Reinterpretation of a Morpho-syntactic System as a Result of Language Contact and Language Attrition: An Example from an Endangered Language in Indonesia

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Abstract

This presentation aims to give an example of a radical morphosyntactic change which is often found when a language undergoes endangerment as a result of language contact. There are many endangered languages which are spoken by small populations in Indonesia. Bantik is one of such Austronesian languages spoken in North Sulawesi and is regarded to belong to the Sangiric subgroup. It has less than 3000 fluent speakers all of whom are in their fifties and older, and is endagered. Second language speakers of Bantik, who are in their thirties and forties, show a language structure which is distinct from the traditional one in many respects. I will mainly focus in this paper on generation differences in morpho-syntax.

1 Introduction: The Socio-linguistic Situation of the Bantik Language

1.1 The Bantik language

- Bantik [1] is an Austronesian language, which belong to Sangiric subgroup within the Philippine group which in turn belongs to the Western Malayo-Polynesian family. It is severely endangered.

- Bantik is reported to have around 10,000 speakers (cf. Noorduyn 1991), but is assumed to be spoken by less than 3000 fluent speakers.

- Bantik has five vowels, /i, e, a, o, u/, and fourteen consonants /p, b, t, d, k, g, ʔ, s, h, m, n, ŋ, ɾ, j/. It has rich morphological system, and has an active voice and two undergoer voices.

1.2 The sociolinguistic situation of the Bantik language

- Bantik is spoken in the vicinity of Manado, the provincial town of North Sulawesi Province. Many people of different ethnic origin live in Bantik villages.

- Indonesian, the national language of Indonesia has two distinct styles; Standard Indonesian (*Bahasa Baku*) which is formal and used for writing, and Colloquial Indonesian. Colloquial Indonesian varies to the great extent from place to place, and in North Sulawesi, the Manado dialect of Colloquial Indonesian (*Bahasa Manado*) [2] has immence vitality and is used as many people's everyday language as well as the common language. The Manado dialect show many features that are not shared with Standard Indonesian and other dialects of Colloquial Indonesian.
  Almost all the speakers of Bantik can also speak the Manado dialect.

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[1]For detailed description of Bantik, please refer to Bawole 1993 and Utsumi 2005.
[2]For more information on the Manado dialect, please refer to Prentice 1994.

- First language of older Bantik people (born before 1950) is Bantik, while that of young Bantik people (born after 1970) is the Manado dialect.

- Standard Indonesian is the High variety of both groups. The Low varieties of the older generation is Bantik and the Manado dialect. Bantik is limited register and is used among people of 'primary relation' (cf. Dorian 1981). The Manado dialect is the Low variety of the younger generation. Their use of Bantik is very limited. They use it only when they speak to the older Bantik speakers.

- Young Bantik people speak the Bantik language as a second language, and as a result, their knowledge of the language has undergone many changes. Their Bantik show discrepancies from the traditional Bantik language shared by older speakers.

- It is assumed that two factors cause these changes in young peoples' Bantik.
    - Langage contact with Standard Indonesian and the Manado dialect.
    - Imperfect Learning (cf. Cook 1995). Young people have limited access to the Bantik language.

- The data used in the description below are collected through a fieldwork research in Buha village, North Sulawesi, from 1996 to 2008. There are two linguistic consultants who belong to the young generation: Mr. Vasco Tuwaidan born in 1972, Mr. Stenly Mamengko born in 1974. Mr. Heis Mamengko, born in 1950 and Mr. Terok Mamengko, born in 1948, are my consultants who speak Bantik as the first language. Many other speakers of diverse age groups in Buha village have been consulted too.

- The variety of Bantik which are shared by older generation (born before 1950) will henceforth be called Traditional Bantik, or TB, and that shared by younger generation (born after 1970) Young Bantik, or YB. (The idea for these naming came from Schmidt 1985).

2 Semantic Changes in the Lexicon

- Overgeneralization of the meaning is often found in the YB lexicon.
- YB speakers take proper nouns for common nouns.

Table 1: Semantic overgeneralization

Word	TB meaning	YB meaning	TB word for YB meaning
paniki	a name of a specific river	river	*ake mihihi* 'flowing water'
wagataʔ	strong west wind	strong (for wind)	*ma-bahuaʔ*
sayohoʔ	kangkung (a kind of vegitable)	uncooked vegitable	*

- The influence of Standard Indonesian and the Manado dialect is apparent [3].

