

Racines sous-spécifiées, hiérarchie dérivationnelle, flexibilité fonctionnelle en amis (langue austronésienne de Taiwan)

1. Categorisation in Amis (Formosan)

Categorisation involves several possible levels of identification: roots, stems and morphosyntactic words (Lehmann 2008: 548).

- En amis, les racines sont sous-spécifiées/precatégorielles ;
- Seuls les mots dérivés (racine + affixes) ont une catégorie assez rigide.

Criteria for precategoryality

Some criteria were profiled by Evans & Osada (2005) to identify precategoryality.

- exhaustivity (i.e. all the lexemes of a language should be precategoryal),
- bi-directionality
- compositionality, i.e. “any *semantic* difference between the uses of a putative ‘fluid’ lexeme in two *syntactic positions* —say argument or predicate— must be attributable to the function of that position” (ibid. 2005: 367).

These criteria apply to **roots** in Amis, **not** to derived stems and word forms.

Plan:

(i) Definitions; (ii) hierarchy of derivation; (iii) asymmetrical functional flexibility; (iv) 1ary & 2ary derivation; (v) co-selection of roots & affixes; (vi) the limits to root underspecification; (vii) category-changing derivations; (viii) lability of causative derivation; (ix) lability of passive derivation; (x) lability of derivational-inflectional TAM affixes.

1.1. Roots: some features

- Roots are pervasively –but not exhaustively– categorially neutral.
All word forms are derived. Nouns & verbs are never cited under the root form.
- Roots have a set of regular derivational and inflectional word-forms sharing some common/related meaning.
- Roots have a general meaning, but only word forms have a specific meaning.
- Roots also have abstract semantic features (entity-denoting, property-denoting and/or event denoting) and some instructions that allow or disallow affixation by primary derivational affixes which specify their class and category. For instance features such as ± human entity; or features such as ± activity, ± state, ± property denoting, etc.).
- Lexical categories are expressed after roots have been derived and inflected as stems and morphosyntactic word forms and projected in a syntactic frame.

1.2. Hierarchy of derivation in Amis : primary vs. secondary derivations

Hierarchy of derivational processes of roots & stems

- *Primary derivation* operates on roots and is *category attributing*;
- *Secondary derivation* operates on already derived verb stems and is *category changing*.

- Primary derivation from categorially neutral roots

- Roots are derived as **noun stems** by zero derivation and are flagged by the NM *u*.

(1)a. Uruma **k-u** lipahak n-u babainay.
 great NOM-NM happy GEN-NM man
 ‘The men are very happy.’ (lit. the men's joy is great)

b. **Ø-lipahak** k-ita.
 Ø-happy NOM-1PL.INCL
 ‘We are very happy.’

- **Verb stems** (other than stative Ø-verb stems) are usually derived by voice affixes.

(2)a. Awaay **k-u** ngudu n-ira.
 NEG.EXS NOM-NM respect GEN-3SG
 ‘He’s not respectful.’ (lit. there is no respect of his)

b. **Ma-ngudu** k-aku.
 NAV-respect NOM-1SG
 ‘I feel shy.’

1.3. The role of SYNTAX: asymmetrical *functional* flexibility of derived noun & verb stems

- Derived morphosyntactic words inserted in a syntactic context are quite rigidly subcategorised as verbal, nominal or adjectival-modifying heads.
- Some *functional* flexibility at syntactic level, but only for nouns & deverbal nouns, pronouns, numerals : they can be predicates *without* derivation, only through syntax.
- *Asymmetrical* functional flexibility; verbs must be nominalised for argument function.

(3)a. [**u saba=aku**] k-u ø-tayni-**ay**.
 NM young.sibling=GEN.1SG NOM-NM ø-arrive-NMZ
 PREDICATE ARGUMENT
 ‘It’s my younger brother who came.’

b. ø-tayni k-u saba=aku.
 ø-arrive NOM-NM young.sibling=GEN.1SG
 ‘My younger brother came.’

- Free pronouns behave like nouns in predicate function.

c. **Caay ka** aku k-u ø-tayni-**ay**.
 NEG NFIN FR.1SG NOM-NM ø-arrive-NMZ
 ‘It’s not me who came.’

Non-verbal predicates may host TAM markers (4a, b).

(4)a. Mi-kutay=**tu** ci Cidal
 AV-replace=PFV PM Sun
 ‘Sun replaced (him).’ (U teker ni Adek.018)

b. Ci Cidal=**tu** k-u mi-kutay-**ay**.
 PM Sun=PFV NOM-NM AV-replace-NMZ
 ‘It was Sun (who was) the substitute.’ (U teker ni Adek.018)

Predicative nouns are negated and asserted by the same illocutionary markers as verbs (5a-b); same TAM markers and degree markers (5c-d).

- (5)a. **Caay ka u** tumay.
 NEG¹ NFIN NM bear
 ‘No, it was not a bear.’
- b. **Caay ka-ngudu** cira.
 NEG NFIN.NAV-be.ashamed NOM.3SG
 ‘He’s not ashamed.’
- c. **Tada u** tamdaw cira.
 DEGREE NM person NOM.3SG
 ‘He’s a true man.’
- d. **Tada Ø-lipahak** k-ita.
 DEGREE happy NOM-1PL.INCL
 ‘We are very happy.’

(6a) *u tumay* is the focused predicative noun, its nominative argument is a gerund deverbal noun *kan-ay* which governs an argument (*tu tamdaw*).

