# ANALYTIC CAUSATIVES IN JAVANESE: A LEXICAL-FUNCTIONAL APPROACH

#### Agus Subiyanto

Diponegoro University subaling@gmai.com

#### Abstract

Analytic causatives are the type of causatives formed by separate predicates expressing the cause and the effect, that is, the causing notion is realized by a word separate from the word denoting the caused activity. This paper aims to discuss the forms and syntactic structure of analytic causatives in Javanese. To discuss the syntactic structure, the theory of lexical functional grammar (LFG) is employed. The data used in this study is the 'ngoko' level of Javanese of the Surakarta dialect. By using a negation marker and modals as the syntactic operators to test mono- or bi-clausality of analytic causatives, the writer found that analytic causatives in Javanese form biclausal constructions. These constructions have an X-COMP structure, in that the SUBJ of the second verb is controlled by the OBJ of the causative verb (N)gawe 'make'. In terms of the constituent structure, analytic causatives have two kinds of structures, which are V-cause OBJ X-COMP and V-cause X-COMP OBJ.

Kausatif analitik adalah tipe kausatif yang dibentuk oleh dua predikat atau dua kata terpisah untuk mengungkapkan makna sebab dan akibat, yakni makna sebab direalisasikan oleh kata yang berbeda dengan kata yang menyatakan makna akibat. Tulisan ini membahas bentuk dan struktur sintaksis kausatif analitik dalam bahasa Jawa. Untuk menjelaskan struktur sintaksis digunakan teori Tata Bahasa Leksikal Fungsional. Data yang digunakan dalam penelitian ini adalah bahasa Jawa dialek Surakarta ragam ngoko. Dengan menggunakan alat uji pemarkah negasi dan penggunaaan modalitas, penulis menemukan bahwa kausatif analitik dalam bahasa Jawa membentuk struktur biklausa. Konstruksi ini memiliki struktur X-KOMP, yakni SUBJ dari verba kedua dilesapkan dan dikendalikan oleh OBJ dari verba kausatif (N)gawe 'membuat'. Dalam struktur konstituen, analitik kausatif memiliki dua macam bentuk, yakni V-kuasatif OBJ X-COMP and V-kausatif X-COMP OBJ.

**Keywords**: analytic causatives, Javanese, Lexical Functional Grammar.

## INTRODUCTION

There are three ways of expressing causativization, namely: analytic, morphological, and lexical causatives (Comrie, 1981). Analytic causatives are the ones having separate predicates or verbs to express the causer and the causee. Morphological causatives occur when the relation between the non-causative predicate and the causative one is marked by morphological means or affixes, and lexical causatives are where the relation between the caused and causing events has nothing to do with formal (morphological) marking, as with the Indonesian verb *membunuh* 'kill', and the Javanese verb *mbukak* 'open'. Based on the formal parameters (Shibatani,1976; Comrie,1989), however, there are basically two types of causatives: periphrastic/analytic causatives and morphological/lexical causatives. In this case, the first type refers to causative constructions which are biclausal in nature, whereas the latter is monoclausal. In other words, morphological and lexical causatives are syntactically treated in the same way in the sense that they are both monoclausal.

Analytic and lexical causatives usually occur in isolating languages, whereas morphological causatives commonly occur in polysynthetic languages (see Bishop, 1992). English (Hollmann, 2003), Thai (Sudmuk, 2005), and Rongga (Arka et.al, 2007) are some of the languages having lexical and analytic causatives but not morphological ones. These languages do not have morphological means or affixes to express causativization. In contrast, some languages like Kewa and Papua New Guinea (see Bishop, 1992) have morphological but not analytic causatives.

Javanese has the morphological marker or the suffix *-ake* for a casative meaning. In addition, this language employs separate verbs expressing the causer and the causee as in analytic causatives. The following examples are causative constructions in Javanese.