Table 2: Differences in semantic interpretation influenced by language contact

Word	TB meaning	YB meaning	Similar Indonesian word
pehaʔ	roe (fish egg)	silver	*perak*, 'silver'
ma-ɾuasaʔ	easy	spacious	*luas*, 'spacious'
sa-sendoʔ	straw	spoon	*sendok*, 'spoon'

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[3]The phoneme /r/ (trill) in Inodonesian often corresponds to Bantik /h/ (*timur* (IND) vs *timuhuʔ* (BAN) 'east', *kertas* (IND) vs *kahatasaʔ*). This is why YB *pehaʔ* is assigned the meaning of *perak* in Indonesian.

- Many other Bantik lexical items are lost in YB, most of which are replaced by the Manado dialect.

- There are many cases where the interpretation of the same word do not coincide between the two age groups.

Table 3: Generation differences in semantics of the lexicon

Word	TB meaning	YB meaning
sumauʔ	to perform a war dance	to be angry
topoŋ	rice without the germ	wheet flour
dedehan	column of a hut	colum (for everything)
papantaʔ	post, stake	fence
ma-ɾotei	weak, feeble	soft
ma-hiaaɾuŋ	be piled up	be up and down
ma-riduŋ	to bury a body, to cover	to dig
tian	belly	belly, stomach

3 Morphological Confusion

Bantik language has a rich affixation system. Both Traditional Bantik and Young Bantik seem to share the same rules for the affixation, but the number of words resulting from the application of the word forming rule are different between the two vareities.

3.1 Word classes and affixes in Bantik

The elements in Bantik language can be devided into words and particles. The word classes in Bantik are nouns, verbs, adjectives, and adverbs. Verbs and adjectives differ in that verbs have two tenses, non-past and past, while adjectives do not change their forms according to the time of the state that they describe.

- Nouns are categorized into two groups: base-only nouns and derivational nouns that undergo reduplication and affixation.

- Adjectives are categorized into three groups: base-only adjectives, those with the prefix *ma-*, and derivational adjectives.

- Verbs (with a few exception) should be affixed in order to appear in a sentence. One of voice indicating affixes is necessarily attached.

  - The infix *-um-/-im-*, the prefix *ma-/na-* or the prefix *maN-/naN* [4] for active voice.
  - The suffix *-AN* and the prefix *ni-* for undergoer voices.
  - Voice-indicating affixes show tense in addition to the voice of the verb. The affixes *-um-*, *ma-*, and *maN-* indicate non-past tense while *-im-*, *na-*, *naN-*, and *ni-* show past tense.

- Derivational affixes can also attach to the verb base in addition to the voice-indicating affixes. For example, the causative prefix *paki-*, the applicative prefix *paN-*, or the abilitative prefix *ka-*.

3.2 Peculiar word formation in Young Bantik

YB speakers, who do not have complete knowledge of the language, sometimes create nonexistent combinations of an affix and a base.

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[4]/N/ in *maN-/naN-* indicates insertion of a nasal which is homo-organic with the first consonant of the base, or a replacement of the first consonant of a base by a homo-organic nasal. In the case where a base begins with a vowel, /ŋ/ is inserted.

3.2.1 Morphological Confusion Concerning Noun Formation

There are several ways to form derivational nouns from adjective or verb bases. YB speakers tend to overgeneralize the formation rule and create words which do not exist. In addition, their interpretation of the derived words always follow the semantic rule of the majority. Those with diosyncratic meanings are not correctly understood. Here is one of such examples.

- 'C1 + /a/ + Base' (reduplication of the first consonant of a verb base followed by /a/ and the base) makes derivational nouns from verb bases. It can be said to be productive, but only applies to less than twenty percent of the verb bases. Most of the derived nouns denote 'the manner of motion denoted by the base'. On the other hand, some of them have unpredicatable meaning. YB speakers tend to apply this formation to many verb bases creating nonexistent words. Their interpretations of the derived nouns are always 'the manner'.