- (6)a. [U tumay haw] [k-u kan-ay t-u tamdaw] ?
 NM bear QM NOM-NM <NAV>eat-NMZ OBL-NM people
 < PREDICATE > < ----- ARGUMENT ----->
 ‘Was it a bear that ate people?’
- b. Kan t-u tamdaw k-u tumay.
 <NAV>eat OBL-NM people NOM-NM bear
 ‘The bear ate people.’

Predicative deverbal nouns:

- (7) U ma-adup-ay cira.
 NM NAV-hunt-NMZ NOM.3sg
 ‘He’s a good hunter/ he often goes hunting/likes hunting.’

1.4. Primary vs. secondary derivations

- **Primary derivation** derives *roots* into **noun stems & verb stems**.
 - common **noun stems** denoting entities, concepts & instances of actions (*a bite, a lie*, etc.) are zero-derived from roots & flagged by the noun marker *u*.
 - Proper nouns are flagged by *i*.
 - **Verb stems** are generally derived by voice morphology.
- **Secondary derivation** operates on already derived *verb stems* : two types (fig. 2)
 - (i) applicative voices (locative, instrumental, conveyance), which modify alignment,
 - (ii) category-changing derivation: nominalisation, modification.

¹ Abbreviations follow the Leipzig glosses, additional ones are: ANAPH: anaphoric; ASS: assertive; AV: actor voice; CONV: conveyance marker; CV: conveyance voice; DX: deictic; EXS: existential verb; FR: free pronoun; INST: instrumental marker; LNK: linker; LV: locative voice; NFIN: non-finite; NAV: non-actor voice; NM: noun marker; PFV: perfect; PN: personal noun marker; PROC: processual; QM: question marker; RED: reduplication; UV: undergoer voice; √ symbol for root.

- (9) Sa-ka-ta-lumaq=aku k-ina dateng.
INST-NFIN-go-home=GEN.1SG NOM-DX vegetables
 ‘These vegetables are for me to take home.’ (are for being taken home by me)

SYNTAX: functional flexibility of applicative instrumental word forms zero-derived as < u noun >.

- (10) U kikay-ay=tu anini k-u sa-ka-nanuwang.
NM mechanic-NMZ=PFV now NOM-NM INST-NFIN-move
 < ---- PREDICATE ----> < ---- ARGUMENT ---->
 ‘It’s with machines that the blending is done now.’ (it’s machines that are used to blend)

1.5. Lexical categories derived from roots

1.5.1. Noun stems: noun markers and case-marking

- Nouns, pronouns & demonstratives are case-marked: NOM *k-*, OBL *t-*, GEN *n-*.
- Case-markers prefixed to common noun marker: *k-u*, *t-u*, *n-u*
- Proper nouns flagged by the personal noun marker *i* (sg) & *a* (pl) & case-marked as *c-i* (sg, nominative or oblique) or *c-a* (pl), *n-i* or *n-a* (genitive)
- only case suffix on (pro)nouns is oblique –*an* (dative, locative, ablative/source).

- (11) **Mi**-nanam **k**-aku ci ama-**an** **t**-u suwal **n**-u Pangcah.
AV-learn NOM-1SG PN father-OBL OBL-NM language GEN-NM Amis
ACTOR SOURCE THEME GENITIVE DETERMINER
 ‘I learned from my father the Amis language.’

1.5.2. Verb stems: voice affixes, VERB CLASSES and semantics

3 main classes : AV *mi-*, NAV <*um*>, *ma-*, \emptyset - property vbs

Table 2. Verb classes

Voice	Verb classes	Argument structure	Frequency
<i>mi-</i> AV	Activities, accomplishments	S NOM/ABS (OBL theme) 	++
<i>ma-</i> NAV	properties, states, weather, position, mode of motion, feelings/ emotion, experiencer, cognition, ingestion, spontaneous/unintentional actions, natural process, body function or grooming, disease, modality, quantifiers, Aktionsart		++
\emptyset -	properties, states, natural process, body function, quantifiers, deictic verbs		++
<i>ma-</i> UV	Vs with utterly affected, definite patients	A GEN P NOM/ABS 	++
<i>-en</i> UV	ALL verbs (includ les \emptyset -V)		++
<i>-an</i> LocV	Vs with superficially affected patient or location argument, natural phenomena, spontaneous, uncontrolled processes oriented towards an experiencer		++
<i>sa-</i> InstV	V allowing instrument		++
<i>si-</i> ConvV	V referring to transfer		infrequent

√*tarakaw*, *u tarakaw* ‘height’, \emptyset -*tarakaw* ‘high’ (a). When used as modifiers, they are derived by –*ay* (b).

(12)a. Walu a ditek k-u tarakaw n-u tireng n-iyaw wawa.
 8 LNK measure NOM-NM height GEN-NM body GEN-ANAPH child
 ‘Eight foot was the height of the child's body.’ (Arikakay)

b. u tarakaw-ay a lutuk
 NM high-MODF LNK mountain
 ‘A high mountain.’

√*banaq*, *u banaq* ‘knowledge’ (a), *ma-banaq* ‘know’ (b), with experiencer pivot (the seat of knowledge) and an oblique theme.

