

Thematic role and movement to subject position

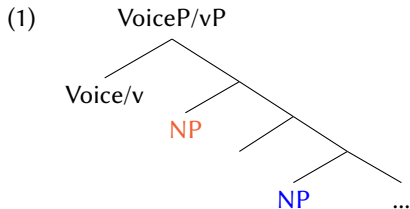
Muskogean evidence for a ‘deactivation’-based account

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Introduction

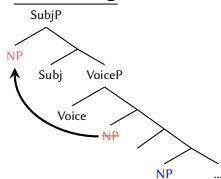
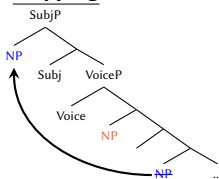
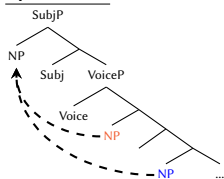


- Passive of ditransitive, or unaccusative with applicative.
- If there is an EPP requirement, which argument becomes the subject?

Three patterns

- **Advancing**: only the **higher** argument can become the subject.
 - E.g. passives in (Standard) English.
- **Skipping**: only the **lower** argument can become the subject.
 - E.g. Non-actives in Albanian (McGinnis 1998:53f.).
- **Symmetric** (advancing or skipping): *either* argument can become the subject.
 - E.g. passives in Kinyarwanda (Woolford 1993).

(2)

a. **Advancing**b. **Skipping**c. **Symmetric**

N.B. The term **asymmetric** is also used, but it implies a dichotomy rather than a trichotomy so I don't use it

Explanations for the patterns

In all accounts, simple locality derives the **advancing** pattern ‘by default’.

(3) [SubjP **NP_{Appl}** ... [AppIP **NP_{Appl}** [VP V **NP_{Theme}**]]]

→ But to derive skipping and symmetric patterns...

Locality-based accounts:¹

- The lower argument raises to an intermediate position.

(4) [SubjP **NP** ... [AppIP **NP_{Appl}** **NP_{Theme}** [VP V **NP_{Theme}**]]]

→ Either argument is now eligible for movement to subject position.

Deactivation-based accounts:²

- The higher argument is ‘deactivated’ somehow.

(5) [SubjP **NP_{Theme}** ... [AppIP **NP_{Appl}** [VP V **NP_{Theme}**]]]

→ Only the lower argument is now eligible for movement to subject position.

1. E.g. Ura (1996), McGinnis (1998, 2004), Anagnostopoulou (2003), Doggett (2004).

2. E.g. Baker (1988), Woolford (2003). See also *mixed* accounts, e.g. Haddican and Holmberg (2015).

Today

- **Choctaw** and **Chickasaw** (Muskogean) show all three patterns.
- What pattern do we see in a given clause?
 - It depends on the **thematic role of NP_{Appl}**.
- I provide a **deactivation**-based account.
 - Different Appl⁰ heads either *do*, *don't* or *optionally* deactivate NP_{Appl}.

(6)

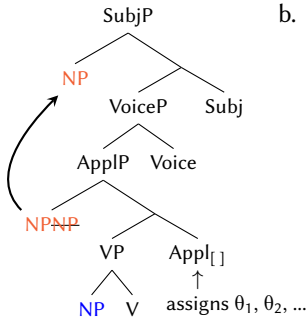
Appl	thematic role	Deactivates NP _{Appl} ?
Appl _[]	engineer affected experiencer external possessor predicative possessor	no
Appl _[D]	beneficiary source/location	yes
Appl _{LOC}	location ₁	yes/optional
Appl _{SUP}	superessive	yes/optional
Appl _{AGAINST}	location ₂	optional
...

- Finally: what is ‘deactivation’ anyway?
 - I suggest fully abstract ‘licensing’.³

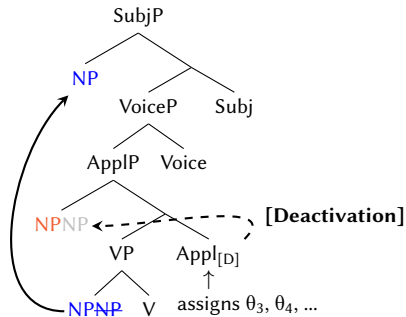
3. Cf. Pesetsky (2013), Sheehan and Van der Wal (2018).

