RIAU INDONESIAN SAMA: A UNIFIED ANALYSIS

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This paper presents a detailed study of the Riau Indonesian form sama, which appears to be associated with a wide range of functions including conjunction, comitative, instrumental, transitive agent, reciprocal, additive focus, sociative, sameness, and others. However, in spite of its macrofunctionality, this paper argues that sama is endowed with a single fundamental meaning conveying the notion of 'togetherness', from which its wide range of usages are derived.

1 INTRODUCTION

In the Riau dialect of Indonesian, there is a single word, sama, whose translations into English make use of various forms such as and, with, to, each other, also, same and others. Thus, from an English point of view, the Riau Indonesian word sama is associated with a wide range of meanings which may or may not be connected to each other in various ways; in other words, sama appears to be polyfunctional.

However, such an Anglocentric perspective tells us more about English than about the language under investigation, Riau Indonesian. Just because English and, with, to, and so forth have distinct functions does not mean that Riau Indonesian sama must necessarily be carved up isomorphically, into several distinct items, a sama1 'and', a sama2 'with', a sama3 'to', and so forth. Rather, Riau Indonesian sama should be described on its own terms, in a way that reflects the realities of the language it is part of, and the grammatical competence of the speakers that use it. Moreover, for such a description, the point of departure and default hypothesis should be the characterization of sama not as polyfunctional but rather as associated with a single function, or in other words as macrofunctional.

This paper, then, tells the story of the Riau Indonesian word sama as it emerges from within the language itself; in doing so it provides an case study of how to deal with the phenomenon of macrofunctionality. The organization of the paper is as follows. Section 2 contains a general discussion of macrofunctionality. Section 3 provides some background information about Riau Indonesian. Section 4 presents a detailed description of sama. Section 5 proposes a unified analysis of sama accounting for its macrofunctionality. And Section 6 concludes with some remaining open questions concerning the description and analysis of sama.

2 MACROFUNCTIONALITY

The term macrofunctionality implies a "large" function, where, admittedly, the attribution of size may reflect a bias stemming from comparison with other languages. However, unlike polyfunctionality, which presupposes a plurality of functions, macrofunctionality assumes a single function, which may or may not be viably decomposable into a set of constituent subfunctions. In cases of macrofunctionality, distinct analytical strategies are available. At one end of the spectrum, macrofunctionality may be construed as involving a single holistic function with no meaningful internal divisions into distinct subfunctions; in such a case one might characterize the form in question as monosemous, and hence as vague with respect to any partitioning of its single unified meaning into submeanings. Alternatively, macrofunctionality may be seen as comprising a plurality of functions which are distinct in the sense that they bear different consequences with regard to grammatical structure and semantic interpretation, but at the same time related in that they involve a core meaning, or perhaps a network of core meanings; in such a situation one might characterize the form in question as being polysemous. Finally, at the other extreme, macrofunctionality may be viewed as lumping together totally unrelated functions; in such an
instance one might characterize the form in question as being **ambigious**. Thus, macrofunctionality subsumes a continuum of possibilities ranging from monosemy through various degrees of polysemy all the way to ambiguity.

How might one go about choosing between such alternative analyses? In general, the default hypothesis in all cases of macrofunctionality should be that of monosemy, or a single unified meaning. One of the dominant design features governing the structure of language is the principle of one-form-one-meaning, which says that each form in a language has a unique meaning different from that of each other form. An overwhelming body of empirical evidence can be cited in support of this principle; see, for example, Tobin (1990).

Nevertheless, the principle of one-form-one-meaning is far from exceptionless: polysemy and ambiguity are widespread throughout language. Thus, for each case of macrofunctionality that is encountered, objective criteria should be invoked in order to choose between the various analytical strategies. Following are three such criteria:

1. A single form is associated with a single meaning to the extent that:
   a. in a variety of genealogically, geographically and typologically unrelated languages, there exists a single form associated with a similar range of meanings;
   b. the boundaries between the putative distinct alternative meanings are ill-defined;
   c. the meaning in question can be defined in a unified manner, without recourse to disjunctions.

The first criterion involves cross-linguistic replicability. If a particular broad meaning is associated with a single form in a variety of genealogically, geographically and typologically diverse languages, then within each language the form in question is monosemous or perhaps polysemous; on the other hand, if an apparent instance of macrofunctionality is found in just one language but does not recur cross-linguistically, then the form in question is ambiguous. The second criterion pertains to the degree to which the boundaries between would-be distinct meanings are well defined, and points towards the **Speakers Intention Test**: Given a form associated with putative distinct meanings, the form is vague between the meanings if it is possible to imagine a normal context in which a speaker uttering the form is indifferent with regard to the distinctions between the various meanings; otherwise it is ambiguous. For example, in English, it is easy to imagine a situation in which one might use the word *spring* without caring whether the spiral object in question was made of metal or plastic; this would count as vagueness. However, one would be hard put to use the word *spring* in a naturally-occurring context without caring whether it denoted a spiral object or a source of water; this would constitute an instance of ambiguity. Finally, the third criterion is the obvious one, namely, if it is possible to define a single common and coherent meaning without recourse to an ad hoc and unstructured listing of submeanings then the form in question is monosemous or polysemous, whereas if no such common meaning can be defined then it is ambiguous.