(13)a. Awaay k-u banaq.
 NEG.EXS NOM-NM knowledge
 ‘(He) is not intelligent.’ (lit. there is no intelligence)

b. **Ma**-banaq haw k-isu iciraan ?
 NAV-know QM NOM-2SG OBL.3SG
 ‘Do you know him ?’ (*ma*- class, **mi*-)

c. Caay **ka**-banaq k-aku iciraan.
 NEG NFIN-know NOM-1sg OBL.3 sg
 ‘I don’t know him.’

Secondary derivation : nominalisation

d. Awaay k-u **ma**-banaq-ay.
 NEG.EXS NOM-NM NAV-know-NMLZ
 ‘Nobody knows.’ (lit. there is no know-er)

1.6. Co-indexation of roots and affixes

The roots’ *ontology* and semantic features pair up with that of voice affixes.

1.6.1. Primary derivation of roots

Table 3 : primary derivation of roots into <*u* noun stems> & into *mi*-, *ma*-, ∅-verb stems.

ROOT	DERIVED NOUN STEMS < <i>u</i> stem >	PRIMARY voice affixes	DERIVED VERB STEMS & verb classes
√CADIWAY	<i>u cadaway</i> ‘fish-net’	<i>MI</i> - activity	<i>mi-cadaway</i> ‘fish with net’
√NANUM	<i>u nanum</i> ‘water’	<i>MI</i> - activity	<i>mi-nanum</i> ‘drink water’
√RADUM		<i>MI</i> - activity	<i>mi-radum</i> ‘draw water’
√DADUI	<i>u dadui</i> ‘weight’	<i>MI</i> - activity	<i>mi-dadui</i> ‘weigh’
√TAKAW	<i>u takaw</i> ‘theft’	<i>MI</i> - activity	<i>mi-takaw</i> ‘steal’
√NANUWANG	<i>u nanuwang</i> ‘motion’	<i>MI</i> - activity <i>MA</i> - dynamic, motion	<i>mi-nanuwang</i> ‘blend’ (caused) <i>ma-nanuwang</i> ‘move’
√NANAM	<i>u nanam</i> ‘thought, idea’ —	<i>MI</i> - activity <i>MA</i> - stative, cognition	<i>mi-nanam</i> ‘think’ <i>ma-nanam</i> ‘have the know-how’
√BEKAC	<i>u bekac</i> ‘a race’	<i>MA</i> - dynamic, motion	<i>ma-bekac</i> ‘run’
√BANAQ	<i>u banaq</i> ‘knowledge’	<i>MA</i> - state, cognition	<i>ma-banaq</i> ‘know’
√TALEM	<i>u talem</i> ‘blade’	<i>MA</i> - property	<i>ma-talem</i> ‘sharp’
√ATEKAK	<i>u atekak</i> ‘hardness’	∅- property	∅-atekak ‘hard’
√TARAKAW	<i>u tarakaw</i> ‘height’	∅- property	∅-tarakaw ‘high’
√BAQKET		∅- property	∅-baqket ‘heavy’

Table 3. Pairing roots and voice affixes

1.6.2. Semantics of voice affixes: stems allowing AV *mi-* & NAV *ma-*

Process denoting

mi-ngata ‘draw near, approach’

mi-lecad ‘compare’

mi-libabui ‘bark’

mi-adup ‘hunt’

Intentional process (perception)

mi-araw ‘watch’

property or state denoting

ma-ngata ‘be close’ (state)

ma-lecad ‘be similar’

ma-libabui ‘bark all the time’, ‘be a barker’

ma-adup ‘be good at hunting’

Unintentional process

ma-araw ‘see’

1.7. ‘Nounier’ and ‘verbier’ roots in Amis: a limit to categorially neutral roots?

Not all roots display the same degree of categorial neutrality, nor the same potential of derivation. This does not jeopardise the rule.

1.7.1. Action-denoting and property-denoting roots

Some action-denoting roots are ‘verbier’: their nominal forms (*a bite*) are derived.

√*tayni* ‘come, arrive’ (**u tayni*), perfective event noun *ni-ka-tayni* ‘arrival’.

√*radum*, (**u radum*), *mi-radum* ‘draw water’; action nominal *pi-radum* ‘water-drawing’.

1.7.2. Proper nouns

- Mono-categorial only: do **not** occur as verbs and **only** host case-marking.

1.7.3. Entity-denoting roots derived as verbs

- Nouns can be predicative (at syntactic level) *without* derivation in equative, attributive, cleft constructions.
- **Derivation** of entity-denoting as verb stems: variable range of derivational affixes, correlating with the root’s ontology, class & semantic structure.
Verbal derivation is also restricted by the type of actions, events or relations that are culturally *conceivable* or that can be carried out with such entities.
- Tools and artefacts, kinship terms have a wider range of relational ontologies than plants, insects or natural elements, & are thus expected to have a wider range of derivations.
- Some less predictable combinations with other affixes are learned by usage and are stored in the speakers’ linguistic knowledge.

A. Derivations with AV *mi-* and NAV *ma-*

- derivations with AV *mi-* denote some prototypical *activity* conducted in relation with the entity, getting it, ingesting it, etc.
u piyu ‘flute’, *mi-piyu* ‘play the flute’
- derivations with NAV *ma-* denote properties, states, etc. (table 2, 3).
u bursen ‘numbness’ *ma-bursen* ‘be stiff, numb’ (ankylosé)
- Some of these roots are derived with *mi-* and *ma-* :
u tamaq ‘game’, *mi-tamaq* ‘hunt game’, *ma-tamaq* ‘be hunted as game’.
u patay ‘death’, *mi-patay* ‘kill’ *ma-patay* ‘die, be dead’

(14) a. Bursen-**an** k-u kuku numaku.

numb-LV NOM-NM leg GEN.1SG
‘My leg has gone numb.’

