

Andrej Malchukov and Bernard Comrie (Eds.)

**Valency Classes in the World's Languages**

Vol. 2

# **Comparative Handbooks of Linguistics**

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Edited by  
Edith Moravcsik and Andrej Malchukov

## **Volume 1.2**

# Valency Classes in the World's Languages

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Volume 2

Case Studies from Austronesia and the Pacific,  
the Americas, and Theoretical Outlook

Edited by  
Andrej Malchukov  
Bernard Comrie

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# Andrej Malchukov and the Leipzig Valency Classes Project team

## Leipzig Questionnaire on valency classes<sup>\*</sup>

### Preliminaries

The present questionnaire was compiled by Andrej Malchukov with feedback from the other Leipzig Valency Classes Project members (Bernard Comrie, Martin Haspelmath, Iren Hartmann and Søren Wichmann) at an early stage of the project and distributed to contributors to the volume. Since 2010 the conception of the project as reflected in the questionnaire has undergone certain changes, as described in the Database Manual (Haspelmath & Hartmann 2013, available at: [http://www.eva.mpg.de/lingua/valency/files/database\\_manual.php](http://www.eva.mpg.de/lingua/valency/files/database_manual.php)). The Database Manual can be seen as a follow-up to the questionnaire but is intended for contributions to the database rather than for book chapters. Moreover, it differs somewhat in scope (see in particular the advanced part of the Leipzig Questionnaire, which addresses a broader set of questions not implemented in the database) and also provides the database contributors with a succinct introduction to the framework and terminological conventions used in the project. The present questionnaire does not pursue this latter goal, which is largely fulfilled within the present volume by the chapter by Haspelmath and Hartmann (this volume). Thus, the Leipzig Questionnaire largely follows the original format reflecting its use to guide contributions to the volume rather than database contributions, except for one important update. It includes an updated list of 70 core meanings rather than the original list of 64 verbs. The definitive list was agreed on the basis of the input from the project participants, as well as the feedback from the contributors.

### Introduction

The present questionnaire deals with a typology of valency classes, or verb types, in terms of Levin (1993). Levin (1993) is a seminal study of syntactic classes of verbs in English, which shows that a semantic classification of verbs can be achieved through applying syntactic diagnostics. Yet, this study, as well as an earlier study by Apresjan (1969) on Russian, has not been followed up cross-linguistically, which leaves open the question of which aspects of these classifications are universal and which are language particular. Similarly, valency dictionaries are few in number and mostly deal with European languages, thus they cannot fill the gap. The questionnaire has been compiled by participants of the DFG funded project on valency classes<sup>1</sup> and is designed to obtain a consistent set of data from a representative set

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<sup>\*</sup> For convenience, we repeat the questionnaire chapter from volume 1 in identical form with adjusted page numbers.

<sup>1</sup> See <http://email.eva.mpg.de/~haspelmt/ValencyClasses.pdf> for the project description.

**Tab. 1:** The 70 verb meanings.

meaning label	role frame	typical context
RAIN	(it) rains	It rained yesterday.
BE DRY	S is dry	The ground is dry.
BURN	S burns	The house is burning.
SINK	S sinks	The boat sank.
ROLL	A rolls	The ball is rolling.
BE A HUNTER	S is a hunter	This man is a hunter.
BE HUNGRY	E is hungry	The baby is hungry.
BE SAD	E is sad	The little girl was sad.
DIE	S dies	The snake died.
FEEL COLD	S is cold	I'm cold.
FEEL PAIN	E feels pain in X	My arm is hurting. = I'm feeling pain in my arm.
SCREAM	S screams	The man screamed.
LAUGH	S laughs	The little girl laughed.
PLAY	S plays	The child is playing.
LIVE	S lives somewhere (L)	The old people live in town.
LEAVE	A left L	The boy left the village.
GO	S goes somewhere (L)	The woman went to the market.
SING	S sings	The boy sang (a song).
JUMP	A jumps	The girl jumped.
SIT DOWN	S sits down (somewhere (L))	The children sat down on the bench.
SIT	S sits somewhere (L)	The children sat on the floor.
RUN	A runs	The horse is running.
CLIMB	A climbs (up L)	The men climbed (up) the tree.
COUGH	S coughs	The old man coughed.
BLINK	S blinks	I blinked (my eyes).
SHAVE	A shaves (his beard/hair)	The man shaved his beard/cut his hair
DRESS	A dresses P	The mother dressed her daughter
WASH	A washes P	The mother washed the baby.
EAT	A eats P	The boy ate the fruit.
HELP	A helps X	I helped the boys.
FOLLOW	A follows X	The boys followed the girls.
MEET	A meets X	The men met the boys.
HUG	A hugs P	The mother hugged her little boy.
SEARCH FOR	A searches for X	The men searched for the women.
THINK	A thinks about X	The girl thought about her grandmother yesterday.
KNOW	A knows P	The girl knew the boy.
LIKE	E likes X	The boy liked his new toy.
FEAR	E fears X	The man feared the bear.
FRIGHTEN	A frightens P	The bear frightened the man.
SMELL	E smells X	The bear smelled the boy.
LOOK AT	A looks at P	The boy looked at the girl.
SEE	E sees X	The man saw the bear.
TALK	A talks (to X) (about Y)	The girl talked to the boy about her dog.

meaning label	role frame	typical context
ASK FOR	A asks (X) for Y	The boy asked his parents for money.
SHOUT AT	A shouts at X	The woman shouted at the children.
TELL	A tells (X) Y	The girl told the boy a funny story.
SAY	A says “...” (to X)	They said “no” to me.
NAME	A name X (a) Y	The parents called the baby Anna.
BUILD	A builds P (out of X)	The men built a house of wood.
BREAK	A breaks P (with I)	The boy broke the window with a stone.
KILL	A kills P (with I)	The man killed his enemy with a club.
BEAT	A beats P (with I)	The boy beat the snake with a stick.
HIT	A hits P (with I)	The boy hit the snake with a stick.
TOUCH	A touches P (with I)	The boy touched the snake with a stick.
CUT	A cuts P (with I)	The woman cut the bread with a sharp knife.
TAKE	A takes P (from X)	The man took the money from his friend.
TEAR	A tears P (from X)	The girl tore the page from the book.
PEEL	A peels (X off) P	The boy peeled the bark off the stick.
HIDE	A hides T (from X)	The boy hid the frog from his mother.
SHOW	A shows T (to R)	The girls showed pictures to the teacher.
GIVE	A gives T to R	We gave the books to the children.
SEND	A sends T (to X)	The girl sent flowers to her grandmother.
CARRY	A carries T (to X)	The men carried the boxes to the market.
THROW	A throws T somewhere (L)	The boy threw the ball into the window.
TIE	A ties P (to L) (with I)	The man tied the horse with a rope to the tree.
PUT	A puts T somewhere (L)	I put the cup onto the table.
POUR	A pours T somewhere (L)	The man poured water into the glass.
COVER	A covers P (with X)	The woman covered the boy with a blanket.
FILL	A fills P (with X)	The girl filled the glass with water.
LOAD	A loads T (onto L)	The farmer loaded hay onto the truck. = The farmer loaded the truck with hay.

of languages to be described in contributions to the edited volume. It starts with the study of a list of 70 verb meanings (Vs, for short) taken as representative of the verbal lexicon, as well as Levin’s taxonomy (but see below, in particular §6)<sup>2</sup>.

Since Vs might allow for different uses, the meanings are narrowed down through the use of example sentences to be translated into the respective languages (see the reference to ‘typical contexts’ in Table 1 above). The subsequent parts of the questionnaire address coding and syntactic properties of Vs. It begins with questions about coding properties in constructions formed by a V (in particular, case-marking of arguments) in order to determine the basic valency pattern. In

<sup>2</sup> This study focuses on lexical verbs rather than auxiliary verbs (with modal, aspectual and other uses).

accordance with a conventional usage the valency of a V is understood here as the list of its arguments with their coding properties (referred to as **coding frames**; see Haspelmath & Hartmann this volume, for definitions of terms). §3 deals with case alternations, which do not involve voice morphology (cf. different ‘transformations’ used to cross-classify the English verbal lexicon in Levin’s work). §4 addresses diathetic alternations (or verb-coded alternations), asking about availability of certain valency operations (like passives and applicatives) for Vs, as well as for the meanings expressed by the valency changing markers with Vs, in case they are polysemous. §3 and §4 can be seen as largely complementary, as what is a case alternation in one language will be coded as a diathetic alternation in another language (for example, many case alternations in English will be expressed by different valency operations in languages with richer morphology). The last (advanced) part of the questionnaire explores to what extent Vs are representative of lexical classes, i.e., which other verbs belong to the same valency class. This latter part cannot be fully reflected in individual contributions to the volume, which due to size limitations will just offer a summary of verb taxonomies starting from these 70 verb meanings.

## I Basic Questionnaire

### 1 Valency patterns basic examples

---

Please provide glossed examples of sentences containing the relevant Vs (see the prompt typical contexts in the Table 1 above).

---

The examples sentences exemplifying typical contexts are intended to elicit the verb meanings (Vs) introduced above. The author of a chapter is asked to provide either translational equivalents of the sentences above or other comparable constructions found with the Vs (possibly extracted from corpora). In either case, of special interest is the coding of verbal arguments, for this reason the arguments should be overtly expressed (at least in dependent-marking languages). For head-marking languages, constructions with pronominal (1<sup>st</sup>/2<sup>nd</sup> person) subjects and objects should also be considered, as 3<sup>rd</sup> person arguments are often not indexed on the verb. Alternatively the corresponding constructions with pronominal arguments should be described in §2.2 under indexing.

Examples might be somewhat modified to reflect cultural realities. In cases where a V has different translational equivalents, please choose the verbal lexeme which is more basic (i.e. more frequent and/or morphologically less complex); in the case of several basic items, please include all.

The following sections will provide further explanation of the glossed examples with respect to coding and behavioral properties of Vs.

## 2 Coding properties of valency patterns

Coding properties involve the following techniques (Haspelmath 2005; Malchukov et al. 2010):

- flagging (case or adposition marking)
- indexing (agreement, cross-referencing)
- word order (in the absence of other kinds of marking)

### 2.1 Flagging

---

How are the arguments of the verbs flagged (by a case or adposition)?

---

NB degree of differentiation will naturally depend on the number of cases available. Thus, German makes finer coding distinctions among verb classes than English, which is due to the availability of verb-specific dative and genitive case selection in German (Sauerland 1994).

**Further questions about flagging**, which may be addressed in case they interact in an interesting way with verb classification.

---

Does flagging differ for different kinds of nominals (animate/inanimate, definite/indefinite)?

---

Some languages show variation in case marking depending on nominal features such as animacy and definiteness; most commonly it has been observed for (direct) objects (cf. differential object marking in languages like Hindi; where P is marked if human, or definite in the case of inanimates). Other arguments may also differ in case marking depending on nominal features; cf. different cases for animate/inanimate locations, as in Dyirbal.

---

Do free pronouns show the same valency pattern? (Bound pronouns are considered in § 2.2).

---

This need not be the case, as witnessed by split-ergative languages of the Australian type.

---

What are other relevant factors affecting argument marking here?

---

In some languages, alignment patterns further depend on TAM-features, as is familiar from split ergative languages like Hindi and Newari which have ergative

alignment in the perfective/past and accusative in the imperfective. Such alternations are relevant for the project to the extent they are sensitive to verb classes. Thus, in Newari, availability of an ergative pattern depends on tense, on the one hand, and on lexical class of the verb, on the other hand, so that 2-argument verbs deviating from the transitive prototype can take this pattern optionally.

## 2.2 Indexing

---

How are the arguments of Vs indexed (by agreement/cross-referencing)?

---

Some languages (head-marking languages), may distinguish valency patterns through indexing rather than flagging. Thus, Tlapanec has 4 different patterns: ergative vs. absolutive indexing patterns are used for canonical transitives, and the ‘pegative’-dative alternation is used for less canonical transitives (like ‘fear’ and ‘meet’). Note that the discussion of indexing (conjugation) markers that also signal voice distinctions (like the middle voice in Greek) should be postponed to §4 dealing with diathetic alternations.

**Further questions about indexing;** which need to be addressed to the extent these patterns reveal verb classification.

---

Does indexing depend on the features of the nominal (see above)?

---

Indexing, like flagging, may depend on nominal features. For example, in many languages with object agreement only prominent (animate/definite) objects are indexed. Again, such cases will be relevant for our project insofar as these features further interact with the verb type. For example, in the Austronesian language Manam some experiencer verbs (‘like’, ‘know’, ‘be bad at’) use object indexing only when the object is prominent, while canonical transitives (like ‘break’) invariably index the object. Thus, here we observe effects of differential object marking (i.e. differential object indexing) for verb-types deviating from canonical transitives.

## 2.3 Word order

---

What are the word order patterns associated with Vs?

---

Most often word order depends on syntactic transitivity, but some languages make further distinctions depending on the valency class. Thus, in (Gao) Songhai, canonical transitives (‘break’, ‘kill’), have SOV order, while less canonical transitives (‘see’, ‘follow’, ‘love’), have SVO order. Questions of word order need to be ad-



dressed to the extent word order interacts in an interesting way with verb classification.

### 3 Argument alternations

In this section only argument alternations (or uncoded case alternations) are considered; discussion of verb-marked diathetic alternation is postponed to the next section. The two sections should be seen as largely complementary, as alternations will be coded by dedicated markers in some languages with a richer morphology and left uncoded in other languages (like English).

---

Do Vs allow for an alternative construction (valency pattern)?

---

For example, for English, Levin (1993) mentions, in particular, the following alternations. (The list below mentions only fairly productive alternations; and does not include verb-coded diathetic alternations like the passive alternation):

- a) the inchoative-causative alternation (*John broke the stick ~ The stick broke*)
- b) the “middle” alternation (*John cut the bread ~ The bread cuts easily*)
- c) the reflexive deletion (*John washed himself ~ John washed*)
- d) the reciprocal transformation (*John married Mary ~ John and Mary married*)
- e) the dative alternation (*Mary gave the book to John ~ gave John the book*)
- f) the locative alternation (*John loaded the truck with hay ~ the hay onto the truck*)
- g) the conative alternation (*John cut the bread ~ cut at the bread*)
- h) the object deletion alternation (*John ate the bread ~ John ate*).
- i) the preposition dropping alternation (*John climbed up the hill ~ climbed the hill*).

Given that Levin’s list includes a number of other more lexically restricted alternations, it is clear that alternation types need to be generalized before they can be applied cross-linguistically.

We will distinguish between the following general types of case alternations, which also find equivalents among voice-alternations to be considered in the next section:

- a) subject-demoting/deleting case alternations

This type will include subject-demoting alternations frequently discussed under the heading of differential subject marking (e.g., genitive of negation in Russian, or ergative/oblique alternation related to volitionality in some ergative languages), but also subject-deleting alternations, as in the case of S/P labile verbs (like *break*; see Levin’s “inchoative-causative alternation”).

## b) object-demoting/deleting case alternations

Object-demoting alternations refer, in particular, to varieties of differential object marking (e.g., asymmetric alternations such as the ACC/NOM alternation in Hindi, but also symmetric ones, such as the ACC/PART alternation in Finnish). Object-deleting alternations will refer, in particular, to A/S-labile verbs (like *eat*; see Levin's "object deletion alternation").

## c) object rearranging case alternations

These include, in particular, varieties of dative and locative alternations (cf. (e, f) above), also found in other languages.

So the first question to be addressed is:

---

What are the major varieties of case alternations in your language (subject-demoting/deleting; object-demoting/deleting; object rearranging)?

---

Of course, there may be further varieties of argument alternations, not listed above (for example, object incorporation). These varieties, as well as the alternations listed above, are relevant to the project to the extent they are sensitive to verb classification (e.g., some varieties of differential object-marking apply to any transitive verb, which does not yield an interesting clustering of verb types). More generally for our purposes most relevant are those alternations which are fairly productive (not restricted to a few lexical items), but – most importantly – are sensitive to lexical classes. That is, we are interested in alternations which are distinctive for the verbal lexicon (as sampled here) rather than in those which apply across the board or apply to just few items.

After delimiting in this way the set of most relevant case-alternations in your language, the question is to be addressed is:

---

To which Vs in your language do these alternations pertain?

---

For example, if your language features labile verbs, which of the verbs from the list are labile: S/P labile (cf. the causative-inchoative alternation), and S/A labile (cf. the unspecified object-deleting transformation)?

## 4 Diathetic alternations and valency changing operations

As mentioned above, languages with richer morphology use diathetic alternations for many argument alternations left uncoded in English. Thus in Even, a Tungusic language, the "middle alternation" is signaled by the mediopassive marker, the "inchoative-causative alternation" is signaled by the causative marker (in competi-

tion with the mediopassive), while equivalents of English verbs allowing for a “reciprocal alternation” commonly involve a lexicalized sociative marker (e.g. *baka-lda* [find-SOC] ‘meet’).

It is convenient to use the same (or similar) taxonomy for the domain of verb-coded diathetic alternations, as we adopted for (uncoded) case alternations. Also in this case we will distinguish between the following types:

- a) Subject demoting/deleting (anticausatives, etc)
- b) Subject-Object rearranging (passives)
- c) Object demoting/deleting (antipassives)
- d) Object-Object rearranging (applicatives)

In addition we address valency increasing alternations:

- e) Subject addition (causatives)
- f) Object addition (applicatives)

It should be noted that in some cases the distinction between these subvarieties may be problematic (especially between subvarieties of valency rearranging vs. valency increasing applicatives). It is also convenient to treat Subject-Object rearranging operations (passives) together with subject demoting/deleting (anticausatives; reflexives, etc), as they frequently employ the same markers. From this perspective, the major distinction will be between valency reducing vs. valency increasing diathetic alternations.

Obviously, the set of valency/voice markers varies across languages; some of these languages distinguish between several such markers (e.g., anticausatives vs. reflexives), while other languages use the same polyfunctional marker. For such cases it is important to state both availability and the meaning of particular markers for certain Vs.

