

Emergence of passive voice in Central Borneo

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Journées de linguistique d'Asie orientale (JLAO) 39, June 2026¹



(handout with appendices)

1 Introduction

- ▶ Austronesian languages are well known for their verb-initiality and so-called “voice systems”: a set of symmetrical/valency-neutral alternations, including multiple undergoer voices (UV; see e.g. Himmelmann 2002, Erlewine, Levin & Van Urk 2017, Chen & McDonnell 2019).
- These properties hold of a well-studied subset of Austronesian languages — the “Philippine-type”: in Taiwan, the Philippines, northern Borneo, and Madagascar — and are reconstructable to Proto-Austronesian (PAN) (see e.g. Wolff 1973, Ross 2002).
- Various changes have led to different types of grammars across the Austronesian family, which diverge from this Philippine-type/PAN prototype.

Today: We study the innovation of analytic passives, accompanied by the loss of Philippine-type syntax, in “Central Bornean-type” (CB) languages (Clayre 1996, Kroeger & Smith 2024, Sommerlot 2024b).

(1) Lebo’ Vo’ (Kenyah):

(Erlewine & Smith 2026)

a. Active: “S_{Ag} (Aux) V O_{Pat}”

Kule nəvəŋ kayu bioʔ ini.
Kule cut.down tree big DEM
‘Kule cut down the big tree.’

b. Passive: “S_{Pat} (Aux) PASS (Ag) V (Ag)”

kayu bioʔ ini ən (Kule) nəvəŋ (Kule)
tree big DEM PASS Kule cut.down Kule
‘The big tree was cut down (by Kule).’

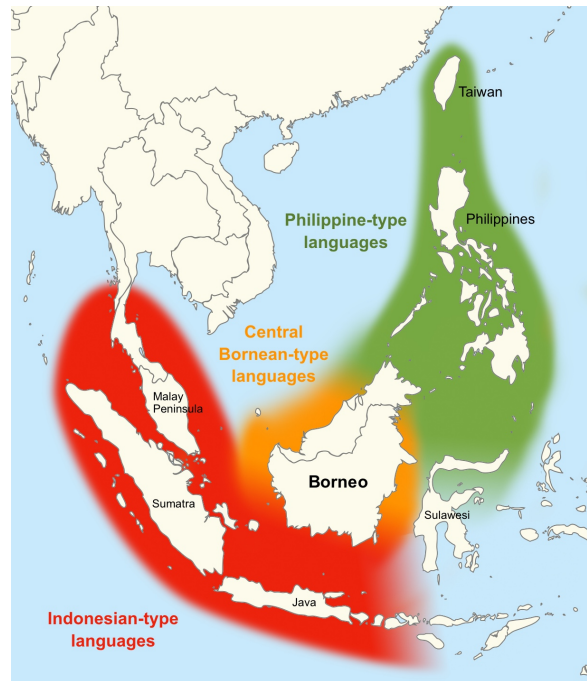
- ▶ Based on the study of passive marker forms and word orders, we identify multiple diachronic sources for these passive patterns.
- Regional contact (Borneo-internal and potentially with Mainland SEA) led to mutually reinforcement of patterns, especially the noteworthy preverbal agent passive (“PASS Ag V” word order).

¹ For helpful comments and suggestions, we thank audiences at SEALS 33, SLE 57, the National University of Singapore, and Tokyo University of Foreign Studies. This work began when we were both at the National University of Singapore (NUS), supported by Singapore Ministry of Education and NUS under grants A-8000132-00-00 and A-8001136-00-00.

2 A first look

- Borneo is the third largest island in the world, situated between the Philippines and the rest of the Malay archipelago (Nusantara).
- Austronesian peoples migrated from the Philippines to Borneo and then further south and west.
- Philippine-type grammars are still observed in northeastern Borneo. Many southern languages exhibit “Indonesian-type” grammars. Clayre (1996, 2014) describes many in between as “Central Bornean-type.”