B. Derivations with si- ‘get, convey’

Si- stems denote acquired property, transitory states or transitory events, transfer of entity, or acquired property.

2ary derivation

<i>u mata</i> ‘eye’	> <i>si-mata</i> ‘get eye/vision’	> <i>u si-mata-ay</i> ‘a seer’ (of spirits)
<i>u kawas</i> ‘spirit’	> <i>si-kawas</i> ‘get spirit’	> <i>u si-kawas-ay</i> ‘a shaman’
<i>u kumes</i> ‘hair’	> <i>si-kumes</i> ‘get hair’	> <i>u si-kumes-ay</i> ‘a hairy, furry x’
<i>u tangal</i> ‘head’	> <i>si-tangal</i> ‘be clever’	> <i>u si-tangal-ay</i> ‘a clever person’

1.7.4. Derivational patterns of entity-denoting roots & semantics

- Roots denoting human beings and kinship relations (not exhaustive).
 \sqrt{kadabu} , *u kadabu* ‘child-in-law’, *mi-kadabu* ‘marry’ (i.e. go as in-law into spouse’s family)

NOUN STEMS	VERB STEMS					
	<i>mi-</i>	<i>ma-</i>	<i>si-</i>	<i>mi-sa-</i>	<i>ma-sa-</i>	<i>pa-</i>
<i>u kadabu</i> child-in-law	<i>mi-kadabu</i> marry					
<i>u dapunuh</i> widow(er)	<i>ma-dapunuh</i> be a widow(er)					
<i>u cabay</i> companion			<i>si-cabay</i> get a companion			<i>pa-cabay</i> accompany
<i>u tamdaw</i> person				<i>mi-sa-tamdaw</i> , get acquainted, make friends	<i>ma-sa-tamdaw</i> behave like a person, seem to be a person	
<i>u babainay</i> man			<i>si-babainay</i> marry a man		<i>ma-sa-babainay</i> behave in a manly way	

Table 4. Derivations of roots DENOTING HUMAN BEINGS

- Body-parts, body excretions.
 \sqrt{tireng} , *u tireng* ‘body’, *tireng* ‘stand’, *pa-tireng* ‘erect, build’, 2^{ary} NMZ *u pa-tireng-an* ‘building’;
 \sqrt{supaq} , *u supaq* ‘saliva’, *mi-supaq* ‘spit’, *pa-supaq* ‘apply saliva’, UV *supaq-en* ‘spit it!’ (lit. let it be spit);
- Animals: derivation depends on the kind of conceptually possible relations:
u ayam ‘bird, hen’, *mi-ayam* ‘hunt birds’, *mi-sa-ayam* ‘raise hens’.
u kalang ‘crab’, *mi-kalang* ‘catch crab’
- Insects:
 \sqrt{udal} , *u udal* ‘bee’, *mi-udal* ‘collect honey’ (lit. go for bees).
- Plants: derivation conceptually related to their potential of cultivation, use
 \sqrt{sadim} , *u sadim* (*Millettia Taiwanica*), *mi-sadim* ‘fish with fish-poison plant’, *ma-sadim* ‘fished with poison’;
 \sqrt{icep} , *u icep* ‘betel nut’, *mi-icep* ‘chew betel nut’, *pa-icep* ‘give betel nut’ (**ma-*)
 \sqrt{habay} , *u habay* ‘millet’, *mi-habay* ‘harvest millet’
 \sqrt{uway} , *u uway* ‘rattan’, *mi-uway* ‘gather rattan’ (rotin)
- Natural phenomena : (no **mi-* form)
u bali ‘wind’, *ma-bali* ‘be windy’, *pa-bali* ‘inflate’
kutem, *u kutem* ‘cloud’, *ma-kutem* or *kutem-an* ‘it’s cloudy’, *si-kutem* ‘be, get cloudy’

u cidal ‘sun’, *cidal-an*, *ma-cidal* ‘it is sunny’
u bulad ‘moon’, *bulad-an* ‘it’s moonlit’, but, *ma-bulad* ‘have menstruation’.

In (15) LV *bulad-an* denotes a situation superficially affecting the subject *k-ita*.

(15) **Bulad-an** k-ita anini a labi.
 moon-LV NOM-1PL.INCL now LNK night
 ‘We are moon-lit tonight.’

- Natural entities :
u nanum ‘water’, *mi-nanum* ‘drink water’, property *ma-nanum* ‘be a water drinker’
- Instruments and tools:
 - some are <*u* stems>
u pitaw ‘(big) hoe’, *mi-pitaw* ‘to hoe’ (herminette)
u rarar ‘(small) hoe’, *mi-rarar* ‘to hoe’.
 - A few are noun stems only (actions expressed by different roots)
u hawan ‘big knife’, *u puut* ‘knife’, *u bunus* ‘machete’, *u rinum* ‘needle’ (\sqrt{tais} ‘sew’)
pa-hawan ‘draw/direct knife against’, *pa-puut* idem
 - some are derived by *sa-* as instrument nouns from *action* roots (newly introduced tools).

