

Internal arguments disguised as external arguments

Lessons from an active alignment system

Matthew Tyler — mt516@cam.ac.uk

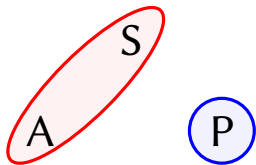
Cambridge University Linguistic Society

11 March 2021

Nominative alignment

- Languages have different alignment systems.

(1)



- **S** = intransitive subject
- **A** = transitive subject
- **P** = transitive object

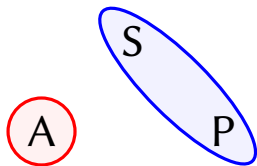
(Diagram from Comrie 1978)

(2) **Canonical nominative case system**

- She** helped **her**.
- She** worked.

Ergative alignment

(3)



- **S** = intransitive subject
- **A** = transitive subject
- **P** = transitive object

(4) **Canonical ergative case system**

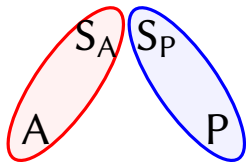
- a. Marlu-ngku ka ngarrka nya-nyi.
 kangaroo-**ERG** PRES man.**ABS** see-NPAST
 'The kangaroo sees the man.'
- b. Ngarrka ka wangka-mi.
 man.**ABS** PRES speak-NPAST
 'The man is speaking.'

(Warlpiri, Levin 1983:140–141)

Active alignment

- Many reported ergative systems are in fact **active** (Woolford 2015):
 - A.k.a. active-stative, split-S, split-intransitive, semantic, agent-patient, extended ergative ...

(5)



- **S_A** = intransitive subject ('agent-like')
- **S_P** = intransitive subject ('patient-like')

(6) **Active case system**

a. Gizon-a-k exte saldu du.
 man-DEF-**ERG** house.**ABS** sold has

'The man has sold the house.'

b. Gizon-a-k ikasi du.
 man-DEF-**ERG** studied has

'The man has studied.'

c. Gizon-a etorri da.
 man-DEF.**ABS** came is

'The man has come.'

(Western Basque, J. Baker 2018:87)

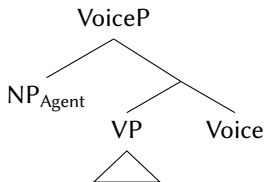
A question

- How does **active alignment** correspond to **syntactic structure**?
 - Today: I bring novel data from **Choctaw** to bear on this question.
- Choctaw is instructive because of pervasive **exceptions** in the mapping from syntactic structure to alignment.

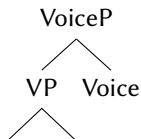
Agents in syntax

- Typological research on active alignment: the S_A/S_P split is based in something like **agenthood**.
- Syntactic theory: intransitive subjects are not syntactically uniform.
 - Perlmutter's (1978) **Unaccusative Hypothesis**; Burzio (1986).
 - 'Agents' are introduced by a dedicated head: **v** (Chomsky 1995); **Voice** (Kratzer 1996).

(7) Agentive verb

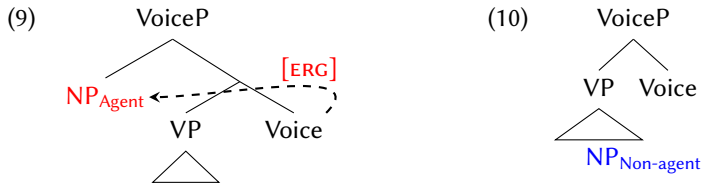


(8) Agentless verb



Analyzing active alignment

- Plausible analysis: **ERG/ABS**-marking ‘reads off’ syntactic position:



- Plausible implementation as case-assignment:¹
 - Voice_[+Spec] assigns **[ERG]** to Spec-VoiceP.
 - Voice_[-Spec] does nothing.
- Easy... right?

1. E.g. an *inherent ergative* analysis (Butt 1995, Woolford 1997, 2006, Aldridge 2004, 2008, 2012, Anand & Nevins 2006, Laka 2006, Legate 2006, 2008, 2012, Coon 2013, 2017). Implementations in terms of Agree or PF-discrimination are given by Baker & Bobaljik (2017) and Woolford (2010).

Variation and arbitrariness in active alignment

- An old observation: the semantic basis of active alignment varies by language (Rosen 1984, Merlan 1985, Van Valin 1990, Mithun 1991, Donohue & Wichmann 2008, J. Baker 2018).

(11) E.g. Change-of-location verbs

a. Ish- la-tok.
2SG.**ERG**-arrive-PST
'You arrived.'

(Choctaw)

b. Gizon-a iritsi da.
man-DEF.**ABS** arrived is.
'The man arrived.'

(Basque, J. Baker 2018:164)

- Another old observation: Class membership is often arbitrary.

(12) Another Basque change-of-location verb

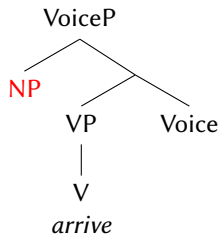
Txistularie-k bederatzietan urtengo dute.
txistu.player-**ERG** nine.at leave have
'Txistu players will leave at 9.'

(Albizu & Fernández 2006)

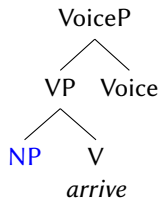
Partial solution

- Equivalent semantics through different syntactic structures:

(13) Choctaw



(14) Basque

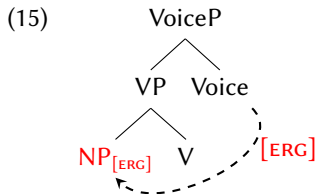


→ Proposed in various guises by Harris (1982), Rosen (1984), Levin & Rappaport Hovav (1995), Berro (2019).

- Will this let us account for *all* arbitrariness in active alignment systems?
 - I argue: **No**.

Today

- Claim #1: For some Choctaw verbs, **ERG**-marking is dissociated from the external argument position:

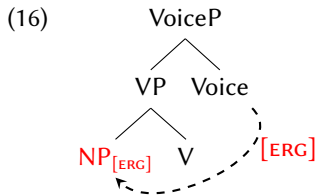


- Claim #2: **ERG**-marking reflects a syntactic dependency with Voice^0 .
 → Formalized here as assignment of **[ERG]** case.²

2. Alternatively: forming an *Agree* relation — point at hand is not affected.

Today (II)

- In light of this structure, which occurs with *some* verbs...



- Q: How does **active alignment** correspond to **syntactic structure**?
 - It's *not* about arguments' syntactic positions—i.e. being an internal vs. external argument.
 - It's about whether Voice⁰ can form a syntactic relations with the argument.
- Q: How should we analyze alignment behavior that is **exceptional** within a language?
 - Fnc⁰s (e.g. Voice⁰) can show default and exceptional syntactic behavior.

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

- 1 Introduction
- 2 **Choctaw**
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Choctaw

- Muskogean language
- Spoken in Mississippi (>5000 speakers) and Oklahoma (<200)
- All data is from my fieldwork in Pearl River and Bogue Chitto, MS, 2016-2019.
- Known among linguists for:
 - Iambic lengthening (Buckley 1998)
 - Prosodic morphology (Lombardi & McCarthy 1991)
 - Switch-reference (Broadwell 1997)
 - **Agreement** (Davies 1986)



https://gssei.wordpress.com/2016/09/06/_trashed-3/

Basic properties

- Example sentence

(17) [Alla-yat im-abooshi pashpoli-t tahli-hm-at] im-achokma-tok.
 child-NOM POSS-room clean-PTCP finish-when-SS DAT-happy-PST
 ‘When the child had cleaned her room, she was happy.’