(1) a. Adi nggawe ibune seneng Adi N-make mother-POSS happy 'Adi made her mother happy'

b. Adi nyenengake ibuneAdi N-happy-CAUS mother-POSS'Adi made her mother happy'

Clause (1-a) is an analytic causative, which is composed of two predicates: nggawe 'make' and seneng 'happy', whereas clause (1-b) is a morphological causative as this clause uses a morphological marker or the causative suffix –ake to change the non-causative verb into the causative one. The difference between morphological causatives and analytic causatives deals with semantic factors, one of which concerns direct or indirect causation. Analytic causatives denote indirect causation, whereas morphological causatives show direct causation, in which the causee is 'directly' acted upon by the causer at a particular specified moment (see Arka, 1993; Comrie, 1989).

This paper focuses on the syntactic aspects of analytic causatives in Javanese. Some questions addressed in this paper are as follows. First, what is the

mechanism of argument sharing between the verbs involved in analytic causatives. Second, do the constructions form a mono- or bi-clausal structure. This second question relates to the fact that analytic causatives usually form a biclausal structure, but there are some languages like Vietnamese that have analytic causatives with both biclausal and monoclausal properties (see Kwon, 2006). In this case, several tests for mono-/bi-clausality are required to examine whether analytic casatives in Javanese are monoclausal or biclausal. In addition, this paper will address the question of how to describe the syntactic structures of analytic causatives in Javanese within the framework of lexical functional grammar (LFG).

The theory used to describe the syntactic structures of analytic causatives is Lexical Functional Grammar (LFG), a non-transformational theory of generative grammar that was initially developed by Bresnan and Kaplan in 1970's. LFG is lexicalist in approach, meaning that lexical items or words are considered as important as syntactic structures in encoding grammatical information. LFG is also functional and not configurational, which means that abstract grammatical functions like subject and object are not defined in terms of phrase structure configurations or of semantic or argument structure relations, but are primitives of the theory. In LFG language is described by using parallel structures representing different levels of linguistic organization and information. These parallel structures are related to one another by means of functional constraints (Dalrymple, 2001).

Two major parrallel structures in LFG are constituent structure (c-str), functional structure (f-str). These levels of grammar coexist in the sense that no level is derived from another. C-str is a surface phrase structure, conveying category information and information on precedence and dominance of constituents. The c-str model in LFG adopts the idea of X-bar theory in that every syntactic structure is endocentric or has a head. Unlike c-str, f-str consists of abstract attributes (features and functions) and their values. In f-str, grammatical relations such as subject and object, the semantic content of every lexicon, as well as the argument structure of a verb predicate are described. The theory of LFG defines f-str and c-str as independent, but mutually constraining levels of representation. This makes it possible for a given sentence to have more than one c-structure realization, as long as well-formedness conditions such as completeness and coherence are met at f-structure (Bresnan, 2001; Dalrymple, 2001).

## RESEARCH METHODS

This paper used the data of the *ngoko* (low) register of Javanese. The data were taken from Javanese native speakers of Surakarta dialect. The data of analytic causative constructions were collected by using observation and interview methods with recording and elicitation techniques. The elicitation technique was also used to test with the informants the grammatical acceptability of causative constructions with their various structures. In this research, the writer also applied reflective-introspective method (see Sudaryanto, 1993:121). In this case, as a Javanese native speaker of Central Java dialect, the writer used his linguistic

intuition to create data and test the acceptability of the data. The data that the writer made were then consulted with the informants to check their grammatical acceptability.

# RESULTS AND DISCUSSION

#### Forms of Analytic Causatives in Javanese

Analytic causatives are composed of two predicates or verbs, which function as PRED1 and PRED2. In Javanese, PRED1 is filled with the verb *nggawe* 'make' or *marak(a)ke* 'cause', and PRED2 is a state, a process, or an action verb. The causative verbs *nggawe* and *marak(a)ke* are semantically different in the sense that with the verb *nggawe*, the caused event denotes a volitional action, whereas with the verb *marak(a)ke*, the action on the part of the causee is not volitional. This especially happens when the causer is human. To prove this, the adverb *sengaja* 'intentionally' can occur before the verb *nggawe* as in (2), but not before the verb *marakake*, as in (3). In addition, analytic causatives with the verb *gawe* can take the passive form as in (4), whereas those with the verb *marakake* cannot. This shows that the causative verb *nggawe* has a higher degree of transitivity than the verb *marakake*.