\sqrt{tuktuk}	<i>u sa-tuktuk</i> ‘hammer’	<i>mi-tuktuk</i> ‘to pound’
$\sqrt{pis?is}$	<i>u sa-?is?is</i> ‘razor’	<i>mi-?is?is</i> ‘to shave’
$\sqrt{rusarus}$	<i>u sa-rusarus</i> ‘a saw’	<i>mi-rusarus</i> ‘to saw’
\sqrt{sait}	<i>u sa-sait</i> ‘scissors’	<i>mi-sait</i> ‘cut’
\sqrt{kales}	<i>u sa-kales</i> ‘a comb’	<i>mi-kales</i> ‘comb’
\sqrt{kalic}	<i>u sa-kalic</i> ‘ladder’	<i>mi-kalic</i> ‘climb’
\sqrt{cukcuk}	<i>u sa-cukcuk</i> ‘key’	<i>mi-cukcuk</i> ‘insert, probe’

Summary: INSTRUMENTAL SA-

PRIMARY DERIVATION

- ZERO-DERIVED INSTR. NOUNS *u sa-* instrument nouns

SECONDARY DERIVATION

- APPLICATIVE INSTR. VOICE (alignment changing) from 1^{ary} DERIVED VERB STEMS
sa-pi-, *sa-ka-*, *sa-Ø-* verb stems
- INSTR. EVENT NOMINALS *u sa-pi-*, *sa-ka-*, *sa-Ø-*

Figure 3. Primary and secondary instrumental derivation

1.7.5. Summary

In spite of a slight tendency for some action-denoting roots to be ‘verbier’ (i.e. less categorially neutral), with nominalized forms denoting instances of actions; still dominant pattern of categorially neutral lexical roots holds.

1.8. Secondary derivations: CATEGORY CHANGING

Primarily derived voice-marked verb stems can further be causativised, nominalised, derived into modifiers, time nouns, locative nouns, etc.,

1.8.1. Nominaliser –*ay*

Derives nouns referring to ± animates:

<i>u banaq</i> ‘knowledge’	<i>si-banaq</i> ‘get knowledge’	<i>u si-banaq-ay</i> ‘a learned person’
<i>u buting</i> ‘fish’	<i>mi-buting</i> ‘to angle, fish’	<i>u mi-buting-ay</i> ‘fisherman’

<i>u takaw</i> ‘theft’	<i>mi-takaw</i> ‘steal’	<i>u mi-takaw-ay</i> ‘thief’
<i>u suwal</i> ‘speech’	<i>suwal</i> ‘speak’	<i>u suwal-ay</i> ‘speaker’
<i>u patay</i> ‘death’	<i>ma-patay</i> ‘die’	<i>u ma-patay-ay</i> ‘the dead’

NMZ denoting inanimates:

<i>mi-kawa</i> ‘block’	<i>u mi-kawa-ay</i> ‘obstacle’
<i>pa-kawa</i> ‘set obstacles’	<i>u pa-kawa-ay</i> ‘set obstacles’

These deverbal nouns behave like gerunds: retain verbal properties & an oblique argument *tu tangal*,

- (16) Awaay=tu k-**u** mi-kawa-ay t-**u** tangal=isu.
 NEG.EXS=PFV NOM-NM AV-block-NMZ OBL-NM head=GEN.2SG
 ‘Your head is freed.’ (lit. there is no longer any trap for your head) (i.e. a glass jar)

1.8.2. Deverbal time or place nouns: *pi-...-an*, *ka-...-an*

Mi-, *ma-*, \emptyset - verb stems are NMZ as *pi-...-an*, *ka-...-an* noun stems by NMZ *-an*. They denote locative & time nouns, abstract nouns.

<i>u buting</i> ‘fish’	<i>mi-buting</i> ‘to fish’	<i>u pi-buting-an</i> ‘fishing place/time’
<i>u bekac</i> ‘speed, race’	<i>ma-bekac</i> ‘run’	<i>u ka-bekac-an</i> ‘stadium’
<i>u butiq</i> ‘sleep’	<i>ma-butiq</i> ‘to sleep’	<i>u ka-butiq-an</i> ‘bedroom’
<i>u tipus</i> ‘rice’	<i>mi-tipus</i> ‘harvest rice’	<i>u pi-tipus-an</i> ‘time of rice harvest’
<i>u bali</i> ‘wind’	<i>ma-bali</i> ‘be windy’	<i>u ka-bali-an</i> ‘windy season’
<i>u signaw</i> ‘the cold’	\emptyset - <i>signaw</i> ‘be cold’	<i>u ka-signaw-an</i> ‘winter’
<i>u subuc</i> ‘birth’	<i>ma-subuc</i> ‘give birth’	<i>u ka-subuc-an</i> ‘birthday’

- plural kinship relations :

<i>u kadabu</i> ‘child in-law’	<i>mi-kadabu</i> ‘go as in-law’	<i>u pi-kadabu-w-an</i> ‘in-laws’ (lit. where one goes as in-law)
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- deverbal nouns denote entities (rather than location or time).

<i>mi-kukung</i> ‘to drum’	<i>u pi-kukung-an</i> ‘a drum’
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Like all nouns, they have predicate (a-b) or argument (c) functions at syntactic level.