- Underlined vowels (a, i, o) are nasalized
- Basic SOV order
- NOMINATIVE-(ACCUSATIVE) case-marking
- Pervasive argument drop
- Switch-reference on embedded clauses

Active agreement

(18) Active agreement for 1st/2nd-person arguments

a. Ish- hapi- apiil-aachi-h-o?
 2SG.ERG-1PL.ABS-help-FUT-TNS-Q
 ‘Will you help us?’

b. Ish- toksal-aachi-h-o?
 2SG.ERG-work-FUT-TNS-Q
 ‘Will you work?’

c. Chi- ttol-aachi-h-o?
 2SG.ABS-fall-FUT-TNS-Q
 ‘Will you fall?’

- No agreement for 3rd-person arguments:

(19) Ohooyo-m-at *pro*₃ Ø- Ø- apiil-aachi-h-o?
 woman-DEM-NOM 3.ERG-3.ABS-help-FUT-TNS-Q
 ‘Will that woman help her/him?’

DATIVE agreement

- DATIVE agreement for all persons:

(20) Sa-shki i- pilaa-li-tok.
 my-mother 3.DAT-send-1SG.ERG-PST
 ‘I sent it to my mother.’

- *N.B.* Agreement is **mismatched** with adnominal case-marking:

- (21) a. Chishnak-oosh ish-baliili-h
 you.FOC-NOM 2SG.ERG-run-TNS
 ‘YOU run.’
- b. Chishnak-oosh chi-nokháklo-h.
 you.FOC-NOM 2SG.ABS-sad-TNS
 ‘YOU are sad.’
- c. Chishnak-oosh chj-polla-h.
 you.FOC-NOM 2SG.DAT-skilled-TNS
 ‘YOU are skilled.’

The semantic basis of the ERG/ABS split

- Categories based on the *Auxiliary Selection Hierarchy* (Sorace 2000):

ERG-subject intransitives	ABS-subject intransitives
Controlled process ('agentive') <i>toksali</i> 'work'	Uncontrolled process (non-body) <i>ittola</i> 'fall', <i>shalalli</i> 'slip/slide'
Motion <i>ala</i> 'arrive', <i>baliili</i> 'run'	Stative <i>abiika</i> 'be sick', <i>chaaha</i> 'be tall'
Uncontrolled process (body) <i>habishko</i> 'sneeze'	Change of state <i>illi</i> 'die', <i>assano</i> 'grow'
	'Lexical passive' <i>boowa</i> 'get beaten up'
	Psych <i>nokshoopa</i> 'be scared'

- Classic analysis: choice of agreement is determined directly by thematic role (Nicklas 1974, Heath 1977, Davies 1981, 1986, Payne 1982, Foley & Van Valin 1984, Rosen 1984, Broadwell 1988, 1990, Hardy & Davis 1993).
→ *But*, shortcomings of this approach have long been known (Munro & Gordon 1982).

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal**
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Section plan

- #1 I identify **four** tests for internal-argument-hood, other than agreement.
- #2 I show that there is a set of **ERG**-subject verbs which (mostly) pass the tests.

verb type	Agr.	Test #1 (Rejects auxiliary <i>tahli</i> ?)	Test #2 (Accepts DAT subject?)	Test #3 (Has causative alternant?)	Test #4 (Pluractional allomorphy?)
canonical ABS	ABS	Y	Y	Y	Y
positional	ERG	Y	Y	Y	Y
quantifier	ERG	Y	Y	Y	N
<i>ishahli</i> 'exceed'	ERG	Y	Y	(Y)	N
transitive psych (motion)	ABS/ERG	Y	N	(Y)	N
	ERG	N	%	((Y))	(Y)
canonical ERG	ERG	N	N	N	N

The unexpected ERG-subject verbs

(22) Positional verbs

li- binohmáya-h.
1PL.ERG-sit.PL.PROG-TNS
'We're sitting.'

(23) Quantifier verbs

li- lawa-h.
1PL.ERG-be.many-TNS
'There are a lot of us.'

(24) *i-shahli* 'exceed' (used to form comparatives)

Chaaha-k-at chí-shahli -li-h.
tall-COMP-SS 2SG.DAT-exceed-1SG.ERG-TNS
'I am taller than you.' (lit. 'I exceed you in being tall.')

(25) Transitive psych verbs

Is- sa-nokshoopa-h.
2SG.ERG-1SG.DAT-scared-TNS
'You are scared of me.'

(26) Motion verbs

Kátit il- oona-tok?
how 1PL.ERG-get.there-PST
'How did we get there?'

Tests for internal-argument-hood

- (ERG vs. ABS agreement)
- Four other tests:
 - #1 Auxiliary selection:
Verb rejects perfect auxiliary *tahli* → subject is I.A.
 - #2 Compatibility with DAT subject:
Verb accepts DAT subject → (old) subject is I.A.
 - #3 Causative alternation:
Verb has a causative alternant → (old) subject is I.A.
 - #4 Pluractional allomorphy:
Verb shows pluractional allomorphy → subject is I.A.

- 1 Introduction
- 2 Choctaw
- 3 **Some ERG-marked arguments are internal**
 - **Test #1: Auxiliary selection**
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Test #1: Auxiliary selection

- When **tahli** and **taha** ('finish') take a participle complement, they add perfect semantics.

(27) **Canonical ERG-subject verbs combine with tahli:**

- a. Taloowa-li-tok.
sing -1SG.ERG-TNS
'I sang.'
- b. Suzie-at taloowa-t **tahli**-h.
Suzie-NOM sing-PTCP **finish**-TNS
'Suzie's done singing.'

(28) **Canonical ABS-subject verbs reject tahli:**

- a. Si- assan-aachi-h.
1SG.ABS-grow-FUT-TNS
'I will grow.'
- b. Kátikm-ak-o chi-assano-t { ***tahl**-aachi-h / tah-aachi-h }?
when.FUT-FOC-ACC 2SG.ABS-grow-PTCP **finish**-FUT-TNS finish-FUT-TNS
'When will you be grown up?'

- Test: Verb rejects perfect auxiliary *tahli* → subject is I.A.

Test #1: Auxiliary selection – Application

- Test: Verb rejects perfect auxiliary *tahli* → subject is I.A.

(29) a. **Positional**

Talohmáya-t taha-h / *tahli-h.
 lie.PL.PROG-PTCP finish-TNS finish-TNS
 ‘They are all there.’

b. **Quantifier**

okla ii-lawá-t taha-h / *tahli-h.
 PL 1PL.ERG-many-PTCP finish-TNS finish-TNS
 ‘There are (already) a lot of us.’

c. ***ishahli* ‘exceed’**

Chaaha-k-at *isha*-t taha-h / *tahli-h.
 tall-C-SS exceed-PTCP finish-TNS finish-TNS
 ‘It’s got taller.’

d. **Transitive psych**

Mary ish-*i*-nokshoopá-t taha-h / *tahli-h.
 Mary 2SG.ERG-DAT-scare.NACT-PTCP finish-TNS finish-TNS
 ‘You’re terrified of Mary.’