Application of the above criteria to a given form may yield results that are clear cut, or alternatively it may fall short of such an ideal. Ambivalent results may occur because each of the above criteria is itself fuzzy rather than categorical, and because the different criteria may sometimes conflict with one another. The functionality of linguistic forms, ranging from monosemy through polysemes to ambiguity, may be thought of as analogous to any number of other complex structures which display varying amounts of homogeneity or heterogeneity, and may accordingly be characterized to differing degrees as either singular or plural. For example, one might think of monosemy as a football team so cohesive that the individual members no longer have any distinct identity. Polysemes, then, would be a loosely organized team of moody individualistic players whose individual identities compete with that of the team as a whole. And ambiguity would be a random assortment of players from different teams who just happen to find themselves one evening drinking in the same pub.
In this paper, it is argued that the Riau Indonesian form sama is monosemous, associated with a single unified meaning embodying the notion of "togetherness". However, in the final section, the possibility is acknowledged that the single function of sama might be decomposed into a few interlocking and overlapping subfunctions, in which case it might also be characterized as exhibiting a limited amount of polysemy.

3 RIAU INDONESIAN

Riau Indonesian is the variety of Malay/Indonesian spoken in informal situations by the inhabitants of Riau province in east-central Sumatra.¹ The population of Riau province is linguistically and ethnically heterogeneous. Although the indigenous population is mostly Malay, a majority of the present-day inhabitants are migrants from other provinces, speaking a variety of other languages. Riau Indonesian is acquired as a native language by most or all children growing up in Riau province, whatever their ethnicity. It is the language most commonly used as a lingua franca for inter-ethnic communication, and in addition, like other colloquial varieties of Indonesian, it is gradually replacing other languages and dialects as a vehicle for intra-ethnic communication.

Riau Indonesian is quite different from Standard Indonesian, familiar to many general linguists from a substantial descriptive and theoretical literature. Riau Indonesian is also distinct from a set of dialects generally referred to as Riau Malay, also used in Riau province, by ethnic Malays, primarily for intra-ethnic communication. In addition, Riau Indonesian is distinguished from another set of Malayic dialects spoken by various indigenous peoples in Riau province, known as Orang Sakai, Orang Akit, Orang Hutan and Orang Laut. Finally, Riau Indonesian is also different from the variety of Malay / Indonesian used by the ethnic Chinese residents of Riau province when speaking to non-Chinese, and by the non-Chinese when speaking to Chinese, which is sometimes referred to as "Bazaar Malay". The Riau Indonesian data presented in this paper are the product of several years of field work in Riau province, reported on in Gil (1994c, 1999, 2000a,b, 2001a,b,c, 2002a,b,c, to appear b,c).

From a general typological perspective, Riau Indonesian is a strongly isolating language, with no inflectional morphology, and relatively little derivational morphology or compounding. It is also a language with very flexible word order. Perhaps the most unusual feature of Riau Indonesian is the pervasiveness of underspecification: the absence of obligatory over grammatical expression for a wide variety of categories, including number, definiteness, tense, aspect, thematic role, and ontological type. Consider, for example, a simple two-word expression such as the following:

(2) Makan ayam
   eat   chicken
   'an association of eating and chicken'

In the above sentence, makan 'eat' is unspecified for tense and aspect, while ayam 'chicken' is unmarked for number and definiteness. In addition, the semantic relation between the two words is indeterminate: the chicken could bear any thematic role whatsoever, such as agent, patient, and so forth. Finally, the expression as a whole may be associated with any ontological category: it can denote an activity, for example 'The chicken is eating'; a thing, for example 'the chicken that is eating'; a time, for example 'when the chicken is eating'; a place, for example 'where the chicken is eating', and so forth. As suggested by the given translation, sentence (2) has a single underspecified meaning, involving eating and chicken, associated with each other in an arbitrary manner. Only in actual discourse is the range of possible interpretations substantially reduced, by the context in which the sentence is uttered. Finally, it is worth

¹At the time of writing, it appears likely that Riau province will split into two distinct provinces, one comprising the mainland parts of Sumatra, the other containing the smaller offshore islands. The dialect described in this paper encompasses both regions.
noting that, since word order is flexible, the two words may be interchanged, and the resulting construction, Ayam makan, retains the same range of possible interpretations.