- (17) a. U ka-subuc-an n-i Balah anini a remiad.
 NM NFIN-be.born-LOC GEN-PM B. now LNK day
 ‘It is Balah's birthday today.’ (Kasubucan.001)
- b. Caay ka u ka-subuc-an n-i Balah.
 NEG NFIN NM NFIN-be.born-LOC GEN-PM B.
 ‘It is not Balah's birthday today.’
- c. Na itini i Pukpuk k-**u** ka-subuc-an.
 PAST here LOC P. NOM-NM NFIN-be.born-LOC
 ‘(He) was born here in Pukpuk.’ (lit. it was here in P. his birthplace)

1.8.3. Collective plural, result, stative nouns derived by *Ca-reduplication ...-an*

<i>u cadaway</i> ‘net’,	<i>ca-cadaway-an</i> ‘the place for net-fishing’,	<i>mi-cadaway</i> ‘to net-fish’.
<i>u suwal</i> ‘language’,	<i>sa-suwal-an</i> ‘words’,	<i>suwal</i> ‘speak’,
<i>u nanam</i> ‘thought’,	<i>na-nanam-an</i> ‘customs’,	<i>mi-nanam</i> ‘learn’,
<i>u adup</i> ‘hunting’,	<i>pa-padup-an</i> ‘game, hunted animals’,	<i>ma-nanam</i> ‘knowledgeable’,
	<i>mi-padup</i> ‘hunt’,	
	<i>la-lingatu-an</i> ‘starting time’,	<i>ma-lingatu</i> ‘start’
<i>u tayiq</i> ‘faeces’,	<i>ta-tayiq-an</i> ‘toilet’,	<i>tayiq</i> ‘defecate’,
		<i>t<in>ayiq</i> ‘intestines’

1.8.4. Secondary modifying derivation

In modifying constructions [modifier *a* modified], the modifier is suffixed by *-ay* or *-an*

(18) a. Ø-atekak k-ina bekeluh. b. U Ø-atekak-ay a bekeluh.
 Ø-hard NOM-DX stone NM Ø-hard-NMZ LNK stone
 ‘This stone is hard.’ ‘(it’s) a hard stone.’

(19) Tuqman k-u lumaq b. I tuqman-an a lumaq.
 dark NOM-NM house LOC dark-LOC LNK house
 ‘The house is dark.’ ‘In the dark house’

2. The lability of affixes on roots : causative derivation *pa-*

Causative *pa-* is another instance of affix **occurring on all types of roots** with slightly distinct functions and meanings.

- On *entity-denoting* roots, *pa-* derives caused transfer, processual verb stems
- On *verb stems*, causative *pa-* has the standard valency-increasing (AV alignment).

2.1. Deriving entity-denoting roots into caused transfer *pa-* verb stems

- Entity-denoting roots derived by *pa-* into caused transfer verb stems involving that entity (< x transfers y (to z) >).

√budui	u budui ‘clothes’	si-budui ‘be dressed up’	pa-budui ‘dress s.o.’
√cael	u cael ‘necklace’	si-cael ‘wear a necklace’	pa-cael ‘put around neck’
√cabay	u cabay ‘partner’	si-cabay ‘have, get a partner’	pa-cabay ‘accompany’
√labang	u labang ‘guest’	si-labang ‘have guests’	pa-labang ‘host, greet’
√kawas	u kawas ‘spirit’	si-kawas ‘host spirit, haunted’	pa-kawas ‘act as a shaman’
√qepah	u qepah ‘alcohol’	si-qepah ‘have alcohol’	pa-qepah ‘put alcohol’
√tusur	u tusur ‘knee’		pa-tusur ‘kneel down’,

- Comparing caused transfer *pa-* with *mi-* verb stems

AV *mi-* verb stems denote activities (often *centripetal*) done in relation with the entity, while *pa-* stems denote some *centrifugal* caused transfer.

√cudad	u cudad ‘letter, book’	mi-cudad ‘study’	pa-cudad ‘write a letter’
√icep	u icep ‘betelnut’	mi-icep ‘chew betelnut’	pa-icep ‘give betelnut to s.o.’
√kasui	u kasui ‘fire-wood’	mi-kasui ‘go cut wood’	pa-kasui ‘fuel wood’ (in fire)
√nanum	u nanum ‘water’	mi-nanum ‘drink water’	pa-nanum ‘give water, to water’
√bekluh	u bekluh ‘stone’	mi-bekluh ‘collect stones’	pa-bekluh ‘put stones’
√cilah,	u cilah ‘salt’,	(*mi-)	pa-cilah ‘to salt’;
√lunan,	u lunan ‘boat’,	(*mi-, *ma-)	pa-lunan ‘steer a boat’.
√huting,	u huting ‘pasture’	(*mi-)	pa-huting ‘take to pasture’

Caused transfer, assistive process:

(20) Pa-icep k-aku t-u ma-tuas-ay.
 CAUS-betel NOM-1SG OBL-NM NAV-old-NMLZ
 ‘I give betelnuts to the elderly.’

(21) Pa-huting k-aku t-u rarapa.
 CAUS-pasture NOM-1SG OBL-NM buffalo
 ‘I take the buffalo to graze.’

- Comparing caused transfer *pa-* with stative *ma-* verb stems
 Roots denoting bodily functions, properties, feelings or psychological features.

c. Mi-nanum cira.

AV-water NOM.3SG
 ‘He’s drinking water.’

- Stative property roots NAV *ma-* stems or \emptyset - verb stems, are causativised as *pa-(ka)-* verb stems and denote a caused property change, with increased valency.