Table 4: Derived nouns and the differences in their interpretations

Word	TB meaning	YB meaning
ta-taɾaʔ	the way of flying	the way of flying
sa-seŋkoʔ	the way of sailing	the way of sailing
ha-huake	heat, fire	the way of liquefying
ka-kodoʔ	eyelid	the way of blinking
ta-tuhuʔ	stick or string (for piercing)	the way of following
ta-tahunduŋ	*	the way of remembering
da-dahuŋ	*	the way of making noise
ga-giɾidiʔ	*	the way of loving

3.2.2 Applying a wrong voice-indicating affix to verb bases

YB speakers sometimes apply a wrong voice-indicating affix to verb bases, or realize /N/ in *maN-/naN-* wrongly.

Table 5: Wrong application of voice-indicating affixes

Meaning	TB form	YB form
to ascend	ma-saka	s-um-aka
to help	ma-tuɾuŋ	manuɾuŋ
to distribute	ma-tiahaʔ	ma-niahaʔ
to carry on the back	mam-baɾukin	ma-maɾukin

4 Reinterpretation of the Voice System

4.1 The voice system of the Bantik language

Bantik verbs can be devided into following three groups depending on the number of voice(s) they can take. There are three voices, Active Voice, Undergoer Voice 1, and Undergoer Voice 2. Each verb is lexically determined how many voice(s) it can take.

- Intransitive verbs: they take only one argument (a subject), and can only take the active voice.
- Mono-transitive verbs: they take two arguments (a subject and an object), they can take the active voice and one undergoer voice.
- Ditransitive verbs: they take three arguments (a subject and two objects), they can take the active voice and two undergoer voices.

Table 6: The paradigm of simple verbs (verbs without derivational affixes)

	Active Voice	Undergoer Voice1	Undergoer Voice2
-um-/-im-:ex. *sakei* (ride)			
non-past	UM-Base	(Base-AN)	*
	s-um-akei	sake-an	*
past	IM-Base	(NI-Base-AN)	*
	s-im-akei	ni-sake-an	*
ma-/na-:ex. tiki (sleep)			
non-past	MA-Base	(Base-AN)	*
tiki (sleep)	ma-tiki	*	*
past	NA-Base	(NI-Base)	*
	na-tiki	*	*
maN-/naN- mono-transitive verb ex. buno(kill)			
non-past	MAN-Base	Base-AN	*
	ma-muno	buno-n	*
past	NAN-Base	NI-Base	*
	na-muno	*	ni-buno
maN-/naN- ditransitive verb bihei (give)			
non-past	MAN-Base	Base-AN	Base
	ma-mihei	bih-an	bihei
past	NAN-Base	NI-Base-AN	NI-Base
	na-mihei	ni-bih-an	ni-bihei

4.2   Difference in subcategorization of verbs

Younger speakers has lost the distinction between the two undergoer voices, and tend to confuse them. They know that there are three morphologically different voice forms, and that there are three subcategories of verbs, that is, intransitive, mono-transitive and ditransitive, but lack the knowledge for deciding which verb belongs to which subcategory. As a result, they often exhibit a morphosyntactically peculiar usage of verbs. This confusion is assumed to be caused by language contact with Indonesian, which has only a two-way voice alternation.

Table 7: Verbs regarded as ditransitive by YB speakers but transitive by TB speakers

base	AV	UV1	*UV2	meaning
toŋkoʔ	ma-noŋkoʔ	toŋkoh-an	*toŋkoʔ	request
tiahaʔ	ma-niahaʔ	tiah-en	*tiahaʔ	share
sahiokoʔ	ma-niokoʔ	sahiok-an	*sahiokoʔ	rush
sohoboʔ	ma-nohoboʔ	sohob-an	*sohoboʔ	light fire
sauduʔ	ma-nauduʔ	saud-an	*sauduʔ	hang

Table 8: Verbs regarded as transitive by YB speakers but ditransitive by OB speakers

base	AV	UV1	UV2	meaning
oŋkohoʔ	ma-ŋoŋkohoʔ	oŋkohoʔ-n	oŋkohoʔ	hand in
suŋi	ma-nuŋi	suŋi-an	suŋi	feed
tuɾau	ma-nuɾau	tuɾau-an	tuɾau	leave something

Some YB speakers confuse the past tense form of verbs with voice-indicating prefixes *ma-/na-* and *maN-/naN-*. Mono-transitive verbs as shown below take the suffix *-AN* when they are in non-past

tense but do not take it when in past tense. Some young speakers, however, consistently add the suffix even in past tense.