- (2) Darmoyo sengaja nggawe dheweke nesu.

  Darmoyo intentionally N-make 2.SG angry

  'Darmoyo intentionally made him angry'
- (3) Darmoyo \*sengaja marakake dheweke nesu.
  Darmoyo intentionally cause 2.SG angry
  'Darmoyo intentionally caused him to be angry'
- (4) Dheweke sengaja digawe nesu (karo/dening) Darmoyo 2,SG intentionally PAS-make angry by Darmoyo 'He was intentionally made angry by Darmoyo'

Analytic causatives in Javanese usually have the word order of SVOV. In other words, between PRED1 and PRED2 there is a noun phrase (NP) being the grammatical OBJ of the causative verb. However, when PRED2 is filled with state verbs such as the verbs *bingung* 'confused', *seneng* 'happy', *susah* 'sad', PRED2 may directly come after PRED1, resulting in the SVVO pattern, which is a variation of the canonical pattern of SVOV word order. The following examples show word order variation in Javanese causative constructions.

- (5) a. Aku nggawe dheweke bingung 1.SG N-make 2.SG confused 'I made him confused'
  - b. Aku nggawe bingung dheweke 1.SG N-make confused 2.SG 'I made him confused'

- (6) a. Bapake kuwalon kuwi sing nggawe dheweke lunga father in law-POSS that REL N-make 2.SG go 'It is his father in law that made him go (away)'
  - b. \*Bapake kuwalon kuwi sing nggawe lunga dheweke father in law-POSS that REL N-make sleep 2.SG 'It is his father in law that made him go (away)'

Sentence (6) shows that PRED2 *lunga* 'go', which is an action verb, should occur after OBJ as in (6-a), and it cannnot come directly after PRED1, as in (6-b). This is different from sentence (5) that has two possible orders as this sentence has PRED2 *bingung* 'confused' belonging to a state verb (see Givon (1984) for the semantic classification of verbs).

The data of analytic causatives as presented above raise a question, that is, whether they are monoclausal or biclausal. To answer this questions, syntactic operators like negation and modals can be applied. In Javanese, negation and modals occur before the verb that they modify. If we claim that analytic causatives are monoclausal, PRED1 and PRED2 should get the same polarity and modals, and it is not allowed for PRED1 and PRED2 to get different polarity and different modal markers. The use of the negation marker *ora* 'tidak' and the modal *bisa* 'dapat' in analytic causative constructions can be seen in (7) and (8) below.

- (7) a. Darmoyo ora nggawe dheweke nangis Darmoyo NEG N-make 2.SG N-cry 'Darmoyo did not make him cry'
  - b. Darmoyo nggawe dheweke ora nangis.
     Darmoyo N-make 2.SG NEG N-cry
     'Darmoyo prevented him from crying (Lit: Darmoyo made him not cry)'
- (8) a. Darmoyo bisa nggawe dheweke nangis Darmoyo can N-make 2.SG N-cry 'Darmoyo can make him cry'
  - b. Darmoyo nggawe dheweke bisa nangis Darmoyo N-make 2.SG can cry 'Darmoyo made him able to cry'

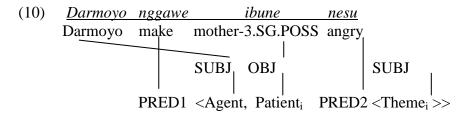
The sentences above show that PRED1 and PRED2 can get different polarity and modals. In (7-a), the negation marker *ora* modifies *nggawe*, whereas in (7-b), the negation modifies the verb *nangis*. This shows that PRED1 and PRED2 do not form a single predicate. The use of the modal *bisa* 'dapat' which can modifies PRED1, as in (8-a), or PRED2, as in (8-b), show that analytic causatives in Javanese are biclausal constructions.