In Gil (1994c) and subsequent works, it is suggested that such facts reflect a grammatical organization that does without many of the staple categories of grammatical theory. In particular, it is argued that in Riau Indonesian there is no distinction between syntactic categories of noun, adjective, verb and sentence, nor between lexical categories and their phrasal projections. Instead, almost all words belong to a single open syntactic category, corresponding roughly to the traditional notion of Sentence. A theory of syntactic categories within which such claims are made more rigorous is provided in Gil (2000b). Thus, for example, in (2) above, both makan 'eat' and ayam 'chicken' belong to the category S(entence). This reflects the fact that, like most other words in the language, they can stand alone as non-elliptical sentences, and can combine freely, in any order, with other words belonging to the category S. A corollary of this analysis is that Riau Indonesian is also lacking in traditional grammatical relations such as subject and direct object. Indeed, the reader may note that everything that needs to be said about Riau Indonesian in this paper can be couched within a very limited technical vocabulary, without recourse to distinct syntactic categories or grammatical relations.

Methodologically, the study of Riau Indonesian faces a number of practical difficulties. Since it is a basilectal language variety, it is often difficult or impossible to elicit reliable judgements from native speakers. What happens all too often is that the moment speakers realize that they are being questioned in a "learned" context, they switch from colloquial Riau Indonesian into the standard language, or rather their sometimes imperfect variants thereof. And when speakers do provide judgements for ordinary or everyday language, they frequently make claims that are in gross conflict with their actual linguistic behaviour, for example by characterizing as ungrammatical forms or constructions that they use all the time. Faced with such obstacles, the study of Riau Indonesian reported on here makes use of an alternative method of data collection, based on the gathering of naturalistic corpora: actual utterances produced by native speakers in real live situations, either jotted down right away into a notebook, or else recorded and subsequently transcribed. All of the data presented below is of such a character.

4 SA MA: DESCRIPTION

Although the concern of this paper is exclusively synchronic, a few introductory words about the history of sama are in order, not the least because of a little mystery that, to the best of my knowledge, has not yet been resolved. The received etymology of sama is that it is a loanword from Sanskrit; see, for example, Jones (1984:10), Adelaar (1992:137), and Casparis (1997:31). This would entail that sama is cognate with, among others, Persian ham discussed briefly in Section 5.1 below, and also English same. However, perusal of Zorc's (1995) reconstructions suggests the tantalizing alternative of a pure Austronesian lineage, from a combination of Proto-Austronesian *sa- 'one' plus *ma 'and, with', or perhaps alternatively *mai 'come'. Two of these three items have reflexes in Adelaar's (1992) reconstructions for Proto-Malayic, *sa- 'one' (p. 116) and *mari(?) 'come, 'hither' (p. 204), thereby increasing the plausibility of an Austronesian origin. Further support for this scenario derives from the observation that in many varieties of contemporary Malay / Indonesian, the proclitic form of the numeral 'one', se- (from Proto-Malayic *sa-above) is also used to express sameness, in constructions such as, from Riau Indonesian, sebesar 'one-big' or 'the same size as', and sekampung 'one-village' or 'the same village as'. Of course, it could be the case that both of the alternatives are right; that is to say, that sama is a Sanskrit borrowing that landed on the fertile soil provided by the fortuitous presence, in the borrowing language, of one or more indigenous collocations with similar sound and meaning. As suggested by Zuckermann (2000), such coincidences are actually quite common in the history of words.²

²In their discussion of colloquial Malay varieties, Adelaar and Prentice (1996) suggest that the presence of sama or some other marker with a similarly wide range of functions is one of eight diagnostic features for what they refer to as "Pidgin Malay Derived"
Returning, now, to the present, as suggested in the previous section, almost all words in Riau Indonesian belong to the single open syntactic category S. And indeed, sama is no exception; it, too, is a member of S. What this means is that in terms of its syntactic behaviour, it may stand alone as a complete, non-elliptical sentence. When occurring as a complete sentence, Sama can have a variety of meanings, such as 'It's the same', 'They're together', and others. Alternatively, as a member of S, sama can combine freely with other S expressions; most of the examples considered below are of that kind.

4.1 The Functions of Sama

A convenient mode for the representation of macrofunctionality is that of semantic maps, as developed by Kemmer (1993), Haspelmath (1997, 2003) and others. A semantic map for Riau Indonesian sama is presented in Figure 1.