(2) Three western Austronesian prototypes:



Also synthesizing refinements in Kroeger & Smith 2024 and Sommerlot 2024b:

(3) Central Bornean-type (CB):

- rigid word order, often subject-initial: “S(Aux)VO”;
- loss of case marking (except possibly genitive pronouns);
- two voices: active vs passive, with active default;
- Philippine-type voice affixes often lost, with frequent use of novel analytic passives.
(Some retain morphological UV, often *-Vn-/-n-*; see §3.3.)

Some CB analytic passives allow passive agents to be preverbal or postverbal (see Lebo’ Vo’ in (1)), while others require one word order or the other:

(4) Kelai (Kayanic): “PASS V (Ag)”

- sɛʔ bəwp koy
3sg hit 1sg
‘He hit me.’
- koy en (*sɛʔ) bəwp (sɛʔ)
1sg PASS hit 3sg
‘I was hit (by him).’

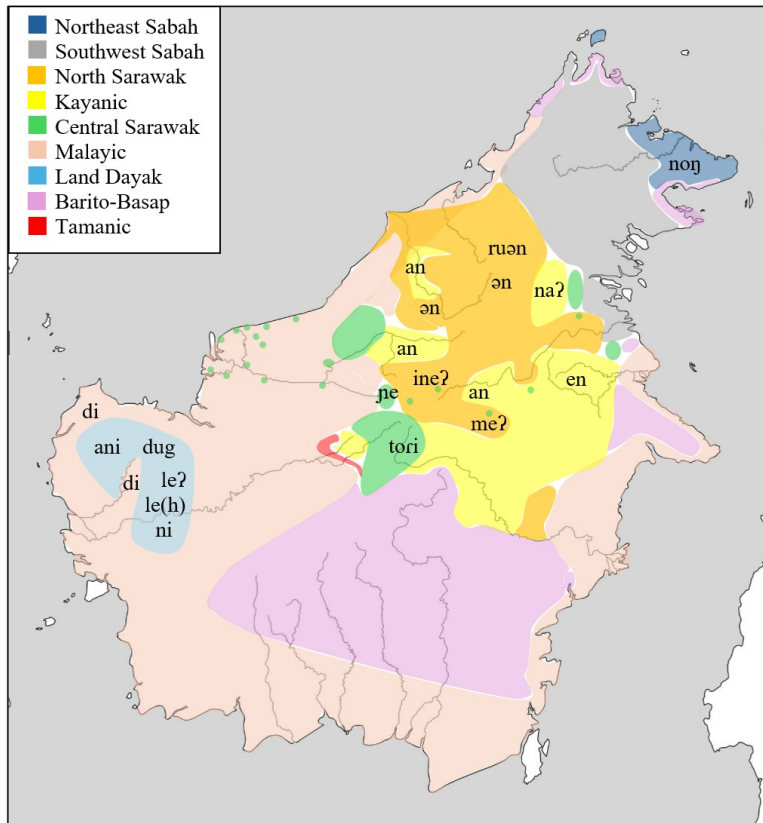
(Smith 2017 notes)

(5) Kayan (Uma Nyaving variety): “PASS (Ag) V”

- asoʔ anih maʔət akuy
dog PROX bite 1sg
‘This dog bit me.’
- akuy an (asoʔ anih) maʔət (*asoʔ anih)
1sg PASS dog PROX bite
‘I was bitten (by this dog).’

(Smith, Erlewine & Sommerlot 2024)

(6) **CB analytic passives and their passive markers:**



From Philippine-type to Central Bornean-type:

Recall that Austronesian is historically verb-initial. Given the frequent and often rigid “S(Aux)VO” word order in CB languages, we assume that CB languages conventionalized a clause-initial subject position early on, reflecting an extension of the optional subject topicalization in Philippine languages:

(7) **Cebuano Patient Voice (PV) pivot topicalization:** (Bell 1976: p. 162)

a. (Aux) V-initial:

Gi-luto’ sa babaye *ang bukas.* →
 PV-cook GEN woman NOM rice
 ‘The rice was cooked by the woman.’

b. S (Aux) V...:

Ang bukas gi-luto’ sa babaye.
 NOM rice PV-cook GEN woman

- Conventionalization of this word order also supports/facilitates the loss of case markers.
- ▶ The possibility of postverbal agent passives in CB is then not so surprising.