Illustration

(7) a.



b.



- Appl[] does not deactivate NP_{Appl} → **advancing** derivation.
- Appl[D] deactivates NP_{Appl} → **skipping** derivation.

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Choctaw and Chickasaw

- Western Muskogean languages
 - Choctaw: spoken in Mississippi and Oklahoma.
 - Chickasaw: spoken in Oklahoma.
- Examples and data here come largely from:
 - Choctaw: my fieldwork in Pearl River, MS and Bogue Chitto, MS, 2016-2019; published works.⁴
 - Chickasaw: Large body of published work by Pam Munro.⁵
- Examples are from **Choctaw** unless noted.
- **Important orthographical note!**
 - Underlined vowels (a i o) are **nasalized** (/ã ã õ/).

4. Byington (1870), Nicklas (1974), Ulrich (1986), Davies (1986), Broadwell (1990, 2006).

5. E.g. Munro and Willmond (1994), Munro (1999, 2016, 2017).

Syntactic properties

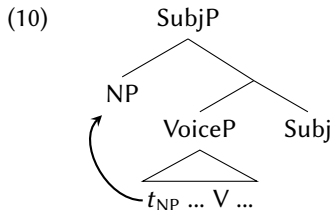
- Head-final, rigid SOV, two-way NOM/OBL case distinction:

(8) Alíkchi-**yat** alla-m-**a** masaali-ch-aachi-h.
 doctor-**NOM** child-DEM-**OBL** heal-CAUS-FUT-TNS
 ‘The doctor will heal that kid.’

- Pervasive argument drop:

(9) *pro pro pro* Im-aa-tok.
 DAT-give-PST
 ‘She gave it to him.’

- Dedicated subject position (Broadwell 2006, Tyler 2020):



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Non-active verbs

Choctaw has a transitivity alternation:

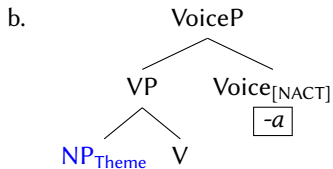
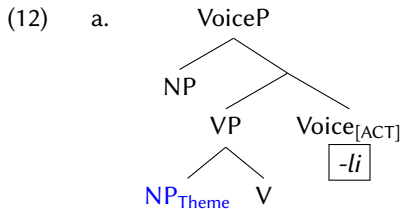
- (11) a. Hattak-m-at akakoshi awash-li-tok
 man-that-NOM egg fry-**ACT**-PST
 ‘That man fried the egg.’

[active]

- b. Akakoshi-t alwash-a-tok
 egg-NOM fry-**NACT**-PST
 ‘The egg (was) fried.’

[non-active]

Analysis: active/non-active Voice heads merge directly with VP.⁶



6. Tyler (2020). Cf. analyses of Greek/Hebrew-type voice systems: Doron (2003), Alexiadou and Doron (2012), Alexiadou (2013), Alexiadou et al. (2015), Spathas et al. (2015), Kastner (2016, 2019), Schäfer (2017), a.o.

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- **Applicatives**

3 Applicatives on non-active verbs

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Applicatives

Applied arguments are indexed by **DAT** agreement or [**ABS** agreement + **APPL** prefix]:

(13) a. **DAT** agreement

Mary-t **anaak-o** **a**-taloowa-tok.
 Mary-NOM me.FOC-OBL **1SG.DAT**-sing-PST
 ‘Mary sang for ME.’

b. **ABS** agreement + **APPL** prefix

pro **Anaak-o** **sa-baa**-toksal-aachi-h.
 me.FOC-OBL **1SG.ABS-COM**-sing-FUT-TNS
 ‘She will work with ME.’

Applicatives – II

Applicatives may be added to virtually any verb:

(14) a. Unergative

Mary-t *pro*_{1SG} a-taloowa-tok.
 Mary-NOM 1SG.DAT-sing-PST
 ‘Mary sang for me.’

b. Active (i.e. transitive)

*pro*_{1SG} Jimmy ishitwashóoha im-okpanii-li-tok.
 Jimmy toy DAT-break.ACT-1SG.ERG-PST
 ‘I broke Jimmy’s toy.’