Interim summary

verb type	Agr.	Test #1 (Rejects auxiliary <i>tahli</i> ?)	Test #2 (Accepts DAT subject?)	Test #3 (Has causative alternant?)	Test #4 (Pluractional allomorphy?)
canonical ABS	ABS	Y	Y	Y	Y
positional	ERG	Y	Y	Y	Y
quantifier	ERG	Y	Y	Y	N
<i>ishahli</i> 'exceed'	ERG	Y	Y	(Y)	N
transitive psych (motion)	ABS/ERG	Y	N	(Y)	N
	ERG	N	%	((Y))	(Y)
canonical ERG	ERG	N	N	N	N

(30) Motion verbs accept *tahli*

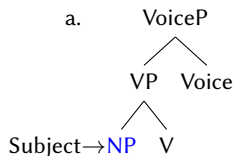
Balii-t taha-h / tahli-h.
 run-PTCP finish-TNS finish-TNS
 'He's finished running.'

→ Though see Broadwell (1998, 2006).

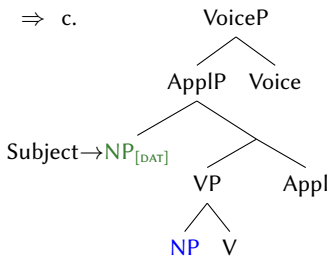
- 1 Introduction
- 2 Choctaw
- 3 **Some ERG-marked arguments are internal**
 - Test #1: Auxiliary selection
 - **Test #2: Compatibility with DAT subject**
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Test #2: Compatibility with DAT subject

(31) Canonical **ABS**-subject verb accepts higher **DAT** argument



⇒ c.

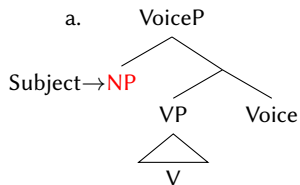


b. **Chi-holisso-at** ittola-tok.
 your-book-NOM fall-PST
 ‘Your book fell down.’

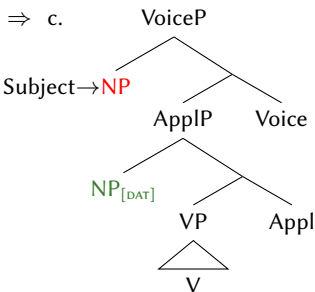
d. **pro**_{1SG} **Chi-holisso** **am**-ittola-tok.
 your-book 1SG.DAT-fall-PST
 ‘I dropped your book.’

Test #2: Compatibility with DAT subject (II)

(32) Canonical **ERG**-subject verb does *not* accept higher **DAT** argument



- b. **Hoshi-t** taloowa-tok.
bird-NOM sing-PST
'The bird sang.'



- d. **Hoshi-t** *pro*_{1SG} a-taloowa-tok.
bird-NOM 1SG.DAT-sing-PST
'The bird sang for me.'
- e. **pro*_{1SG} Hoshi a-taloowa-tok.
bird 1SG.DAT-sing-PST
'(I had a bird sing.)/'My bird sang.'

Test #2: Compatibility with DAT subject — Application

Positional and quantifier verbs

- Test: Verb accepts DAT subject → subject is I.A.
 - Cf. Hebrew possessive datives (Borer & Grodzinsky 1986), Spanish dative subjects (Cuervo 2003), a.m.o.

(33) Positional verbs

- a. Ofi-yat oklah kahmáya-h.
 dog-NOM PL lie.PL.PROG-TNS
 ‘The dogs are lying around.’
- b. **Alikchi-yat** ofi i-kahmáya-h.
 doctor-NOM dog DAT-lie.PL.PROG-TNS
 ‘The doctor has some dogs.’

(34) Quantifier verbs

- a. Alla-yat lawa-tok.
 child-NOM many-PST
 ‘There were a lot of kids.’
- b. **pro**_{1SG} Alla a-lawá-h.
 child 1SG.DAT-many-TNS
 ‘I have a lot of kids.’

Test #2: Compatibility with DAT subject — Application

Ishahli ‘exceed’ and motion verbs

- Test: Verb accepts DAT subject → subject is I.A.

(35) *ishahli* ‘exceed’

- a. Oka yapp-at kapassa-k-at chaffa-p-a ishahli-h.
 water this-NOM cold-C-SS other-this-ACC exceed-TNS

‘This water is colder than the other one.’

(lit. ‘This water exceeds the other one in being cold.’)

- b. *pro*_{1SG} Oka-p-ak-o am-ishahli-h.
 water-this-FOC-ACC 1SG.DAT-exceed-TNS

‘I prefer THIS water.’

(36) Motion verbs

- a. Kátos-at baliili-h.
 Pam-NOM run-TNS

‘The cat is running.’

- b. %*Pam-at* katos-at *i*-baliili-h.
 Pam-NOM cat-NOM DAT-run-TNS

‘Pam’s cat is running.’

(Broadwell 2006:307)

Interim Summary

verb type	Agr.	Test #1 (Rejects auxiliary <i>tahli</i> ?)	Test #2 (Accepts DAT subject?)	Test #3 (Has causative alternant?)	Test #4 (Pluractional allomorphy?)
canonical ABS	ABS	Y	Y	Y	Y
positional	ERG	Y	Y	Y	Y
quantifier	ERG	Y	Y	Y	N
<i>ishahli</i> 'exceed'	ERG	Y	Y	(Y)	N
transitive psych (motion)	ABS/ERG	Y	N	(Y)	N
	ERG	N	%	((Y))	(Y)
canonical ERG	ERG	N	N	N	N

(37) **Psych verbs are not compatible with a DAT subject**

* **Anaak-oosh** ofi a-nokshoopa-h.

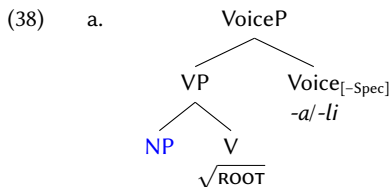
I.FOC-NOM dog 1SG.DAT-scared-TNS

('I had a dog be scared.'/'My dog is scared.')

- 1 Introduction
- 2 Choctaw
- 3 **Some ERG-marked arguments are internal**
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - **Test #3: Causative alternation**
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

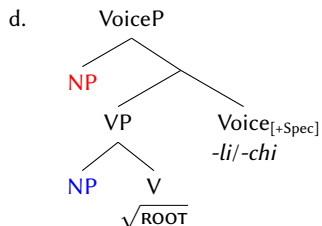
Test #3: Causative alternation

- Many **ABS**-subject intransitives have transitive, **ERG**-subject counterparts.



b. sa- boow -a
1SG.ABS- $\sqrt{\text{BEAT}}$ -INTR

c. sa- shalal-li
1SG.ABS- $\sqrt{\text{SLIP}}$ -INTR



e. is- sa- boo -li
2SG.ERG-1SG.ABS- $\sqrt{\text{BEAT}}$ -TR

f. is- sa- shalaa-chi
2SG.ERG-1SG.ABS- $\sqrt{\text{SLIP}}$ -TR
'You dragged me.'

- Cf. Alexiadou et al. (2006, 2015), Schäfer (2008, 2017), Wood (2015), Spathas et al. (2015), a.m.o.

Test #3: Causative alternation (II)

- Canonical **ERG**-subject intransitives don't participate in the causative alternation.
- Test: Verb has a transitive alternant → subject is I.A.
- *N.B.* There are various morphological expressions of the intransitive and transitive alternants (Tyler 2020).

Test #3: Causative alternation — Application

Positional and quantifier verbs

- Test: Verb has a transitive alternant → subject is I.A.