On the other hand, preverbal agent passives deserve special attention.

- We note that analytic passives with “PASS (Ag) V” word order are common in Mainland Southeast Asia (and East Asia), as with Khmer *trəw*, Thai *thùuk*, Vietnamese *bị*, and Mandarin Chinese *bèi* (see e.g. Prasithratsint 2004, 2006). Although converging anthropological, genetic, and lexical evidence indicates a history of Mainland Southeast Asia (i.e. Austroasiatic) contact and influence

in Borneo (see e.g. Blench 2010, Simanjuntak 2017, Hoh, Deng & Xu 2022, Blevins & Kaufman 2023), no CB languages to our knowledge suggest MSEA sources for CB passive marker forms.

- The question of the historical source of these passives in Borneo remains unanswered.

Summary and questions:

Central Bornean passives thus exhibit one or both of the basic word orders in (8):

- (8) a. Subject/Patient PASS Verb (Agent) ... (BY Agent) ...
b. Subject/Patient PASS (Agent) Verb ...

We are interested in two related questions:

Q1: What is the source of these **passive marker forms** (PASS)?

Q2: What is the source for these **passive word orders**, especially with preverbal agents (8b)?

3 Pathways to preverbal agent passives

A closer look at the inventory of passive marker forms motivates multiple innovation pathways:

§3.1 Reanalysis of constructions with ‘do/make’ verbs as passives

§3.2 Fronting of postverbal agent *by*-phrases

§3.3 Retained undergoer voice affix + pattern copying

(App. C. Reanalysis of object focus constructions (pseudoclefts) as passives)

3.1 Light verb → passive marker

In many Dayic (North Sarawak) languages, analytic passives with “S PASS Ag Verb” order arose through a reanalysis of complex constructions involving a higher undergoer voice ‘do/make’ verb embedding a (morphologically) active verb (Clayre 1996, 2014, Hemmings 2015, Mortensen 2021).

(9) **Reanalysis of UV ‘do/make’ verb into analytic passive marker:**

$S_{\text{Pat}} \text{ do/make.UV Ag.GEN [AV-V ...]} \rightarrow S_{\text{Pat}} \text{ PASS Ag.GEN AV-V ...}$

Lun Bawang (Dayic) maintains a morphological AV vs PV distinction, as well as some case distinctions (10), but it also developed a periphrastic passive construction with a ‘do/make’ verb (11):

(10) **Lun Bawang AV/PV distinction:** (Mortensen 2021: p. 98)

- | | |
|---|---|
| <p>a. {uih} m-[b]ukut neneh {uih}
 1sg AV-punch 3sg.OBL 1sg
 ‘I hit him.’</p> | <p>b. {ieh} bekut-in =kuh {ieh}
 3sg punch-PV 1sg.GEN 3sg
 ‘I hit him.’ / ‘He was hit by me.’</p> |
|---|---|

(11) **Lun Bawang periphrastic passive:** (p. 114–115)

- | | |
|---|--|
| <p>a. iko <u>ru-en</u> =neh m-[b]ukut
 2sg do/make-PV 3sg.GEN AV-punch
 ‘You are punched by him.’</p> | <p>b. * iko <u>ru-en</u> =neh bukut-en
 2sg do/make-PV 3sg.GEN punch-PV
 (lexical verb must be AV)</p> |
|---|--|

(12) **Other passives with UV ‘do/make’ sources (all in North Sarawak group):**

- | | |
|---|---|
| <p>a. Sa’ban (Dayic): <i>aru’</i> / <i>uen</i> [ʌn]
 b. Karayan (Dayic) dialects: forms based on (<i>t</i>)<i>aru’</i>
 c. Belait (Lower Baram): <i>u’an/’an</i>
 d. Penan (Kenyah): <i>na-nəw?</i> ‘PV-make’</p> | <p>(Clayre 1996: pp. 77–78, 2002: p. 60)
 (Clayre 2005: p. 45):
 (Clynes 2005: pp. 448–449)
 (Smith 2017 notes)</p> |
|---|---|

Summary:

Q1: What is the source of these passive marker forms (PASS)?