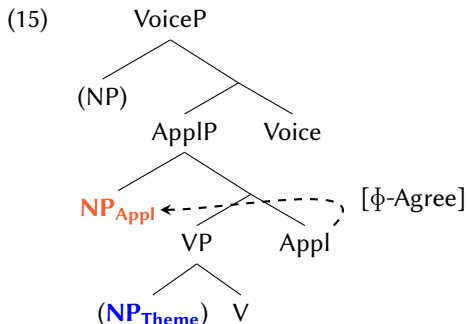
c. Non-active

Katie-at okkísa i-tiw-a-h.
 Katie-NOM door DAT-open-NACT-TNS
 ‘The door opened on Katie.’

→ Note also: applied arguments have a range of thematic roles.

Structure of applicatives

- I adopt a Pykkänenian ApplP analysis.⁷
- Appl⁰ agrees with NP_{Appl}, resulting in verbal agreement morphology.

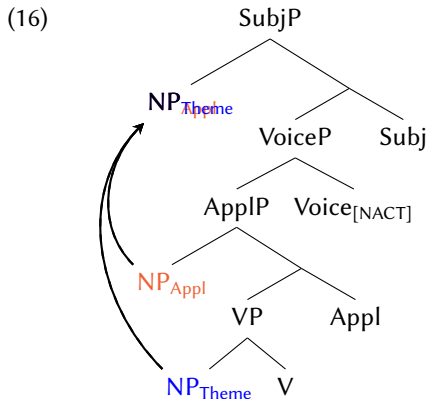


7. Pykkänen (2002, 2008). Hi/lo distinction not relevant here, cf. Jerro (to appear).

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Applicatives on non-active verbs

Given this input structure...



→ What happens when the subject position needs to be filled??

- Advancing...
- Skipping...
- Advancing or skipping (symmetry)...

Applicatives on non-active verbs

Most verb roots license both advancing *and* skipping derivations.

(17) a. Advancing

Katie-at tali i-kochoofa-tok.

Katie-NOM metal DAT-bend.NACT-PST

‘The metal bent on Katie.’

b. Skipping

Tali-t Katie-ano i-kochoofa-tok.

metal-NOM Katie-OBL DAT-bend.NACT-PST

‘The metal bent for Katie.’

- Previous analyses: an operation transforms (17b) \implies (17a), akin to passivization.⁸
- But observe: **NP_{Appl} gets different thematic roles!**

8. Possessor-raising (Davies 1986, Broadwell 2006); III-subjectivalization/dative-raising (Munro and Gordon 1982, Broadwell 2006); the Oblique/Applicative Subject Rule (Munro 1999, 2016).

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Advancing constructions

Advancing: when NP_{Appl} becomes the subject.

(18) Affected experiencer (typically maleficiary)

- a. A-car-hat filíhma-tok.
 1SG.DAT-car-NOM turn.NACT.HG-PST
 ‘My car flipped over (suddenly).’
- b. *pro*_{1SG} Chi-car a-filíhma-tok!
 2SG.DAT-car 1SG.DAT-turn.NACT.HG-PST
 ‘Your car flipped (suddenly) on me!’

(19) ‘Engineer’ (in the sense of Myler 2016: an intentional indirect causer)

- a. Aapísa-t tiwa-tok.
 window-NOM open.NACT-PST
 ‘The window opened.’
- b. Míko-yat aapísa móyyoma-k-a i-tiwa-t taha-tok.
 chief-NOM window all.YG-COMP-OBL DAT-open.NACT-PTCP finish.NACT-PST
 ‘The boss had all of the windows opened.’

Advancing constructions – II

Advancing: when NP_{Appl} becomes the subject.

(20) External possessor

- a. Ókfochoosh-at illi-h.
 duck-NOM die-TNS
 ‘The duck died.’
- b. Alíkchi-yat ókfochoosh im-illi-tok.
 doctor-NOM duck DAT-die-PST
 ‘The doctor’s duck died.’