## 4.1 Valency-reducing operations

Valency reducing operations come in several subtypes, as illustrated below:

- a) Subject demoting/deleting voice alternations
  - anticausative (cf. a) in § 3 above)
  - middle (cf. b) in § 3 above)
  - reflexive (cf. c) in § 3 above)
  - reciprocal (cf. d) in § 3 above)
- b) Object demoting/deleting voice alternations
  - antipassive (cf. g), h) in § 3 above)
- c) Subject-Object rearranging voice alternations
  - passive (differs from anticausative in that A may be expressed, or is implied)

---

Does your language have the voice alternations listed above? If not, how are these functions expressed (this information should be given in § 3 if the functions are expressed through argument alternations). If so, what Vs do these markers apply to?

---



---

What are the functions of these markers when applied to different Vs?

---

For example, in Russian the “reflexive” suffix *-sja* can be used in a reflexive function with some verbs (*myt’-sja* ‘wash’), while with other verbs it has anticausative (*slomat’-sja* ‘break’), passive (*stroit’-sja* ‘be built’), or reciprocal (*vstrečat’-sja* ‘meet’) function.

## 4.2 Valency-increasing and valency-rearranging operations

The most important valency-increasing operations are causatives and applicatives; the latter however may rearrange rather than increase the valency. In some languages, the same marker is used both in causative and applicative functions; also for such cases it is important to determine which Vs select for which function.

---

If your language has causative markers, which Vs can they apply to? Does the meaning of the causative marker differ with the V involved?

---

Note that some languages have several causative markers, for example, for building intransitive vs. transitive causatives. These can be used to test for transitivity of less prototypical transitive verbs.

---

If your language has applicative markers, which Vs can they apply to? Does it have several applicative markers used with different Vs? Does the meaning of the applicative marker differ with the V involved?

---

There may be several subtypes of applicatives, depending on which object is promoted (for example, in Hoocak (Siouan), there are 4 different applicative markers, including the benefactive applicative, the instrumental applicative and two types of locative applicatives). On the other hand, the general applicative in Salish has been claimed to have different meanings depending on the verb’s class. Applicatives may be used to render many of the alternations listed in § 3, including the dative (cf. e) in § 3 above), locative (cf. f)), but also preposition dropping (cf. i)). Other languages may use directional markers to code some of these alternations (cf. Russian *na-gruzit’ seno na telegu* [PREF-load hay on cart] ‘to load the hay on the cart’ vs. *za-gruzit’ telegu senom* [PREF-load cart hay.INSTR] ‘to load the cart with hay’; German *laden* vs. *be-laden*).

### 4.3 Other valency/voice categories

Of course, it is impossible to foresee (let alone, list here) all language-particular voice categories. While choosing to address certain voice alternations, one should again be reminded that voice constructions will be relevant to the project to the extent that they interact in an interesting way with the verb lexicon (in particular, are neither restricted to few lexical items, nor apply across the board to all verbs).

---

Does your language have other voice categories? Which Vs do they apply to?

---

For example, some (Austronesian) languages show a variety of “voice” (or “focus”) forms (“actor focus”, “goal focus”, etc), used for ‘promotion’ of different objects to the subject position; for these languages it will be relevant which Vs allow for which voice constructions. On the other hand, head-marking languages of the “hierarchical type” show a direct-inverse alternation triggered by the relative prominence of the A and P arguments. In that case it is relevant to study the use of direct-inverse alternations with different groups of two and three argument verbs (in the latter case, it is also relevant which of the object arguments takes part in the alternation; e.g., Theme or Recipient of a ditransitive verb). But also for the domain of monotonitives some languages may show further differentiation; e.g., some languages (like Tlapanec) may have different inverse forms for different subtypes of 2-argument verbs.

## II Advanced Questionnaire

### 5 Further properties of individual verbs

#### 5.1 Morphological issues: complexity

---

Indicate which of the Vs are morphologically complex?

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In §1 the contributors were prompted to select for the basic (nonderived) equivalent of verbs on the list. In some cases, however, this is impossible, as in the case where all ditransitives including GIVE are derived (e.g. applicative, as in Tzotzil). Therefore it is important to provide information about morphological complexity of Vs. This question is relevant insofar as morphological make-up may determine availability of a certain valency pattern. For example, in Malayalam, only derived ditransitives (causatives of transitives), take a double object construction, while basic (underived) ditransitives take a dative construction.

## 5.2 Semantic issues: polysemy

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Do Vs have other meanings?

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This question is relevant insofar as the valency pattern may be motivated through one of the meanings of the polyfunctional item. For example, in some languages, which use the same verbs for both ‘hit’ and ‘throw’, this verb follows the allative pattern, as expected for caused motion verbs.

## 5.3 Semantic issues: etymology

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Do you know etymology of Vs?

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The motivation for this question is the same as for the previous one: a verb may inherit the valency pattern from its original meaning.

# 6 Further properties of lexical classes

## 6.1 Lexical issues: open and closed valency classes

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Which other verbs belong to the same valency pattern as individual Vs? Is it an open or a closed class? For an open class, please specify which verbs belong to this class (in terms of relevant semantic or formal features). For a closed class, please list other verbs in this class.

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For example, if some of the Vs are labile (see §3 above), please give the list of other (S/P and S/A) labile verbs.

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Do other verbs, semantically similar to a V, participate in the same alternations as this V?

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Do other verbs, semantically similar to a V, show the same diathetic alternations as this V?

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## Part II: **Case Studies (cont.)**

### **Austronesia and the Pacific**



## 22 Balinese valency classes<sup>1</sup>

### 1 Introduction

Balinese (*Basa Bali*) is one of the eastern-most members of the Western Malayo-Polynesian language family. According to Adelaar (2005), Balinese forms the Malayo-Chamic-BSS (Balinese-Sasak-Sumbawa) group together with Malayic, Chamic, Sasak, and Sumbawa. Like many other Western Malayo-Polynesian languages in Indonesia, Balinese shows a remnant of the Austronesian focus system, which has undergone a gradual attrition such that, while many Formosan and Philippine languages rather faithfully reflect the original four-way morphological contrast (Actor-focus <\*um>, Patient-focus \*-ən, Locative-focus -an, Circumstantial-focus -(S)i), Balinese and many other focusing Austronesian languages of Indonesia retain only a two-way morphological opposition of a nasal vs. zero verbal prefix, which corresponds to the proto-Austronesian AF and PF morphology. This morphological contrast correlates with the structural opposition of the Actor-focus (AF) and the Patient-focus (PF) construction, where the former aligns the Subject/Actor with the Topic relation and the latter the Object with the Topic, as seen below:<sup>2</sup>

- (1) a. Standard Indonesian (Bahasa Indonesia)

AF construction (N-)

*Saya me-motong daging.*

I AF-cut meat

‘I cut some meat.’

- b. PF construction (Ø-)

*Daging itu saya potong.*

meat that I PF.cut

‘I cut the meat.’

---

<sup>1</sup> I Wayan Arka helped the preparation of this paper greatly by providing us with a number of relevant examples as well as his grammaticality judgments on many of the examples contained in this paper. Our sincere thanks also extend to Bernard Comrie for reading an earlier version of this paper closely and providing us with comments we found highly valuable in improving both the content and the style of this paper. The support by the U.S. National Science Foundation grant BCS-0617198 is also gratefully acknowledged.

<sup>2</sup> See Blust (2002), Ross (2009), and Starosta et al. (1982) for details on the Austronesian focus morphology and its syntactic correlates.

- (2) a. Balinese (Basa Bali)  
 AF construction (N-)  
*Tiang n-godot be.*  
 I AF-cut meat  
 'I cut some meat.'
- b. PF construction (Ø-)  
*Be=ne godot tiang.*  
 meat=DEF PF.cut I  
 'I cut the meat.'

A distinction between the grammatical relations Subject and Topic must be made for Austronesian languages because many belonging to the Western Malayo-Polynesian family in the Philippines and Indonesia as well as Formosan languages exhibit syntactic phenomena controlled by the Subject, namely the union of the Agent (A) nominal of a transitive sentence and the intransitive subject (S), on the one hand, and those that are controlled by Topic nominals, irrespective of their Subject and Object status, on the other. Because the difference between the Subject=Topic alignment in the AF construction and the Object=Topic alignment in the PF-construction is not directly relevant to the issues of valency in this language, we shall primarily present the data in AF form and concentrate on the coding patterns at the *semantico-syntactic* level, where argument types are organized in terms of the syntactic relations of Subject, Object, and Oblique. That is, in the following discussion we shall ignore the characteristic Austronesian *pragmatico-syntactic* phenomenon of Subject=Topic and Object=Topic alignment alternation, except for illustration purposes.

Balinese shows three levels of register that are known as *Basa Bali sor* (Low Balinese), *Basa Bali kepara* (Ordinary Balinese) or *Basa Bali madya* (Medium Balinese), and *Basa Bali alus/singgih* (High Balinese). Low Balinese is used only when speaking derogatively about the subject referent or to a socially lower addressee. Ordinary (or Medium) Balinese is used when speaking to a familiar person and is the most commonly heard variety, while High Balinese, with different degrees of formality, is used in addressing a respected person or in a formal setting like a ceremony. These are illustrated below, where the three different forms for the verb 'eat' (*ngamah*, *ma-daar*, and *ngajeng*), for 'I' (*icang*, *tiang*, and *titiang*), and for 'child' (*panak*, *oka*, and *putra*), in addition to the two different forms for 'dog' (*cicing* and *asu*) and the two adverbs for 'still' (*nu* and *kari*) should be noticed.

(3) Low Balinese

Speaking about a lowly thing to a familiar person:

- a. *Cicing icang=e ngamah nasi.*  
 dog I=POSS AF.eat rice  
 'My dog is eating a meal.'

- b. In a quarrel

*Panak cai=ne ngamah dogen.*

child you=DEF AF.eat only

‘Your son is only eating (without doing anything else).’

(4) Ordinary/Medium Balinese

Speaking to a friend

- a. *Cicing tiang=e ngamah nasi.*

dog I=POSS AF.eat rice

‘My dog is eating a meal.’

- b. *Panak cai=ne nu naar nasi.*

child you=POSS still AF.eat rice

‘Your child is still eating a meal.’

- c. *Panak tiang=e nu naar nasi.*

child I=POSS still AF.eat rice

‘My child is still eating a meal.’

(5) High Balinese

Speaking to a teacher

- a. *Cicing tiang=e ngamah.*

dog I=POSS AF.eat

‘My dog is eating.’

- a'. *Asu-n guru=ne ngamah.*

dog-POSS teacher=POSS AF.eat

‘Your dog is eating.’ / Lit. ‘The teacher’s dog is eating.’

- b. *Oka=n guru=ne kari ngajeng.*

child=POSS teacher=DEF still AF.eat

‘Your child is still eating.’ / Lit. ‘The teacher’s child is still eating.’

- c. Speaking to the Indonesian Presidentip

*Asu=n titiang=e ngamah nasi.*

dog=POSS I=POSS AF.eat rice

‘My dog is eating a meal.’

- d. *Putra=n ratu=ne kari ngerayunang.*

child=POSS caste.title=POSS still AF.eat

‘Your child is still eating.’ / Lit. ‘Sir’s child is still eating.’

The following discussion is based on the data from Ordinary/Medium Balinese provided primarily by Ketut Artawa, who was born and grew up in Penatahan Village, Bali Island. Additional data come from several speakers from the capital city of

Denpasar, whose dialect is less conservative than the varieties spoken in the villages away from Denpasar. Notable differences are pointed out in the relevant sections of the paper.

## 2 Basic properties of the Balinese verbal lexicon

One peculiar feature of the Balinese verbal lexicon, which is also seen in Standard Indonesian and perhaps in other major Indonesian languages of Austronesian stock, is the existence of what Artawa (1994) and others call “precatatorial” roots. While there are a fair number of verb roots that are associated with one or two basic valency patterns without derivation, there are also a large number of roots that cannot be used as verbs without a derivational affix and as such whose valency value and alignment pattern are not determined until a derivational affix is selected. Take the form *uruk* ‘learn/teach’. In order for this to function syntactically, it must take the middle prefix *m(a)-*, or one of the transitive suffixes *-in* or *-ang*, as below, where neither the AF marking (6a) nor the PF (zero) marking (6b) alone is sufficient.<sup>3</sup>

### (6) Underived verb form

- a. \**Tiang ng-uruk basa Inggeris (ka anak=e cenik ento).* (AF)  
 I AF-learn language English to person=DEF small that  
 ‘I am teaching English (to the child).’
- b. \**Basa Inggeris uruk tiang (ka anak=e cenik ento).* (PF)  
 language English PF.learn I to person=DEF small that  
 ‘I am teaching English (to the child).’

### (7) *m(a)*-derived form

- Tiang m-uruk (basa Inggeris).*  
 I MID-learn (language English)  
 ‘I am learning (English).’

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<sup>3</sup> Our definition of precatatorials differs from that offered in Artawa (1994). When a root form is usable only after a verbal derivation, it is precatatorial. AF and PF marking is not a derivational process and hence if a root is usable with just AF or PF marking, it is not precatatorial. The verb root *tegak* ‘sit’, for example, is not precatatorial and can be used as an intransitive verb without a derivation by simply marking it AF (i.e. by nasalizing the initial consonant) as *I Nyoman negak di bataran ento* ‘Nyoman sits on the floor’. There are also noun-based precatatorial verbs such as *suah* ‘comb’ and *sikat* ‘tooth’, which can be used as nouns by themselves, but which must undergo a derivation in order for them to function as a verb (see §5.3). There is one other way, besides *ma-/in/-ang* derivations, in which some of these precatatorial roots can be realized, namely reduplication. The precatatorial verb *kijep* ‘blink’, for example, can be used as intransitive either via *ma*-derivation (*ma-kijep-an*) or in the form of *kijep-kijep* via reduplication (see §7). As this example shows, *ma*-derivation produces a circumfixed *ma...an* form with certain roots.

(8) *-in* derived form

- a. *Tiang ng-uruk-in anak=e cenik ento (basa Inggeris).* (AF)  
 I AF.learn-IN person=DEF small that (language English)  
 'I am teaching the child (English).'
- b. *Anak=e cenik ento uruk-in tiang (basa Inggeris).* (PF)  
 person small that PF.learn-IN I (language English)  
 'I am teaching the child (English).'

(9) *-ang* derived form

- a. *Tiang ng-uruk-ang basa Inggeris (ka anak=e cenik ento).* (AF)  
 I AF.learn-ANG language English to person=DEF small  
 that  
 'I am teaching English (to the child).'
- b. *Basa Inggeris uruk-ang tiang (ka anak=e cenik ento).* (PF)  
 language English PF.learn-ANG I to person=DEF small  
 that  
 'I am teaching English (to the child).'

Compare the above with the pattern shown by the non-precategorial verb *tegul* 'tie' below, where the AF (10a) and the PF (10b) forms without a derivational affix are both grammatical.

## (10) Underived basic verb form

- a. *Tiang negul<sup>4</sup> jaran=ne (ka punyan kayu=ne).* (AF)  
 I AF.tie horse=DEF to trunk tree=DEF  
 'I tied the horse to the tree trunk.'
- b. *Jaran=ne tegul tiang (ka punyan kayu=ne).* (PF)  
 horse=DEF PF.tie I to trunk tree=DEF  
 'I tied the horse to the tree trunk.'

(11) *ma*-derived form

- Jaran=ne ma-tegul (ka punyan kayu=ne).*  
 horse=DEF MID-tie to trunk tree=DEF  
 'The horse is tied (to the tree trunk).'

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<sup>4</sup> In the Denpasar dialect, where the *-in* suffix is widely used as a transitivity suffix, *negul-in* is also usable here.

(12) *-in* derived form

- a. *Tiang negul-in punyan kayu=ne jaran.* (AF)  
 I AF.tie-IN trunk tree=DEF horse  
 Lit. 'I tied the tree trunk (with) a horse.'
- b. *Punyan kayu=ne tegul-in tiang jaran.* (PF)  
 trunk tree=DEF PF.tie-IN I horse  
 Lit. 'I tied the tree trunk (with) a horse.'

(13) *-ang* derived from

- a. *Tiang negul-ang jaran=ne ka punyan kayu=ne.* (AF)  
 I AF.tie-ANG horse=DEF to trunk tree=DEF  
 'I tied the horse to the tree trunk.'
- b. *Jaran=ne tegul-ang tiang ka punyan kayu=ne.* (PF)  
 horse=DEF PF.tie-ANG I to trunk tree=DEF  
 'I tied the horse to the tree trunk.'

The presence of the precategorial roots indicates that valency patterns<sup>5</sup> and derivational processes are much more tightly integrated in Balinese than in other languages, where the basic verb valency patterns and the derived patterns (that is, valency alternations) are relatively clearly delineated in terms of the absence vs. the presence of derivational affixes. In addition, Balinese valency alternation has two aspects to it. One is valency increase and the other is argument realignment or rearrangement (without valency increase). These two aspects of valency alternation are effected by the same derivation affix. Compare the basic pattern and the *-in* derived pattern in (14a)–(14b) and (15a)–(15b) below, where one usage pattern of the verb GIVE (*baang*), i.e. with an animal goal, is illustrated.

(14) SLEEP (*pules*)

- a. *Ia pules<sup>6</sup> telung jam (di umah=ne anyar).*  
 he PF.sleep three hour at house=3SG.POSS new  
 'He slept three hours (in his new house).'
- b. *Ia mules-in umah=ne anyar telung jam.*  
 he AF.sleep-IN house=3SG.POSS new three hour  
 'He slept three hours in his new house.'

<sup>5</sup> By the term "valency pattern" we refer to two argument properties. One is valency value, which relates to the number of obligatory nominal expressions that a verb requires, and the other is the argument alignment pattern, especially the alignment of the Figure and Ground expressions with the grammatical relations of Object and Oblique. See below on the Figure/Ground distinction.

<sup>6</sup> See Section 7 below on the focus marking on intransitive verbs.



(15) GIVE (*baang*)

## a. Basic verb form

*Tiang maang banyu ka celeng=e.*

I AF.give scrap to pig=DEF

‘I gave food scraps to the pig.’

b. *-in* derived form

*Tiang maang-in celeng=e banyu.*

I AF.give-IN pig=DEF scrap

‘I gave the pig food scraps.’

The verb *pules* ‘sleep’ is a monovalent intransitive verb and as such the specification of a goal location is optional, as in (14a) above. When the *-in* form is used, a location must be specified, as in (14b). The *-in* derivation here, therefore, counts as a case of valency increase. In the case of the trivalent verb *baang* ‘give’, however, a goal specification is obligatory, as in (15a). The *-in* derived form in (15b), therefore, does not increase valency since the goal specification is part of the basic valency of the verb. Thus the *-in* derivation in (15b) constitutes a case of argument realignment rather than valency increase. In addition to the cases where alternations involve no change in the valency value, *-in* and *-ang* derivations of precategorial roots cannot be characterized in terms of valency increase/decrease because precategorials, by definition, do not have a basic valency value.