A: Undergoer voice ‘do/make’ verbs, embedding AV lexical verbs

Q2: What is the source for preverbal agent passive (“PASS Ag V”) word order?

A: The agent is the postverbal (genitive) agent of the higher, UV ‘do/make’ verb.

- This provides one potential source for passive markers of the form *Vn* common in Kayanic (reconstructed as **in* in Smith, Erlewine & Sommerlot 2024), through attested reduction of UV ‘do/make’ verbs into *Vn*-like forms (see e.g. Clynes 2005: p. 449, Hemmings 2016: p. 216).
- It’s not clear what the semantics of the source construction is. (Possibly a causative? See e.g. Haspelmath 1990, Yap & Iwasaki 2003.)

3.2 Fronting of postverbal agent *by*-phrases

A second possibility is that the fronting of postverbal agent/‘by’-phrases:

(13) **Reanalysis of agent case markers/prepositions into passive markers:**

$S_{Pat} \ V \ [CM/P_{by} \ Ag] \ \rightarrow \ S_{Pat} \ [CM/P_{by} \ Agent] \ V \ \dots \ \rightarrow \ S_{Pat} \ PASS \ (Agent) \ V \ \dots$
passive agent (<i>by</i> -phrase) fronting reanalysis

For example, Punan Malinau (Kayanic, variant of Kelai) exhibits preverbal agent passives with *in* (14).² *In* is also “a preposition indicating causality or purpose” in Punan Malinau (Soriente 2013: p. 197); (15) shows *in* in a dative context in Kelai.

(14) **Punan Malinau passive:**

bupet neh in diq koi hut
dress that PASS mother 1sg sew

‘That dress was sewn by my mother.’

(Soriente 2013: p. 197)

(15) **Punan Kelai prepositional /in/:**

koy hay tuy [in sɛʔ]
1sg give that DAT 3sg

‘I gave that to him.’

(Smith 2017)

Indirect evidence for the plausibility of this pathway comes from Manuk Mangkaw Sinama (MMS), spoken in the extreme southwest of the Philippines, 80km off the coast of Borneo.

MMS exhibits verb-initial clauses with a Philippine-type voice alternation, with prefixes *N-* vs *ni-*. Postverbal non-subject agents are introduced by the preposition *leq*, as in (16b).

(16) **Philippine-type voice alternation in Manuk Mangkaw Sinama:**

(pp. 361 358)

a. ng-adjal aku manuk
N-cook 1SG.NOM chicken
‘I cook chicken.’

b. bey ni-qadjal manuk leq si Abdul
PERF NI-COOK chicken AG DET Abdul
‘Abdul cooked the chicken.’

But MMS also allows for preposed *leq*-agents. The verb in such cases is *N-* marked:³

(17) **Preverbal agent/‘by’-phrase construction in Manuk Mangkaw Sinama:**

[Leq ku] ng-adjal manuk
AG 1SG.GEN N-cook chicken

‘I have cooked the chicken.’

(p. 362)

Q1: What is the source of these **passive marker forms** (PASS)?

A: An agent-introducing case marker or preposition

Q2: What is the source for these **passive word orders**, especially with preverbal agents (8b)?

A: The agent phrase (‘by’-phrase) was fronted to preverbal position

- Unfortunately, aside from Punan Malinau (and possibly na’?), there are not other clear cases from the forms of passive markers. (Malay *di* is another candidate, but see Appendix A for discussion.)

² Punan Malinau also allows for postverbal agent passives with *in*:

(i) asau in bop ulin co koi
dog PASS hit sibling little 1sg

‘The dog was hit by my brother.’