![Semantic Map for Riau Indonesian Sama]

Figure 1: A Semantic Map for Riau Indonesian Sama

isolects. As pointed out in Gil (2001a), sama is in fact the only one of these eight diagnostic features exhibited by Riau Indonesian, thereby suggesting that, to the extent that their criteria are valid, Riau Indonesian is not one of their "Pidgin Malay Derived" varieties. Indeed, the presence of a macrofunctional marker sama is characteristic of a wide range of colloquial Malay and Indonesian dialects, although, unsurprisingly, its actual range of usages varies from dialect to dialect.
The above map makes reference to 21 would-be functions associated with *sama*. These 21 functions are introduced for purely expository purposes, and have no theoretical status whatsoever: one could imagine alternative and equally adequate descriptions of *sama* making reference to 7 functions or to 63. Indeed, the extent to which these or other functions are distinct from each other is precisely what is at issue. Of the 21 functions, 16 are represented in **boldface**: these are functions for which *sama* is a primary mode of expression, either the sole one or a common alternative. The remaining 5 functions are ones for which *sama* is a relatively minor mode of expression, in comparison with other more common alternatives. Some functions are connected to neighbouring functions with lines; these lines represent proximity, as motivated by the following criteria: (a) connected functions are conceptually closer; and (b) connected functions are more likely to be expressed by an identical form in Riau Indonesian or in other languages. Of the 21 functions, 16 are enclosed within a round-cornered box. This box also represents proximity, as reflected in the above two criteria. (Using lines to connect closely related functions within the box would have yielded a visually uninterpretable jumble.) However, as is suggested in Section 6 below, the box also demarcates what might constitute a distinct and coherent subfunction of *sama*. In the remainder of Section 4.1, examples of each of the above 21 functions of *sama* are presented in turn.

The first set of examples illustrate usages of *sama* expressing **conjunction**.³

(3) Doni *sama* Amat mau ditumbuk dia
Doni *sama* Amat want PAT-hit 3
[About a quarrel among a group of friends]
'He wants to hit Doni and Amat'

(4) Teh o *sama* teh o beng, ya?
tea black *sama* tea black ice yes
[Man at coffee stall returns to table to double-check order]
'A black tea and a black iced tea, right?'

(5) Ambil topi *sama* hidupkan tivi
take hat *sama* live-EP TV
[Playing card game in which loser has to do what other players bid; speaker throws his cap across the floor and then orders his friend]
'Bring the hat and turn the TV on'

(6) Makan *sama* ojek,
    itu aja
eat *sama* motorcycle.taxi DEM-DEM:DIST CONJ.OP
[Speaker telling how he spent 5000 Rupiah in one day]
'On eating and motorcycle taxis, that's all'

(7) Kerja *sama* sekolah, gitu
    work *sama* school LIKE-DEM-DEM:DIST
[Discussing life]
'Working and school, that's how it is'

In the above examples, *sama* occurs between two conjoined items, the first of which is double-underlined while the second is single-underlined; in these examples, *sama* is rendered into English as 'and'. In example (3), the conjoined items are names of people, in (4) they are drinks, and in (5) activities with an associated participant. In examples (6) and (7), the first item denotes an activity while the second item

³In all of the examples of naturalistic data cited in this paper, the context in which the utterance occurred is indicated in square brackets. The translation given beneath it is one which is appropriate to the context in question, and does not reflect the usually much wider range of meanings the sentence could have had in other hypothetical contexts.
denotes an object; nevertheless, these constructions are still understood as conjunctions of equally ranked items.

As suggested in the previous section, Riau Indonesian does not distinguish between major open syntactic categories such as NP and VP. Examples (3) - (7) above highlight one of the consequences of the absence of such a distinction. In languages that distinguish between NPs and VPs, this distinction typically interacts with conjunction in one of two ways. In many languages, different forms are used for conjoining NPs and VPs; see, for example, Haspelmath (2000, to appear). For example, in Dagbani, mini is used to conjoin NPs while ka is used to conjoin VPs; see Olawsky (1999). Alternatively, many languages make use of the same form but impose a constraint of homogeneity: both of the conjuncts must belong to the same category. Thus, in English, one can say John and Bill, sang and danced, but not *John and danced. However, as evident in (3) - (7) above, neither of these effects is present in Riau Indonesian. Examples (3) - (5) show that the same form sama is used for the equivalents of both NP conjunction and VP conjunction. And examples (6) and (7) demonstrate that sama may be used for the equivalent of conjoining a VP and an NP. In order to render the latter examples into English, the translation of the VP must be nominalized (or alternatively, the translation of the NP verbalized); however, there is no trace of such a category-changing process in the original Riau Indonesian. Thus, examples (6) and (7) provide a vivid instantiation of the generalization to the effect that in Riau Indonesian, expressions denoting objects and activities enjoy the same distributional privileges, and therefore need not be assigned to distinct syntactic categories such as NP and VP.