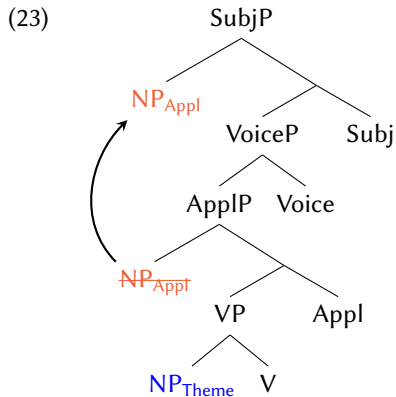
(21) Predicative possessor

- a. Ofi-yat lawa-tok.
 dog-NOM many-PST
 ‘There were a lot of dogs’
- b. Alíkchi-m-at ofi i-lawa-h.
 doctor-that-NOM dog DAT-many-TNS
 ‘That doctor has a lot of dogs.’

Advancing constructions: summary

When added to a non-active verb, NP_{Appl}s with *these* roles become subjects:

- (22) affected experiencer
 engineer
 external possessor
 predicative possessor



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Skipping constructions

Skipping: when NP_{Theme} becomes the subject.

(24) Beneficiary

- a. *Ak**a**koshi-m-at* alwasha-tok.
egg-that-NOM fry.NACT-PST
'The eggs were fried.'
- b. *Ak**a**koshi-m-at* *sipp**o**kni-m-ak-o* *im*-alwasha-ttook.
egg-that-NOM old.person-that-FOC-OBL DAT-fry.NACT-DPST
'The eggs were fried for the ELDER.'

(25) Source/location

- a. *Mi**i**ko* *i*-*k**atos-at* ittola-tok.
chief DAT-cat-NOM fall-PST
'The chief's cat fell down.'
- b. *Mi**i**ko* *i*-*k**atos-at* *pro*₃ *im*-ittola-tok.
chief DAT-cat-NOM DAT-fall-PST
'The chief's cat fell from her.'

Skipping constructions – II

N.B. All NP_{AppI}s introduced with APPL prefixes are skipped.

(26) Locative (*aa-*)

- a. *Ak**a**koshi-m-at* alwasha-tok.
egg-that-NOM fry.NACT-PST
'The eggs were fried.'
- b. *Ak**a**koshi-t* *aahopóoni-ya* *aay*-alwasha-h.
egg-NOM kitchen-OBL LOC-fry.NACT-TNS
'The eggs were frying in the kitchen.'

(27) Superessive (*o-*)

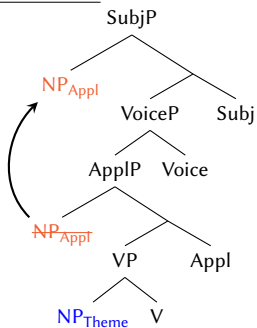
- a. *Chi**i*-wak nípi-yat lowa-h!
2SG.DAT-COW meat-NOM burn-TNS
'Your steak is burning!'
- b. *Chi**i*-wak nípi-yat *aahopóoni* *o*-lowa-ka!
2SG.DAT-COW meat-NOM stove SUP-burn-AFF
'Your steak is burning on the stove!'

Interim summary: applicatives of non-actives

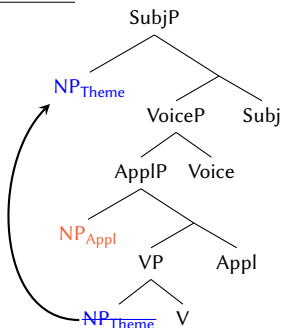
- (28) **NP_{Appl} = subject**
 affected experiencer
 engineer
 predicative possessor
 external possessor

- NP_{Appl} = object**
 beneficiary
 source/location
 locative (aa-)
 superessive (o-)
 ...

- (29) a. Advancing



- b. Skipping



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Symmetric constructions

Symmetric: when NP_{Appl} or NP_{Theme} can become the subject.

(30) Chickasaw: AGAINST-applicative a-

a. **Nampanaa'**-at **anaako** a-sa-shiiyalhchi-taha.
 string-NOM 1SG.ACC AGAINST-1SG.ABS-be.tied-be.done
 'The string is tied onto me.'

b. **Anaakoot** **nampanaa'**-at a-sa-shiiyalhchi-taha.
 1SG.NOM string-NOM AGAINST-1SG.ABS-be.tied-be.done
 'I have the string tied on me.' (Chickasaw, Munro 1999:263)

(31) Chickasaw: superessive applicative on-

a. **Hashi'**-at **Jan-a** on-toomi-tok.
 sun-NOM Jan-ACC SUP-shine-PERF
 'The sun shone on Jan.'

