## The Acquisition of Voice Morphology in Jakarta Indonesian

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# Cross-Linguistic Variation in the Acquisition of Voice Morphology

★ Languages with early acquisition of passives:

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• Zulu (Suzman 1985)

• Sesotho (Demuth 1989, 1990)

• Inuktitut (Allen and Crago 1966)

• Quiche (Pye and Quixtan Poz 1988)

### 2. Jakarta Indonesian in Sociolinguistic Context

- ★ Jakarta Indonesian is the general colloquial language of Jakarta, used in most 2 everyday contexts for inter-ethnic and ethnically-neutral communication, and increasingly also for intra-ethnic communication; described by Wouk (1989,1999).
- ★ Jakarta Indonesian is not:
  - Standard Indonesian, used in more formal contexts in Jakarta and throughout Indonesia; acquired by children at a later age, often 'imperfectly', largely from the media and via conscious schooling.
  - Betawi Malay, the native dialect of the indigenous ethnic community of Jakarta, now a small minority of the total population of Jakarta described by Kähler (1966), Abdul Chaer (1976), Ikranagara (1980), Muhadjir (1981), Grijns (1991) and others.
- ★ However, there exists a continuum of language varieties between Jakarta Indonesian and Standard Indonesian, and between Jakarta Indonesian and Betawi Malay.
- ★ Jakarta Indonesian is acquired naturally and completely at a young age by most children growing up in Jakarta.
- ★ Standard Indonesian is acquired by children at a later age, often 'imperfectly', largely from the media and via conscious schooling.

#### 3. Voice Morphology in Standard Indonesian

- (1) (a) ?\* Adi pukul Bowo Adi hit Bowo "Adi hit Bowo"
  - (b) Adi dipukul Bowo Adi **di-**hit Bowo "Adi was hit by Bowo"
  - (c) Adi memukul Bowo Adi **meN**-hit Bowo "Adi hit Bowo"
  - (d) \*\* Adi dimemukul Bowo Adi **di-meN**-hit Bowo "Adi was hit by Bowo" / "Adi hit Bowo"
  - ★ Some ways in which Standard Indonesian passives and actives differ from those of Standard Average European:
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- Passive and active both derived from a basic stem unmarked for voice
- Passive and active clauses of similar formal complexity
- Passive clauses more highly transitive (in the sense of Hopper and Thompson 1980), used to express foregrounded events in narratives
- Passive clauses more frequent than active ones

### 4. Voice Morphology in Jakarta Indonesian

- (2) (a) Adi pukul Bowo
  - Adi hit Bowo
  - (i) "Adi hit Bowo"
  - (ii) "Bowo hit Adi" [infrequent]
  - (b) Adi dipukul Bowo
    - Adi **di-**hit Bowo
    - (i) "Adi hit Bowo" [infrequent]
    - (ii) "Bowo hit Adi"
  - (c) Adi mukul Bowo
    - Adi N-hit Bowo
    - (i) "Adi hit Bowo"
    - (ii) "Bowo hit Adi" [infrequent]
  - (d) Adi dimukul Bowo
    - Adi **di-N**-hit Bowo
    - (i) "Adi hit Bowo" [infrequent]
    - (ii) "Bowo hit Adi" [infrequent]

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- *di* and *N* have no grammatical functions.
- In particular, *di* and *N* do not select a particular argument of the word to which they are attached and associate that argument with morphosyntactic properties such as linear order.
- As a result, arguments of a word to which di- or N- are attached are unmarked with respect to thematic roles and the agent/patient distinction: (2), (3) (8).
- The function of *di* and *N* is purely semantic: marking the host word as having a patient or an agent in its argument structure: (9) (11). (Thus, attaching *di* or *N* to a word is like adding an attributive adjective to a noun: the semantics of the NP is enriched, but its grammatical role in the clause remains unchanged.)
- Whereas *di* is very productive, the distribution of *N* is constrained by arbitrary lexical factors: (12)

#### Adult utterances from naturalistic corpora

- (3) Nanti dokternya dipereksa di-X preceded by non-patient FUT:PROX doctor-ASSOC di-examine [Playing with toy animals, experimenter talking to child] "The doctor will examine them"
- (4) Ntar ya, Tante dibikinin ya?