#### **Syntactic Structures of Analytic Causatives in Javanese**

Analytic causatives belong to a complex predicate. The concept of complex predicate in this context refers to Alsina et al (1997) and Butt (1997) who claim that a complex predicate consists of at least two predicates (PRED1 and PRED2), with one predicate (PRED2) being an argument of the other (PRED1). This implies that a complex predicate consists in the argument structures of two separate arguments being brought together, and one of the arguments in isolation is taken to be incomplete. In this context, PRED2 is required by PRED1 in order to make the sentence complete. PRED2 here functions as a complement, especially an open complement (X-COMP) or a complement having a controlled argument. This can be seen from the unexpressed argument, especially SUBJ of the subordionate clause, and this argument is controlled by the argument OBJ of the matrix clause. The argument sharing mechanism of clause (2) can be described in (9) below.

		X-COMP	
			_
SUBJ	OBJ	SUBJ	
(9) Darmoyo nggawe	$ibune_i$	[i ]	nesu
Darmoyo N-make	mother-3	3.SG.POSS	angry

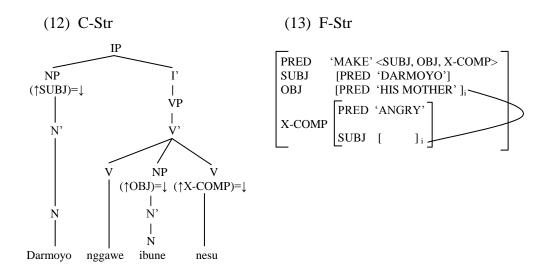
The sentence above has two clauses: a matrix clause and a subordinate clause or an X-COMP. In the sentence, the OBJ of the matrix verb *nggawe* is the same as the SUBJ of the subordinate verb *nesu*. Therefore, the SUBJ of PRED *nesu* should be unexpressed as it is controlled by the OBJ the matrix verb. The structure of the sentence above can be described below.



The argument structure above show the verb *nggawe* (PRED1) has three arguments: Agents, Patient and PRED2. The Agent has the grammatical function as the SUBJ and the Patient has the function as the OBJ. The argument (Theme) of PRED2 is the same as the Patient argument or the OBJ of the matrix clause.

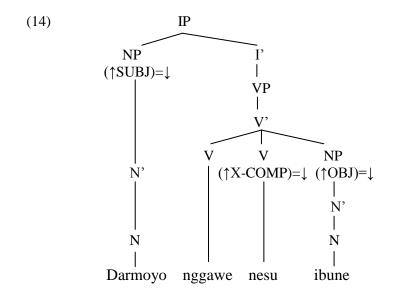
In LFG, the causative construction in (9) is be described by using parallel structures, which are c-str and f-str. With the input from the lexical entry as in (11), sentence (9) has c-str as in (12) and f-str as in (13).

(11)	Darmoyo	$N (\uparrow PRED) = 'DARMOYO'$
	ibune	$N (\uparrow PRED) = 'HIS MOTHER'$
	nggawe	$V (\uparrow PRED) = 'MAKE < SUBJ, OBJ, X-COMP > '$
		$(\uparrow OBJ) = X\text{-}COMP SUBJ$
	nesu	$V (\uparrow PRED) = 'ANGRY < SUBJ > '$



In the c-structure, IP corresponds to a sentence. The I' (I-bar) node is a non-maximal projection, which can be expanded to I and VP. In Javanese, the I node can be filled with a modal or an auxiliary verb. In the c-structure above, PRED1 nggawe is under the same node as the NP OBJ ibune and PRED2 nesu, showing that PRED1 and PRED2 do not form a constituent. Note that the annotations take the form of equations such as  $\uparrow = \downarrow$ , where  $\uparrow$  can be read as 'the f-structure of my mother node' and  $\downarrow$  as 'my f-structure'. The c-structure is parallel with the f-structure, which represents functional information. In the f-structure, we can also see the argument sharing of the predicates, that is, the OBJ of the PRED meaning MAKE is the same as the SUBJ of X-COMP.