b. **Jan-at** **hashi'**-at on-toomi-tok.
 Jan-NOM sun-NOM SUP-shine-PERF
 'Jan had the sun shine on her.' (Chickasaw, Munro 1999:263)

Summary of applicatives of non-actives

(32) $NP_{\text{Appl}} = \text{subject}$	$NP_{\text{Appl}} = \text{object}$	$NP_{\text{Appl}} = \text{subject or object}$
affected experiencer	beneficiary	superessive ($\underline{o-}$, Chickasaw)
engineer	source/location	AGAINST ($a-$, Chickasaw))
predicative possessor	locative ($aa-$)	
external possessor	superessive ($\underline{o-}$)	
	...	

- [$NP_{\text{Appl}} = \text{subject}$] (i.e. *advancing*) derivations are explained by simple locality alone:

(33) [_{SubjP} NP_{Appl} Subj⁰ [_{VoiceP} Voice⁰ [_{AppIP} NP_{Appl} Appl⁰ [_{VP} V NP_{Theme}]]]]

- [$NP_{\text{Appl}} = \text{object}$] (i.e. *skipping* derivations) require an extra explanation:

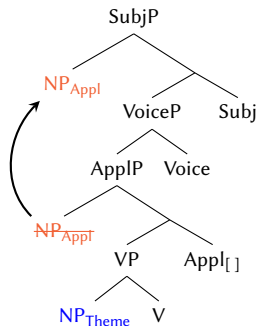
(34) [_{SubjP} NP_{Theme} Subj⁰ [_{VoiceP} Voice⁰ [_{AppIP} NP_{Appl} Appl⁰ [_{VP} V NP_{Theme}]]]]

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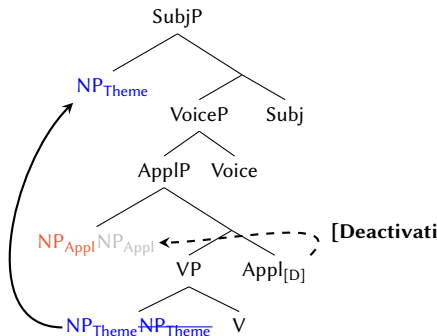
Analysis

In a skipping derivation, **Appl_[D]** deactivates NP_{Appl}.

(35) a. Advancing



b. Skipping



How do you like them Appl's?

Appl	Exponent	Agr type	θ -roles	Deactivates NP _{Appl} ?
Appl _[D]	\emptyset	[DAT]	Affected experiencer Engineer Predicative possessor External possessor	No
Appl _[_]	\emptyset	[DAT]	Beneficiary Source/Location	Yes
Appl _{LOC}	<i>aa-</i>	[ABS]	Location	Yes
Appl _{SUP}	<i>o-</i>	[ABS]	Superessive	Yes; Chickasaw: optional
Appl _{AGAINST}	<i>a-</i>	[ABS]	Location ₂	Chickasaw: optional
...				

Different Appl⁰s have:

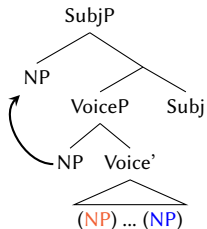
- different morphology
- different interpretations
- different deactivation behaviors

Applied objects

When there is an **external argument**, deactivation is irrelevant.

→ NP_{Appl} is **always** an object.

(36)



(37) a. NP_{Appl} = affected experiencer

*pro*_{2SG} *pro*_{1SG} *chi*-*chokka* *am*-*okpani*-*t* *ish*-*tahli*-*tok*.
 2SG.DAT-house 1SG.DAT-break.ACT-PTCP 2SG.ERG-finish.ACT-PST
 'You tore your house down on me.'

b. NP_{Appl} = beneficiary

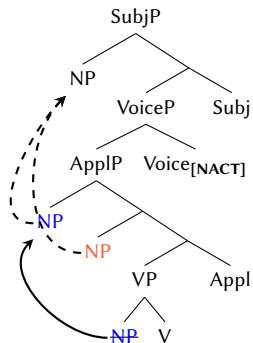
*pro*_{1SG} *sipókni*-*m-a* *okkísa* *i*-*tiwwi*-*li*-*tok*.
 old.person-that-OBL door DAT-open.ACT-1SG.ERG-PST
 'I opened the door for the elderly person.'