  FUT:PROX yes aunt **di-**prepare-APPL yes

  [Child wants to eat noodles, experimenter says to him]

  "Wait a little bit, I'll make you some"
- (5) Plastiknya ditaro dulu yuk plastic.bag-ASSOC **di-**put before EXHRT [Mother talking to child while cooking] "And now let's put it into the plastic bag"
- (6) Mama nibanin kaki aja sakit *N-X preceded by non-agent* mother **N-**fall.on-APPL foot just hurt [Mother warning son who is playing with a heavy object] "If that drops on my foot it's going to hurt"
- (7) Lho, rambutnye motong, ye
  EXCL hair-ASSOC **N**-cut yes
  [Speaker, with two of his friends, encounters another friend]
  "Hey, he had his hair cut"
- (8) Ini megang
  DEM:PROX N-hold
  [Speaker massaging friend, extends his hand and asks friend to hold it while he massages it with his other hand]
  "Hold this"

- (9) Kandangnya dikunci Prefixes introducing new argument stable-ASSOC di-key
  [Experimenter to child playing with toy animals]
  "Lock the stable"
- (10) Sekarang ayah ngopi now father N-coffee [Grandfather telling child to offer her father some coffee] "Daddy wants some coffee now"
- (11) Diminggirin dulu rambutnya di-N-edge-APPL before hair-ASSOC [Experimenter talking to child] "Move your hair aside"

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Stacked prefixes

(12) Distribution of N-: The cycle of lexicalization

stage		stem	N-stem	gloss
non-existent	(a)	pergi tidur susu	* <b>m</b> ergi * <b>n</b> idur * <b>ny</b> usu	'go' 'sleep' 'milk'
rare	(b)	tali putih teh	R <b>n</b> ali R <b>m</b> utih R <b>ng</b> eteh	'string' 'white' 'tea'
common	(c)	liat semir kopi	ngeliat nyemir ngopi	'see' 'polish' 'coffee'
usual ↓	(d)	R intip R ompol R sangkut	ngintip ngompol nyangkut	'peek' 'wet bed' 'hook'
reanalyzed as part of stem and therefore	(e)	nonton nangis ngantuk	(Standard Indonesian: tonton) (Standard Indonesian: tangis) (Standard Indonesian: antuk)	'watch' 'cry' 'sleepy'
non-existent	(f)	makan minum masuk	(Tagalog: kain) (Tagalog: inum) (Tagalog: pasok)	'eat' 'drink' 'enter'
*	(g)	maling nyamuk mata	(Proto-Malayo-Polynesian: maliq) (Proto-Malayo-Polynesian: ñamuk) (Proto-Malayo-Polynesian: mata)	'steal' 'mosquito' 'eye'

# Some Previous Studies of the Acquisition of Malay and Indonesian

★ Jakarta Indonesian: Soenjono (2000)

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\* Lampung Indonesian: Patuan Raja (2000)

★ Singapore Malay: Norhaida (1999)

## 6. The MPI Jakarta Project

	Date of Birth	Age first recorded	Projected age at end of project	Utterances to date
Timoty	28.08.1998	1;6	5;2	9907
Hizkia	06.09.1997	1;7	6;1	15859
Riska	24.07.1997	1;8	6;3	20499
Michael	22.02.1998	2;0	5;8	9166
Priska	30.07.1997	2;7	6;3	15756
Larissa	16.04.1997	2;10	6;6	14617
Ido	01.01.1996	3;4	7;9	21518
Pipit	30.11.1994	4;4	8;11	16680
Total (target kids)				124002
Other kids				34357
Total kids				158359
Adults				165906
Grand total				324265

Table 1: The MPI Jakarta Project data

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age	total	di-	N-	di- (%)	N- (%)	di-/N-
-1;5	328	0	0	0	0	NA
1;6-1;11	6307	29	11	0.46	0.17	2.6
2;0-2;5	17816	165	88	0.93	0.49	1.9
2;6-2;11	33471	645	282	1.9	0.84	2.3
3;0-3;5	22973	577	328	2.5	1.4	1.8
3;6-3;11	18286	575	438	3.1	2.4	1.3
4;0-4;5	11242	414	307	3.7	2.7	1.3
4;6-4;11	13177	616	338	4.7	2.6	1.8
5;0-9;11	34759	1307	761	3.8	2.2	1.7
10-	165906	8017	4512	4.8	2.7	1.8
total	324265	12345	7065	3.8	2.2	1.7

Table 2: Frequency of Occurrence of *di-* and *N-* in Naturalistic Corpus

 $<sup>\</sup>star$  di- and N- are used productively from a very young age, between 1;6 and 2;0.

 $<sup>\</sup>star$  The frequency of di- and N- increases until around 3;6 - 4;0, when it attains adult frequency.

 $<sup>\</sup>star$  di- occurs more frequently than N- from the beginning.