Because of these facts, it is essential to first understand the basic functions of the derivational suffixes *-in* and *-ang* and then to compare the valency patterns across the Balinese verbal lexicon, whether or not the derived forms/valency alternations result in valency change.

### 3 Figure and Ground in argument alignment

In considering valency patterns within and across languages, a useful notion is the perceptual construct of the Figure-Ground distinction that has been invoked by a number of linguists in the descriptions of argument coding in several languages (Talmy 2000; Croft 1991; DeLancey 2001). In terms of the thematic roles, the Theme corresponds to the Figure and represents an entity that is situated at a location or in a state that moves from one location to another in physical space or from one state to another in the construal of a change-of-state as an abstract motion. The Ground is the background against which a Figure is delineated, and it subsumes various locative expressions in language such as a stationary location (expressed as *at*, *on*, *in* in English), a source location (*from*), a goal location (*to*, *against*), etc. with respect to which a Figure expression is predicated as being located or moving. Locations can be both physical or human, and thus both so-called goal locations

(as in *John walked to the station*) and human recipients (as in *John gave Bill the book*) count as instances of the Ground.

What is generally characterized as Patient in the study of thematic roles is construed to be an instance of the Ground=Object in this paper. The two main alignment patterns that figure importantly in the following discussion are the Ground=Object (GR=OBJ) alignment, seen in (16), and the Figure=Object (FIG=OBJ) alignment, as in (18) below.

(16) GR=OBJ construction

- a. *John loaded the wagon with hay.*
- b. *John hit the fence with the stick.*

(17) FIG=OBJ construction

- a. *John loaded the hay onto the wagon.*
- b. *John hit the stick against the fence.*

### 3.1 *-in* locative applicative

As some of the earlier examples show, Balinese *-in* derived forms align a Ground expression with the Object, and this is consistent with the role this suffix plays in deriving locative applicative forms with a variety of locational meanings such as a locus of both static and dynamic events, a goal location (including a human recipient), and a source location.

(18) COME (*teka*)

- a. *Ia teka ka kantor=e ene.*  
s/he PF.come to office=DEF this  
'S/he came to this office.'
- b. *Ia neka-in kantor=e ene.*  
s/he AF.come-LOC office=DEF this  
'S/he came to this office' / 'S/he visited this office.'

(19) SIT (*tegak*)

- a. *Ia negak di kursi=ne.*  
s/he AF.sit in chair=DEF  
'S/he sits in the chair.'
- b. *Ia negak-in kursi=ne.*  
s/he AF.sit-LOC chair=DEF  
'S/he sits in the chair.'

- (20) a. *Tiang mula biyu di tegal=e.*  
I AF.plant banana in garden=DEF  
'I planted bananas in the garden.'

- b. *Tiang mulan-in tegal=e biyu.*  
 I AF.plant-LOC garden=DEF banana  
 ‘I planted the garden with bananas.’

- (21) a. *Cai nyilih pipis uli/sig bapa=ne.*  
 you AF.borrow money from father=3SG.POSS  
 ‘You borrowed money from his father.’  
 b. *Cai nyilih-in bapa=ne pipis.*  
 you AF.borrow-LOC father=3SG.POSS money  
 ‘You borrowed money from his father.’

Like locative applicatives in other languages, the Balinese *-in* locative derivation construes the conceptualization of the specified location as being somehow affected or more interactive with the activity of the described event. Thus, the *-in* derived ditransitive construction in (20b) implies that the entire garden has been planted with banana trees.<sup>7</sup>

Earlier we noted a situation where *-in* derivation increases valency and another in which it simply realigns arguments without valency increase – cf. (14) and (15). The latter realignment case results in the same alignment pattern as the valency-increasing case; namely, in both cases the *-in* derived form has a locative Ground expression aligned with the Object. In other words, the role of the *-in* suffix as a valency-increasing operator is simply a consequence of the basic function of this suffix, namely that of aligning a Ground argument with the Object. If the basic verb valency frame includes a Ground expression, as in the case of *baang* ‘give’, the *-in* form selects it as the Object. If the basic valency does not contain a locative element construable as a Ground, then the *-in* derivation introduces a new locative argument and aligns it with the Object. This is the essence of the valency-increasing effect of *-in* derivation.

### 3.2 *-ang* causative

In contrast to the *-in* locative applicative, which aligns a Ground expression with the Object, *-ang* derivation aligns a Figure with the Object. There are two types of Figure involved in this derivation. The typical causative construction aligns the Theme Figure of a caused motion with the Object, as in *I pushed the chair across the room* and *I made him roll down the hill*.

<sup>7</sup> See Section 8 below for a fuller discussion on this sort of restriction.

- (22) a. *Anak=e cenik ento menek ka gedebeg=e.*  
 person=DEF small that AF.climb to cart=DEF  
 'The child climbed onto the cart.'
- b. *Ia menek-ang anak=e cenik ento ka gedebeg=e.*  
 s/he AF-CAUS person=DEF small that to cart=DEF  
 Lit. 'S/he loaded the child onto the cart.'
- (23) a. *Lumur=e ento ulung.*  
 glass=DEF that PF.fall  
 'The glass fell down.'
- b. *Tiang ng-ulung-ang lumur=e ento.*  
 I AF-fall-CAUS glass=DEF that  
 'I dropped the glass.'

Balinese *-ang* morphological causatives are also semantically restricted, and they generally express direct causation (see Section 8). As such, favorite inputs to *-ang* causativization are inactive processes or stative predicates, where a Theme/Figure undergoes either a concrete motion in space, as in (22) and (23), or an abstract motion from one state to another, as in (24) and (25) below.

- (24) a. *Tembok=e tegeh.*  
 wall=DEF PF.high  
 'The wall is high.'
- b. *Tiang negeh-ang tembok=e.*  
 I AF.tall-CAUS wall=DEF  
 'I made the wall high.'
- (25) a. *Celeng=e mati.*  
 pig=DEF PF.dead  
 'The pig is dead.'
- b. *Anak=e ento nge-mati-ang celeng=e.*  
 person=DEF that AF-dead-CAUS pig=DEF  
 'The man killed the pig.'

The other type of Figure involved in *-ang* derivation is an instrument that moves in space and that typically comes into contact with a Ground element. The following illustrates the typical use of *-ang* aligning an instrumental Figure with the Object.

- (26) a. *Ia ng-lempag cicing=e aji sampat.*  
 s/he AF-hit dog=DEF with broom  
 'S/he hit the dog with a broom.'

- b. *Ia ng-lempag-ang sampat ka cicing=e.*  
 s/he AF-hit-CAUS broom to dog=DEF  
 'S/he hit the broom against the dog.'  
 Lit. 'S/he caused the broom to hit the dog.'
- (27) a. *Ia nyikut natah=e aji tungked.*  
 s/he AF.measure yard=DEF with stick  
 'S/he measured the yard with a stick.'
- b. *Ia nyikut-ang tungked ka natah=e.*  
 s/he AF.measure-CAUS stick to yard=DEF  
 'S/he used a stick to measure the yard.'

The above use of *-ang* is normally analyzed as a case of instrumental applicative apart from causativization (Artawa 1999: Chap. 3; Arka 2003: 195 ff.). But, compare the alignment patterns of the earlier causative forms in (22b)–(23b) and the *-ang* instrumental applicative forms in (26b)–(27b) above. In both, the Figure expressions are aligned with the Object, and the Ground expressions are coded as a prepositional phrase. As discussed below, Balinese instrumental applicatives are based on the coding of an event as a caused motion involving an instrument as a causee Theme. In the following descriptions, the *-ang* suffix, which aligns a Figure expression with the Object, will be glossed 'CAUS'.

The following transitive/ditransitive sentences illustrate the contrastive functions of the locative *-in* and the causative *-ang* suffix with regard to the Object alignment. The valency phenomena involving bi-/trivalent verbs discussed next center around these two alignment patterns.

- (28) GR=OBJ alignment (*-in* locative suffix)  
*Tiang ng-uruk-in anak=e cenik cenik (basa Inggeris).*  
 I AF-learn-LOC person=DEF small small language English  
 'I teach the children (English).'
- (29) FIG=OBJ alignment (*-ang* causative suffix)<sup>8</sup>  
*Taang ng-uruk-ang basa Inggeris (ka anak=e cenik cenik).*  
 I AF-learn-CAUS language English to person=DEF small small  
 'I teach English (to the children).'

<sup>8</sup> The *-ang* causative, as a caused motion expression, normally requires or strongly implicates a Ground (goal) expression. Like the English counterpart, *uruk* 'learn/teach' can be used as mono-transitive with a GR=Object or a FIG=Object, as in (29) and (30).

## 4 The valency classes of transitive/ditransitive verbs

As noted above, the locative *-in* and causative *-ang* suffixes play an integral role in the valency structures of Balinese verbs. In order to see this, observe first the transitive/ditransitive verb classes according to the basic valency patterns and their alternants.

As is clear from Table 1, *-in* and *-ang* derivations supply the forms with the specific valency patterns where basic (underived) verbs displaying the relevant patterns are not available. Also recognized from the table is that the precategorical/non-precategorical distinction in Balinese has an important implication for the study of valency due to the fact that a large number of verb forms do not have a basic valency pattern associated with them. *-in* and *-ang* derivations fix the valency value and argument alignment for them, without which they cannot function as a verb.

On the basis of the Object alignment pattern, Balinese (di-)transitive verbs group themselves into four large classes:

- (i) a very small minority of verbs (e.g., *baang* GIVE) display unmarked (un-coded) alternating patterns of SU > GR=OBJ > FIG=OBJ/OBL (the GR=OBJ pattern) or SU > FIG=OBJ > GR=OBL (the FIG=OBJ pattern)
- (ii) a fair number of verbs (e.g., *ejang* PUT) are FIGURE-oriented and display the basic FIG=OBJ pattern, which alternates with the GR=OBJ pattern via *-in* derivation
- (iii) another class (e.g., *lempag* HIT) has GROUND-oriented verbs displaying the basic GR=OBJ pattern, which alternates with the FIG=OBJ pattern via *-ang* derivation

**Tab. 1:** Transitive/Ditransitive. Verb Classes and Alternation Patterns.

Alignment:	GR=OBJ > FIG=OBL/OBJ (Locative pattern)	FIG=OBJ > GR=OBL (Causative pattern)
Basic verb class (A)	basic forms	basic forms
Basic verb class (B)	basic forms	<i>-ang</i> forms
Basic verb class (C)	<i>-in</i> forms	basic forms
Basic verb class (C'):	————	basic forms
Basic verb class (D)	basic forms	<i>-ang</i> forms
	<i>-in</i> forms	basic forms
Precategorical class 1	<i>-in</i> forms	<i>-ang</i> forms
Precategorical class 2	<i>-in</i> forms	————

(The dash mark for Class (C') and Precategorical 2 indicates that no form is available for the respective alignment pattern even via *-in* or *-ang* derivations.)

- (iv) a considerable number of precategorial verbs (e.g., *uruk* LEARN/TEACH) have no basic valency pattern associated with them, their valency pattern being determined by *-in* (for the GR=OBJ pattern) and *-ang* derivation (for the FIG=OBJ pattern).

It is in this manner that *-in* and *-ang* derivations fill the gap in the two transitive/ditransitive valency patterns, namely the GR=OBJ and the FIG=OBJ pattern. Other coded alternations effected by benefactive, middle, and passive operations do not revolve around the GR=OBJ/FIG=OBJ alternation per se, and, accordingly, their contributions to the Balinese valency patterns are discussed separately below. With this proviso, the Balinese transitive/ditransitive alternation patterns can be most conveniently discussed in terms of the seven classes of verbs on the basis of derivational possibilities, as summarized in Table 1 above.

## 4.1 Basic transitive verb class (A)

**Basic locative pattern: GR=OBJ > FIG=OBJ**

**Basic causative pattern: FIG=OBJ > GR=OBJ/OBL**

GIVE (*baang*), FILL (*isinin*)<sup>9</sup>

The only basic verbs allowing the two alternate alignment patterns without coding/derivation are GIVE (*baang*) and FILL (*isinin*).

(30) GIVE (*baang*)<sup>10</sup>

- a. Basic locative pattern: GR=OBJ > FIG=OBJ

*Guru=ne (nge-)maang anak=e cenik ento buku.*  
 teacher=DEF AF.give person=DEF small that book  
 'The teacher gave the child the book.'

- b. Basic causative pattern: FIG=OBJ > GR=OBL

*Guru=ne (nge-)maang buku ka anak=e cenik ento.*  
 teacher=DEF AF.give book to person=DEF small that  
 'The teacher gave the book to the child.'

<sup>9</sup> In this paper, verbs are cited in their root forms, which are identical with the PF forms for non-precategorials.

<sup>10</sup> The verb *baang* is interesting in that it allows an optional *-in* derivation when the goal is an animal as opposed to a human, permitting Valency Pattern C and indicating that animals are treated as if they were a locational Ground. There may be a possibility that *ang* of *baang* is related to the causative *-ang*. See next footnote.

(31) FILL (*isinin*)<sup>11</sup>

- a. Basic locative pattern: GR=OBJ (> FIG=OBJ/OBL)

*Anak=e ento ng-isinin lumur=e ento ((aji) yeh).*  
 person=DEF that AF-fill glass=DEF that (with) water  
 'The man filled the glass (with water).'

- b. Basic causative pattern: FIG=OBJ > GR=OBL

*Anak=e ento ng-isinin yeh ka lumur=e.*  
 person=DEF that AF-fill water to glass=DEF  
 Lit. 'The man filled water into the glass.'

GIVE (*baang*) is the only true ditransitive verb that requires both Figure and Ground expressions in both the GR=OBJ and the FIG=OBJ pattern. The verb FILL (*isinin*) does not require a Figure nominal in the GR=OBJ construction, as in (31a), while both Figure and Ground nominals are required in the FIG=OBJ construction (31b). Unlike the English verb *put*, the Balinese counterpart *ejang* does not obligatorily require a Ground expression. Sentence (32b) below, without a Ground specification, is perfectly well-formed and has a meaning similar to 'put down' in English. It is only when the Ground expression is aligned with the OBJ that both Figure and Ground nominals are required, as in (c). This makes *ejang* difficult to classify, but we consider it a member of Class (C), which would then contain both trivalent and bivalent verbs that optionally take a locative phrase.

(32) PUT (*ejang*)

- a.
- Ia ng-ejang buku di meja=ne.*

s/he AF-put book on table=DEF  
 'S/he put the book on the table.'

- b.
- Ia ng-ejang buku.*

s/he AF-put book  
 'S/he put down the book.'

- c.
- Ia ng-ejang-in meja=ne (aji) buku.*

s/he AF-put-LOC table=DEF (with) book  
 Lit. 'S/he put the table (with) a book.'

<sup>11</sup> The (n)in ending of *isinin* 'fill' is likely to have historically come from the locative *-in* suffix. Observe that it disappears in the middle-marked resultative form of this verb: *Lumur-e ma-isi yeh* 'the glass is filled with water'. However, this ending does not seem to be functioning as the LOC suffix any longer. The true LOC *-in* suffix disappears, unlike ... (n)in in (32b), when a FIG expression is aligned with the Object.



## 4.2 Basic transitive verb class (B):

**Basic locative pattern: GR=OBJ (> FIG=OBL/OBJ)**

**-ang derived causative pattern: FIG=OBJ > GR=OBJ**

HIT/BEAT (*lempag*), TOUCH (*tundik*), STAB (*tusuk*),  
COVER (*rurub*)

(CUT (*godot*), SAW (*regaji*))

These surface-contact verbs are Ground-oriented and have the GR=OBJ alignment pattern as basic. They yield the FIG=OBJ pattern through *-ang* derivation.

(33) HIT/BEAT (*lempag*)<sup>12</sup>

- a. *Anak=e ento ng-lempag lalipi-ne (aji tungked).*  
 person=DEF that AF-hit snake=DEF with stick  
 'The man hit the snake (with a stick).'
- b. *Anak=e ento ng-lempag-ang tungked ka lalipi=ne.*  
 person=DEF that AF-hit-CAUS stick to snake=DEF  
 'The man hit the stick against the snake.' /  
 Lit. 'The man caused the stick to hit the snake.'

In the basic pattern of this type, an instrumental Oblique is optional, whereas in the derived pattern it is aligned with the OBJ and is obligatory, rendering the *-ang* causative derivation here a valency-increasing operation. Notice that the Oblique *ka*-phrase in (33b) is a required argument. The *-ang* form here obtains most readily when the movement of a Figure in space is clearly perceived, as in the case of HIT/BEAT (*lempag*) and STAB (*tusuk*). When a surface contact does not result from a clearly perceivable directed motion, as in the case of slicing and sawing, it is rather difficult to apply the *-ang* derivation. The (b) form below is deemed not as well-formed as (33b) above. Similarly, while STAB (*tusuk*) and THROW (*timpug*) are perfect in the *-ang* derived form, SAW (*regaji*) is not.

(34) CUT/SLICE (*godot*)

- a. *Anake ento ngodot poh (aji tiuk).*  
 person that AF.cut mango with knife  
 'The man cut the mango with a knife.'

<sup>12</sup> This verb permits an *-in* derived form as well, which adds a repetitive meaning to the basic meaning. The repetitive meaning associated with many action verbs is perhaps related to the transitivity effect associated with the *-in* suffix.

- b. \*?*Anake ento ngodot-ang tiuk=ne ka poh=e.*  
 person that AF.cut-CAUS knife=DEF to mango=DEF  
 'The man cut the mango with the knife.' /  
 Lit. 'The man caused the knife to cut the mango.'

The verb COVER (*rurub*) is somewhat unusual and behaves differently from the other members of this class in allowing the *-in* locative derivation despite the fact that the basic form already has the locative GR=OBJ pattern associated with it. The *-in* derived form, however, is different from the basic form in that it allows both OBJ > OBJ (double Object) and OBJ > OBL configurations, though the FIG expression remains optional.