(Soriente 2013: p. 197)

³ This construction is not restricted to pronominal agents. Interestingly, MMS additionally exhibits a word order where *leq* alone precedes the *N*-marked verb, together with a postverbal *leq*-marked agent; the resulting string exhibits two *leq*:

(i) leq-ng-adjal [leq ku] manuk
??-N-cook AG 1SG.GEN chicken

3.3 Retained undergoer voice affix + pattern copying

Q: Could analytic passive markers reflect retentions of earlier undergoer voice (UV) morphology?

- In many CB languages which have retained voice/aspect affixes, UV is indicated by a *-Vn-* infix, inserted after the first consonant.⁴
- Could reanalysis of *Vn* as a prefix, and subsequent degrammaticalization, explain the prevalence of *Vn* analytic passive markers (as in Kayanic)?

A1: This is unlikely as a source for *Vn* analytic passive markers. In many CB languages with UV infix *-Vn-*, where the stem does not support *-Vn-* infixation (for instance, vowel-initial), it surfaces instead as initial *n-*: see e.g. *k<en>alot* ‘PASS.PFV-mix.together’ vs *n-abit* ‘PASS.PFV-hold’ in Kiput (North Sarawak > Lower Baram; Blust 2003: p. 11).

A2: A prefixal variant allomorph related to UV *-Vn-* could be the source for the marker *di* in Kendayan (Malayic) preverbal analytic passives... albeit indirectly.

- The passive morpheme across Malayic (both in Borneo and beyond) is *di-*. In all of Malayic except for the Kendayan group (which we discuss in a moment), *di-* is a verbal prefix, only allowing postverbal agents.

(18) **Van den Berg’s (2004) hypothesis for Malayic *di-*:**

Proto-Austronesian <i>*-in-</i>	>	Old Malay ⁵ <i>ni-</i>	>	Malayic <i>di-</i>
(perfective/UV; see note 4)		(passive prefix)		(passive prefix)
		prefixation		idiosyncratic
		with metathesis ⁶		denasalization

(Note that Van den Berg’s hypothesis for Malayic *di-* is controversial, and runs counter to Adelaar 2005a hypothesis as in §3.2. See also discussion Ross 2004.)

There *are* CB preverbal agent passives with the form *di*, but only in the Kendayan subgroup of Malayic in western Borneo; see e.g. Adelaar 2005b,c, Sommerlot 2024a.

⁴ *-Vn-* is a reflex of the Proto-Austronesian perfective marker **-in-*. But in various Philippine-type languages (as also observed in contemporary Tagalog), Patient Voice is null in perfective contexts, supporting an interpretation of reflexes of **-in-* as encoding both UV and perfective aspect. See discussion in e.g. Wolff 1973, Ross 2004.

⁵ Old Malay refers to a variety found on stone and copper inscriptions from the 7th to 10th century AD.

⁶ Reflexes of the UV/perfective (see note 4) appearing as an infix *-in-* or as a prefix *ni-* depending on the stem is observed in some varieties of Balantak (Sulawesi; Busenitz 1994, van den Berg 2004: pp. 538–539, 2012), Pendau (Sulawesi; Quick 2007: p. 93), Pangasinan (Philippines; Benton 1971: p. 92) and, further afield, Bola (Oceanic; van den Berg 2019) and Chamorro (Klein 2005). See also discussion in Halle 2001.

(19) **Bangape (Malayic > Kendayan):**

(Sommerlot 2024a)

Babi nya di ayutn-ku m-[b]unuh
pig DEM PASS friend-1sg N-kill
'This pig was killed by my friend.'

- Kendayan is adjacent to many Land Dayak languages, where preverbal agent passives are well attested. We propose that Kendayan preverbal agent passives reflect pattern copying from Land Dayak influence:

(20) **Kendayan (Malayic) preverbal agent passives via pattern copying:**

general Malayic “*di-V*” → Kendayan “*di (Ag) V*”
(Land Dayak “*PASS (Ag) V*”) ↗



(Cf. the view that Kendayan preverbal agent passives are a retention, as suggested by Ross (2004: p. 104) and discussed in Appendix A.)