Table 9: Confusion concerning Undergoer Voice form

base	AV non-past	UV past	YB Form	meaning
bei	ma-bei	ni-bei	*ni-bei-an	pick up
tunu	ma-tunu	ni-tunu	*ni-tunu-an	grill
ɾutaŋ	ma-ɾutaŋ	ni-ɾutaŋ	*ni-ɾuta-men	shoot
buno	ma-muno	ni-buno	*ni-buno-n	kill
tuɾubuʔ	ma-nuɾubuʔ	ni-tuɾubuʔ	*ni-tuɾub-an	cover

4.3 Overgeneralization of the derivational verb-forming rules

The other characteristics of YB is that it overgeneralize the derivational rules of those affixes and applies them to inapplicable bases.

4.3.1 Adversative verbs

The form '*ka-* + Adjective Base + -*AN*' conveys adversative meaning, and words with this form are verbs (because they have two tense forms). Alghough adjective bases with unfavorable meanings have a tendency to take this form, not all of them can take it. YB speakers tend to make nonexistent words with this form by overgeneralizing the formation rule. A possible factor for this is that there is a form '*ka-* + Adjective Base', which is the nominalization form derived from adjective bases. YB speakers might confuse these two forms and functions.

Table 10: Adversatives: existent and nonexistent words presented by YB speakers

base	Adjective	meaning	Adversative verb	meaning
pidisiʔ	ma-pidisiʔ	painful	ka-pidis-an	suffer from a pain
suɾedo	ma-suɾedo	dirty	ka-suɾedo-n	suffer from dirtiness
ɾoŋoʔ	ma-ɾoŋoʔ	fat	ka-ɾoŋoʔ-an	suffer from being fat
hagaŋ	ma-hagaŋ	spicy	ka-hagaŋ-en	suffer from spiciness
pudu	ma-pudu	bitter	ka-pudu-an	experience bitterness
sahioko	ma-sahioko	fast	*ka-sahiok-an	*speed
bahaʔ	ma-bahaʔ	heavy	*ka-bahaʔ-en	*suffer from heaviness
misiʔ	ma-misiʔ	sweet	*ka-misiʔ-an	*suffer from sweetness
dodoʔ	ma-dodoʔ	slow	*ka-dodoʔ-an	*

(1) *baɾei   nu   ka-suɾedo-n   ada   ŋasa   anaʔ-anaʔ*
    house   NI-2sg   KA-dirty-AN   if   many   children
    'Your house will get dirty if you have many children'

(2) *i-pasko   ni-ka-hagaŋ-en*
    I-Vasco   NI-KA-spicy-AN
    'Vasco was suffered from spiciness'

(3)   a *ka-sahiok-an   nu-otoʔ   ene   ma-pia*
          KA-fast-AN   NU-car   that MA-good
       '*The speed of that car is nice'

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b *ka-sahioko   nu-otoʔ   ene   ma-pia*
  KA-fast   NU-car   that   MA-good

  'The speed of that car is nice'

4.3.2 Applicative verbs

- The prefix *paN-* forms applicative verbs when attached to the transitive verb bases. The productivity is limited though; only around twent percent of such bases can take *paN-*. Applicative verbs are ditransitive and take all the three voices.

- The Active Voice form of applicative verbs is '*ma-/na-* + *paN-* + Base'.

- The Undergoer Voices of applicative verbs are: '*paN-* + Base + *-AN*' for Undergoer Voice 1 and '*paN-* + Base' for Undergoer Voice 2.

  - The Undergoer Voice 1 form '*paN-* + Base + *-AN*' is identical with locative verb form which has no Active Voice form.
  - The Undergoer Voice 2 form '*paN-* + Base' is identical with instrumental verb form which has no Active Voice form.

- YB speakers tend to create applicative verbs from every transitive verb base. As a result, they insist nonexistent applicative Active Voice forms to be present.

- Three factors for this is suggested below.