(35) COVER (*rurub*)

- a. Basic locative pattern: GR=OBJ (> FIG=OBL)  
*Ia ngerurub anak=e cenik ento (aji saput).*  
 s/he AF.cover person=DEF small that (with blanket)  
 'S/he covered the child with a blanket.'
- b. *-in* locative pattern  
*Ia ngerurub-in anak=e cenik ento (saput)/(aji saput).*  
 s/he AF.cover-LOC person=DEF small that (blanket)/(with blanket)  
 'S/he covered the child with a blanket.'
- c. *-ang* causative pattern  
*Ia ngerurub-ang saput ka anak=e cenik ento.*  
 s/he AF.cover-CAUS blanket to person=DEF small that  
 Lit. 'S/he covered the blanket to the child.'

Surface-contact verbs contrast with verbs of creation such as *tulis* 'write' and *bangun* 'build', which may take an instrumental nominal but which do not allow *-ang* derivation.

(36) WRITE (*tulis*)

- a. *Anak=e ento nulis surat (aji pulpen=ne ene).*  
 person=DEF that AF.write letter with pen=DEF this  
 'The man wrote a letter (with this pen).'
- b. \**Anak=e ento nulis-ang pulpen=ne ene ka surat.*  
 person=DEF that AF.write-CAUS pen=DEF this to letter  
 'The man wrote a letter with this pen.'

It is not clear how verbs of creation like these should be classified since the created objects seem to be neither a Figure nor a Ground, which classify those elements denoting things that exist independently from the activities expressed by the verbs. Interestingly, WRITE (*tulis*) also behaves somewhat like a member of Precategorical

Class 1 and allows both *-in* locative and *-ang* causative derivations when a Ground is specified with respect to which an instrumental Figure is perceived to move.

- (37) a. *Ia nulis aksara Bali (di tembok=e) (aji pulpen).*  
 s/he AF.write characters Balinese on wall=DEF with pen  
 ‘S/he wrote Balinese characters (on the wall) (with a pen).’
- b. *Ia nulis-in tembok=e (aksara Bali) (aji pulpen).*  
 s/he AF.write-LOC wall=DEF characters Balinese with pens  
 ‘S/he wrote (Balinese characters) on the wall (with a pen).’
- c. *Ia nulis-ang pulpen=e aksara Bali ka tembok=e.*  
 s/he AF.write-CAUS pen=DEF characters Balinese to wall=DEF  
 ‘S/he wrote Balinese characters on the wall with the pen.’

Notice that the basic form of WRITE (*tulis*) is bivalent, with a location and an instrumental specification being optional (37a). The *-in* derivation, while it aligns a GR expression with the Object, does not increase valence, as seen in (37b), where the affected patientive entity and the instrument Figure are both optional. The *-ang* causative derivation in (37c), on the other hand, increases valence by two, requiring specifications of an instrument Figure aligned with the first Object (the first of the double Objects defined in terms of word order) and a Ground expression coded as an OBL. The effected patientive entity is then coded as a second Object as in (37c). (Cf. (37b, c) with the patterns exhibited by precategorical verbs below. The status of the first and second Objects of the double Object construction is discussed in Section 6.)

### 4.3 Basic transitive verb class (C)

**Basic causative pattern: FIG=OBJ (> GR=OBL/OBJ)**

***-in* derived locative pattern: GR=OBJ > FIG=OBL/OBJ**

PUT (*ejang*), SEND (*kirim*), STEAL (*maling*),  
 ASK (*idih*), GIVE (*baang* with an animal recipient)

Basic verb class (C) primarily contains caused-motion verbs exhibiting the trivalent FIG=OBJ > GR=OBL pattern with the *-in* derived alternate pattern.

- (38) SEND (*kirim*)
- a. Basic causative pattern: FIG=OBJ > GR=OBL  
*Anak-e ento ngirim buku=ne ka sekolah.*  
 person=DEF that AF.send book=DEF to school  
 ‘The man sent the book to the school.’

- b. *-in* derived locative pattern: GR=OBJ > FIG=OBJ/OBL  
*Anak=e ento ngirim-in sekolah buku=ne.*  
 person=DEF that AF.put-LOC school book=DEF  
 Lit. 'The man sent the school the book.'

(39) STEAL (*maling*)

- a. Basic causative pattern: FIG=OBJ (> GR=OBL)  
*Tiang nge/ma-maling pipis (uli guru=ne).*  
 I AF/MID-steal money from teacher=DEF  
 'I stole money from the teacher.'
- b. *-in* derived locative pattern: GR=OBJ > FIG=OBJ  
*Tiang nge-maling-in guru=ne pipis.*  
 I AF-steal-LOC teacher=DEF money  
 Lit. 'I stole the teacher money.'

The verb GIVE (*baang*) shows the above pattern when the goal Ground is an animal as noted earlier (see (15)).

#### 4.4 Basic transitive verb class (C')

**Basic causative pattern: FIG=OBJ (> GR=OBL/OBJ)**

**\*-in derived locative pattern: GR=OBJ > FIG=OBL**

BRING (*aba*), CARRY (*tenteng*)

GET (*baan*), TEAR (*uek*), WIPE (*sapuh*)

This class is a subclass of C and contains those basic caused-motion verbs but that do not easily permit the alternate *-in* locative pattern. The GR=OBL expressions of the verbs belonging to this class take either the preposition *ka* 'to' or *uli* 'from'. The verbs that introduce the GR=OBL by *ka* include BRING (*aba*) and CARRY (*tenteng*), and the other verbs listed use *uli* to mark the OBL.

Compare the following examples with (38) above:

(40) BRING (*aba*)

- a. Basic causative pattern: FIG=OBJ (> GR=OBL/OBJ)  
*Tiang ng-aba buku=ne ka kantor pos.*  
 I AF-bring book=the to office post  
 'I brought the book to the post office.'
- b. \**Tiang ng-aba-in kantor pos buku=ne.*  
 I AF-bring-LOC office post book=DEF  
 Lit. 'I brought the post office the book.'

When the Ground is a person, the *-in* derived form is possible with this verb, but it, in addition, has the benefactive meaning of carrying something for someone.

(41) BRING (*aba*)

- a. *Anak luh ento ng-aba buku=ne ka guru=ne.*  
 person female that AF-bring book=DEF to teacher=DEF  
 ‘The girl brought the books to the teacher.’
- b. *Anak luh ento ng-aba-in guru=ne buku.*<sup>13</sup>  
 person female that AF-bring-LOC teacher=DEF book  
 ‘The girl brought the books to the teacher.’  
 ‘The girl carried the teacher’s books (while walking with the teacher).’

The verb *tenteng* ‘carry’, on the other hand, does not permit the usual (i.e. the GR=OBJ) *-in* derivation whether the Ground is human or not.

(42) CARRY (*tenteng*)

- a. *Anak luh ento nenteng buku-ne ka sekolah/guru=ne.*  
 person female that AF.carry book=DEF to school/teacher=DEF  
 ‘The girl carried the book to the school/teacher.’
- b. *Anak luh nenteng-in guru=ne buku.*  
 person female AF.carry-LOC teacher=DEF book  
 ‘The girl carried the book for the teacher.’  
 ‘\*The girl carried the book to the teacher.’
- c. \**Anak luh nenteng-in sekolah buku.*  
 person female AF.carry-LOC school=DEF book  
 Lit. ‘The girl carried the school a book.’

The verbs GET (*baan*), TEAR (*uek*), and WIPE (*sapuh*) introduce a locative Oblique expression with *uli* ‘from/with’, but *-in* suffixation is unavailable, preventing the GR=OBJ pattern to obtain with them. Compare the pattern of STEAL (*maling*) in (39) above with that of GET (*baan*) below. Perhaps the difference lies in the fact that STEAL implicates the affectedness of the Ground more strongly than GET.

(43) GET (*baan*)

- a. Basic causative pattern: FIG=OBJ (> GR=OBL)  
*Anak luh ento maan buku ento (uli guru=ne).*  
 person female that AF.get book that (from teacher=DEF)  
 ‘The girl got a book from the teacher.’

<sup>13</sup> Both this example and (42b) below can replace *-in* with the benefactive *-ang* suffix. See Section 5.1 on *-ang* benefactives.

b. *-in* derived GR=OBJ pattern

\**Anak luh ento maan-in guru=ne buku.*  
 person female that AF.get teacher=DEF book

## 4.5 Basic transitive verb class D

## (a) Basic locative pattern: GR=OBJ (&gt; FIG=OBL)

*-ang* derived causative pattern: FIG=OBJ > GR=OBJ

## (b) Basic causative pattern: FIG=OBJ &gt; GR=OBL

*-in* derived locative pattern: GR=OBJ > FIG=OBJ

TIE (*tegul*), NAIL (*pacek*), SMEAR (*uap*), GLUE (*elim*)

The semantics of verbs of fixing contained in this class allows them to behave both like the surface-contact Class B verbs and like the caused-motion Class C verbs in allowing the basic forms to exhibit both the locative GR=OBJ and the causative FIG=OBJ pattern, respectively. These basic patterns are then altered to the reverse pattern via *-in* and *-ang* derivations.

(44) TIE (*tegul*)

## a. Basic locative pattern: GR=OBJ (&gt; FIG=OBL)

*Tiang negul(-in) jaran=e (aji tali).*

I AF.tie horse=DEF with rope

'I tied the horse (with a rope).'

b. *-ang* derived causative pattern: FIG=OBJ > GR=OBL

*Tiang negul-ang tali=ne ka jaran=e.*

I AF.tie-CAUS rope=DEF to horse=DEF

'I tied the rope to the horse.'

(45) TIE (*tegul*)a. Basic causative pattern: FIG=OBJ (> GR=OBL)<sup>14</sup>

*Tiang negul jaran=e (di/ka punyan kayu=ne).*

I AF.tie horse=DEF in/to trunk tree=DEF

'I tied the horse (to the tree trunk).'

<sup>14</sup> Without a Ground specification, we would not know whether the Object (the horse) is construed as a Figure or a Ground. The optional *-in* suffix in (44a), on the other hand, specifically marks the Object to be Ground.

- b. *-ang* derived causative pattern: FIG=OBJ > GR=OBL

*Tiang negul-ang jaran=e ka punyan kayu=ne.*

I AF.tie-CAUS horse=DEF to trunk tree=DE

'I tied the horse to the tree trunk.'

- c. *-in* derived locative pattern: GR=OBJ > FIG=OBJ

*Tiang negul-in punyan kayu=ne jaran.*

I AF.tie-LOC trunk tree=DEF horse

Lit. 'I tied the tree trunk (with) the horse.'

Example (45b) with *-ang* has the same FIG=OBJ alignment as the basic alignment pattern in (45a). But (45a) and (45b) differ crucially in that while a locative expression is optional in the former, it is obligatory in the latter due to the valency-increasing effect of the *-ang* suffix. (44b) and (45b) both align the Figure expressions with Object. In the former, an Instrumental Figure is aligned with the Object and has a valency-increasing effect due to the promotion of an Oblique to the Object position. In (45b) the valency is increased without promotion, the basic Theme/Figure=OBJ alignment remaining unaffected.

The verbs showing the alternation patterns above are either trivalent ditransitive verbs requiring both Ground and Figure expressions or those transitive verbs that optionally allow these. Those basic transitive verbs, such as KNOW (*tawang*), that do not take any optional Ground or Figure expression do not show the derived/coded alternation patterns under study.

- (46) KNOW (*tawang*)

*I Made nawang anak=e cenik ento.*

I Made AF.know person=DEF small that

'I Made knows the boy.'

Other transitive verbs like EAT (*ajeng/daar*) and SLAUGHTER (*tampah*) may take an optional locative and/or an instrumental expression, but since these optional expressions do not satisfy the semantic requirements for either *-ang* or *-in* derivation (see §4.2 and §9), they do not show the relevant alternation patterns either. These verbs should perhaps be considered members of a separate class of transitive verbs that fail to, ones that fail to alternate due to the semantic restrictions pertaining to the alternate GR=OBJ construction.

- (47) EAT (*ajeng*)

a. *Anak=e luh ento ng-ajeng roti di kamar=ne.*

person=DEF female that AF-eat bread in room=DEF

'The girl is eating bread in the room.'

- b. \**Anak=e luh ento ng-ajeng-in kamar=ne roti.*  
 person=DEF female that AF-eat-LOC room=DEF bread  
 'The girl is eating bread in the room.'
- (48) a. *Anak=e ento nampah celeng=e aji parang.*  
 person=DEF that AF.slaughter pig=DEF with cleaver  
 'The man slaughtered the pig with a cleaver.'
- b. \**Anak=e ento nampah-ang parang=e ka celeng=e.*  
 person=DEF that AF.slaughter-CAUS cleaver=DEF to pig-DEF  
 'The man slaughtered the pig with a cleaver.'

## 4.6 Precategorial Class 1

**No Basic pattern:**

**-in derived locative pattern: GR=OBJ > FIG=OBJ**

**-ang derived causative pattern: FIG=OBJ > GR=OBL**

- (i) SHOW (*edeng*), GIVE (*enjuh*), SAY/TELL (*orah*), INSERT (*selek*)  
 (ii) POUR (*turuh*), THROW (*entung*), HIDE (*engkeb*)  
 (iii) DRESS SOMEONE (*payas*)

Precategorial verbs form a large class, and, lacking a specified valency pattern, many of them allow both *-in* and *-ang* derivations with the respective alignment pattern, as shown below.

- (49) SHOW (*edeng*)
- a. *-in* derived locative pattern: GR=OBJ > FIG=OBJ  
*Anak=e luh ento ng-edeng-in guru=ne buku.*  
 person=DEF girl that AF-show-LOC teacher=DEF book  
 'The girl showed the teacher the book.'
- b. *-ang* derived causative pattern: FIG=OBJ > FIG=OBL  
*Anak=e luh ento ng-edeng-ang buku ka guru=ne.*  
 person=DEF girl that AF-show-CAUS book to teacher=DEF  
 'The girl showed the book to the teacher.'
- (50) POUR (*turuh*)
- a. *-in* derived locative pattern: GR=OBJ > FIG=OBJ  
*Anak=e ento nuruh-in lumur=e yeh.*  
 person=DEF that AF.pour-LOC glass=DEF water  
 Lit. 'The man poured the glass water.'



- b. *-ang* derived causative pattern: FIG=OBJ (> GR=OBL)

*Anak=e ento nuruh-ang yeh=e ento (ka lumur=e ento).*  
 person=DEF that AF.pour-CAUS water=DEF that to glass=DEF that  
 'The man poured the water into the glass.'

(51) DRESS SOMEONE (*payas*)

- a. *-in* derived locative pattern: GR=OBJ (> FIG=OBL)

*Tiang mayas-in anak=e cenik ento (aji baju).*  
 I AF.dress-LOC child=DEF small that (with shirt)  
 Lit. 'I dressed the child (with a shirt).'

- b. *-ang* derived causative pattern: FIG=OBJ > GR=OBL

*Tiang mayas-ang baju=ne ento ka anak=e cenik ento.*  
 I AF.dress-CAUS shirt=DEF that to child=DEF small that  
 'I put the shirt on the child.'

While the alignment patterns displayed by the *-in* and *-ang* forms above are similar, the three sets of the examples above represent three different argument patterns. SHOW (*edeng*), GIVE (*enjuh*), SAY/TELL (*orah*), and ENTER/INSERT (*celep*) all require both a Figure and a Ground expression as arguments in either the *-in* and the *-ang* pattern. With POUR (*turuh*), THROW (*entung*), and HIDE (*engkeb*), the *-in* LOC=OBJ pattern requires both Figure and Ground arguments, while in the *-ang* FIG=OBJ pattern, an OBL Ground expression typically shows up, but it is not a requirement. DRESS SOMEONE (*payas*) reverses this pattern and calls for both Figure and Ground arguments in the *-ang* FIG=OBJ form, while an OBL Figure expression is optional in the *-in* GR=OBJ pattern. Compared to POUR (*turuh*), the basic verb FILL (*isinin*) aligns with DRESS SOMEONE (*payas*) in that a Figure expression is optional in the GR=OBJ construction with them, whether the GR=OBJ pattern is basic as in FILL (*isinin*) or *-in* derived as in DRESS SOMEONE (*payas*).

There are two GIVE verbs in Balinese. One is the basic verb *baang*, which allows the GR=OBJ and the FIG=OBJ alignment without derivation, as seen in the earlier examples in (30). The other is precatatorial *enjuh*, which yields the GR=OBJ pattern through *-in* derivation and the FIG=OBJ pattern through *-ang* derivation, as shown below. The basic verb *baang* is more general in meaning, whereas the precatatorial *enjuh* specifically means giving/delivering something to someone by hand.

(52) GIVE (*enjuh*)

- a. *-in* derived locative pattern: GR=OBJ > FIG=OBJ

*Ia ng-enjuh-in timpal=ne buku.*  
 s/he AF-give-LOC friend=3.POSS buku  
 'S/he gave his/her friend a book.'

- b. *-ang* derived causative pattern: FIG=OBJ > GR=OBL

*Ia ng-enjuh-ang buku=ne ento ka timpal=ne.*  
 S/he AF-give-CAUS book=DEF that to friend=3.POSS  
 'S/he gave the book to his/her friend.'

The *-in* derived form here contrasts with the *-ang* derived form in that the former has the double Object pattern, while the latter has the OBJ > OBL pattern, reflecting the semantics of caused motion characteristic of the *-ang* causative construction.

A number of notionally bivalent precategorial verbs show somewhat irregular patterns. There are some that allow both *-in* and *-ang* derived forms with the same alignment pattern. In the case of LOOK (*telektek*), the *-ang* version is more commonly used than the *-in* version.

(53) LOOK (*telektek*)

*Tiang nelektek-ang/-in anak=e cenik ento.*  
 I AF.look-CAUS/-LOC person=DEF small that  
 'I look at the child.'

The verb FOLLOW (*tuut*) has a basic alignment pattern, but it still allows both *-in* and *-ang* derived forms that differ in meaning. The basic form *tuut* means to copy or to imitate, but the *-in* derived form means to follow or to obey, and the *-ang* derived form means to obey.

(54) FOLLOW (*tuut/tutut*)

a. Basic

*Tiang nuut anak=e luh ento.*  
 I AF.follow person=DEF female that  
 1. 'I copied (the work done by) the girl.'  
 2. 'I imitate the girl.'  
 3. 'I obeyed the girl.'

b. *-in* derived

*Tiang nuut-in anak=e luh ento.*  
 I AF.follow-LOC person=DEF female that  
 1. 'I emulate the girl.'  
 2. 'I obeyed the girl.'

c. *-ang* derived

*Tiang nuut-ang anak=e luh ento.*  
 I AF.follow-CAUS person=DEF female that  
 1. 'I copied the girl.'  
 2. 'I obeyed the girl.'