(39) **All positional verbs have transitive alternants. E.g.**

- a. Ofi nósi písa-a-sh **biní** -li -li-h.
 dog sleep.NMLZ see-PTCP $\sqrt{\text{SIT-INTR-1SG.ERG-TNS}}$
 ‘I’m sitting watching the sleeping dogs.’
- b. Chi-ppókni tíkba okl= ii- **binii-ch**-aachi-h.
 your-grandmother front PL= 1PL.ERG- $\sqrt{\text{SIT-TR-FUT-TNS}}$
 ‘We will seat your grandmother at the front.’

(40) **All quantifier verbs have transitive alternants. E.g.**

- a. Okl= ii- **móm-a** -t taha-h.
 PL= 1PL.ERG- $\sqrt{\text{ALL-INTR-PTCP}}$ finish-TNS
 ‘That’s all of us.’
- b. Alíkchi-yat alla **momí-chi**-t masaalichi-tok.
 doctor-NOM child $\sqrt{\text{ALL-TR-PTCP}}$ heal-TNS
 ‘The doctor cured all the kids.’
 (lit. ‘The doctor cured the kids, doing it to all of them.’)

Test #3: Causative alternation — Application

ishahli ‘exceed’, psych and motion verbs

- Test: Verb has a transitive alternant → subject is I.A.

- (41) ***ishahli* ‘exceed’ has a causative alternant** (though transitivity unaffected)

Taloowa-k-at *chi-* **shahli-chii**-li-tok.
 sing-C-SS 2SG.DAT-**exceed-TR** -1SG.ERG-PST
 ‘I sang more than you.’

- (42) **Some psych verbs have causative alternants. E.g.**

<p>a. Nokshoop-a -tok. $\sqrt{\text{SCARE}}$ -INTR-PST ‘She/he was scared.’</p>	<p>b. Shokka <i>anopa</i>-m-at sa- nokshob-li -tok. pig word-DEM-NOM 1SG.ABS-$\sqrt{\text{SCARE}}$ -TR-PST ‘The story scared me.’</p>
---	---

- (43) **A couple of motion verbs have causative alternants. E.g.**

<p>a. Okl= <i>ii-</i> yilhiip -a -tok. PL= 1PL.ERG-$\sqrt{\text{ROUT.PL}}$-INTR-PST ‘We ran off.’</p>	<p>b. Oklah yilhib -li -li-tok. people $\sqrt{\text{ROUT.PL-TR}}$-1SG.ERG-PST ‘I ran them off.’</p>
---	---

Interim Summary

verb type	Agr.	Test #1 (Rejects auxiliary <i>tahli?</i>)	Test #2 (Accepts DAT subject?)	Test #3 (Has causative alternant?)	Test #4 (Pluractional allomorphy?)
canonical ABS	ABS	Y	Y	Y	Y
positional	ERG	Y	Y	Y	Y
quantifier	ERG	Y	Y	Y	N
<i>ishahli</i> 'exceed'	ERG	Y	Y	(Y)	N
transitive psych (motion)	ABS/ERG	Y	N	(Y)	N
	ERG	N	%	((Y))	(Y)
canonical ERG	ERG	N	N	N	N

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal**
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - **Test #4: Pluractional allomorphy**
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Test #4: Pluractional allomorphy

- Many change-of-state intransitives show **pluractional** allomorphy
- (44) a. kalaa-**fa** ‘it got scratched’
 kala-**hli** ‘they got scratched’/‘it got scratched up’
- b. bokaa-**fa** ‘it popped’
 boka-**hli** ‘they popped’/‘it crackled’
- Canonical **ERG**-subject intransitives do not show pluractional allomorphy.
 - See also: Sapir (1917), Frajzyngier (1985), Durie (1987), Aikhenvald & Dixon (2011), Harley (2014), Bobaljik (2015), Bobaljik & Harley (2017).
 - Test: Verb (intransitive) shows pluractional allomorphy → subject is I.A.

Test #4: Pluractional allomorphy – Application

- Test: Verb (intransitive) shows pluractional allomorphy → subject is I.A.

(45) Almost all positional verbs show pluractional allomorphy

- | | | | |
|----|----------------------|-----------------|---------------|
| a. | binii -li | ‘she sits’ | |
| | chiiya | ‘they two sit’ | ← suppletion! |
| | bin -ohmáya | ‘they sit’ | |
| b. | takaa -li | ‘it hangs’ | |
| | tak -ooha | ‘they two hang’ | |
| | tak -ohmáya-h | ‘they hang’ | |

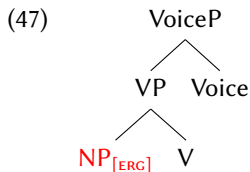
(46) Many motion verbs show pluractional allomorphy

- | | | | |
|----|-----------------------|-------------------|---------------|
| a. | iya | ‘she goes’ | |
| | itt- iyaa -chi | ‘they two go’ | |
| | ilhkooli | ‘they go’ | ← suppletion! |
| b. | ala | ‘she arrives’ | |
| | itt- alaa -chi | ‘they two arrive’ | |
| | aay- ala | ‘they arrive’ | |

Interim Summary

verb type	Agr.	Test #1 (Rejects auxiliary <i>tahli</i> ?)	Test #2 (Accepts DAT subject?)	Test #3 (Has causative alternant?)	Test #4 (Pluractional allomorphy?)
canonical ABS	ABS	Y	Y	Y	Y
positional	ERG	Y	Y	Y	Y
quantifier	ERG	Y	Y	Y	N
<i>ishahli</i> 'exceed'	ERG	Y	Y	(Y)	N
transitive psych (motion)	ABS/ERG	Y	N	(Y)	N
	ERG	N	%	((Y))	(Y)
canonical ERG	ERG	N	N	N	N

- Conclusion: There are several classes of **ERG**-subject verbs that behave like **ABS**-subject verbs.

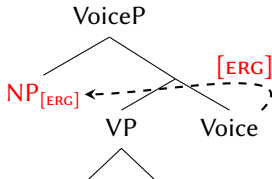
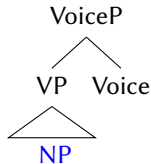
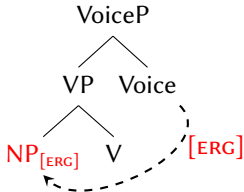


Interim Summary

verb type	Agr.	Test #1 (Rejects auxiliary <i>tahli</i> ?)	Test #2 (Accepts DAT subject?)	Test #3 (Has causative alternant?)	Test #4 (Pluractional allomorphy?)
canonical ABS	ABS	Y	Y	Y	Y
positional	ERG	Y	Y	Y	Y
quantifier	ERG	Y	Y	Y	N
<i>ishahli</i> 'exceed'	ERG	Y	Y	(Y)	N
transitive psych (motion)	ABS/ERG	Y	N	(Y)	N
	ERG	N	%	((Y))	(Y)
canonical ERG	ERG	N	N	N	N

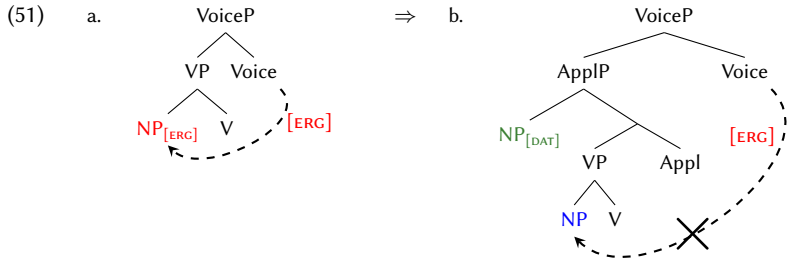
- Should we be worried about **exceptions**?
 - Pluractional allomorphy: The 'N's can be attributed to lexical gaps.
 - Psych verbs: ERG agreement only emerges when the verb takes an object—scrambles the 'DAT subject' test.
 - Motion verbs: Possible generational shift to canonical-ERG class.