  - YB speakers have tendency to overgeneralize derivational rules. Examples of this abound as we have seen above. Once they are asked to make derivational forms, they tend to elicit combinations of affixes and bases without taking lexical information into account.
  - YB speakers have lost lexical information concerning verb (and verb base) subcategorization. Examples above suggest that they cannot discern intransitive verbs from mono-transitive verbs, and they often confuse mono-transitive verbs with ditransitive verbs.
  - A large proportion of morpho-syntactic knowledge is lost in YB. Although YB speakers know there are three voice forms, a three-way voice alternation system is seldom activated in their mind, possibly because High variety language they are willing to learn (Standard Indonesian) has a two-way voice alternation. (The Manado dialect has no morphologically apparent voice alternation system.) When they are aware that derivational verbs with a specific affix can take three voice forms, they automatically apply every voice form to any verb base. As a result, they create nonexistent forms and ungrammatical sentences.

- To summarize, YB speakers have a morpho-syntactic system distinct from that of TB speakers. They look for possible morphological forms, and then, without consulting lexical information which is sometimes idiosyncratic, apply every form to adequate and inadequate bases. If there are forms which can be interpreted as three voice forms, they automatically create a paradigm for ditransitive verbs and fill the slot with nonexistent forms.

Table 11: Arguments of applicative verbs

Structure of simple verbs				
Active Voice	**subject**	**verb**		**object 1**
semantic role	**actor**			**patient**
non-past	*i-/ø*NP	*maN*-Base		*si-/su-/ø*NP
past	*i-/ø*NP	*naN*-Base		*si-/su-/ø*NP

Structure of applicative verbs				
Active Voice	**subject**	**verb**	**object 2**	**object 1**
semantic role	**Actor**		**Instrument**	**Patient**
non-past	*i-/ø*NP	*ma-paN*-Base	*nu*-NP	*si-/su*-NP
past	*i-/ø*NP	*na-paN*-Base	*nu*-NP	*si-/su*-NP
Undergoer Voice 1	**subject**	**verb**	**actor**	**object 2**
semantic role	**Patient**		**Actor**	**Instrument**
non-past	*i-/ø*NP	*paN*-Base-AN	*ni-/nu*-NP	*nu*-NP
past	*i-/ø*NP	*ni-paN*-Base-AN	*ni-/nu*-NP	*nu*-NP
Undergoer Voice2	**subject**	**verb**	**actor**	**object 1**
semantic role	**Instrument**		**Actor**	**Patient**
non-past	*i-/ø*NP	*paN*-Base	*ni-/nu*-NP	*si-/su*-NP
past	*i-/ø*NP	*ni-paN*-Base	*ni-/nu*-NP	*si-/su*-NP

(4) a   *i-heis   ma-pa-maɾeŋ   nu-batu   ie   su-uai   ene*
    I-Heis   MA-PAN-take by throwing   NU-stone   this   SU-mango   that

   'Heis will take mango by throwing this stone' (Active Voice)

   b   *uai   pa-maɾeŋ-an   ni-heis   nu-batu   ie*
    mango   PAN-take by throwing-AN   NI-Heis   NU-stone   this

   'That mango will be taken by Heis by throwing this stone' (Undergoer Voice 1)

   c   *batu   ie   pa-maɾeŋ   ni-heis   su-uai   ene*
    stone   this   PAN-take by throwing   NI-Heis   SU-mango   that

   'This stone will be used by Heis to take that mango' (Undergoer Voice 2)

(5) a   **i-stenli   ma-paŋ-geheʔ   nu-pahigi   su-kahatasa*
    I-Stenly   MA-PAN2-tear   NU-knife   SU-paper

   '*Stenly will tear a piece of paper with a knife' (nonexistent applicative Active Voice form insisted by YB speakers)

   b   *su-meʒa   ie   paŋ-geheʔ-an   ni-stenli   kahatasaʔ*
    paper   this   PAN-tear-AN   NI-Stenly   paper

   'On this table, Stenly will tear a piece of paper' (Locative verb)

   b'   **kahatasaʔ   paŋ-geheʔ-an   ni-stenli   **nu**-pisou*
    paper   PAN-tear-AN   NI-Stenly   NU-knife

   '*A piece of paper will be torn by Stenly with a knife' (Ungrammatical sentence insisted by YB speakers)

   c   *pisou   paŋ-geheʔ   ni-stenli   kahatasa*
    knife   PAN-tear   NI-Stenly   paper