## 4.7 Precategorial Class 2

**No Basic pattern:**

***-in* derived locative pattern: GR=OBJ**

**\**-ang* derived causative pattern: FIG=OBJ**

HELP (*tulung*), SEE/MEET (*tepak*)  
 CALL X Y (*kauk*)

There are several precategorial verbs that have *-in* derived forms with no corresponding *-ang* derived forms. The verb CALL X Y (*kauk*) belongs to this class.

(55) HELP (*tulung*)

a. *Tiang nulung-in anak=e luh ento.*  
 I AF.help-LOC person=DEF female that  
 'I helped the girl.'

b. *Tiang nulung-in guru=ne ngae umah.*  
 I AF.help-LOC teacher=DEF build house  
 'I help the teacher to build a house.'

(56) CALL X Y (*kauk*)

*Luh Sari ngauk-in anak=e ento I belog.*  
 female Sari AF.call-LOC person=DEF that ART fool  
 'Sari called the man a fool.'

## 5 Other verb-coded valency alternations

In addition to *-in* and *-ang* derivations, there are several other processes that provide verb-coded valency alternations in Balinese. The most pertinent ones are *-ang* benefactives, *ma*-middles, and *-a* passives. All these apply to (di)transitive verbs, provided the relevant semantic restrictions are satisfied. *ma*-middles play the important role of filling the lexical gap of missing intransitives and, thereby, feed the intransitive repertoire of the language.

### 5.1 Valency-increasing *-ang* benefactive applicative

As in many other languages, the benefactive applicative is limited to situations involving the transfer of an object to a beneficiary, and, as such, it typically involves basic transitive verbs of procurement and production; however, it does not apply to intransitive verbs and those transitive situations where the transfer of an object to a beneficiary does not materialize, as e.g., throwing away garbage on someone's behalf (Shibatani 1996). The following form with the verb BUY (*beli*) is a typical Balinese benefactive applicative, by which we mean a construction that aligns a Beneficiary with the Object and whose meaning conveys an intended or successful transfer of a Theme/Figure to the Beneficiary. Syntactically, the benefactive applicative is ditransitive, and semantically, it contrasts with expressions in which a Beneficiary is coded in Oblique form, as in the contrast between English *I*

*bought Made this book* and *I bought this book for Made* – the former is a benefactive applicative without morphology (see below).

(57) BUY (*beli*)

a. Basic bivalent form

*Tiang meli buku=ne ene.*

I AF.buy book=DEF this

'I bought this book.'

b. Benefactive trivalent form

*Tiang meli-ang Made buku=ne ene.*

I AF-BEN Made book=DEF this

'I bought Made this book.'

Involvement of the suffix *-ang* and of a transferred object would make us wonder whether the benefactive alignment pattern has the Theme/Figure argument in Object position. But this is not the case. As in (57b) above, the benefactive applicative has what looks like a Ground (recipient Beneficiary) expression in Object position, the pattern that *-in* derivation normally entails. Upon closer examination, however, it becomes clear that the Beneficiary expression in Object position is not a Ground. First of all, a true Ground expression cannot be aligned with the Object via benefactive derivation. Unlike the English dative-shift counterpart (as in the translation in the parentheses below), benefactive applicative (58b) below does not mean that the Beneficiary "my mother" was the goal to which the letter was to be sent. In other words, (58a) and (58b) are not synonymous as are the English translations *I wrote a letter to my mother* and *I wrote my mother a letter*. What grammatically corresponds to the English sentence *I wrote my mother a letter* would be (58c), but this sentence is not very well-formed in Balinese because of the semantic requirement on the *-in* derivation that the Ground be highly interactive with the relevant action (see Section 9, and compare (58c) with the earlier example in (38b) and with (60) below).

(58) a. *Tiang nulis surat ka meme=n tiang=e.*

I AF.write letter to mother=POSS I=POSS

'I wrote a letter to my mother.'

b. *Tiang nulis-ang meme=n tiang=e surat.*

I AF.write-BEN mother=POSS I=POSS letter

'I wrote a letter for my mother.' (≠ I wrote my mother a letter.)

c. *\*?Tiang nulis-in meme=n tiang=e surat.*

I AF.write-LOC mother=POSS I=POSS letter

'I wrote my mother a letter.'

Secondly, a true Ground expression can be overtly specified in addition to a Beneficiary nominal, as in (59b) below.

- (59) a. *Tiang ngirim buku ka sekolah.*  
 I AF.send book to school  
 'I sent books to the school.'
- b. *Tiang ngirim-ang guru=ne buku ka sekolah.*  
 I AF.send-BEN teacher=DEF book to school  
 'I sent books to the school for the teacher.'

The above sentence still entails that the teacher is to ultimately receive the books that are sent to the school, but *ka sekolah* 'to the school' is the true Ground in this expression. Contrast this with the *-in* locative construction, where a true Ground is coded as the Object.

- (60) *Tiang ngirim-in sekolah=e buku.*  
 I AF.send-LOC school=DEF book  
 'I sent the school books.'

The Ground and the Beneficiary are also distinguished in Standard Indonesian when they occur as Obliques (see (61a, b) below). The benefactive applicative *-kan* form in (61c) is not exactly synonymous with (61b) in that the former implies that while "his/her father" is not the addressee of the letter, he nevertheless temporarily obtains the letter written on his behalf. That is, (61c) means that s/he wrote the letter on his/her father's behalf and handed it to him (to mail to the ultimate recipient). any other languages, the benefactive applicative

- (61) a. Standard Indonesian  
*Dia me-nulis surat kepada ayah=nya.*  
 s/he AF-write letter to father=3POSS  
 'S/he wrote a letter to his/her father.'
- b. *Dia me-nulis surat untuk ayah=nya.*  
 s/he AF-write letter for father=3POSS  
 'S/he wrote a letter for his/her father.'
- c. *Dia me-nulis-kan ayah=nya surat.*  
 s/he AF-write-BEN father=3POSS letter  
 'S/he wrote a letter for his/her father.  
 (≠ S/he wrote his/her father a letter.)  
 (Sneddon 1996: 81)

An OBL Beneficiary expression corresponding to (61b) is not available in Balinese (see (62c) below for an alternative).

The *-ang* benefactive applicative, which aligns a Beneficiary expression with the Object, is, thus, different from the GR=OBJ construction effected via *-in* derivation in its alignment pattern. While synchronically we may want to distinguish the causative *-ang*, which aligns a causee Theme/Figure with the Object, from the *-ang*

benefactive, which aligns a Beneficiary with the Object, the causative/benefactive applicative polysemy finds an explanation in the historical development of the benefactive applicative from the causative via direct causative construal of a causative semantics following the derivation pattern of the GIVE verb. The causative semantics [X CAUSE Y to HAVE Z] under the direct causative construal may lexicalize as [X HAVE-CAUSE Y (the child) Z (a book)], where the abstract causative predicate is realized as a causative suffix, as in Ainu *kor-e* (have-CAUS) ‘give’. Similarly, [X CAUSE Y to HEAR Z] is lexicalized as *nu-re* (hear-CAUS) ‘inform’ in Ainu. In some other languages, like English, lexicalization of these causative semantics incorporates the causative component CAUSE into a hosting verb, giving rise to expressions like “X gives Y (the child) Z (a book)” and “X informs Y of Z”.

The rise of benefactive applicatives from causatives follows these lexicalization patterns. [X CAUSE Y to BUY Z], for example, may give rise to a lexical benefactive applicative “X buys Y Z” following the “X gives Y Z”, or it may give rise to a morphological benefactive applicative in the form of “X buy-CAUS Y Z” following the GIVE pattern “X have-CAUS Y Z”, where the causative suffix is subsequently reanalyzed as a benefactive applicative suffix. In Balinese the verb of giving *baang* follows the English lexicalization pattern, while benefactive applicatives follow the Ainu pattern of realizing CAUSE morphologically.<sup>15</sup>

Since the basic function of the locative *-in*, the causative *-ang*, and the benefactive *-ang* is to align respectively a Ground location, a Theme Figure, and a Beneficiary with the Object, rather than to increase valency per se, these do not combine. In other words, they compete for the (first) Object position and once Object alignment is fixed by a derivation, it cannot be altered by another derivation. Thus, even semantically plausible *-ang/-in* derived verbs such as *turuh-ang* ‘pour-CAUS’ and *kirin-in* ‘send-LOC’ do not yield *-ang* benefactives. Serial verb benefactive constructions involving the verb *baang* ‘give’ must be used instead, as in (62c).

- (62) a. *Tiang nuruh-ang yeh ka lumur=e.*  
           I       AF.pour-CAUS water to glass=DEF  
           ‘I poured water into the glass.’
- b. \**Tiang nuruh-ang-ang guru=ne yeh ka lumur=e.*  
           I       AF.pour-CAUS-BEN teacher=DEF water to glass=DEF  
           ‘I poured water into the glass for the teacher.’
- c. *Tiang nuruh-ang yeh ka lumur=e baang guru=ne.*  
           I       AF.pour-CAUS water to glass=DEF GIVE teacher=DEF  
           ‘I poured water into the glass for the teacher.’

Compare (62a–b) and (59a–b). Both (59a) and (62a) have the semantically comparable alignment pattern of FIG=OBJ > GR=OBL, but only the former yields a benefactive *-ang* form (59b). Similarly, while both (63a) and (64a) below have the same

<sup>15</sup> Also note the interpretation “I carried the girl” of the causative form in (121b).

alignment pattern of GR=OBJ > FIG=OBJ, only the underived structure in (63a) yields a correct *-ang* benefactive counterpart.

- (63) a. *Tiang ngodot poh aji tiuk.*  
 I AF.cut mango with knife  
 'I cut the mango with a knife.'
- b. *Tiang ngodot-ang anake=e cenik poh aji tiuk.*  
 I AF.cut-BEN person=DEF small mango with knife  
 'I cut the mango with a knife for the child.'
- (64) a. *Tiang ngebat-in meja=ne aji taplak meja.*  
 I AF.spread-LOC table=DEF with cloth table  
 Lit. 'I spread the table with a tablecloth.'
- b. *\*Tiang ngebat-in-ang meme=ne meja=ne aji taplak meja.*  
 I AF.spread-LOC-BEN mother=DEF table=DEF with cloth table  
 Lit. 'I spread the table with a tablecloth for mother.'
- c. *?Tiang ngebat-in meja=ne aji taplak meja baang meme=ne.*<sup>16</sup>  
 I AF.spread-LOC table=DEF with cloth table GIVE mother=DEF  
 Lit. 'I spread the table with a tablecloth for mother.'

The precategorical verb HUNT (*boros*) is interesting with regard to the above discussion. As seen above, a transitive derived from the locative *-in* or the causative *-ang* suffixation cannot undergo the benefactive derivation. What is interesting about the verb *boros* 'hunt' is that (i) its *ma*-middle form takes an indefinite Object (see (65a) and the discussion on this topic in § 5.2), and (ii) the locative-based benefactive is directly built on the verb root, thereby avoiding the *-in-ang* combination.

- (65) HUNT (*boros*)
- a. *Anak=e ento ma-boros kidang.* (Does not allow a definite Object)  
 person=DEF that MID-hunt deer  
 'The man hunted (himself) deer.'
- b. *Anak=e ento moros-in kidang.* (Allows a definite Object)  
 person=DEF that AF.hunt-LOC deer  
 'The man hunted deer.'
- c. *\*Anak=e ento moros-in-ang tiang kidang.*  
 person=DEF that AF.hunt-LOC-BEN I deer  
 'The man hunted me deer.'

<sup>16</sup> The oddity of this sentence is due to the difficulty of construing the table with a tablecloth on it as a transferred entity. Compare this with (62c), where the glass of water is easily construable as a transferred entity.

- d. *Anak=e ento moros-ang tiang* (Semantic equivalent of (65c))  
 person=DEF that AF.hunt-BEN I  
*kidang.*  
 deer  
 'The man hunted me deer.'

Usually the (b) to (d) derivation above is not possible with *-in* transitive verbs.

(66) HEAT (*panas-in*)

- a. *Ia manas-in yeh=e ento.*  
 s/he AF.heat-LOC water=DEF that  
 'S/he heated the water.'
- b. \**Ia manas-in-ang tiang yeh=e ento.*  
 s/he AF.heat-LOC-BEN I water=DEF that  
 'S/he heated me the water.'
- c. \**Ia manas-ang tiang yeh=e ento.*  
 s/he AF.heat-BEN I water=DEF that  
 'S/he heated me the water.'
- d. *Ia manas-in yeh=e ento baang tiang.*  
 s/he AF.heat-LOC water=DEF that GIVE I  
 'S/he heated the water for me.'

We will look at the combinability of the *-in* locative with the *-ang* causative in Section 8 below.

## 5.2 Valency-decreasing *ma*-middle and *-a* passive

Both *ma*-middle and *-a* passive reduce syntactic valency (but see below). While the resultative *ma*-middle and the passive are similar in syntactic transitivity, they differ in semantic transitivity; the former is syntactically as well as semantically monovalent, while the latter is syntactically monovalent but semantically bivalent, allowing the possibility of encoding the Agent as an Oblique nominal. Compare the following examples:

- (67) a. *Anake ento negul jaran=e dipunyan kayu=ne.* (Active)  
 person that AF.tie horse=DEF to trunk tree=DEF  
 'The man tied the horse to the tree trunk.'
- b. *Jaran=ne ma-tegul di punyan kayu=ne (\*teken anak=e ento).* (Middle)  
 horse=DEF MID-tie to trunk tree=DEF by person=DEF  
 that  
 'The horse was tied to the tree trunk.'



- c. *Jaran=ne tegul-a di punyan kayu=ne (teken anak=e* (Passive)  
 horse=DEF tie-PASS to trunk tree=DEF by person=DEF  
*ento).*  
 that  
 ‘The horse was tied to the tree trunk (by the man).’

Together with a separate periphrastic transitive reflexive construction, Balinese morphological middle *ma*-forms cover the central middle semantics of body actions (grooming and changing body posture), translational and non-translational motions, reciprocals, resultatives, spontaneous processes, and antipassive middles (Shibatani & Artawa 2007). Many roots yielding grooming verbs are either precategorial (*sugi* ‘wash (face)’, *baseh* ‘wash (limbs)’, *ambuh* ‘wash (hair)’), or noun-based precategorials (*suah* ‘comb’, *sikat* ‘(brush) teeth’, *pupur* ‘powder (face)’, which can be used as nouns without any derivation but which must undergo a derivation in order for them to function as a verb. Similarly, many body-posture middles (*ma-linge* ‘lie face down’, *ma-sila* ‘sit down cross-legged’, *ma-jujuk* ‘stand up (straight, not bending)’, *ma-tangi* ‘stand up’), non-translational and translational motion middles (*ma-kecog* ‘jump’, *ma-lincer* ‘spin’, *ma-jalan* ‘walk’, *ma-laib* ‘run’), as well as some miscellaneous types (*ma-suryak* ‘shout’, *ma-takon* ‘ask’, *ma-bangkes* ‘sneeze’, *ma-kecuh* ‘spit’, *ma-kenyir* ‘smile very briefly’) are all precategorials, and they can be used only with the middle marker. The middle derivation here does not constitute a case of valency reduction or intransitivization since these roots are precategorial without a basic valency value.

There are, in addition, transitive grooming verbs that reduce valency via *ma*-derivation.

- (68) a. *Wayan nyukur Ketut.*  
 Wayan AF.shave Ketut  
 ‘Wayan is shaving Ketut (his head hair).’  
 b. *Wayan ma-cukur.*  
 Wayan MID-shave  
 ‘Wayan is cutting his hair.’<sup>17</sup>  
 ‘Wayan had his hair cut (by somebody).’

Other valency-reducing middle constructions are also transitive-based.

- (69) Reciprocal middle  
 a. *I Nyoman ngaplug I Ketut.*  
 ART Nyoman AF.bump ART Ketut  
 ‘Nyoman bumped into Ketut.’

<sup>17</sup> This reading is not available for some speakers.

- b. *I Nyoman lan I Ketut ma-kaplug.*  
 ART Nyoman and ART Ketut MID-bump  
 'Nyoman and Ketut bumped into each other.'

(70) Resultative middle: COVER (*rurub*)

- a. *Ia ngerurub anak=e cenik ento (aji) saput.*  
 s/he AF.cover person=DEF small that (with) blanket  
 'S/he covered the child with a blanket.'
- b. *Anak=e cenik ento ma-rurub (aji) saput.*  
 person=DEF small that MID-cover (with) blanket  
 'The child is covered with a blanket.'

(71) Antipassive middle: EAT (*daar*)

- a. *Tiang naar nasi=ne.*  
 I AF.eat rice=DEF  
 'I ate the rice.'
- b. *Tiang ma-daar (nasi).*  
 I MID-eat rice  
 (Cannot have the definite *nasi=ne* 'the rice/meal')  
 'I ate (a meal).'

A *ma*-middle form may enter the active (transitive)/antipassive (intransitive) opposition with a derived transitive construction when the root is precategorial, as below.

(72) Active/antipassive opposition based on a precategorial

- a. *-in* derived transitive  
*Ia ngeneh-in tiang.*  
 s/he AF-think-LOC I  
 'S/he loves me.'
- b. *ma*-antipassive middle  
*Ia ma-keneh teken tiang.*  
 s/he MID-think with I  
 'S/he is in love with me.'

While the valency-decreasing property of these middle constructions is clear, the nature of the syntactic transitivity of some middle expressions is not quite straightforward. That is, certain middle constructions have what looks like an Object. We have already seen instances of this in (65a) and (71b) above, where an indefinite Object may occur in *ma*-middle constructions. While it is true that a definite Object cannot occur in such a form, the definiteness restriction itself is not clear. Sometimes definite noun phrases such as *basa Ingggris* 'English language' may co-occur with a middle verb, as in the following example (73a):

- (73) a. *Anak=e cenik cenik ento m-uruk basa Inggeris.*  
 Person=DEF small small that MID-learn language English  
 'The children are learning English.'
- b. *\*Basa Inggeris m-uruk-a taken anak=e cenik cenik ento.*  
 language English MID-learn-PASS by person=DEF small small that  
 'English is learned by the children.'