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰**
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

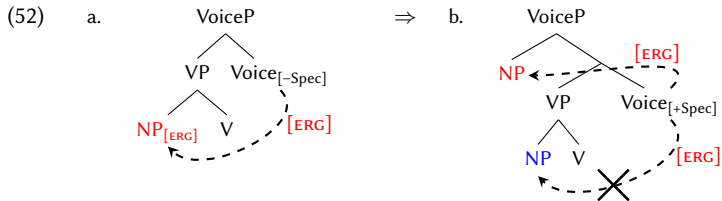
ERG-marking results from a syntactic relation with Voice⁰(48) **Canonical ERG-subject verb**(49) **Canonical ABS-subject verb**(50) **'Low' ERG-subject verb**

Evidence

- Argument #1: DATIVE intervention prevents [ERG]-assignment to I.A.



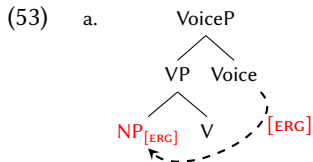
- Argument #2: Replacing Voice⁰ head prevents [ERG]-assignment to I.A.



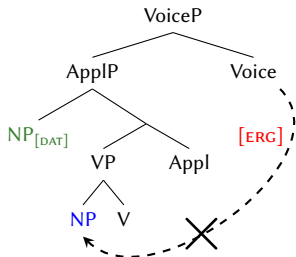
- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰**
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Dative intervention prevents [ERG]-assignment to I.A.

- On dative intervention: Chomsky (2001), Holmberg & Hróarsdóttir (2003), Hiraiwa (2005), Preminger (2009).



⇒ c.



- b. **Alla-yat** oklah máya-móma-h.
 child-NOM PL be.PL.PROG-still-T
 ‘The kids are still here.’

- d. *pro*_{2SG} **Alla** *chi*-máya-h-o?
 child 2SG.DAT-be.PL.PROG-TNS-Q
 ‘Do you have kids?’

- Problem: 3rd-person argument makes the **ERG**→**ABS** switch **unobservable**.

Dative intervention prevents [ERG]-assignment to I.A. (II)

- How can we tell the underlying **ERG/ABS** value of the theme in (54)?

(54) *pro*_{2SG} Alla Alla Alla oklah \emptyset - *chi*-máya-h-o?
 child PL 3.ABS-3.ERG-2SG.DAT-be.PL.PROG-TNS-Q
 ‘Do you have kids?’

- Answer: we’ve got to look at agreement co-occurrence restrictions (Tyler 2019).
 - If **ABS** + **DAT** → **ABS** argument must be 3rd-person.
 - If **ERG** + **DAT** → **ERG** argument can be 1st/2nd/3rd-person.
- Result: 1st/2nd-person themes are **impossible**:

(55) *ish- im- átta-h
 2SG.ERG-DAT-be.PROG-TNS
 (‘She has you.’/‘You are hers.’)

→ **DAT** argument blocks [ERG]-assignment (cf. Albizu & Fernández 2006, Rezac et al. 2014).

→ I.A. **depends on Voice** for its [ERG]-marking.

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰**
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.**
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Switching out the Voice⁰ head (II)

- Compare with DAT I.A.s — DAT survives transitivity:

(57) a.

b. *pro*_{1SG} a- *pitiip* -a-tok.
1SG.DAT-√WORSEN-INTR
'I got worse.'

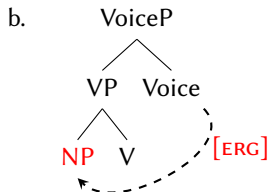
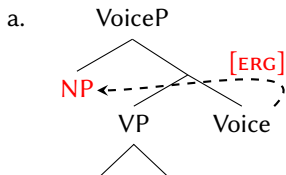
c.

d. **Okkish-at** *pro*_{1SG} a- *pitiib* -li-tok.
medicine-NOM 1SG.DAT-√WORSEN-TR-PST
'The medicine made me worse.'

→ DAT survives transitivity because [DAT] is *not* dependent on Voice⁰.

ERG as a syntactic relation with Voice: summary

(58) [ERG] is associated with Voice⁰

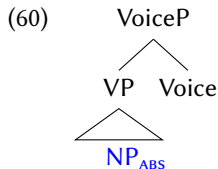
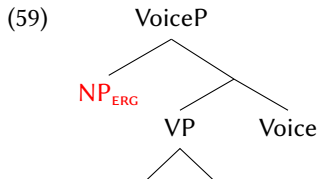


- Two arguments for (58b):
 - [ERG]-assignment to I.A. is blocked by dative intervention.
 - [ERG]-assignment to I.A. doesn't survive a change in Voice⁰ head.
- Next: With the link between external-argument-hood and [ERG]-assignment now severed, how should we understand the relation between **syntactic structure** and **morphological alignment**?

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 **Towards a theory of exceptional alignment behaviour**
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Taking stock

- Simple analysis of active alignment:

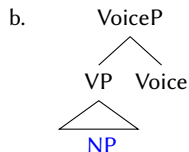
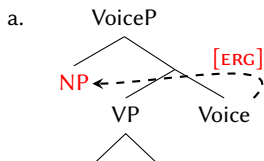


- Today: the analysis is not right:
 - Internal arguments can be [ERG].
- ...but it is not entirely *wrong*:
 - ERG-marking requires a relation with **Voice**.

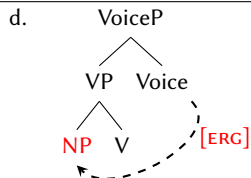
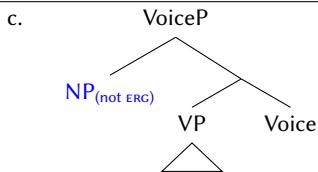
- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 **Towards a theory of exceptional alignment behaviour**
 - **Filling out the typology**
 - The default and contextual behavior of Voice
- 6 Conclusions

Filling out the typology of exceptions

Default

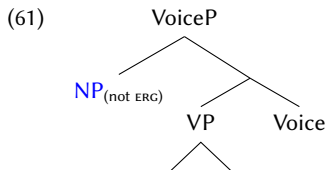


Exceptional



- Does structure (c) exist (in Choctaw or any other active alignment system)?
- *N.B.* I abstract away from ‘split’ active alignment, where ERG also requires certain T/M/A values.

ERGless external arguments?



(62) **Promising possibilities from other languages with active alignment**

a. **bii-** wíisshi-k
 1SG.ABS-tell.lie-DECL
 'I lie.'

(Crow, Ko 2019)

b. **wakyó?te?**
 'I (PATIENT CASE) work.'

(Mohawk, Mithun 1991:535)

- "It would seem that no one is more agentive semantically than a worker."

(Mithun 1991:535)

ERGless external arguments? (II)

(63) Agentive transitives with **ABS** subjects

a. yewakátyeʔs

‘I (PATIENT CASE) throw (it).’

