo, a panoan language of the ucayali. In S. Gildea and F. Queixalós (Eds.), *Ergativity in Amazonia*, Number 89 in Typological Studies in Language, pp. 63–94. Amsterdam: John Benjamins.

Valenzuela, P. (2011). Multi-verb predicates and transitivity harmony in shipibo-konibo. In P. C. Muysken and A. Y. Aikhenvald (Eds.), *Multi-verb Constructions: A view from the Americas*, Studies in the Indigenous Languages of the Americas, pp. 185–212. Amsterdam: Brill.

Valenzuela, P. (2013). El sistema de concordancia del participante en las lenguas pano y sus implicancias para el conocimiento de la protolengua. *Revista Brasileira de Linguística Antropológica 5*(1), 117–157.

Valenzuela, P. (2014). Armonía transitiva en las lenguas pano y takana. paper accepted for publication in Amerindia.

Van Driem, G. (1993). *A grammar of Dumi.* Berlin/New York: Mouton de Gruyter.

Vuillermet, M. (2012). *A grammar of Ese Ejja, a Takanan language of the Bolivian Amazon.* Ph. D. thesis, Université Lumière Lyon 2.

Zariquiey, R. (2011). *A grammar of Kashibo-Kakataibo.* Ph. D. thesis, La Trobe University.

Table 8: Abbreviations

Abbreviation	Gloss	Abbreviation	Gloss
1	'first person'	2	'second person'
3	'third person'	A	'transitive subject'
ABS	'absolutive'	ACC	'accusative'
ADV	'adverbial marker'	ANAPH	'anaphora'
ANTIP	'antipassive'	APPLI	'applicative'
AUX	'auxiliary'	CAUS	'causative'
CL	'classifier'	CONTR	'contrastive'
CONVB	'converb'	DES	'desiderative'
DIM	'diminutive'	ERG	'ergative'
EXCL	'exclusive'	FAC	'factitive'|| FEM
'feminine'	FUT	'future' GEN	'genitive'
HAB	'habitual' IMP	'imperative'	IMPF
'imperfective' INCL	'inclusivo'	IND.LOC	'indirect locative'
INT	'interrogative'	INTR	'intransitive'
ITER	'iterative'	LOC	'locative'
LOG	'logophoricity'	MASC	'masculine'
NAR	'narrative register'	NEG	'negative'
NOMLZ	'nominalizer'	non.prox	'non-proximal to the addressee'
NPST	'non-past'	P	'transitive object'
PA	'participant agreement'	PAST	'past'
PE	'previous dependent event'	PERF	'perfective'
PL	'plural'	POSS	'possessive'
PREF	'prefix'	PRES	'present'
PROG	'progressive'	PRON	'pronoun'
prox	'proximal to the addressee'	REC	'reciprocal'
REDUP	'reduplication'	REF	'reflexive'
REM.PAST	'remote past'	REP	'reportative'
S	'intransitive subject'	SE	'simultaneous dependent event'
SG	'singular'	TRAN	'transitive'
U	'undergoer'	>	'switch-reference tracking'

Thanks!