(13)	Dibuka di-open [Asking mother to open picture poster] "Open it"	<u>Timo 1;8</u>
	cf. Buka open [Asking mother to open door] "Open it"	<u>Timo 1;7</u>
(14)	Buang aja. Dibuang throw just <b>di</b> -throw [Playing with the microphone] "Just throw it away. Throw it away"	<u>Timo 1;11</u>
(15)	Ditumpahin di-spill-APPL [Seeing another child dropping crackers from a bag] "She's dropping them"	Riska 1;8
	cf. Bedak tumpah powder spill [About some face powder] "The powder's spilt"	<u>Riska 2;0</u>
(16)	Pasang. Dipasang. fasten <b>di</b> -fasten [Watching experimenter set the camera up on the tripod; experimenter utters the bare form <i>pasang</i> , the child repeats and then adds the prefix <i>di</i> -] "Setting it up. Setting it up"	<u>Riska 1;11</u>
(17)	Mbuka N-open [Asking mother to take his shirt off] "Take it off"	<u>Timo 1;9</u>
	cf. Buka open [Asking mother to open door] "Open it"	<u>Timo 1;7</u>
(18)	xx ngeliat xx xx N-see xx [Asking to see something (unclear)] "See"	<u>Timo 1;11</u>
	cf. liat xx see xx [Asking to see something (unclear)] "See"	<u>Timo 1;11</u>

(19)	Apa, lagi ngapain what PROG <b>N</b> -what-APPL [About a picture in a book] "What's he doing?"	<u>Riska 2;0</u>
(20)	Ngambil buah N-take fruit [Looking at a picture book with mother; mother points to a giraffe and asks what he's doing] "Taking fruit"	<u>Riska 2;1</u>
	cf. Ica ambil Ica take [Asking for a pen that her mother is holding] "I want to take it"	<u>Riska 2;1</u>
(21)	Eh, kasurnya pengen, pengen dinyuci dulu,  EXCL mattress-ASSOC want want di-N-wash before  pengen dicuci  want di-wash  [Playing with toy animals in a farm]  "I want to, want to wash the mattress first, to wash it"	Riska 2;10
(22)	Dek Ido mo ke kantor di-, TRU-younger.sibling Ido want to office di- dinabrakin ini, xx ah bom di-N-collide-APPL DEM:PROX xx EXCL EXCL [Playing with toy car] "I want to go to the office, it crashed, ah, boom"	<u>Ido 3;11</u>
	cf. Wah, tabrakan, we EXCL collide-AUG EXCL [Playing with toy car] "Wah, crash, yay"	<u>Ido 3;4</u>

# 8. Why Are di- and N- Acquired So Early in Jakarta Indonesian?

- $\star$  The prefixes di- and N- in Jakarta Indonesian are acquired early because they occur with high frequency in the adult language.
- because they occur with high frequency in the adult language.

  ★ The prefixes *di* and *N* in Jakarta Indonesian are acquired early

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- $\star$  The prefixes di- and N- in Jakarta Indonesian are acquired early because they are simple, being associated with a single semantic function, without any grammatical consequences.
- $\star$  The greater frequency of the prefix di- (relative to N-) in the child data reflects its greater frequency in the adult data.
- ★ The greater frequency of the prefix *di* (relative to *N*-) in the child data reflects the patient prominence of Jakarta Indonesian as a typical Austronesian language (Cena 1977, De Guzman 1976, 1992, Gil 1984, to appear).

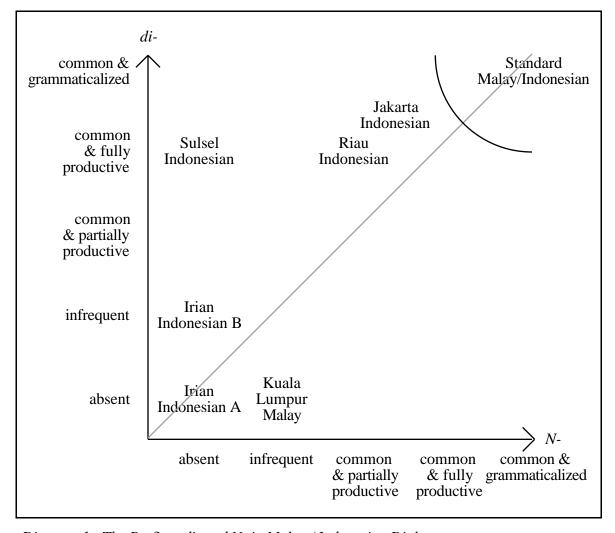


Diagram 1: The Prefixes di- and N- in Malay / Indonesian Dialects

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