(Mohawk, Mithun 1991:534)

b. Kabir-(**ne*) vo kitaab laay-aa/**ii*

Kabir.M-(**ERG*) that book.F bring.PERF-M/**F*

‘Kabir brought that book’

(Hindi-Urdu, Mahajan 2012:208)

c. Jinta-kari ka-rla ngirrily-ngirrily-wangka

one-other.ABS PRES.IMPF-3DAT aggressive-aggressive-speak.NONPAST

jinta-kari-ki, kulu-kungarnti.

one-other-DAT fight-in.preparation.for

‘One is provoking the other to fight.’

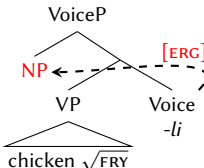
(Warlpiri, Legate 2012:187)

- ‘Semantic eyeballing’ doesn’t replace the need for language-specific diagnostics for external-argument-hood.

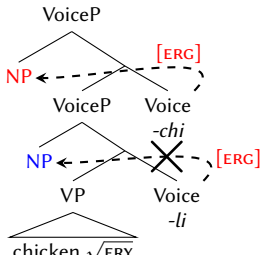
→ *But* these verbs have often been argued to be ‘exceptional’ (Oyharçabal 1992, Mahajan 2012, Aldai 2009, Berro 2010, Legate 2012).

Syntactic causatives in Choctaw

- **Causativization** strips embedded agents of their **ERG** case.

(64) a. 

b. Akaka **ish-** awash-li-tok.
 chicken 2SG.**ERG**- $\sqrt{\text{FRY}}$ -TR-PST
 'You fried the chicken.'

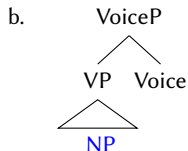
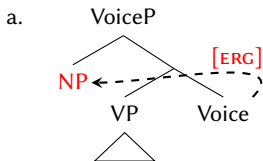
c. 

d. Akaka **chi-** awash-li -chii-**li**-tok.
 chicken 2SG.**ABS**- $\sqrt{\text{FRY}}$ -TR-CAUS-1SG.**ERG**-PST
 'I made you fry the chicken.'

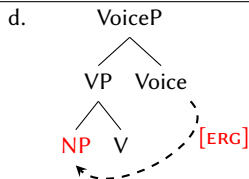
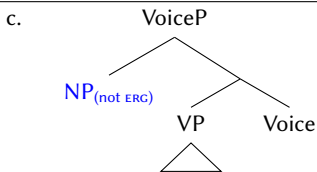
→ Here, Choctaw Voice⁰_[+Spec] fails to assign **[ERG]**.

Mismatches in active alignment systems

Default



Exceptional



- Recall our simple case-assignment rules:

$\text{Voice}_{[+Spec]}$ assigns [ERG] to Spec-VoiceP. ~~$\text{Voice}_{[+Spec]}$ assigns [ERG] to Spec-VoiceP.~~

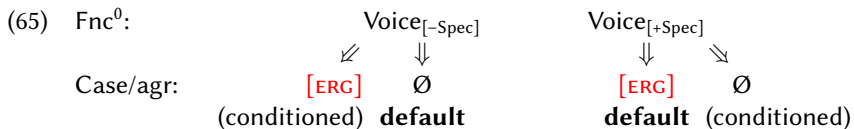
$\text{Voice}_{[-Spec]}$ does nothing. ~~$\text{Voice}_{[-Spec]}$ does nothing.~~

→ Do we give in to chaos!?

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

The default and contextual behavior of Voice

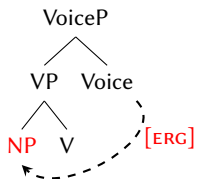
- I've argued for this:



- Proposal: Voice^0 heads have **default** and **contextually-conditioned** case/agreement properties.

Conditions on exceptional ERG assignment

(66) ‘Low’ ERG-subject verb



- Exceptional [ERG]-assignment to I.A. occurs in the context of:
 - Particular **roots**: positional, quantifier, *ishahli* ‘exceed’, %motion.
 - Particular **syntactic configurations**:

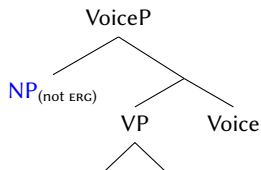
(67) Adding stimulus object to psych verb (a.k.a. ‘Absolutive promotion’, Tyler 2019)

a. **Chi-** nokshoopa-h.
 2SG.ABS-scared-TNS
 ‘You’re scared’

b. **Is-** sa- nokshoopa-h.
 2SG.ERG- 1SG.DAT-scared-TNS
 ‘You’re scared of me.’

Conditions on exceptional *non-ERG* assignment

(68) ERG-less agentive verb



- Exceptional *non-[ERG]*-assignment occurs in the context of:
 - Particular **roots** (perhaps not in Choctaw).
 - Particular **syntactic configurations**:

(69) Syntactic causativization

a. **Ish-** awashli-h.
 2SG.ERG-fry.TR-TNS
 ‘You fried it’

b. **Chi-** awashli-**chi-h**.
 2SG.ABS-fry.TR-CAUS-TNS
 ‘She made you fry it.’

Syntactic rules

(70) Case-assignment rules for Voice⁰_[-Spec]:

- a. \emptyset / Elsewhere
- b. Assign [ERG] / $\{\sqrt{\text{POS}}, \sqrt{\text{QUANT}}, \sqrt{\text{EXCEED}}, \dots\}$ _
- c. Assign [ERG] / NP_[DAT] + $\{\sqrt{\text{PSYCH}}\}$ _ (syntactic configuration)

(71) Case-assignment rules for Voice⁰_[+Spec]:

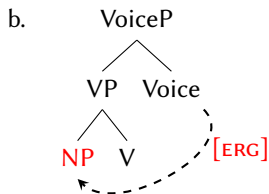
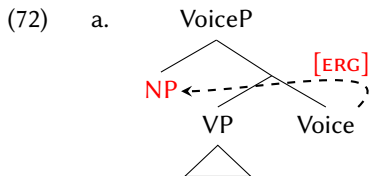
- a. Assign [ERG] / Elsewhere
- b. \emptyset / $\{\sqrt{1}, \sqrt{2}, \sqrt{3}, \dots\}$ _ \leftarrow perhaps not in Choctaw
- c. \emptyset / _ Voice⁰ (syntactic configuration)

- 1 Introduction
- 2 Choctaw
- 3 Some ERG-marked arguments are internal
 - Test #1: Auxiliary selection
 - Test #2: Compatibility with DAT subject
 - Test #3: Causative alternation
 - Test #4: Pluractional allomorphy
- 4 ERG-marking results from a syntactic relation with Voice⁰
 - Dative intervention prevents [ERG]-assignment to I.A.
 - Replacing Voice⁰ head prevents [ERG]-assignment to I.A.
- 5 Towards a theory of exceptional alignment behaviour
 - Filling out the typology
 - The default and contextual behavior of Voice
- 6 Conclusions

Some answers

- Q: How does **active alignment** correspond to **syntactic structure**?

→ Some NPs form a **syntactic relation** with **Voice**.



→ Syntactic position is *important* in determining which arguments form these relations, but *is not the sole determinant*.

- Q: How should we analyze alignment behavior that is **exceptional** within a language?

→ Functional heads (e.g. Voice) have **default** and **contextual** syntactic behavior.