Summary:

Q1: What is the source of these passive marker forms (*PASS*)?

A: Malayic *di* comes from a *ni-* prefix variant of the perfective/UV infix **-in-*.

Q2: What is the source for preverbal agent passive (“*PASS Ag V*”) word order?

A: Pattern borrowing from neighboring languages with preverbal agent passives.

4 Conclusion

“Central Bornean-type” languages stand apart from the nearby and much better studied Philippine-type and Indonesian-type languages, in the existence of preverbal agent passives (“*S_{Pat} PASS (Ag) V*”).

- We propose that multiple innovation pathways underly these CB preverbal agent passives, as determined by their passive marker forms and possible derivations for their word order.

§3.1 Reanalysis of constructions with ‘do/make’ verbs as passives

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(App. C. Reanalysis of object focus constructions (pseudoclefts) as passives)

- The prevalence of preverbal agent passives reflects convergence under contact: for example, by pattern copying (as in Land Dayak → Kendayan Malayic; §3.3) and through mutual reinforcement

between CB languages (and possibly Mainland Southeast Asian languages) that independently innovated this word order.

- Surface similarities which suggest cohesive typologies are not necessarily motivated by shared source constructions.

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Appendix A: Passive *di* from preposition in Malayic?

The possibility of preverbal agent passives being derived from fronted agents echoes the idea as in Adelaar 2005a (and citations there) suggest that Malayic passive *di* derives from the locative preposition *di*, which is reconstructed to Proto-Austronesian (see e.g. Blust 2015: pp. 458–460).

- Suppose that in a precursor to Malayic, (i) postverbal agents (‘by’-phrases) could be introduced by *di* and (ii) agent phrases could then be fronted, as in §3.2. This offers another account for the availability of preverbal agent passives in Malayic and the form *di* of its marker, as an alternative to the contact-driven account in §3.3 above.

First, we note that both (i) and (ii) are both plausible possibilities:

- (i) Some contemporary Malayic languages also use *di* for introducing postverbal agents (‘by’):

- (21) **Coastal Terengganu Malay bare passive with *di* agent phrase:** (Wu 2023: p. 237)

abih ikan hɔʔ bæli p=pasɔ taʔdi makaŋ [di kuciŋ]
 finish fish REL buy LOC=market just.now eat AGT cat

‘The fish that (I) bought at the market was eaten by the cat.’

(ii) Although the fronting of *by*-phrases in many contemporary Malay/Indonesian varieties is marked, many historical examples are attested. (We thank Hiroki Nomoto for highlighting such examples.)

(22) **Fronted *by*-phrase in *Hikayat Pandawa Lima* (15th c. Malay):**

(Kaswanti Purwo 1983: p. 240)

Maka [oleh Maharaja Salya] di-urai-kan sanggul Dawi Satyawati.
 then by Maharaja Salya PASS-unravel-APPL bun Dawi Satyawati
 ‘Then Dawi Satyawati’s bun was unraveled by Maharaja Salya.’

Nonetheless, this approach for Malay *di* seems challenging, as it suggests that preverbal *di* started with “*di* Ag V” word order, even though this is unattested across Malayic except in the Kendayan group. Our pattern copying proposal in §3.3 above better explains the rarity of this pattern within Malayic.

Appendix B: Form copying from Malayic to Land Dayak

Land Dayak languages exhibit some diversity amongst its analytic passive markers. Among these, Ribun (and Sanggau) are alone in having *le?*/*le(h)* form. But notice too that postverbal agents can be introduced by *le?* as well.