The next example illustrates a somewhat different use of sama to express conjunction, in what is sometimes referred to as an inclusory construction.

(8) Kami main sama Kairil
    1 play SAMA Kairil
[Boy taking leave from adults]
'Me and Kairil are going to play'

In many languages, there are constraints on the occurrence of pronouns within conjunctions. In such languages, instead of constructions of the form PRONOUN1 COORDINATOR X (for example, English Me and John), one finds constructions of the form PRONOUN2 (...) MARKER (...) X, where MARKER is typically some kind of adposition, and PRONOUN2 is a pronoun whose reference includes both PRONOUN1 and the other conjunct X (hence the term inclusory). Thus, in Riau Indonesian, for 'Me and Kairil' it is possible to say Saya sama Kairil (where saya is the first-person singular pronoun 'I'); however, the preferred construction, indicated in (8), involves the pronoun kami, whose core meaning is that of first-person plural exclusive, which, in the above example, refers to both the speaker and the third-person Kairil.4

In a wide range of examples, encompassing (9) - (38) below, the function of sama resembles that of an adposition or case-marker in other languages. In these examples, sama occurs in front of an expression, which is single-underlined, characterizing that expression as standing in a particular semantic relation, or thematic role, to some other expression, which is double-underlined. In the semantic map in Figure 1, these usages of sama comprise the functions (other than conjunction and inclusory) enclosed within the round-cornered box. As suggested by the box, these functions are all very close to each other, and the boundaries between them are often ill-defined.

The first class of cases are those in which sama expresses a comitative relation, translatable into English with the preposition 'with'.

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4As noted by Lichtenberk (2000a), inclusory constructions come in two varieties: phrasal, where the three parts of the construction (PRONOUN2, marker, and X) form a single constituent; and split, where they do not. Riau Indonesian has both kinds of inclusory construction; example (8) illustrates the latter, split kind, in that Kami is separated from sama Kairil by the word main 'play'.

7
(9) Damsir beli celana sama si Man sudah bulu-bulu
Damsir buy trousers SAMA PERS Mansudir|FAM PFCT DISTR—feather
[About a pair of trousers]
'The trousers that Damsir bought with Mansudir are already all frayed'

(10) Kita makan sama bang Ai itu?
1.2 eat SAMA FAM|elder.brother Aidil|FAM DEM-DEM:DIST
[Speaker asks interlocutor where he bought the rice; interlocutor says by the harbour; speaker asks]
'The place we ate with elder brother Aidil?'

The comitative use of sama is one of its core functions, and one that occurs with high frequency. From a cross-linguistic perspective, the formal identity of conjunctions and comitatives is widespread and well-documented; see, for example Stassen (2000, to appear a) and many of the articles in Haspelmash ed. (to appear). In addition, the formal identity of inclusory markers and comitatives is also well-attested, see Haspelmash (2000), Moravcsik (to appear) and others. An example of this is the Russian preposition с, as described by Urtz (1994).

A somewhat more limited function of sama is to express an instrumental relation, also translatable into English with the preposition 'with'.

(11) Berangkat sama apa?
depart SAMA what
[At harbour, waiting for boats]
'Which boat are you leaving on'

(12) Abang sama Mikonata balik?
elder.brother sama Mikonata return
[At harbour, asking which boat I am planning to take back to Singapore]
'Are you returning on the Mikonata?'

The cross-linguistically widespread formal identity of comitatives and instrumentals has been described by Stolz (1996a,b), Stolz, Stroh and Urdze (to appear) and others; an obvious example of this is provided by English with. In Riau Indonesian, however, most instrumentals are more commonly expressed by means of a different form, namely pakai ‘use’; the use of sama to mark instrumentals is largely if not exclusively limited to instrumentals of vehicular motion, as in the above two examples.

Another function of sama is expressing a relation that might be referred to as animate locative:

(13) Saya simpan sama David mana?
1SG deposit sama David which
[About some money that the speaker had left with me for safekeeping but now wants back]
'Where's what I deposited with you?'

(14) Tak ada duit kecil sama saya
NEG exist money small sama 1SG
[Wanting to make purchase]
'I don't have any small change on me'

In general, in Riau Indonesian, ordinary locatives involving places are not marked with sama, but rather with the locative marker di. However, one particular type of locative-like relation, involving animates, can be marked with sama, as shown above. As suggested by (13) and (14), both of which happen to involve money, this semantic relationship might alternatively be characterized as temporary possessor. Indeed, as noted by Heine (1997), Stassen (to appear b) and many others, possessors are often expressed by means of locative markers, for example Russian u 'at' and Hebrew l- 'to'.
Another related function of sama is the expression of a relation that could be termed animate source:

(15) Minta __ uang sama dia
    request money SAMA 3
    [One beggar, catching sight of me, says to another]
    'Ask him for money'

(16) Aku __ beli sama David
    1SG buy SAMA David
    [Offering to buy my camera off me]
    'I'll buy it from you'

For the most part, in Riau Indonesian, ordinary sources, involving places, are marked with the source marker dari 'from'. However, as suggested by the above examples, when the source is animate, sama is used instead.