As mentioned above, word order variation of the causative construction occurs when  $PRED_2$  is a state verb. This variation of constituent structure is governed by a phrase structure rule of V'(V-bar) as  $V' \rightarrow V_{CAUSE/MAKE}$  {NP,V}, meaning that V' can be composed of  $V_{CAUSE/MAKE}$  NP V, as in (12) above, or  $V_{CAUSE/MAKE}$  V NP, as in (14) below.



In LFG, word order variation is handled in c-str, and not in f-str (see Dalrymple, 2001). Therefore, the placing of the verb *nesu* 'angry' directly after the verb *nggawe* 'make' as described in (14) will not affect the form of f-str.

## **CONCLUSION**

Analytic causatives in Javanese are composed of two verbs to express the causer and the causee. The verb expressing the causer is *nggawe* or *marakake*, while the verb expressing the causee can be a state or an action verb. The causative constructions with the verb *nggawe* are different from those with the verb *marakake*. The use of the verb *nggawe* in a causative construction implies a volitional action, while the use of the verb *marakake* does not show a volitional action.

Javanese analytic constructions have a biclausal structure, as seen from their ability to take different polarity and modality for their verbs. As biclausal structures, analytic causatives in Javanese have a complex predicate with an X-COMP structure. In this case, the OBJ of the causative verb controls the SUBJ of the X-COMP.

Analytic causatives in Javanese have the canonical word order of SVOV. There is, however, word order variation of SVVO, especially when the second verb is a state verb. In LFG, this word order variation can be handled clearly in c-str. Meanwhile, the description of f-str is not affected by the word order variation.

## REFERENCES

- Alsina, Alex, Joan Bresnan, Peter Sells. 1997. "Complex Predicates: Structure and Theory" dalam Alex Alsina, Joan Bresnan, Peter Sells (Ed) *Complex Predicates*. 1-12. Standford, California: CSLI
- Arka, I Wayan. 1993 "Morphological Aspects of the-kan Causatives in Indonesian". Sydney: the University of Sydney master thesis
- Arka, I Wayan, Jeladu Kosman, I Wayan Suparsa. 2007. *Bahasa Rongga: Tata Bahasa Acuan Ringkas*. Jakarta: PUAJ
- Bishop, Nancy.1992. "A Typology of Causatives, Pragmantically Speaking" in Shin Ja J. Hwang and William R. Merrifield (Eds.) *Language in Context: Essays for Robert E. Langacre*. Dallas: SIL
- Bresnan, Joan. 2001. Lexical Functional Syntax. Oxford: Blackwell Publishers
- Butt, Miriam. 1997. "Complex Predicates in Urdu" dalam Alex Alsina, Joan Bresnan, Peter Sells (Ed) *Complex Predicates*. 107-150. Standford, California: CSLI
- Comrie, B. 1981. Language Universals and Linguistic Typology. Oxford: Basil Blackwell.
- Comrie, B. 1989. Language Universals and Linguistic Typology. London: Basil Blackwell.
- Dalrymple, Mary. 2001. Lexical Functional Grammar: Syntax and Semantics. New York: Academic Press
- Hollmann, Willem B. 2003. "Synchrony and Diachrony of English Periphrastic

Causatives: a Cognitive Perspective". The University of Manchester doctoral dissertation

- Kwon, Nayoung. 2006. "A semantic and syntactic analysis of Vietnamese causatives". In Asier Alcazar, Roberto Mayoral Hernández & Michal Temkin Martínez (eds), *Proceedings of Western Conference in Linguistics* 2004 (WECOL 2004). Fresno, CA: California State University.
- Shibatani, M. (ed). 1976. Syntax and Semantics. The Grammar of Causative constructions.
  - New York: Academic Press.
- Sudaryanto. 1993. *Metode dan Teknik Analisis Bahasa : Pengantar Penelitian Wahana Kebudayaan secara Linguistik*. Yogyakarta : Duta Wacana University Press
- Sudmuk, Cholthicha.2005. "The Syntax and Semantics of Serial Verb Constructions
- in Thai. Austin: The University of Texas doctoral dissertation