As indicated by (73b), the Object of the middle verbs cannot be turned into a passive Subject. This means either that the definite Object in (73a) is not a true Object syntactically or that middles, even if they had a syntactic Object, would not undergo passivization, which is the case in other languages. Notice that a (regular) transitive Object, whether it is basic or derived via the *-ang* causative or the *-in* locative, turns into a passive Subject.

- (74) a. *Guru=ne ng-uruk-ang basa Inggeris ka anake cenik cenik ento.*  
 teacher=DEF AF-learn-CAUS language English to person small small  
 that  
 'The teacher teaches English to the children.'
- b. *Basa Inggeris uruk-ang-a ka anake cenik cenik ento (taken guru=ne).*  
 language English learn-CAUS-PASS to person small small that by  
 teacher=DEF  
 'English is taught to the children (by the teacher).'
- c. *\*Basa Inggeris suba m-uruk-ang ka anake cenik cenik ento.*  
 language English already MID-learn-CAUS to person small small that  
 'English is already taught to the children.'
- (75) a. *Guru=ne ng-uruk-in anake cenik cenik ento basa Inggeris.*  
 teacher=DEF AF-learn-LOC person small small that language English  
 'The teacher teaches the children English.'
- b. *Anake cenik cenik ento uruk-in-a basa Inggeris (taken guru=ne).*  
 person small small that learn-LOC-PASS language English by  
 teacher=DEF  
 'The children are taught English (by the teacher).'
- c. *\*Anake cenik cenik ento suba m-uruk-in basa Inggeris.*  
 person small small that already MID-learn-LOC language English  
 'The children are already taught English.'

One of the major differences between the *ma*-resultative middle and the *-a* passive is that the former is far more restricted in its applicability, as indicated by the ungrammatical forms in (74c) and (75c) above. There are two factors relevant to the formation of Balinese middle constructions. One is a morphological consideration. Like some other derivational affixes, the middle prefix *ma-* does not combine with the locative *-in* suffix. Some causative forms can be made from either the *-ang* or *-in* suffix, as in (a) example below. But only the *ma ... ang* combination, which is realized as *ma ... an*, is permitted.<sup>18</sup>

- (76) a. *-ang(/-in)* causative (AF)  
*Tiang mutih-ang/in tembok-e.*  
 I AF.white-CAUS/LOC wall-DEF  
 'I whiten the wall.'
- b. *Tembok=e suba ma-putih-an.*  
 wall=DEF already MID-white-CAUS(?)  
 'The wall is already whitened.'
- c. *\*Tembok=e suba ma-putih-in.*  
 wall=DEF already MID-white-LOC  
 'The wall is already whitened.'
- (77) a. *-in* derived transitive  
*Ia mules-in umah=ne anyar.*  
 s/he AF.sleep-LOC house=3POSS new  
 'S/he slept in his new house.'
- b. *ma*-resultative middle  
*\*Umah=ne anyar suba ma-pules-in.*  
 house=DEF new already MID-sleep-LOC  
 'His new house has already been slept in.'
- (78) a. *-ang* derived causative  
*Tiang nylampar-ang sandal ka cicing=e ento.*  
 I AF.throw-CAUS sandal to dog=DEF that  
 'I threw a sandal at the dog.'
- b. *ma*-resultative middle  
*Sandal=ne ento ma-slampar-an ka cicing=e ento.*  
 sandal=DEF that MID-throw-CAUS(?) to dog=DEF that  
 'The sandal is thrown at the dog.'

<sup>18</sup> Some younger speakers from Denpasar permit both *ma ... in* and *ma ... ang/an* forms; that is, for them (76c) and (76b) are also acceptable as well as the *ma ... ang* version of (76b). Some, on the other hand, do not even accept (76b), indicating the general resistance for *ma-* to combine with either *-ang* and *-in*.

The other restriction on the derivation of *ma*-resultatives is semantic in nature. Specifically, the subject of a *ma*-resultative middle must be in a perceptibly new state characterized in terms of a change of state or location resulting from the previous event. The best qualified resultative subjects, accordingly, are the following type:

- (79) a. Active with underived verb with GR=OBJ  
*Anake ento ngodot poh aji tiuk.*  
 person that AF.cut mango with knife  
 'The man cut/sliced the mango with a knife.'
- b. Resultative middle  
*Poh=e suba ma-godot aji tiuk.*  
 mango=DEF already MID=cut with knife  
 'The mango is already cut/sliced with a knife.'
- (80) a. Active with underived verb with FIG=OBJ  
*Anak=e ento ngejang buku di meja-ne.*  
 person=DEF that AF.put book on table=DEF  
 'The man placed the book on the table.'
- b. Resultative middle  
*Buku=ne suba ma-ejang di meja=ne.*  
 book=DEF already MID-put on table=DEF  
 'The book is already placed on the table.'

Neither of the double Objects of GIVE (*baang*) and *-ang* benefactives qualifies as an entity in a new state, nor do they turn up as the subject of *ma*-resultatives.

- (81) GIVE (*baang*)
- a. *Tiang maang anak=e cenik ento buku.*  
 I AF.give person=DEF small that book  
 'I gave the child a book.'
- b. \**Anak=e cenik ento suba ma-baang buku.*  
 person=DEF small that already MID-give book  
 'The child is already given a book.'
- c. \**Buku suba ma-baang anak=e cenik ento.*  
 book already MID-give child=DEF small that  
 'The book is already given to the child.'
- (82) a. Benefactive *-ang* ditransitive  
*Wayan meli-ang anak=e cenik ento buku.*  
 Wayan AF.buy-BEN person=DEF small that book  
 'Wayan bought the child a book.'

- b. \**Anak=e cenik ento suba ma-beli(-ang) buku.*  
 person=DEF small that already MID-buy(-BEN) book  
 ‘The child has already been bought a book.’
- c. \**Buku=ne ento suba ma-beli(-ang) anake=e cenik ento.*  
 book=DEF that already MID-buy-BEN person=DEF small that  
 Lit. ‘The book is already bought the child.’

Again, the *-a* passive is not as restricted as the *ma*-resultative, and the ungrammatical forms in (81b, c) and (82b, c) can be made passive grammatically by replacing the middle prefix with the passive suffix – see (83) and (85) below.

## 6 Object symmetry

As seen above, Balinese passivization converts a wide variety of Objects into passive Subjects. Some of the second Objects of double Object constructions, however, cannot be converted in this way.<sup>19</sup> Double Objects may be sanctioned by underived ditransitive verbs or by *-in/-ang* derivations. While some double Objects are symmetrical in the sense that both behave similarly to the monotransitive Object, some are not. The double Objects of the underived verb GIVE (*baang*) are symmetrical at least with respect to passivization and topic formation, such that both the first and the second Object can be made a passive Subject as well as the Topic of a PF construction. Passivization, therefore, provides two types of coded valency alternation, as shown below.

### (83) Lexical double Object constructions: GIVE (*baang*)

- a. *Guru=ne maang anak=e cenik ento buku=ne.* (AF)  
 teacher=DEF AF.give person=DEF small that book=DEF  
 ‘The teacher gave the child the book.’
- b. *Anak=e cenik ento baang=a buku=ne (teken guru=ne).*  
 person=DEF small that give=PASS book=DEF by teacher=DEF  
 ‘The child was given the book (by the teacher).’
- c. *Buku=ne ento baang=a anak=e cenik ento (teken guru=ne).*  
 book=DEF that give=PASS person=DEF small that by teacher=DEF  
 ‘The book was given to the child (by the teacher).’

<sup>19</sup> We avoid the terms Primary and Secondary Objects since determining which of the double Objects is syntactically primary requires a thorough investigation beyond the checking of the syntactic status of the two relevant Objects against a couple of syntactic phenomena. We use the terms “first Object” and “second Object” in reference to their order of occurrence in double Object constructions.

Double Object constructions similar to GIVE in meaning, such as *-in* derived SEND (*irim-in*) and SHOW (*edeng-in*), as well as benefactive double Object constructions, have symmetrical Objects.

(84) *-in* derived double Object construction: SHOW (precategorial: *edeng*)

- a. *Wayan ng-edeng-in Made poto=ne.*  
Wayan AF-show-LOC Made photo=DEF  
'Wayan showed Made the photo.'
- b. *Made edeng-in-a poto=ne (teken Wayan).*  
Made show-LOC-PASS photo=DEF (by Wayan)  
'Made was shown the photo (by Wayan).'
- c. *Poto=ne edeng-in-a Made (teken Wayan).*  
photo=DEF show-LOC-PASS Made (by Wayan)  
Lit. 'The photo was shown Made (by Wayan).'

(85) Benefactive double Object constructions

- a. *Guru=ne beli-ang Made buku=ne ene.*  
teacher=DEF buy-BEN Made book=DEF this  
'The teacher bought Made this book.'
- b. *Made beli-ang-a buku=ne ene (teken guru=ne).*  
Made buy-BEN-PASS book=DEF this (by teacher=DEF)  
'Made was bought this book (by the teacher).'
- c. *Buku=ne ene beli-ang-a Made (tekan guru=ne).*  
book=DEF this buy-BEN-PASS Made (by teacher=DEF)  
Lit. 'This book was bought Made (by the teacher).'

In contrast, the second Objects of many other double Object constructions involving *-in* derived verbs do not behave like the first Object, showing the non-symmetric nature of the double Objects involved.

(86) POUR (*turuh*)

- a. *Made nuruh-in lumur=e yeh.*  
Made AF.pour-LOC glass=DEF water  
Lit. 'Made poured the glass (with) water.'
- b. *Lumur=e ento turuh-in-a yeh (teken Made).*  
glass=DEF that pour-LOC-PASS water (by Made)  
Lit. 'The glass was poured water (by Made).'
- c. *\*Yeh=e turuh-in-a lumur=e (teken Made).*  
water=DEF pour-LOC-PASS glass=DEF (by Made)  
'The water was poured (into) the glass (by Made).'

(87) HIDE (*engkeb*)

- a. *Anak=e luh ento ng-engkeb-in guru=ne buku=n*  
 person=DEF female that AF-hide-LOC teacher=DEF book=3.POSS  
*dane=ne.*  
 dear/he=DEF  
 Lit. 'The girl hid the teacher his book.'
- b. *Guru=ne engkeb-in-a buku=n dane=ne (teken*  
 teacher=DEF hide-LOC-PASS book=3.POSS dear/he=DEF by  
*anak=e luh ento).*  
 person=DEF female that  
 'The teacher had his book hidden by the girl.'
- c. *\*Buku=n dane=ne engkeb-in-a guru=ne (teken*  
 book=3.POSS dear/he=DEF hide-LOC-PASS teacher=DEF by  
*anak=e luh ento).*  
 person=DEF female that  
 'His book was hidden (from) the teacher by the girl.'

As with many other phenomena, object symmetry is not entirely clear-cut. The -in double Object construction with STEAL (*paling*) exhibits the following pattern, where the status of the second Object is unclear with regard to passivization:

(88) STEAL (*paling*)

- a. *Anak=e ento nge-maling-in guru=ne pipis spp.*  
 person=DEF that AF-steal-LOC teacher=DEF money school  
 Lit. 'The man stole the teacher the school money.'
- b. *Guru=ne paling-in-a pipis spp (teken anak=e ento).*  
 teacher=DEF steal-LOC-PASS money school (by person=DEF that)  
 'The teacher had the school money stolen (by the man).'
- c. *?Pipis spp paling-in-a guru=ne (teken anak=e ento.*  
 money school steal-LOC-PASS teacher=DEF (by person=DEF that)  
 Lit. 'The school money was stolen the teacher (by the man).'

## 7 Intransitive verbs

On morphological grounds, basic (underived) Balinese intransitive verbs are divided into two classes: (i) those calling for the PF zero-marking and (ii) those taking the AF nasal-marking. While there are several eventive verbs such as *ulung* 'fall' and *teka* 'come' that are PF zero-marking, PF zero-marking verbs are generally



stative predicates denoting uncontrollable states of affairs, and the AF nasal-marked verbs are largely activity verbs, suggesting split intransitivity (Arka 2003).<sup>20</sup> We shall, accordingly, consider the subject of AF-marked intransitives to be Agent (A), or Agent/Theme (A/TH) when motion is involved, and that of PF-marked intransitives to bear the Theme (TH) role.

(89) PF (Ø-prefix) monovalent predicates

- a. *Anak=e cenik ento seduk.*  
 person=DEF small that PF.hungry  
 'The boy is hungry.'
- b. *Tembok=e putih.*  
 wall-DEF PF.white  
 'The wall is white.'
- c. *Raket tiang=e usak.*  
 racket I=POSS PF.broken  
 'My racket is broken.'

(90) AF (N-prefix) monovalent predicates

- a. *Anak-e cenik ento negak di bataran=e.*  
 person=DEF small that AF.sit on ground=DEF  
 'The child sits on the ground.'
- b. *Anak=e cenik ento nongos di desa=ne.*  
 person=DEF small that AF.live in village=DEF  
 'The child lives in the village.'
- c. *Anak=e cenik ento ng-eling.*  
 person=DEF small that AF-cry  
 'The child cried.'

The intransitive verbs in the sample verb list group in the following way on the basis of the marking they take.

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**20** These intransitives are all non-precategorial. A similar intransitive split is seen in Philippine languages as well (see Shibatani 1988). Arka (2003) gives a list of verbs showing the relevant meaning contrast between the PF zero form and the AF nasal form; e.g., *joh* 'far': *nge-joh* 'make oneself far', *enceh-enceh* 'involuntarily urinate repeatedly': *ng-eceh* 'urinate'. We know that the nasal marking in these intransitive verbs is the same AF marking that occurs in transitive verbs from the fact that the intransitive nasal marking remains the same when intransitive verbs are transitivized via *-ang* derivation, and also from the fact that it is lost in PF transitive form (see (94)). Similarly, the PF intransitive verb has the same zero marking as in transitive PF verb forms (cf. (63a) and (93c)).

## (91) Ø-marked

COME (*teka*), LAUGH (*kedek*), SLEEP (*pules*), FALL (*ulung*), BURN (*puun*),  
 BREAK/BROKEN (*belah*), DRY(*tuh*), DIE/DEAD (*mati*), HUNGRY (*seduk*), SAD  
 (*sebet*), FEEL PAIN (*sakit*), LIKE (*demen*), FRIGHTENED (*takut*)

(92) N-marked<sup>21</sup>

SIT (*negak*), CLIMB (*menek*), ROLL (*ngelilik*), LIVE (*nongos*), APPEAR (*ngenah*),  
 FEEL COLD (*ngedged*), and all other intransitives in the sample list.

Many of these basic monovalent verbs undergo either *-ang* or *-in* derivation, or both, and become transitive, exhibiting the AF/PF alternation. Observe the alternation in the initial consonant between the transitive AF form (93b) and the transitive PF form (93c), which has the same zero marking as the basic PF intransitive form (93a).

## (93) Basic PF intransitive with a TH subject

a. *Tembok-e putih.*

wall-DEF PF.white

'The wall is white.'

b. *Tiang putih-ang tembok-e.*

(AF)

I AF.white-CAUS wall-DEF

'I whitened the wall.'

c. *Tembok-e putih-ang tiang.*

(PF)

wall-DEF PF.white-CAUS I

'I whitened the wall.'

## (94) Basic AF intransitive with an A/TH subject

a. *Tiang negak di dampar=e.*

I AF.sit on bench=DEF

'I sit on the bench.'

b. *Cai negak-ang tiang di dampar=e.*

(AF)

you AF.sit-CAUS I on bench=DEF

'You sat me on the bench.'

c. *Tiang tegak-ang cai di dampar=e.*

(PF)

I PF.sit-CAUS you on bench=DEF

'You sat me on the bench.'

<sup>21</sup> The root forms of these all have an oral/zero initial consonant, which reveals itself when the forms are used in PF of the derived transitive constructions.

- d. *Tiang negak-in dampar=e.* (AF)  
 I AF.sit-LOC bench=DEF  
 'I sit on the bench.'
- e. *Dampar=e tegak-in tiang.* (PF)  
 bench=DEF PF.sit-LOC I  
 'I sit on the bench.'

Besides these basic (underived) intransitive verbs, there are two other types of derived intransitive verbs. They are: (i) *ma*-derived middles, discussed earlier in Section 6, and (ii) reduplicated intransitive verbs, which may be derived from pre-categorial roots like JUMP (*kejong-kejong* < *kejong*), from the roots of nasal-marked intransitives like ROLL (*gelilik-gelilik* < *ngelilik*), or from zero-marked intransitives like COME (*teka-teka* < *teka*). These reduplicated forms, which do not show the AF/PF/MID marking contrast, may co-exist with basic or *ma*-derived forms, as below.

(95) Basic intransitive: ROLL (*gelilik*)

- a. *Bola=ne ngelilik.*  
 ball=DEF AF.roll  
 'The ball rolled.'
- b. *Bola=ne gelilik-gelilik.*  
 ball=DEF roll-roll  
 'The ball is rolling.'

(96) Precategorial: JUMP (*kejong*)

- a. *Anak=e cenik ento ma-kejong.*  
 person-DEF small that MID-jump  
 'The child jumped/jumps.'
- b. *Anak=w cenik ento kejong-kejong.*  
 person-DEF small that jump-jump  
 'The child is/was jumping.'

In our discussion of the transitive/ditransitive alternation earlier, we noted that in Balinese the notion of valency increase is difficult to maintain consistently with the derivational processes, partly because of the presence of pre-categorial verbs, which do not have a basic valency value, and partly because the relevant derivation may simply alter the alignment patterns without affecting the number of required nominal expressions. A similar problem is seen with some semantically bi-valent but syntactically intransitive verbs which require two nominal expressions in completing a predication but which code the second nominal as an OBL. Compare example (97) and (98):

- (97) Bivalent transitive verb  
*Tiang nyepak cicing=e.*  
 I AF.kick dog=DEF  
 'I kicked the dog.'
- (98) Bivalent intransitive verb: DISTRUST (*sangsaya*)  
 a. *Tiang sangsaya **teken** anak=e ento.*  
 I PF.distrust with person=DEF that  
 'I distrust that man.'  
 b. *Tiang nyangsaya-in anak=e ento.*  
 I AF.distrust-LOC person=DEF that  
 'I distrust that man.'