Contextually-conditioned properties of Fnc^0 s

- I have argued that **case/agreement** properties of a Fnc^0 can be contextual.
- ...just like **morphological** properties:

(73) English past tense

- $T^0_{[\text{Past}]} \leftrightarrow -d / \text{Elsewhere}$
- $T^0_{[\text{Past}]} \leftrightarrow -t / \{\sqrt{\text{BEND}}, \sqrt{\text{MEAN}}, \sqrt{\text{DREAM}}, \dots\} _$
- $T^0_{[\text{Past}]} \leftrightarrow -\emptyset / \{\sqrt{\text{RUN}}, \sqrt{\text{SINK}}, \sqrt{\text{READ}}, \dots\} _$

- ...and **semantic** properties (Marantz 2013 et seq., Wood & Marantz 2017, a.m.o.):

(74) English plural

- $\text{Num}^0_{[\text{Pl}]} \leftrightarrow \lambda P. \text{Plural}(P) / \text{Elsewhere}$
- $\text{Num}^0_{[\text{Pl}]} \leftrightarrow \emptyset / \{\sqrt{\text{SCALE}}, \sqrt{\text{ODD}}, \sqrt{\text{DIG}}\} _$

→ Just like **allomorphy** and **allosemy**, contextually-conditioned case/agreement allows us to minimize the number of Fnc^0 s we need to posit.

Thanks!

Choctaw consultants	Elijah Ben, Patty Billie, Chris Chickaway, Shayla Chickaway, Zonie Isaac, Carol Jim, Deborah Tubby, Buck Willis, Darlene Willis
Professional linguists	Karlos Arregi, Claire Bower, Aaron Broadwell, Veneeta Dayal, Bob Frank, Martin Fuchs, Larry Horn, Jack Martin, Jason Shaw, Natalie Weber, Jim Wood, Raffaella Zanuttini
MBCI	Language Program, Culture Committee, Office of the Chief
Audiences	CamCos, CLS, WSCLA & UMass Amherst
Funding	Yale MacMillan Center for International and Area Studies

References I

- Aikhenvald, Alexandra Y. & R. M. W. Dixon. 2011. Non-Ergative Associations Between S And O. In *Language at Large: Essays on Syntax and Semantics*, 143–169. Brill.
- Albizu, Pablo & Beatriz Fernández. 2006. Licit and illicit ERG-DAT pairings. In Beatriz Fernández & Itziar Laka (eds.), *Andolin gogoan. Essays in honour of Professor Eguzkitza*, 69–96. Bilbao: UPV-EHU.
- Aldai, Gontzal. 2009. Is Basque morphologically ergative?: Western Basque vs. Eastern Basque. *Studies in Language* 33(4). 783–831. Publisher: John Benjamins.
- Aldridge, Edith. 2004. *Ergativity and word order in Austronesian languages*. Cornell University PhD Thesis.
- Aldridge, Edith. 2008. Generative approaches to ergativity. *Language and Linguistics Compass* 2(5). 966–995.
- Aldridge, Edith. 2012. Antipassive and ergativity in Tagalog. *Lingua* 122(3). 192–203.
- Alexiadou, Artemis, Elena Anagnostopoulou & Florian Schäfer. 2006. The properties of anticausatives crosslinguistically. In Mara Frascarelli (ed.), *Phases of interpretation*, vol. 91, 187–211. Berlin: Mouton de Gruyter.
- Alexiadou, Artemis, Elena Anagnostopoulou & Florian Schäfer. 2015. *External arguments in transitivity alternations: A layering approach*. Oxford: Oxford University Press.
- Anand, Pranav & Andrew Nevins. 2006. The locus of ergative case assignment: Evidence from scope. In Alana Johns, Diane Massam & Juvenal Ndayiragije (eds.), *Ergativity*, 3–25. Springer.
- Baker, James Samuel. 2018. *Split intransitivity: Thematic roles, case and agreement*. University of Cambridge PhD Thesis.
- Baker, Mark & Jonathan David Bobaljik. 2017. On inherent and dependent theories of ergative case. In Jessica Coon, Diane Massam & Lisa Travis (eds.), *The Oxford handbook of ergativity*, Oxford: Oxford University Press.
- Berro, Ane. 2010. Unergative predicates in Basque varieties: consequences for the ergative case assignment. DEA research work. UPV-EHU.
- Berro, Ane. 2019. (In) transitive Verbs: Unergatives and Unaccusatives. In Ane Berro, Beatriz Fernández & Jon Ortiz de Urbina (eds.), *Basque and Romance*, 139–175. Brill.
- Bobaljik, Jonathan David. 2015. Suppletion: Some theoretical implications. *Annual Review of Linguistics* 1. 1–18.
- Bobaljik, Jonathan David & Heidi Harley. 2017. Suppletion is local: Evidence from Hiaki. In Heather Newell, Máire Noonan & Lisa Travis (eds.), *The Structure of Words at the Interfaces*, 141–159. Oxford: Oxford University Press.
- Borer, Hagit & Yosef Grodzinsky. 1986. Syntactic Cliticization and Lexical Cliticization: The Case of Hebrew Dative Clitics in The Syntax of Pronominal Clitics. In Hagit Borer (ed.), *The Syntax of Pronominal Clitics*, 175–217. San Diego, CA: Academic Press.
- Broadwell, George Aaron. 1988. Multiple theta-role assignment in Choctaw. In W. Wilkins (ed.), *Syntax and semantics*, vol. 21, 113–127. San Diego, CA: Academic Press.
- Broadwell, George Aaron. 1990. *Extending the binding theory: A Muskogean case study*. UCLA dissertation.
- Broadwell, George Aaron. 1997. Binding theory and switch-reference. In Hans Bennis, Pierre Pica & Johann Rooryck (eds.), *Atomism and binding*, 31–50. Dordrecht: Foris.

References II

- Broadwell, George Aaron. 1998. Directionals as complex predicates in Choctaw. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the 1998 Lexical-Functional Grammar Conference*, .
- Broadwell, George Aaron. 2006. *A Choctaw reference grammar*. Lincoln, NE: University of Nebraska Press.
- Buckley, Eugene. 1998. Iambic lengthening and final vowels. *International Journal of American Linguistics* 64(3). 179–223. Publisher: University of Chicago Press.
- Burzio, Luigi. 1986. *Italian syntax: A government-binding approach*, vol. 1. Dordrecht: Kluwer.
- Butt, Miriam. 1995. *The structure of complex predicates in Urdu*. Stanford, CA: CSLI Publications.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*, 1–52. Cambridge, MA: MIT Press.
- Comrie, Bernard. 1978. Ergativity. In Winfred Lehmann (ed.), *Syntactic Typology*, 329–294. Austin, TX: University of Texas Press.
- Coon, Jessica. 2013. *Aspects of split ergativity*. Oxford: Oxford University Press.
- Coon, Jessica. 2017. Two types of ergative agreement: implications for case. In Claire Halpert, Hadas Kotek & Coppe van Urk (eds.), *A Pesky Set: papers for David Pesetsky*, 361–370. Cambridge, MA: MIT Working Papers in Linguistics.
- Cuervo, María Cristina. 2003. *Datives at large*: Massachusetts Institute of Technology dissertation.
- Davies, William. 1986. *Choctaw Verb Agreement and Universal Grammar*. Dordrecht: Reidel.
- Davies, William D. 1981. *Choctaw clause structure*: UC San Diego dissertation.
- Donohue, Mark & Søren Wichmann. 2008. *The typology of semantic alignment*. Oxford: Oxford University Press.
- Durie, Mark. 1987. Grammatical relations in Acehnese. *Studies in Language* 11(2). 365–399.
- Foley, Wiliam A. & Robert D. Van Valin. 1984. *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.
- Frajzyngier, Zygmunt. 1985. Ergativity, number, and agreement. In *Annual Meeting of the Berkeley Linguistics Society*, vol. 11, 96–106.
- Hardy, Heather K. & Philip W. Davis. 1993. The semantics of agreement in Alabama. *International journal of American linguistics* 59(4). 453–472.
- Harley, Heidi. 2014. On the identity of roots. *Theoretical Linguistics* 40(3-4). 225–276.
- Harris, Alice C. 1982. Georgian and the unaccusative hypothesis. *Language* 58(2). 290–306.
- Heath, Jeffrey. 1977. Choctaw cases. In *Annual Meeting of the Berkeley Linguistics Society*, vol. 3, 204–213.
- Hiraiwa, Ken. 2005. *Dimensions of symmetry in syntax: Agreement and clausal architecture*: MIT PhD Thesis.