(23) **Ribun *le?* passives**

(Sommerlot 2024b)

- | | |
|--|--|
| <p>a. onyo han <u>le?</u> kosu mitak
 person that PASS dog bite
 ‘That person was bit by a dog.’</p> | <p>b. oko <u>le?</u> mise [<u>le?</u> odi?]
 1sg PASS call AGT 3sg
 ‘I was called by him/her.’</p> |
|--|--|

- Reflexes of Proto-Malayo-Polynesian **l* are *r* in Land Dayak. This suggests that Ribun/Sanggau *le?*/*le(h)* reflect relatively recent borrowings, likely from Malayic *oleh*, the passive agent-introducing preposition ‘by’ in Standard Malay/Indonesian and various other Malayic languages.
- We propose that *le?* was first used for postverbal agent marking (‘by’), then form copying led to the passive marker being *le?* as well. This exemplifies yet another process that obscures the historical sources of passive constructions.

Appendix C: Pseudocleft → passive

Another possible source for preverbal agent passives is from reanalysis of object focus constructions; specifically, null copula pseudoclefts:

(24) **Reanalysis of patient focus constructions (pseudoclefts):**

X_{Foc} [REL S_{Ag} V ___ ...] → S_{Pat} PASS Ag V ___ ...
'X is [what S_{Ag} V...]'

In the Punan subgroup (Central Sarawak), the Beketan passive marker *ne* appears to be cognate with some attested relative complementizers, such as Punan Aput *na* or Seputan *ne*. (Smith 2017 notes)

(25) **Beketan passive:**

hok ne hen n̄əroti?
1sg PASS 3sg hit
'I was hit by him.'

(26) **Punan Aput pseudocleft:**

he [RC na kaman kun ku]
who REL eat food 1SG.GEN
'Who is the one who ate my food?'

Ida'an Begak (Northeast Sabah) *noŋ* introduces many patient relatives⁷ and also appears as a temporal/modal auxiliary which yields analytic passive word order.

(27) **Uses of *noŋ* in Ida'an Begak:**

(Goudswaard 2005: pp. 191–192)

a. Introducing patient relatives:

pasod [NP ulan [RC noŋ ku m-uppu?]]
many clothes AUX/REL 1sg DEP.UV-laundry
'The clothes that I wash are many.'

b. Forming preverbal agent passives:

suku a-ssak no noŋ kəm̄mi m-iaŋ
all NV-ripe DEM AUX/PASS 1pl.ex DEP.UV-separate
'All the ripe (rice) has to be/is usually separated by us.'

The verb appears in the “dependent” form: “Begak does not have an AV-equivalent for the Dependent” (p. 186), hence enforcing the association of *noŋ* with patient relatives (27a) and analytic passives (27b). Boutin (1996) identifies the analytic passive markers in Bonggi (also Northeast Sabah) as derived from the stem *anu*, which is a placeholder, i.e. ‘whachamacallit/what’s-her-name’:

(28) **Uses of *anu* in Bonggi:**

(Boutin 1996)

a. As a placeholder:

Bas ku m-ori anu... perangi?
PAST 1sg.GEN ACT-give whachamacallit pineapple
'I already gave whachamacallit, pineapple.'

⁷ Goudswaard (2005) describes *nong* in both cases here as an auxiliary, treating (27a) as a contact relative, but then notes that “This auxiliary is obligatory in certain constructions such as relative clauses and questions with interrogative pronoun” (p. 190).

b. As a passive marker, inflected:

Sia bas na in-anu ku m-ori
3sg PAST already PFV-PASS 1sg.GEN ACT-give
'He already has been given it by me.'

- Placeholders make natural, light heads for relative clauses.
- A complication here is that the passive marker *anu* gets inflected, reflecting *in-* (perfective) > *in-anu*, *-an* (imperfective UV) > *nu-an*, or *-a?* (imperative) > *nu-a?*

Summary:

Q1: What is the source of these passive marker forms (PASS)?

A: Relative complementizers (or other functional material) introducing patient relatives

Q2: What is the source for preverbal agent passive (“PASS Ag V”) word order?

A: Null copula pseudoclefts: “X_{Foc} [REL S_{Ag} V ...]”