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Locality-based accounts

- In a locality-based account (of a 'symmetric' passive), NP_{Theme} moves to the specifier of ApplP.
 - NP_{Theme} and NP_{Appl} are equidistant from Spec-SubjP.⁹

(38)



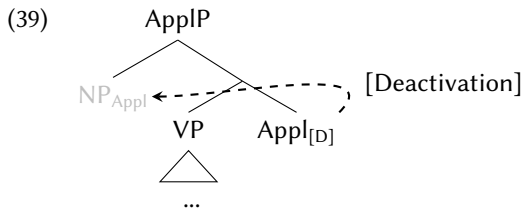
- Locality-based accounts can only derive **symmetry**.

→ There is no way to derive the skipping-only pattern *without adding something extra*.

9. (Ura 1996, McGinnis 1998, 2004, Anagnostopoulou 2003, Doggett 2004, Haddican and Holmberg 2015)

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What is 'deactivation'?



Previous accounts of what 'deactivates' NPs:

- (a) Abstract Case, via the **Activity Condition**¹⁰
 - Abstract *inherent* Case¹¹
- (b) Valuing an Agree probe¹²
- (c) Encasement PP/functional 'shell'¹³

Only (a) will work for Choctaw (and not straightforwardly).

10. Chomsky (2000, 2001)

11. Alexiadou et al. (2014), Anagnostopoulou and Sevdali (2015)

12. Yuan (2018)

13. Bittner and Hale (1996), Rezac (2008), Caha (2009), Alexiadou et al. (2014), Baker (2014, 2015)

Valuing an Agree probe does not deactivate NP

- All applied arguments (advancing and skipped-over) are targeted for verb agreement.

- (40) a. *pro*_{1SG} Chi-car **a**-filihma-tok!
 2SG.DAT-car **1SG.DAT**-turn.NACT.HG-PST
 ‘Your car flipped (suddenly) on me!’ [**NP_{Appl}** = subj]
- b. Akakoshi-m-at **an-aak-o** **am**-alwasha-ttook.
 egg-that-NOM me-FOC-OBL **1SG.DAT**-fry.NACT-DPST
 ‘The eggs were fried for ME.’ [**NP_{Appl}** = obj]

→ Therefore, participation in verb agreement cannot cause deactivation.

Deactivated NPs are not encased in null PP shells

- PP-like constituents in Choctaw do not behave like applied arguments.¹⁴

→ Choctaw PPs are opaque for agreement:

- (41) [PP? *pro*_{1SG} Si-ashaka] ish-(***sa**/***sa**)-hikiya-h-o?
 1SG.ABS-behind 2SG.ERG-(***1SG.ABS**/***DAT**)-stand.NG-TNS-Q
 'Are you behind me?'
- (42) Achi-t [PP? an-aak-o si-aapakna] (***sa**/***am**-)ittola-h.
 blanket-NOM me-FOC-OBL 1SG.ABS-on.top (***1SG.ABS**/***1SG.DAT**-)lie.NG-TNS
 'The blanket is on top of me.'

14. Broadwell (2006), Tyler (2020). See Baker (2014, 2015) for the pro-PP-shells side.

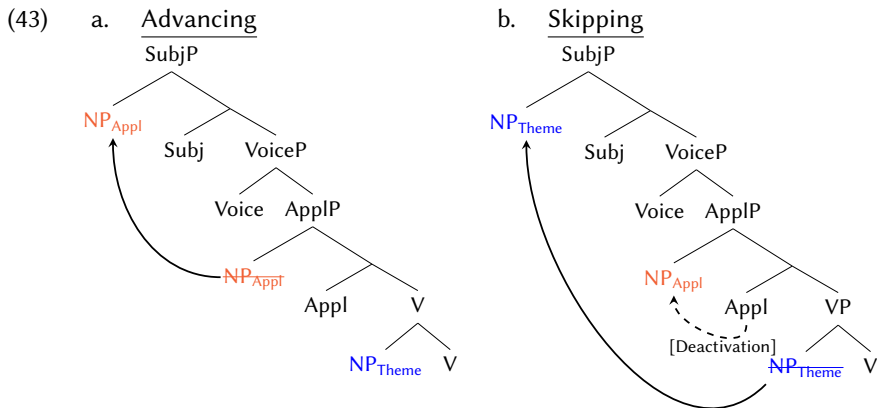
Deactivation as fully abstract 'licensing'

- Deactivation involves an abstract *syntactic* relation between X^0 and Spec-XP.
 - Deactivation is distinct from Agree.
 - ...which may be fully morphological anyway; cf. Bobaljik (2008)
- Proposal: deactivation is fully abstract 'Vergnaud-licensing', in the sense of Pesetsky (2013) and Sheehan and Van der Wal (2018).