ROOT	NOUN	STATIVE VERB	CAUSATIVE VERB
√ <i>atekak</i>	<i>u atekak</i> ‘hardness’	\emptyset - <i>atekak</i> ‘hard’	<i>pa-ka-atekak</i> ‘harden, solidify’
√ <i>biyaraw</i>	<i>u biyaraw</i> ‘anxiety’	<i>ma-biyaraw</i> ‘anxious’	<i>pa-ka-biyaraw</i> ‘make anxious’

(25) Pa-ka-biyaraw k-isu itakuwan.

CAUS-NFIN-anxious NOM-2SG OBL.1SG
 ‘You make me anxious.’

Summary: Causative *pa-* is thus a primary or secondary derivational affix occurring on roots or on already derived verb stems with different functions and semantics.

This brings up one other important feature of neutrally categorial roots:

the same derivational affixes occur on roots with different ontologies (e.g. entity, property, action- or event-denoting); the morphosyntactic words derived from those roots have distinct functional and semantic outputs that result from the co-selection & compositional effects between the roots’ ontology and the properties of affixes.

3. The lability of UV passive *-en*

UV-*en* hosted by all types of roots, denoting entities, action, state or properties.

3.1. Manner of action verbs derived from entity-denoting roots by *-en*

Impersonal passive restricted to complex verb constructions expressing manner of action.

√*taruduq* *u taruduq* ‘finger’ *mi-taruduq* ‘point at’ *ma-taruduq* ‘(be) point(ed) at’,
 √*alapit* *u alapit* ‘chopsticks’ *mi-alapit* ‘seize with chopsticks’

(26) Taruduq-**en** a mi-ala.

finger-UV COMP AV-take
 ‘(they) are picked with fingers.’ (lit. it’s done with finger to pick)

(27) Alapit-**en** a kan t-u titi !

chopsticks-UV COMP <NAV>eat OBL-NM meat
 ‘Eat the meat with chopsticks!’

3.2. Action and property denoting roots

UV passive *-en* is affixed to action & property stems. Pas de restriction de construction.

√*dimataq*, *u dimataq* ‘a load (on shoulder)’, *mi-dimataq* ‘carry on the shoulder’, UV *ma-dimataq*, *dimataq-en* ‘be carried on the shoulder’.

(28) Dimataq-**en**=tu [amin k-u ni-ala t-u buting].

carry.on.shoulder-UV=PFV all NOM-NM PFV.NMZ-take OBL-NM fish
 ‘All the caught fish were carried on the shoulder.’

√*subuc*, *u subuc* ‘birth’, UV *ma-subuc* ‘be born, be given birth’, NAV *ma-subuc* ‘give birth’, with a non-actor pivot (i.e. seat of bodily function), UV *subuc-en* ‘be given birth’ has a patient subject.

- (29) Yu subuc-en k-aku, ira hen k-u bayi numaku.
 when bear-UV NOM-1SG EXS still NOM-NM grandma GEN.1SG
 ‘When I was born (lit. was given birth), my grandmother was still alive.’

4. The lability of roots hosting derivational-inflectional affixes

Inflectional affixes are *generally* specific to derived stems; but some are both derivational and inflectional.

4.2. Derivational and inflectional aspectual affixes: fusion of voice & aspect features

- (i) composés de *mi-* et *ma-* : inchoative AV *mi-sa-* or NAV *ma-sa-*
- (ii) ongoing or immediate process *mah(a)-*,
- (iii) change of state *mala-*.

- They are all affixed to *entity*-denoting and *action* or *event* roots (*mi-sa-* & *mala-* also derive *property*-denoting roots)
- Like voice affixes, these affixes also have nonfinite forms (i) *mi-sa-* > *pi-sa-*, (ii) *mah(a)-* > *kah(a)-*, (iii) *mala-* > *kala-* and causative *pala-*.

4.2.1. Inchoative actions, transformation activities: *mi-sa-* derivations

Mi-sa- (*sa-* possibly a bound light verb ‘do’) derives activity verbs from entity-denoting roots & stative, property-denoting roots.

A. On *entity*-denoting roots

Mi-sa- denotes creation, processing, transformation applied to or conducted with the entity.

<i>u waneng</i> ‘sugar’,	<i>mi-sa-waneng</i> ‘make honey’
<i>u qepah</i> ‘alcohol’,	<i>mi-sa-qepah</i> ‘make alcohol’ (* <i>mi-</i>), <i>pa-qepah</i> ‘put alcohol’
<i>u turun</i> ‘rice-pudding’,	<i>mi-sa-turun</i> ‘make turun’
<i>u lumaq</i> ‘house’,	<i>mi-sa-lumaq</i> ‘build a house’
<i>u tebun</i> ‘well’,	<i>mi-sa-tebun</i> ‘dig a well’
<i>u lunan</i> ‘boat’,	<i>mi-sa-lunan</i> ‘build a boat’
<i>u ayam</i> ‘chicken’	<i>mi-sa-ayam</i> ‘feed, raise (the) hens’ (<i>u ayam</i> ‘hen’)

- Compare derivations with *mi-* & *mi-sa-*
u dateng ‘vegetables’ *mi-dateng* ‘collect vegetables’ *mi-sa-dateng* ‘plant vegetables’;
u alapit ‘chopsticks’ *mi-alapit* ‘eat with chopsticks’ *mi-sa-alapit* ‘make chopsticks’
u umah ‘field’ *ma-umah* ‘work in the field’ *mi-sa-umah* ‘plough field’.
 Both stems can be nominalized: *ma-umah-ay* ‘peasant’, *mi-sa-umah-ay* ‘ploughman’.
u dipung ‘nest’, *mi-sa-dipung* ‘make a nest’, *mi-sa-dipung-ay* ‘nestmaker’.