References III

- Holmberg, Anders & Thorbjörg Hróarsdóttir. 2003. Agreement and movement in Icelandic raising constructions. *Lingua* 113(10). 997–1019.
- Ko, Edwin. 2019. Unaccusativity in Crow. Handout from paper presented at the 39th Annual Siouan & Caddoan Languages Conference, May 30, 2019.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In Johan Rooryck & Laurie Zaring (eds.), *Phrase structure and the lexicon*, 109–137. Dordrecht: Kluwer.
- Laka, Itziar. 2006. On the nature of case in Basque: structural or inherent. In Hans Broekhuis, Norbert Corver, Riny Huybregts, Ursula Kleinhenz & Koster (eds.), *Organizing grammar: Linguistic studies in honor of Henk van Riemsdijk*, 374–382. Berlin, New York: Mouton de Gruyter.
- Legate, Julie Anne. 2006. Split absolutive. In *Ergativity*, 143–171. Springer.
- Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39. 55–101.
- Legate, Julie Anne. 2012. Types of ergativity. *Lingua* 122(3). 181–191.
- Levin, Beth & Malka Rappaport Hovav. 1995. *Unaccusativity*. Cambridge, MA: MIT press.
- Levin, Beth C. 1983. *On the nature of ergativity*: Massachusetts Institute of Technology PhD Thesis.
- Lombardi, Linda & John McCarthy. 1991. Prosodic circumscription in Choctaw morphology. *Phonology* 8(1). 37–72. Publisher: Cambridge University Press.
- Mahajan, Anoop. 2012. Ergatives, antipassives and the overt light v in Hindi. *Lingua* 122(3). 204–214.
- Marantz, Alec. 2013. Locality domains for contextual allomorphy across the interfaces. In Ora Matushansky & Alec Marantz (eds.), *Distributed morphology today: Morphemes for Morris Halle*, 95–115. Cambridge, MA: MIT Press.
- Merlan, Francesca. 1985. Split intransitivity: Functional oppositions in intransitive inflection. In Johanna Nichols & Anthony C. Woodbury (eds.), *Grammar inside and outside the clause: Some approaches to theory from the field*, 324–362. Cambridge: Cambridge University Press.
- Mithun, Marianne. 1991. Active/agentive case marking and its motivations. *Language* 67(3). 510–546.
- Munro, Pamela & Lynn Gordon. 1982. Syntactic relations in Western Muskogean: a typological perspective. *Language* 58(1). 81–115.
- Nicklas, Thurston Dale. 1974. *The elements of Choctaw*: University of Michigan dissertation.
- Oyharçabal, Beñat. 1992. Structural case and inherent case marking: Ergaccusativity in Basque. In Joseba Andoni Lakarra & Jon Ortiz de Urbina (eds.), *Syntactic theory and Basque syntax*, 309–342. Bilbao: Euskal Herriko Unibertsitatea.
- Payne, Doris L. 1982. Chickasaw Agreement Morphology: A Functional Explanation. In Paul J. Hopper & Sandra A. Thompson (eds.), *Studies in Transitivity*, vol. 15 Syntax and Semantics, 351–378. New York: Academic Press.

References IV

- Perlmutter, David. 1978. Impersonal passives and the Unaccusative Hypothesis. In Jeri Jaeger (ed.), *Papers from the 5th Annual Meeting of the Berkeley Linguistics Society*, vol. 4, 157–189. Berkeley, CA: University of California, Berkeley Linguistics Society.
- Preminger, Omer. 2009. Breaking agreements: Distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* 40(4). 619–666.
<http://www.mitpressjournals.org/doi/pdf/10.1162/Ling.2009.40.4.619>.
- Rezac, Milan, Pablo Albizu & Ricardo Etxepare. 2014. The structural ergative of Basque and the theory of Case. *Natural Language & Linguistic Theory* 32(4). 1273–1330.
- Rosen, Carol G. 1984. The interface between semantic roles and initial grammatical relations. In David Perlmutter & Carol G. Rosen (eds.), *Studies in relational grammar*, vol. 2, 38–77. Chicago: University of Chicago Press.
- Sapir, Edward. 1917. Review of “Het Passieve Karakter van het Verbum Transitivum of van het Verbum Actionis in Talen van Noord-Amerika (The Passive Character of the Transitive Verb or of the Active Verb in Languages of North America)” by C. C. Uhlenbeck. *International Journal of American Linguistics* 1(1). 82–86.
- Schäfer, Florian. 2008. *The syntax of (anti-) causatives: External arguments in change-of-state contexts*. Philadelphia: John Benjamins Publishing.
- Schäfer, Florian. 2017. Romance and Greek medio-passives and the typology of Voice. In Roberta D’Alessandro, Irene Franco & Ángel J. Gallego (eds.), *The verbal domain*, 129–152. Oxford: Oxford University Press.
- Sorace, Antonella. 2000. Gradients in auxiliary selection with intransitive verbs. *Language* 859–890.
- Spithas, Giorgos, Artemis Alexiadou & Florian Schäfer. 2015. Middle Voice and reflexive interpretations: afto-prefixation in Greek. *Natural Language & Linguistic Theory* 33(4). 1293–1350.
- Tyler, Matthew. 2019. Absolutive Promotion and the Condition on Clitic Hosts in Choctaw. *Natural Language & Linguistic Theory* 37(3). 1145–1203.
- Tyler, Matthew. 2020. *Argument structure and argument-marking in Choctaw*: Yale University dissertation.
- Van Valin, Robert D. 1990. Semantic parameters of split intransitivity. *Language* 66. 221–260. Publisher: JSTOR.
- Wood, Jim. 2015. *Icelandic morphosyntax and argument structure*. Dordrecht: Springer.
- Wood, Jim & Alec Marantz. 2017. The interpretation of external arguments. In Roberta D’Alessandro, Irene Franco & Ángel J. Gallego (eds.), *The Verbal Domain*, 255–278. Oxford: Oxford University Press.
- Woolford, Ellen. 1997. Four-way case systems: Ergative, nominative, objective and accusative. *Natural Language & Linguistic Theory* 15. 181–227.
- Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic inquiry* 37. 111–130.
- Woolford, Ellen. 2010. Active-stative agreement in Choctaw and Lakota. *Revista Virtual de Estudos da Linguagem* 8. 6–46.
- Woolford, Ellen. 2015. Ergativity and transitivity. *Linguistic Inquiry* 46(3). 489–531.