   'A knife will be used by Stenly to tear a piece of paper' (Instrumental verb)

   c'   *pisou   paŋ-geheʔ   ni-stenli   **su**-kahatasa*
    knife   PAN-tear   NI-Stenly   SU-paper

   'A knife will be used by Stenly to tear a piece of paper' (Ungrammatical sentence insisted by YB speakers)

Table 12: Examples of applicative verbs in TB lexicon

base	simple verb	meaning	applicative verb	meaning
boheʔ	ma-moheʔ	write	ma-pa-boheʔ	write with st
paɾeŋ	ma-maɾeŋ	take st	ma-pa-maɾeŋ	take st with st
mada	ma-mada	dry	ma-pa-mada	dry st at sw
tuɾubu	ma-nuɾubu	close	ma-pa-nuɾubu	close with st
saŋkoi	ma-naŋkoi	plow	ma-pa-naŋkoi	plow with st
sohoboʔ	ma-nohoboʔ	flame	ma-pa-nohoboʔ	flame st
dahuŋ	man-dahuŋ	sew	ma-pan-dahuŋ	sew on st

Table 13: Examples of applicative verbs elicited by YB speakers but are not acknowledged by TB speakers

base	simple verb	meaning	applicative form	meaning
kiʔaŋ	ma-ŋiʔaŋ	lift	*ma-pa-ŋiʔaŋ	let sb lift st
tekosoʔ	ma-nekosoʔ	steal	*ma-pa-nekosoʔ	steal st sw
gogahaʔ	maŋ-gogahaʔ	break	*ma-paŋ-gogahaʔ	break st with st
geheʔ	maŋ-geheʔ	tear	*ma-paŋ-geheʔ	tear st with st
kaɾimuʔ	ma-ŋaɾimuʔ	make	*ma-pa-ŋaɾimuʔ	make st sw
kaɾaʔ	ma-ŋaɾaʔ	scoop out	*ma-pa-ŋaɾaʔ	scoop out st with st
tukusuʔ	ma-nukusuʔ	wrap	*ma-pa-nukusuʔ	wrap st with st

5 Summary

It is widely reported that endangered language show morphological reduction (Dorian 1981, Campbell and Muntzel 1989, Schmidt 1985a). For example, in Dyirbal, ergative allomorphs are subsumed into lesser number of allomorphs as the speaker's competency reduces. Some incompetent speakers have only one form, and less competent ones finally lose the case marking itself (Schmidt 1985a).

In Bantik, however, the reduction of the number of allomorphs is not observed. Instead, 'overgeneralization of morphological rules' is widely observed in Young Bantik. YB speakers retain knowledge of morphological rules for deriving words, but they do not know lexical restriction for the word formation.

It seems that YB speakers are losing vocabulary of Bantik quite fast. Since all of them are fluent in the Manado dialect, when they cannot find the right word which convey the intended meaning in Bantik, they easily replace it with the Manado dialect.

YB speakers supplement the loss of vocabulary by being conscious of the morphological rules in Bantik, and by combining the bases and the affixes following the rules, they create words which are not traditionally used nor admitted by Traditional Bantik speakers. When they come to assign meanings to a nonexistent word, they simply combine the meaning of an affix and a base.

The overgeneralization of the rules by YB speakers extend to the inflectional rules. They inflect words by applying the morpho-syntactic rules by analogy regardless of the lexical restriction. As a result, they create strange words for TB speakers and make ungrammatical sentences for TB speakers using their own words.

YB speakers are more conscious of the morphological and morpho-syntactic rules than TB speakers, since it is one of the few ways to compensate loss of lexicon. By applying morphological rules to as many bases as possible, they can increase the vocabulary. Morpho-syntactic rules help them to create sentences without consulting to lexical information.

Although YB speakers are quite competent in creating words by affixation, they are often not sure of their meaning. This fact indicates that they do not actually use the words they elicit in daily speech. TB speakers, on the other hand, when asked to elicit words with derivational affixes, consult lexical information and decide whether a resulting form exist or not. Naturally, they are confident of and

consistent with the meaning of the words once they acknowledged their existence.

It is suggested that overgeneralization of the rules is found in morphology and morpho-syntax when a language is on the way of extinction. Under the circumstances, reinterpretation of morpho-syntactic system also emerges.

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