As shown in (98b) above, the *-in* derivation makes DISTRUST (*sangsaya*) syntactically transitive, but without increasing valency (since the basic form of the verb is semantically bivalent, requiring two arguments). This contrasts with the valency-increasing transitivity by the *-in* derivation shown below.

- (99) Monovalent intransitive: STUDY (*plajah*)  
 a. *Tiang mlajah.*  
 I AF.study  
 'I am studying.'  
 b. *Tiang mlajah-in basa Inggeris.*  
 I AF.study-LOC language English  
 'I am studying English.'

On the basis of the realization pattern of the Oblique expression marked *teken* 'with/about' seen in (98a), we can distinguish several classes of (syntactically) intransitive verbs.

## 7.1 Basic monovalent disallowing a *teken* OBL

This class of intransitive verbs does not permit an Oblique nominal marked *teken* 'with' and shows the following valency alternation pattern:

### Basic: Intransitive (\**teken* OBL)

**-in derived: Transitive**

**-ang derived: Transitive**

- (100) CRY (*eling*)  
 a. *Tiang ng-eling (\*teken Ketut).*  
 I AF-cry with Ketut  
 'I cried.'

- b. *Tiang ng-eling-in Ketut.*  
 I AF-cry-LOC Ketut  
 ‘I cry over/about Ketut (because e.g., he is leaving / he is suffering).’
- c. *Ketut ng-eling-ang tiang.*  
 Ketut AF-cry-CAUS I  
 ‘Ketut made me cry.’

There do not seem to be many verbs that disallow a *teken* OBL nominal but that can introduce an OBJ via *-in/-ang* derivation.

## 7.2 Basic monovalent intransitive verbs with an optional *teken* OBL

These verbs allow an optional *teken* OBL nominal, displaying the following alternation pattern:

**Basic: Intransitive (*teken* OBL)**

**-in derived: Transitive**

**-ang derived: Transitive**

ANGRY (*pedih*), CRAZY ABOUT (*buduh*), APPEAR (*enah*)

(101) ANGRY (*pedih*)

- a. *Nadi pedih (teken Ketut).*  
 Nadi PF.angry (with Ketut)  
 ‘Nadi is angry (at Ketut).’
- b. *Nadi medih-in Ketut.*  
 Nadi AF.angry-LOC Ketut  
 ‘Nadi is angry at Ketut / Nadi scolded Ketut.’
- c. *Ketut medih-ang Nadi.*  
 Ketut AF.angry-CAUS Nadi  
 ‘Ketut made Nadi angry.’

## 7.3 Basic bivalent intransitive verbs with an obligatory *teken* OBL

These verbs are semantically bivalent, requiring a *teken* Oblique nominal, but are syntactically intransitive, and they display the following alternation pattern:

**Basic: Intransitive \*(*teken* OBL)**

**-in derived: Transitive**

**(-ang derived: Transitive)**

In addition to DISTRUST (*sangsaya*), illustrated above in (98) above, LIKE (*demen*) and a few others belong to this class. LIKE (*demen*) is odd in that it does not nasalize the initial consonant under *-in* conversion and the derived *-in* form only accepts an indefinite Object, similar to *ma*-middles. Many of these verbs, e.g., LOVE (*tresna*) and BELIEVE (*percaya*), do not allow *-ang* forms, and even those that do have irregular meanings, as in the cases of REMEMBER (*ingat*) and HATE (*gedeg*).

(102) REMEMBER (*ingat*)

- a. *Tiang ingat                teken anak=e       ento.*  
    I       PF.remember with person=DEF that  
    'I remember the man.'
- b. *Tiang ng-ingat-in       anak=e       ento.*  
    I       AF-remember-LOC person=DEF that  
    1. 'I recognize the man.'  
    2. 'I reminded the man (to do something).'
- c. *Tiang ng-ingat-ang       anak=e       ento.*  
    I       AF-remember-CAUS person=DEF that  
    1. 'I made the man remember.'  
    2. 'I reminded him (to do something/no to do something).'

(103) HATE (*gedeg*)

- a. *Tiang gedeg   teken anak=e       luh       ento.*  
    I       PF.hate with person=DEF female that  
    'I hate that girl.'
- b. *Tiang ngedeg-in   anak=e       luh       ento.*  
    I       AF.hate-LOC person=DEF female that  
    'I hate that girl.'
- c. *Tiang ngedeg-ang   anak=e       luh       ento.*  
    I       AF.hate-CAUS person=DEF female that  
    'I am angry at that girl.'

While the verbs allowing the classification above in terms of a *teken* Oblique are mostly psychological/cognitive verbs, other intransitive verbs can also be classified on the basis of the realization pattern of a locational Oblique nominal. The following expemplify the two patterns – one involving a verb that calls for an obligatory locational Oblique (104) and the other with a verb taking an optional locational Oblique (105):

(104) CLIMB (*penek*)<sup>22</sup>

- a. *Anake cenik ento menek ka gedebeg=e.*  
 person small that AF.climb to cart=DEF  
 'The child climbed onto the cart.'
- b. *Anake cenik ento menek-in gedebeg=e.*  
 person small that AF.climb-LOC cart=DEF  
 'The child climbed onto the cart.'
- c. *Tiang menek-ang anake cenik ento ka gedebeg=e.*  
 I climb-CAUS person small that to cart=DEF  
 'I made the child climb onto the cart.'

(105) APPEAR (*enah*)

- a. *Anake cenik ento ng-enah.*  
 person small that AF-appear  
 'The child is visible.'
- b. *Tiang ng-enah ka anak=e cenik ento.*  
 I AF-appear to person=DEF small that  
 'I became visible to the child.' / 'I emerged in front of the child.'
- c. *Tiang ng-enah-in anak=e cenik ento.*  
 I AF-appear-LOC person=DEF small that  
 Lit. 'I appeared to the child.' / 'I became visible to the child.'
- d. *Tiang nge-nah-ang anak=e cenik ento.*  
 I AF-appear-CAUS person=DEF small that  
 'I made the child visible.'

## 7.4 Precategorial intransitives

Many precategorial roots yield intransitive verbs via *ma*-derivation, exhibiting the following pattern, where *ma*-forms fill the gap in the basic intransitive repertoire. This is actually the complete paradigm, including the intransitive version, for the transitive/ditransitive alternation pattern of precategorial roots that we saw earlier in § 4.6 and § 4.7. Examples (106)–(109) below show the triad pattern, consisting of a *ma*-derived middle intransitive, an *-in* derived transitive, and an *-ang* derived transitive form. As can also be seen in the following examples, the derivation patterns and the semantics involved are irregular with some of these verbs.

### \*Basic: Intransitive

### *ma*-derived: Intransitive

<sup>22</sup> This verb also allows a transitive version without the preposition *ka*.

**-in derived: Transitive****-ang derived: Transitive**LEARN/TEACH (*uruk*), DRESS (*payas*), COMB (*suah*),THINK ABOUT (*keneh*), SWEAR (*sumpah*)(106) GET DRESSED (*payas*)

- a. Precategorical: no basic intransitive/transitive form

\**Anak=e cenik ento mayas.*

person=DEF small that AF.dress

'The child dressed.'

- b.
- ma*
- derived monovalent intransitive

*Anak=e cenik ento ma-payas.*

person=DEF small that MID-dress

'The child dressed.'

- c.
- in*
- derived transitive

*Tiang mayas-in anak=e cenik ento baju.*

I AF.dress-LOC person=DEF small that shirt

Lit. 'I dressed the child (with) a shirt.'

- d.
- ang*
- derived transitive

*Tiang mayas-ang baju=ne ka anak=e cenik ento.*

I AF.dress-CAUS shirt=DEF to person=DEF small that

'I put the shirt on the child.'

(107) ASK ABOUT (*takon*)

- a. Precategorical

\**I Made nakon teken tiang unduk sekolahan.*

I Made AF.ask with I about school

'I Made asked me about the school.'

- b.
- ma*
- derived intransitive

*I Made ma-takon teken tiang unduk sekolahan.*

I Made MID-ask with I about school

'I Made asked me about the school.'

- c.
- in*
- derived transitive

*I Made nakon-in tiang unduk sekolahan.*

I Made AF.ask-LOC I about school

'I Made asked me about the school.'

- d.
- ang*
- derived transitive

*I Made nakon-ang (unduk) sekolahan teken/ka tiang.*

I Made AF.ask-CAUS (about) school with/to I

'I Made asked me about the school.'



(108) SWEAR (*sumpah*)

## a. Precategorical

*\*Ia nyumpah.*

he AF.swear

'He is swearing.'

b. *ma*-derived intransitive*Ia ma-sumpah unduk Nyoman teken/ka tiang.*

he MID-swear about Nyoman with/to I

'He is swearing to me about Nyoman.'

c. *-in* derived transitive*Ia nyumpah-in tiang (\*unduk Nyoman).*

he AF.swear-LOC I (about Nyoman)

'He is swearing to me.'

d. *-ang* derived transitive*Ia nyumpah-ang Nyoman teken tiang.*

he AF.swear-CAUS Nyoman with I

1. 'He swears about Nyoman to me.'

2. 'He makes Nyoman swear to me.'

(109) THINK ABOUT (*keneh*)

## a. Precategorical

*\*Ia ngeneh teken tiang.*

s/he AF.think with I

'S/he is in love with me.'

b. *ma*-derived bivalent intransitive*Ia ma-keneh teken tiang.*

s/he MID-think with I

'S/he is in love with me.'

c. *-in* derived transitive*Ia ngeneh-in tiang.*

s/he AF-think-LOC I

'S/he loves me.'

d. *-ang* derived transitive*Ia ngeneh-ang tiang.*

s/he AF.think-CAUS I

'S/he loves me.'

Most of these precategorical roots have both *ma*-middle intransitive and *-ang* causative transitive forms, but some lack *-in* locative forms largely for the reason

discussed in the next section. In other words, a few items are like COUGH (*kokohan*) in that they are usable only as *ma*-middle intransitives.

(110) COUGH (*kokohan*)

*Anak-e cenik ento ma-kokohan.*

person=DEF small that MID-cough

‘The child coughed.’

## 8 Semantic and morphological restrictions on valency-increasing processes

As is clear from the previous discussions, two productive valency-increasing operations allowing coded valency alternation in Balinese are the *-in* locative applicative and the *-ang* causativization. Both processes, however, are semantically constrained. As for the locative applicative, the Ground expression to be placed in the Object position must be construable as something highly interactive with the action, such as being fully affected or being integral and connected to the denoted action in terms of a function conventionally defined. Observe the following contrast between grammatical and ungrammatical forms:

(111) SIT (*tegak*): *di*-marked location

a. *Ia negak di kursi=ne.*

s/he AF.sit in chair=DEF

‘S/he sat in the chair.’

b. *Ia negak-in kursi=ne.*

s/he AF.sit-LOC chair=DEF

‘S/he sat in the chair / S/he occupies the chair – a professional post.’

(112) a. *Ia negak di taman=e.*

s/he AF.sit in garden=DEF

‘S/he sat in the garden.’

b. *\*Ia negak-in taman=DEF.*

s/he AF.sit-LOC garden=DEF

‘S/he sat in the garden.’

(113) COME (*teka*): *ka*-marked goal location:

a. *Ia teka ka rumah sakit (ng-adep nasi/bakal ma-preksa gigi).*

s/he come to house sick AF-sell food/to MID-exam tooth

‘S/he came to the hospital (to sell food/to get his/her teeth examined).’

- b. *Ia neka-in rumah sakit (?ng-ade<sup>p</sup> nasi/bakal ma-preksa gigi).*  
 s/he AF.come-LOC house sick AF-sell food/to MID-exam tooth  
 'S/he visited the hospital (to sell food/to get his/her teeth examined).'
- (114) a. *Ia teka ka Bali jani.*  
 s/he PF.come to Bali today  
 'S/he came to Bali today.'
- b. *\*Ia neka-in Bali jani.*  
 s/he AF.come-LOC Bali today  
 'S/he came to Bali today.'
- (115) STEAL (*maling*): *uli*-marked source location
- a. *Tiang nge-maling pipis uli guru=ne.*  
 I AF-steal money from teacher=DEF  
 'I stole money from the teacher.'
- b. *Tiang nge-maling-in guru=ne pipis.*  
 I AF-steal-LOC teacher=DEF money  
 Lit. 'I stole the teacher money.'
- (116) GET (*baan*): *uli*-marked source location
- a. *Anak luh ento maan buku ento uli guru=ne.*  
 person female that AF.get book that (from teacher=DEF)  
 'The girl got a book from the teacher.'
- b. *\*Anak luh ento maan-in guru=ne buku.*  
 person female that AF.get teacher=DEF book  
 'The girl got a book from the teacher.'

Since *ma*-middles do not generally allow a definite object, they do not undergo the *-in* locative derivation, which creates a transitive structure. For example, while the lexical/underived middle *tegak* 'sit' can undergo *-in* derivation, the *ma*-derived middle verb *ma-sila* 'sit cross-legged' cannot.

- (117) SIT (*tegak*)
- a. *Ia negak di kasur=e.*  
 s/he AF.sit on bed=DEF  
 'S/he sat on the bed.'
- b. *Ia negak-in kasur=e.*  
 s/he AF.sit-LOC bed=DEF  
 'S/he sat on the bed.'

(118) SIT CROSS-LEGGED (*ma-silla*)

- a. *Ia ma-sila di kasur=e.*  
 s/he MID-sit.cross-legged on bed=DEF  
 'S/he sat cross-legged on the bed.'
- b. \**Ia ma-sila-in kasur=e.*  
 s/he MID-sit.cross-legged bed=DEF  
 'S/he sat cross-legged on the bed.'

The *-ang* causativization is also restricted both semantically and morphologically. The morphological causative with *-ang* typically requires a causee bearing a Theme role construed as a Figure in the Figure-Ground framing of an event. This applies to both intransitive-based and transitive-based constructions, as below.

(119) WHITE (*putih*)

- a. *Tembok=e putih.*  
 wall=DEF white  
 'The wall is white.'
- b. *Tiang putih-ang tembok=e.*  
 I white-CAUS wall=DEF  
 'I whitened the wall.'

(120) STAB (*tusuk*)

- a. *Tiang nusuk anak=e ento aji temutik.*  
 I AF.stab person=DEF that with knife  
 'I stabbed the man with a knife.'
- b. *Tiang nusuk-ang temutik ka baong anak=e ento.*  
 I AF.stab-CAUS knife to neck person=DEF that  
 Lit. 'I caused the knife to stab to the neck of that person.'

Where the causee of an *-ang* causative is understood to be agentive, the causation involved is of the sociative type, where the causer is directly involved in and is totally in control of the activity denoted (Shibatani & Pardeshi 2002). In (121b) below, the interpretation is either that the causer also ran along with the girl holding her hand and assisting her or that the causer carried the girl. (122b) expresses a situation where the causer brought the causee's face closer to the younger sibling so that s/he may be able to kiss him/her (Arka 2003: 187). "Normal" indirect causation with an agentive causee calls for a periphrastic construction with the causative verb derived from the verb *ngae* 'make', as in (122c).

(121) RUN (*palaib*)

- a. *Anak=e luh ento malaib.*  
 person=DEF female that AF.run  
 'The girl ran.'

- b. *Tiang malaib-ang anak=e luh ento.*  
 I AF.run-CAUS person=DEF female that  
 'I made the girl run / I carried the girl and ran / I ran carrying the girl.'

(122) KISS (*diman*)

- a. *Ia niman adi=ne.*  
 s/he AF.kiss younger.sibling=3.POSS  
 'S/he kissed his/her younger sibling.'
- b. *Tiang niman-ang ia sig adi=ne.*  
 I AF.kiss-CAUS s/he to younger.sibling=3.POSS  
 'I made him/her kiss his/her younger sibling.'  
 (Arka 2003: 187)
- c. *Tiang ngae ia niman adi=ne.*  
 I AF.CAUS s/he AF.kiss younger.sibling=DEF  
 'I made him/her kiss his/her younger sibling.'

The *-ang* derivation is restricted morphologically as well, such that it cannot apply to an *-in* derived transitive structure even if the valency structure itself satisfies the condition for it.

(123) PUT (*ejang*)

- a. Basic causative pattern: FIG=OBJ (> GR=OBL)  
*Anak=e ento ng-ejang buku=ne (di meja=ne).*  
 person=DEF that AF-put book=DEF on table=DEF  
 'The man put (down) the book (on the table).'
- b. *-in* derived locative pattern: GR=OBJ > FIG=OBJ/OBL  
*Anak=e ento ng-ejang-in meja=ne (aji) buku.*  
 person=DEF that AF.put-LOC table=DEF (with) book  
 Lit. 'The man put the table with the book.'
- c. *-ang* derived pattern: FIG=OBJ > GR=OBL  
 \**Anak=e ento ng-ejang-in-ang buku ka/di meja=ne.*  
 person=DEF that AF.put-LOC-CAUS book to/on table=DEF  
 'The man put the book on the table.' /  
 Lit. 'The man caused the book to put to/on the table.'

The *-ang* derived form in (123c) may strike one as superfluous (and accordingly ungrammatical) since that entails a similar alignment pattern with the basic form of the verb PUT (*ejang*), as in (123a). But the *-ang* derivation typically creates a valency pattern in which an OBL Ground is obligatory. *-ang* derivation here is thus functional, as the comparison between (123a) and (123c) indicates (cf. earlier exam-

ples (8) and (11)). The ungrammaticality of (123c) is again due to the ban against tampering with the valency pattern fixed by a previous derivational process.

The *-ang* causative derivation cannot apply to *-ang* derived causatives either.

(124) BREAK (*belah-ang*)

(GR=OBJ (> FIG=OBL))

- a. *Tiang melah-ang jendela aji tungked=e.*

I AF.break-CAUS window with stick=DEF

'I broke the window with a stick.'

(FIG=OBJ > GR=OBL)

- b. \**Tiang melah-ang-ang tungked=e ka jendela.*<sup>23</sup>

I AF.break-CAUS-CAUS stick=DEF to window

'I broke the window with a stick.' /

Lit. 'I caused the stick to break the window.'

Compare the above with the following pattern, where the FIG=OBJ (> FIG=OBL) argument pattern by an underived basic verb is shown to undergo *-ang* causativization.

(125) TOUCH (*tundik*)

- a. *Anak=e ento nundik lelipi=ne (aji tungked=e).*

person=DEF that AF.touch snake=DEF with stick=DEF

'The man touched the snake with the stick.'