Yet another related function of sama, and a much more common one, is the expression of the opposite relation animate goal:

(17) Kenapa David tak __ kasi ikan sama dia?
    why David NEG give fish SAMA 3
    [After fishing; usually I would give the fish that we caught to the cleaning lady; this time I
    hadn't, and speaker asks why]
    'Why didn't you give her the fish?'

(18) Dia juga __ belum bayar sama saya
    3 CONJ.OP NEG:PFCT pay SAMA 1SG
    [Playing cards, speaker says he hasn't yet paid interlocutor his winnings, then, pointing to third
    player, says]
    'I haven't paid him yet either'

(19) Orang __ bahasa Inggeris sama David?
    person language English SAMA David
    [Discussing my trip to the Philippines]
    'Did people speak English to you?'

Once more, an animacy split is in evidence. In general, for inanimate goals, such as places towards which motion is directed, the proclitic form ke 'to' is used; however, for animate goals, as in the above examples, sama is used instead. The formal marking of goal marking and the marking of other oblique expressions is of course so widespread cross-linguistically that it hardly warrants further discussion.

A number of closely related functions of sama, exemplified in (20) - (26) below, involve relations associated with mental states. One less common function is the expression of a relation which might be denoted theme of cognition:

(20) Bapak saya sama David sudah lupanya
    father 1SG SAMA David PFCT forget-ASSOC
    [After long absence, I encounter speaker's father, who does not recognize me]
    'My father has already forgotten you'

However, in such contexts, sama is relatively infrequent, while zero-marking is the more natural option.

A more common function of sama is the expression of a relation which might be referred to as trigger of emotion:
(21) Mister takut sama tadi?
white.person fear SAMA:PST:PROX
[Walking through town, we are followed by group of men who then disappear; speaker asks]
'Were you afraid of those guys just before?'

(22) Sama dua orang ini aja yang marah dia
SAMA TWO PERSON DEM-DEM:PROX CONJ:OP REL angry 3
[Group of people watching a trained monkey climb a coconut palm and pick coconuts; when the monkey comes back down he becomes very agitated at two children; his owner reassures me]
'It's only these two persons that he's angry with'

(23) Malu lah sama pengawal
ashamed CONTR SAMA official
[From a tale about a king and queen; the queen is crying out loudly to have sex, but the king is embarrassed, and afraid the officials will overhear]
'I'll be embarrassed in front of the officials'

In each of the above examples, an expression marked with sama that is single-underlined, refers to a participant that is the trigger of an emotion, described in the expression that is double-underlined. A very common function of sama involves the expression of the experiencer relation:

(24) Putih 'kan nampak sama ikan
white Q AG-see SAMA fish
[Watching TV program about fishing lures]
'The white ones, the fish can see'

(25) "Tak apa lah, nanti saya kasi tahu sama, a, bapak saya,
NEG what CONTR FUT:PROX 1sg give know SAMA FILL father 1SG
kamu tidur di tempat saya, di istana", ha
2 sleep loc place 1sg loc palace deic
[From a tale of a jackfruit vendor and a princess; the princess invites the jackfruit vendor to spend the night with her; the jackfruit vendor is reluctant, and the princess coaxes him]
'She said "It doesn't matter, I'll let my father know that you're sleeping at my place, in the palace", there'

(26) Semua enak sama David
all nice SAMA David
[Complaining that I like too many different kinds of food]
'You like everything'

In each of the above examples, an expression preceded by sama that is single-underlined, refers to a participant that is the experiencer of a mental activity, described in the expression that is double-underlined. The above examples illustrate three different subtypes of mental activities: perception in (24), cognition in (25), and emotion in (26). The formal identity of experiencer marking on the one hand, and datives and obliques on the other, is of course well-documented cross-linguistically; see, for example, the articles in Verma and Mohanan eds. (1991).

A major function of sama is to express the relation of transitive agent:

(27) Minum sama abang
drink SAMA elder.brother
[Speaker wants me to finish my drink quickly]
'Drink up'
(28) Sama David pegang
    SAMA David hold
    [My wallet goes missing; speaker and I are looking for it]
    'You were holding it'

(29) Nampar sama komandan
    AG-slap SAMA commander
    [About army life, and what happens to new recruits who are caught smoking]
    'They get slapped by the commander'

(30) Talinya digit-gigit sama ikan
    string-ASSOC PAT-DISTR-bite SAMA fish
    [While fishing, after the speaker's line snapped]
    'The line was bitten by a fish'

(31) Kita kasikan sama dia lagi?
    1.2 give-ep SAMA 3 CONJ.OP
    [Discussing what would happen if a passport were to be lost]
    'Would they give it back to one again?'