- (30) U maan a ayam-an [k-u mi-sa-dipung-ay] ?
 NM what.sort LNK bird-COLL NOM-NM AV-do-nest-NMZ
 ‘What kind of bird makes that nest?’ (lit. ... is the nestmaker?)

B. On *stative*, *property*-denoting roots

Stative, property-denoting roots derived by *mi-sa-* express inchoative processes, transformation & change of state, (AV alignment, increased valency).

Ø-atekak ‘hard’	<i>u atekak</i> ‘hardness’	<i>mi-sa-atekak</i> ‘harden’
Ø-adidiq ‘small’		<i>mi-sa-adidiq</i> ‘diminish, belittle’
Ø-bangcal ‘beautiful’	<i>u bangcal</i> ‘beauty’	<i>mi-sa-bangcal</i> ‘embellish’

C. NAV *ma-sa-* : change of state

Occurs on entity-denoting & state- or property-denoting roots

√*kaput*, *u kaput* ‘a team’, *mi-kaput* ‘join the team’, *ma-sa-kaput* ‘team up’

√*muhting* ‘black’ *ma-sa-muhting* ‘become black’

- (31) *Ma-sa-muhting k-u pising n-ira.*
 NAV-do-black NOM-NM face GEN-3SG
 ‘His face became black.’

4.2.2. *Mah(a)-* derivations of entity-denoting roots & action, motion-denoting roots : immediate, ongoing process

A. On entity-denoting roots: *mah-(ka)-* or *mah(a)-Ca-*

- ongoing processes conducted with that entity. Non-finite form is *kah(a)-*. (**mah-pi-*)
u budui ‘clothes’, *mah-ba-budui* ‘be dressing’.
u cukap ‘shoe’, *mah-ca-cukap* ‘be putting on shoes’

- (32) a. *Mah(a)-ba-budui k-aku.*
 NAV.ASP-Ca.RED-clothes NOM-1SG
 ‘I’m getting dressed.’
- b. *Caay hen k-aku kah(a)-ba-budui.*
 NEG yet NOM-1SG NAV.ASP.NFIN-Ca.RED-clothes
 ‘I’m not yet dressed.’

B. On action or motion denoting roots: *mah(a)-(ka)-*

- *mah(a)-* only hosted by intransitive verb stems (NAV *ma-*, *mu-* or \emptyset - verb classes).
mah-cerem ‘be setting (sun)’, *mu-cerem* ‘dive’, *mah-ka-mu-cerem* ‘be setting (sun)’
- On \emptyset - motion & time-denoting verb stems, it occurs as *mah(a)-ka* :
 \emptyset -*tayni* ‘come’, *mah-ka-tayni* ‘just arriving’,
 \emptyset -*tangelal* ‘dawn’, *mah-ka-tangelal* ‘(break) of dawn’.

4.2.3. Deriving stative roots: *mala-* change of state & *pala-* caused change of state

A. Entity-denoting roots: expressing a change of state

√*heci*, *u heci* ‘fruit, result’, *mala-heci* ‘become fruitful, be fulfilled’, *pala-heci* ‘cause to become fruitful’.

- (33) a. *Mala-qepah k-u nanum.*
 BECOME-alcohol NOM-NM water
 ‘The water is changed into wine.’ (lit. ‘winised’)
- b. *Pala-qepah t-u nanum.*
 CAUS.BECOME-alcohol OBL-NM water
 ‘(He) turned the water into wine.’ (lit. ‘winise’ the water)

B. Stative, property roots : change of state

√*adidiq* ‘small, little’ > *mala-adidiq* ‘diminish’. Nonfinite form *kala-* (b).

- (34) a. *Mala-lahngang k-u cengel n-ira.*
 BECOME-brown.red NOM-NM colour GEN-3SG
 ‘Its colour changed to brownish red.’

- b. Caay kala-lahngang k-u cengel=isu.
NEG NFIN.BECOME-brown.red NOM-NM colour=GEN.2SG
'Your colour has not changed to brownish red.'

5. To conclude

- In Amis, lexical roots are pervasively categorially neutral.
- Word forms are categorised as nouns, verbs, or adjectival modifiers after primary derivation from roots and/or by secondary derivation (category changing derivation or alignment changing through applicatives)
- Roots and affixes have ontological and semantic structure and properties, their co-selection is ruled by principles of non-contradiction & compatibilities of such properties (class properties).
- Once roots have been derived and inflected into word forms, they are strictly categorised and unambiguously identifiable.
- There is some functional flexibility at syntactic level. But it is not bidirectional: nouns and derived nouns have some functional flexibility as predicates, arguments or modifiers once they are inserted in the appropriate syntactic slot and construction.
- The last point concerns the labiality of use of the same affixes on entity-denoting roots and on action-denoting roots, with slightly different derivational functions and meanings varying with their host's class.

The function and meaning of these affixes result from compositional effects with a derived stem, projected in a syntactic frame where the ultimate function and meaning of the word forms are interpreted.

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