- b. *Anak=e ento nundik-ang tungked=e ka lelipi=ne.*

person=DEF that AF.touch-CAUS stick=DEF to snake=DEF

'The man touched the snake with the stick.' /

Lit. 'The man caused the stick to touch the snake.'

## 9 Summary and theoretical implications

A major Balinese valency phenomenon revolves around argument coding in Object position. Non-agentive, secondary event participants are divided into two groups according to the Figure/Ground distinction. Instrument, Theme, Causee-Theme, and Beneficiary-Theme are grouped as Figure, while locations of various types including a human recipient as well as the contact point of a surface-contact action are grouped as Ground. It is the alternation between the Figure=Object and the

<sup>23</sup> The ungrammaticality of this sentence may be due to the possibility that the derived verb *melah-ang* 'break' does not count as a surface contact verb.

Ground=Object alignment that largely determines the valency patterns underlying the classification of transitive and ditransitive verbs.

Except for the verbs GIVE (*baang*) and FILL (*isinin*), the alternation patterns in Balinese are morphologically coded in the verb, such that the locative *-in* suffix aligns a Ground expression with the Object, and the causative *-ang* suffix aligns a Figure expression with the Object, effecting the two alternative alignment patterns corresponding to *John loaded the truck with hay* (GR=OBJ pattern) and *John loaded the hay onto the truck* (FIG=OBJ pattern). When the basic (underived) verb is Ground-oriented and countenances the GR=OBJ pattern as a non-coded alternant, the *-ang* derivation typically supplies the FIG=OBJ pattern as a coded alternant. Surface-contact verbs CUT (*godot*), TOUCH (*tundik*), HIT/BEAT (*lempag*), and COVER (*rurub*) are all Ground-oriented. On the other hand, caused-motion verbs such as PUT (*ejang*), SEND (*kirim*), TAKE (*jemak*), STEAL (*paling*), etc. are Figure-oriented, and the basic verb form shows the FIG=OBJ pattern, which alternates with the GR=OBJ pattern through *-in* derivation. Fixing verbs, e.g., TIE (*tegul*), NAIL (*pacek*), SMEAR (*uap*), have neutral orientation and allow both GR=OBJ and FIG=OBJ patterns without derivation. But unlike GIVE (*baang*) and FILL (*isinin*), these verbs also allow coded valency patterns through *-in* and *-ang* derivations. The two versions of the GR=OBJ construction, one uncoded (e.g., “TIE (*negul*) the horse (with a rope)”) and the other, the *-in* coded pattern (e.g., “TIE (*negul-in*) the tree trunk with a horse”), are different in valency value in that, while in the former, the instrumental Figure expression is optional, both the Ground expression (tree trunk) and the Figure expression (horse) are obligatory in the latter. The same observation holds for the two versions of the FIG=OBJ construction. In the uncoded version (e.g., “TIE (*negul*) the horse (to the tree trunk)”), the Ground expression is optional, whereas in the *-ang* derived form (e.g., “TIE (*negul-ang*) the rope to the horse”), both the Figure expression (rope) and the Ground expression (horse) are obligatory.

Similar valency-increasing properties of *-in* and *-ang* derivations are observed between underived intransitive constructions and the transitive counterparts resulting from these derivations. These observations about the *-in* locative applicative and the *-ang* causative are consistent with the general understanding about them as valency-increasing processes. Balinese, however, presents two cases where these processes cannot be characterized as valency-increasing. One is where a Ground expression is obligatory as in “SEND (*ngirim*) the books to the school”. The *-in* derived form aligns the Ground expression with the Object and yields a form like “SEND (*ngirim-in*) the school the book” without increasing valency. This represents the case of argument realignment without valency increase.

More unusual is the existence of so-called precategorial roots that do not have a basic valency value and that need to be derived in order to function as a verb. These may undergo *ma*-middle, *-in* locative, or *-ang* causative derivation (as well as reduplication for some). The *ma*-middle derivation typically reduces valency. However, with precategorials, one cannot really speak of valency reduction for this

or valency increase for *-in* and *-ang* derivations because precategorials by definition do not have a basic valency value. Yet, even with precategorials, *ma*-derivation derives various types of intransitive middle expressions, and *-in/-ang* derivations align a Ground expression with the Object and the Figure expression with the Object, respectively; e.g., *ma-uruk* ‘to learn’, *nguruk-in* ‘teach’ children (English), *nguruk-ang* ‘teach’ English (to children).

What Balinese shows with these two cases where the *-in* locative applicative and the *-ang* causative do not increase valency is that the essential function of these processes is that of aligning a Ground or a Figure expression with the Object rather than what our customary characterization of them as valency-increasing processes suggests.<sup>24</sup> The valency-increasing property associated with these processes is simply a consequence or a side effect of their fundamental function; when there is a Ground or Figure argument in the specified valency frame of the verb root, *-in/-ang* derivations align them with the Object, and if neither of them is countenanced by the verb root, they introduce them in Object position, regardless of whether it results in actual valency increase or not.

On the basis of the following kind of pattern, causatives are usually understood as introducing a new agent/Subject.

- (126) a. *Lelipi=ne mati.*  
 snake=DEF dead  
 ‘The snake is dead.’
- b. *Anak=e ento nge-mati-ang lelipi=ne.*  
 person=DEF that AF-dead-CAUS snake=DEF  
 ‘The man killed the snake.’
- (127) a. *Anak=e cenik ento menek ka gedebeg=e.*  
 person=DEF small that AF.climb to cart=DEF  
 ‘The child climbed onto the cart.’
- b. *Ia menek-ang anak=e cenik ento ka gedebeg=e.*  
 s/he AF-CAUS person=DEF small that to cart=DEF  
 ‘He made the child climb onto the cart.’

But we have argued above that the *-ang* causative derivation places a causee Figure in Object position as if it were a causee that was being introduced. Indeed, the pattern below suggests this.

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<sup>24</sup> Our characterization of the functions of applicativization and causativization must be generalized in order to accommodate those languages that may not have the grammatical relation Object, as in ergative-alignment languages.



- (128) a. *Ia menek-in gedebeg=e somi.*  
 s/he AF.load-LOC cart=DEF hay  
 'S/he loaded the cart with hay.'
- b. *Ia menek-ang somi=ne ka gedebeg=e.*  
 s/he AF.load-CAUS hay=DEF to cart=DEF  
 'S/he loaded the hay onto the cart.'

Moreover, (128b) has no corresponding non-causative intransitive like (127a); the following is not possible.

- (129)\* *Somi=ne menek ka gedebeg=e.*  
 hay=DEF AF.climb to cart=DEF.  
 Lit. 'The hay climbed onto the cart.'

Actually the Subject of (127a), which bears the A/TH (Agent/Theme) double roles, and does not semantically correspond to the causee Object in (127b), which bears only the Theme role. It is only when there is a strict thematic correspondence between the Subject of an intransitive sentence and the causee Object of a causative expression, as in (126a) and (126b), that we can speak of introducing a causer in the formation of direct causatives of the type that Balinese *-ang* causatives represent.

We have also suggested that the causative-instrumental applicative and the causative-benefactive polysemy, also observed in a fair number of other languages, should be analyzed as resulting historically from the direct causative construal of causative structures, where a parellism was drawn between the HAVE-CAUS and BUY-CAUS lexicalization patterns: (i-a) *I give* (HAVE-CAUS) *him a book* / (i-b) *I buy* (BUY-CAUS) *him a book* vs. (ii-a) *I have-CAUS him a book* / (ii-b) *I buy-CAUS him a book*. While the Balinese verb *baang* 'give' opts for the (i-a) lexicalization pattern, its benefactive applicatives are based on the reanalysis of the (ii-b) pattern effected by direct causative construal of the relevant structure; e.g., a direct causative situation of making someone buy a book can be brought about by buying a book and giving it to the person in question.

There is an interesting debate going on regarding whether the kind of alternation shown by Balinese *-in* and *-ang* forms involves derivation at all. The problem is acute in a case like English, where the relevant alternation is not accompanied by morphological derivation (see Iwata (2008) on the controversy over the derivational vs. non-derivational accounts). Balinese presents a clear case where the direction of derivation is indicated morphologically. Apart from the precategorical roots, which show a bipolar derivation pattern, Figure-oriented verbs (caused-motion verbs) are morphologically unmarked for the FIG=OBJ alignment pattern, and they realize the alternate GR=OBJ pattern through *-in* derivation. Surface-contact Ground-oriented verbs, on the other hand, are unmarked in realizing the GR=OBJ

pattern, while they must undergo *-ang* derivation in realizing the alternate FIG=OBJ pattern. In ascertaining the role of derivation in the alignment alternations of this type, it is necessary that we look into both cognitive and functional underpinnings of morphological derivation. Crosslinguistic investigations of the markedness patterns and examination of the usage patterns of alternating forms provide a useful avenue of inquiry into this problem.<sup>25</sup>

Balinese presents some clear evidence that morphological derivation matters. For example, in contrast to basic verb forms, those derived via *ma-*, *-in*, and *-ang* derivations generally do not undergo further derivations. It is noteworthy that derived forms that have the same alignment pattern as underived forms do not undergo (further) derivation, while the latter may undergo the relevant derivation, indicating that the grammatical status of derived forms is different from that of underived basic forms.

The three central derivations effected by the *ma*-middle prefix, the *-in* locative applicative, and the *-ang* causative are best considered as lexical derivational processes, which create new verbs. These are highly productive processes, but they on occasion create verbs whose meanings are irregular and are unpredictable from the forms themselves. *ma*-middle formation and *a*-passivization both typically reduce valency, and both involve morphology in Balinese. Yet, they differ in that the former is more severely constrained by semantic and morphological restrictions than the latter. Though *ma*-forms as a whole constitute a middle-voice domain, they vary considerably in the specific meanings they express (see the summary table below). This differs significantly from passivization, which does not create new verbs with different referential meanings. While Balinese *ma*-middle formation and *-a* passivization can be both considered voice phenomena, they differ in a way similar to the way lexical aspect and grammatical aspect do.

The summary table in the appendix includes information on the basic valency patterns for representative verbs and their derivational possibilities for alternate valency patterns. The table does not indicate the Actor-focus/Patient-focus and the active/passive alternation patterns since they are generally predictable; those forms with a definite Object typically show alternations over these oppositions.

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<sup>25</sup> See Shibatani (forthcoming).

Appendix: Summary table

#	Meaning label	Verb form	Coding frame schema	Causative with instrument causee	Causative with Theme causee	Locative alternation (argument adding)	Locative alternation (argument rearranging)	Locative alternation (oblique to object)	Passive -a alternation	Passive ka-alternation	Resultative ma-alternation
69	RAIN	<i>ujan</i>	V	-	-	-	-	-	-	-	-
46	BLINK	<i>ngedipang mata</i>	1 V	-	-	-	-	-	-	+	-
47	COUGH	<i>makokohan</i>	1 V	-	-	-	-	-	-	-	-
49	RUN	<i>malaib</i>	1 V	-	-	+	-	-	-	-	-
52	JUMP	<i>makejog</i>	1 V		m				-	-	-
53	SING	<i>magending</i>	1 V	-	-	-	-	-	-	-	-
57	LAUGH	<i>kedek</i>	1 V	-	-	+	-	-	-	-	-
58	SCREAM	<i>makraik</i>	1 V	-	-	-	-	-	-	-	-
60	FEEL COLD	<i>dingin</i>	1 V		+	-	-	-	-	-	-
61	DIE	<i>mati</i>	1 V		+	-	-	-	-	-	-
62	PLAY	<i>macanada</i>	1 V	-	-	-	-	-	-	-	-
63	BE SAD	<i>sebet</i>	1 V	-	-	-	-	-	-	-	-
64	BE HUNGRY	<i>seduk</i>	1 V		-	-	-	-	-	-	-
65	ROLL	<i>ngelilik</i>	1 V		+	-	-	-	-	-	-

#	Meaning label	Verb form	Coding frame schema	Causative with instrument causee	Causative with Theme causee	Locative alternation (argument adding)	Locative alternation (argument rearranging)	Locative alternation (oblique to object)	Passive -a alternation	Passive ka-alternation	Resultative ma-alternation
66	SINK	<i>nyilem</i>	1 V		+	-	-	-	-	-	-
67	BURN	<i>puun</i>	1 V	-	+	-	-	-	-	-	-
68	BE DRY	<i>tuh</i>	1 V	-	+	-	-	-	-	-	-
70	BE A HUNTER	<i>tukangboros</i>	1 V	-	-	-	-	-	-	-	-
1	EAT	<i>ngajeng</i>	1 V 2	-	-	-	-	-	+	+	+
2	HUG	<i>ngelut</i>	1 V 2		+	-	-	-	+	+	+
3	LOOK AT	<i>nlektakang</i>	1 V 2	-	-	-	-	-	+	+	-
4	SEE	<i>nepukin</i>	1 V 2	-	-	-	-	-	+	+	-
5	SMELL	<i>ngadekin</i>	1 V 2	-	-	-	-	-	+	+	-
6	FEAR	<i>nakutin</i>	1 V 2	-	-	-	-	-	+	+	-
7	FRIGHTEN	<i>nakutin</i>	1 V 2	-	-	-	-	-	+	+	-
8	LIKE	<i>nemenin</i>	1 V 2	-	-	-	-	-	+	+	-
9	KNOW	<i>nawang</i>	1 V 2	-	-	-	-	-	+	+	-
10	THINK	<i>ngenehang</i>	1 V 2	-	-	-	-	-	+	+	-
11	SEARCH FOR	<i>ngalihin</i>	1 V 2	-	-	-	-	-	+	+	-
12	WASH	<i>ngayehang</i>	1 V 2	-	-	-	-	-	+	+	+
13	DRESS	<i>majunin</i>	1 V 2	-	-	-	-	-	+	+	+
14	SHAVE	<i>nguris</i>	1 V 2	-	-	-	-	-	+	+	+

15	HELP	<i>nulungin</i>	1 V 2	-	-	-	-	-	-	+	+	-
16	FOLLOW	<i>ngikutin</i>	1 V 2	-	-	-	-	-	-	+	+	-
20	SHOUT AT	<i>ngerakin</i>	1 V 2	-	-	-	-	-	-	+	+	-
33	PEEL	<i>melutin</i>	1 V 2	-	-	-	-	-	-	+	+	+
48	CLIMB	<i>menekin</i>	1 V 2		+	-	-	-	-	+	+	-
55	LEAVE	<i>ngalahin</i>	1 V 2			-	-	-	-	+	+	-
59	FEEL PAIN	<i>nyakitang</i>	1 V 2	-	-	-	-	-	-	+	+	-
19	ASK FOR	<i>nagihin</i>	1 V 2 3	-	-	-	-	-	-	+	+	-
21	TELL	<i>ngorahin</i>	1 V 2 3	-	-	-	-	-	-	+	+	-
23	NAME	<i>ngelunin</i>	1 V 2 3	-	-	-	-	-	-	+	+	-
24	BUILD	<i>mangunang</i>	1 V 2 aji+3	-	-	-	-	-	-	+	+	-
25	BREAK	<i>melahang</i>	1 V 2 aji+3	-	-	-	-	-	-	+	+	-
26	KILL	<i>ngematiang</i>	1 V 2 aji+3	-	-	-	-	-	-	+	+	-
27	BEAT	<i>nglempagin</i>	1 V 2 aji+3	-	-	-	-	-	-	+	+	-
28	HIT	<i>nglempag</i>	1 V 2 aji+3	+		-	-	-	-	+	+	+
29	TOUCH	<i>nundik</i>	1 V 2 aji+3	+		-	-	-	-	+	+	+
30	CUT	<i>ngodot</i>	1 V 2 aji+3	+		-	-	-	-	+	+	+
43	COVER	<i>ngerurub</i>	1 V 2 aji+3							+	+	+
44	FILL	<i>ngisinin</i>	1 V 2 aji+3	+		-	-	-	-	+	+	+

#	Meaning label	Verb form	Coding frame schema	Causative with instrument causee	Causative with Theme causee	Locative alternation (argument adding)	Locative alternation (argument rearranging)	Locative alternation (oblique to object)	Passive -a alternation	Passive ka-alternation	Resultative ma-alternation
40	TIE	<i>negul</i>	1 V 2 aji+3 ke+4	+				+	+	+	+
41	PUT	<i>ngejang</i>	1 V 2 di+3	-	-				+	+	+
35	SHOW	<i>ngedengang</i>	1 V 2 ke+3	-	-			+	+	+	+
36	GIVE	<i>maang</i>	1 V 2 ke+3	-	-			+	+	+	-
37	SEND	<i>ngirimang</i>	1 V 2 ke+3	-	-			+	+	+	+
38	CARRY	<i>ngaba</i>	1 V 2 ke+3	-	-	-	-	-	+	+	+
39	THROW	<i>ngentungang</i>	1 V 2 ke+3	-	-		+		+	+	+
42	POUR	<i>nuruhang</i>	1 V 2 ke+3	-	-		+		+	+	+
45	LOAD	<i>menekang</i>	1 V 2 ke+3	-	-		+		+	+	-
31	TAKE	<i>nyemak</i>	1 V 2 uli+3	-	-			+	+	+	+
32	TEAR	<i>nguek</i>	1 V 2 uli+3	-	-	-	-	-	+	+	+
34	HIDE	<i>ngengkebang</i>	1 V 2 uli+3	-	-			+	+	+	+
18	TALK	<i>ngomongin</i>	1 V 2 unduk+3	-	-	-	-	-	+	+	-
50	SIT	<i>negak</i>	1 V di+2	+	+			+	-	-	-
51	SIT DOWN	<i>negak</i>	1 V di+2	+	+			+	-	-	-
56	LIVE	<i>nongos</i>	1 V di+2	+	+			+	-	-	-

54	GO	<i>luas</i>	1 V ke+2	-	-	-	-	-	-	-	-	-
17	MEET	<i>matemu</i>	1 V teken+2	-	-	-	-	-	-	-	-	-
22	SAY	<i>ngorahang</i>	1 V UTT2 teken+3	-	-	-	-	-	-	+	+	-

Legend: + occurs regularly; m occurs marginally; - occurs never; \_ no data

## Abbreviations

AF	actor focus
ANG	- <i>ang</i> marked derivation
FIG	figure
GR	ground
IN	- <i>in</i> marked derivation
MID	middle
PF	patient focus

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