In each of the above examples, an expression marked with sama that is single-underlined, refers to a participant that is the agent of an activity, described in the expression that is double-underlined. Moreover, in each case, the activity is one whose semantic frame contains another participant with the role of theme or patient. For activities whose semantic frame does not contain such a second participant, for example lari 'run', tidur 'sleep', and senyum 'smile', sama cannot be used to mark the agent expression. Thus, the relation expressed by sama in such examples is that of transitive agent. Examples (27) - (31) above provide some indication of the range of constructions in which sama may mark transitive agents. Whereas in (27) and (28) the activity expression occurs in bare form, in (29) - (31) it bears one of a set of affixes which denote particular thematic roles and, in doing so, assign them greater salience; elsewhere, these affixes are characterized as generalized voice markers (Gil 2002c). Thus, in (29) tampar 'slap' is prefixed with the actor-oriented marker N-, in (30) gigi 'bite' is prefixed with the patient-oriented marker di-, and in (31) kasi 'give' is suffixed with the end-point-oriented marker -kan. In unison, then, examples (27) - (31) show that the transitive-agent-marking function of sama is independent of generalized voice and the affixes that may occur on the expression denoting the relevant activity.5

A similar function of sama involves the expression of the cause relation:

(32) Jatuh sama siapa?
    fall SAMA PERS-what
    [About a damaged camera]
    'Who dropped it?'

(33) Sama saya banyak sekali masuk itu
    SAMA 1SG much one-time enter DEM-DEM:DIST
    [Watching game in which people are throwing bottle tops into bucket]
    'I would get lots in'

5With reference other colloquial varieties of Indonesian, such as that of Jakarta, it is occasionally suggested that constructions corresponding to that in (30) are passive, and that sama is the colloquial equivalent of the standard form oleh, which marks the agent phrase in passive constructions. In Gil (2002c) it is argued that constructions containing the prefix di- are not passive constructions in either Jakarta or Riau Indonesian. But whatever the merits of that argument, the data in (27) - (31) show clearly that sama plays no role in any putative distinction between active and passive sentences in Riau Indonesian.
(34) Ini rambut enak sama dia
DEM-DEM:PROX hair nice SAMA 3
[About some hairspray]
'This makes one's hair nice'

In the above examples, an expression marked with sama that is single-underlined, refers to a participant that is the cause of an activity, described in the expression that is double-underlined.

Some additional functions of sama, of a rather heterogeneous nature, may be characterized as involving the expression of various "minor" thematic roles. One such role is standard of comparison:

(35) Vid, kalau Manado sama Jakarta mana jauh Vid?
FAM|David TOP Manado SAMA Jakarta which far FAM|David
[Discussing a friend's planned move to Manado]
'David, which is further, Manado or Jakarta?'

In the above example, Jakarta, marked with sama, is the standard of a comparison of which the theme of comparison is Manado. Another minor role expressed by sama is one which might be referred to as experiencer of exquisitiveness:

(36) Ini kecil sama David
DEM-DEM:PROX small SAMA David
[About trousers in shop that I was about to try on]
'They're too small for you'

In the above example, David, marked with sama, is the experiencer of exquisitiveness with respect to the scalar property kecil 'small'. Yet another minor role expressed by sama is one which could be termed maledictive theme:

(37) Ini jatuh sama kau
DEM-DEM:PROX fall SAMA 2
[Playing Mario, having just knocked off a bad mushroom]
'Away with you'

In general, neither patients nor themes of motion can be marked with sama; in particular, jatuh 'fall' is an activity whose single participant cannot ordinarily be marked with sama. However, in (37), illustrating a rather uncommon construction type of high expressivity, the theme of jatuh, namely kau, is in fact marked with sama, the presence of sama contributing maledictive force to the utterance. It is interesting to note that this function also seems to be expressible in English with with, as in the translation to (37) above, and also in the Queen of Hearts' Off with her head (from Lewis Carroll's Alice in Wonderland).

The final function of sama involving thematic roles to be discussed here is the expression of the symmetric participant relation:

(38) Saya tabrak sama dia
1SG collide SAMA 3
[Playing Nintendo racing-car game, speaker's car collides with other one]
'I collided with him'

In the above example, the third person pronoun dia bears the same thematic role as the first person singular pronoun saya with respect to tabrak 'collide'. Accordingly, example (38) could have been paraphrased symmetrically as a conjunction, bringing us full circle back to the first function of sama discussed in the beginning of this section. (Note, however, that given the constraints on conjunction pointed out above, such a paraphrase would have assumed the form of an inclusory construction similar to (8), for example Kami sama dia tabrak 'Me and him collided'.) However, as is the case in (38), the same
symmetric event may also be cast in an asymmetric syntactic mould reflecting an alternative asymmetric, and in this particular case speaker-oriented, perspective. As evidenced by the translation above, English has a very similar construction, again involving the use of with.