- 1 Introduction
- 2 Choctaw and Chickasaw
 - Non-active verbs
 - Applicatives
- 3 Applicatives on non-active verbs
 - Advancing constructions: when NP_{Appl} becomes the subject
 - Skipping constructions: when NP_{Theme} becomes the subject
 - Symmetric constructions: when either argument can become the subject
- 4 Analysis: 'deactivating' NP_{Appl}
 - Against a locality-based account
 - What is 'deactivation'?
- 5 Conclusion

Conclusions

- Different Appl⁰s may or may not deactivate Spec-ApplP.
- In the absence of an external argument, presence/absence of deactivation is decisive in determining which argument moves to subject position.



→ The *skipping* pattern requires deactivation in some form.

Conclusions - II

- We can taxonomize Appl⁰s based on morphological, semantic, and syntactic properties.

Appl	Exponent	Agr type	θ -roles	Deactivates NP _{Appl} ?
Appl _[-]	\emptyset	[DAT]	Affected experiencer Engineer Predicative possessor External possessor	No
Appl _[D]	\emptyset	[DAT]	Beneficiary Source/Location	Yes
Appl _{LOC}	<i>aa-</i>	[ABS]	Location	Yes
Appl _{SUP}	<i>o-</i>	[ABS]	Superessive	Yes; Chickasaw: optional
Appl _{AGAINST}	<i>a-</i>	[ABS]	Location ₂	Chickasaw: optional
...				

- And what is deactivation?
 - Fully abstract licensing, unrelated to Agree or morphological case.

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Argument #1: Beneficiaries pass standard diagnostics for being high applicatives

- (44) Beneficiaries are compatible with unergatives

Mary-t anaak-o a-taloowa-tok.

Mary-NOM me.FOC-OBL 1SG.DAT-sing-PST

‘Mary sang for ME.’

- (45) Beneficiaries do not need to be recipients or goals

John-at pro_{1SG} holisso chito a-hókli-h.

John-NOM paper big 1SG.DAT-hold.NG-TNS

‘John is holding the book for me.’

Argument #2: Default word order in ditransitives is Beneficiary-Theme

- (46) Sippókni-m-a okkisa i-tiwwi-li-tok.
 old.NMLZ-DEM-OBL door **DAT**-open.ACT-1SG.ERG-PST
 ‘I opened the door for the elderly person.’

Argument #3: Beneficiaries of non-actives show distinct PCC effects

(47) PCC signature of ABS>DAT verb

- a. I-sa- nokshoopa-h.
 DAT-1SG.ABS-be.afraid-TNS
 ‘I am afraid of her.’ ✓ 1SG.ABS>3.DAT
- b. *I-chi- nokshoopa-h.
 DAT-2SG.ABS-be.afraid-TNS
 (int.: ‘You are afraid of her.’) ✗ 2SG.ABS>3.DAT
- c. ish-i- nokshoopa-h
 2SG.ERG-DAT-be.afraid-TNS
 ‘You are afraid of her.’ ✓ 2SG.ERG>3.DAT

Argument #3: Beneficiaries of non-actives show distinct PCC effects - II

(48) PCC signature of non-active verb with beneficiary

- a. * I-sa- fama-h.
 DAT-1SG.ABS-whip.NACT-TNS
 (int.: 'I got whipped for him.') ✗ 1SG.ABS > 3.DAT
- b. * I-chi- fama-h.
 DAT-2SG.ABS-whip.NACT-TNS
 (int.: 'You got whipped for him.') ✗ 2SG.ABS > 3.DAT
- c. * ish-i- fama-h
 2SG.ERG-DAT-whip.NACT-TNS
 (int.: 'You got whipped for him.') ✗ 2SG.ERG > 3.DAT