All of the usages of sama discussed so far involve the expression of functions which, in the semantic map in Figure 1, are enclosed within the round-cornered box. In particular, all of the usages exemplified in (9) (38) involve the expression of functions in which sama occurs in front of a particular expression, and marks it as standing in a certain semantic relation, or thematic role, to some other expression. As evidenced by the diversity of the examples, the semantic relation in question may vary quite a bit. However, as was observed in the course of the preceding discussion, such variation is not unconstrained. Some of the core semantic relations not expressible by sama include patients and intransitive agents. Moreover, outside the core relations, there are several more peripheral semantic relations that are not expressible by sama, including temporals, many locatives and many instrumental. Cross-linguistically, the range of thematic roles expressible by sama overlaps considerably with that of some comitative markers which, in certain languages, have expanded their functions to a considerable degree. An example of this is provided by Seychelles Creole ek, discussed in Michaelis and Rosalie (2000) and also Haspelmath (2003). In addition, the range of thematic roles expressible by sama bears a certain resemblance to that associated with ergative case markers in languages where ergative case generalizes to cover a variety of so-called oblique functions. Some examples of case markers with a range of functions similar to sama include the "oblique" in Kabardian as described in Colarusso (1989, 1992), and in Adyghe as discussed in Kibrik (2003) based on Jakovlev and Ashxamaf (1940).

We now turn to consider the remaining functions of sama, those lying outside the round-cornered box in the semantic map in Figure 1. These functions differ from the preceding ones in that they do not involve thematic roles; that is to say, they do not assert a particular semantic relation between the phrase containing sama and some other phrase. As a result, in the examples that follow, there is no counterpart to the double-underlined expressions in the preceding examples. As in the preceding examples, the expression occurring in immediate construction with sama is single-underlined. However, whereas in the preceding examples, sama invariably precedes the relevant expression, in the examples below sama may either precede or follow the expression in question.

The first function to be considered in this group is that of the reciprocal:6

(39) Ha, bagus, nembak sama
    DEIC good ag-shoot SAMA
    [Viewing a drawing of two people pointing guns at each other]
    'There, good, they're shooting each other'

In the above example, sama marks nembak 'shoot' as reciprocal. Constructions such as the above are relatively infrequent; more commonly, reciprocals are expressed by reduplication, or by two more specific constructions involving a combination of sama plus reduplication; these latter constructions are discussed in Section 4.2 below. The formal identity of reciprocal and other functions of sama has been described in a variety of other languages; see for example Maslova (2000) on reciprocals and comitatives in Yukagir and Bantu languages.

A second function is that of additive focus, of the type commonly expressed in English by means of 'too', 'also' and 'as well':

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6Example (39), as well as examples (50) and (54) below, also expressing reciprocals, were obtained though a method of "directed spontaneous speech production", whereby subjects are brought into a situation conducive to a certain type of grammatical construction in the hope that they will spontaneously produce an utterance exemplifying that construction. In the case at hand, the speakers happened to observe me working on a laptop computer displaying a picture of two people pointing guns at one another, and, without being asked to, spontaneously produced the given reciprocal constructions.
(40) **As sama, ya?**
    ace SAMA yes
    [Adding up score at end of card game; since an ace counts for extra points, the speaker reminds the person adding up that he had one and that he should include it]
    'An ace too, right?'

In the above example, *sama* marks as 'ace' as being within the scope of a contextually provided activity, the adding up of the score, in addition to some other cards which are presupposed to be in the scope of the same activity. Again, constructions such as the above are relatively infrequent; more typical would have been the use of one or more of a set of conjunctive operators such as *juga*, *pun* and *lagi*, each of which has a wide range of usages including, among others, those corresponding to English *too*, *also* and *as well*. Cross-linguistically, the formal identity of conjunction and additive focus is extremely widespread; see for example König (1991) and Gil (1994a,b, 1995a).

A third and closely related function is that of **universal quantification:**

(41) **Sama bawa lah**
    SAMA bring CONTR
    [Speaker and friend had an accident on a motorcycle; interlocutor is angry at speaker for driving carelessly; speaker responds]
    'We were both driving'

In the above example, *sama* marks *bawa* 'bring' or 'drive' as having a participant undergoing universal quantification, reflected in the English translation with 'both'. Once again, the use of *sama* to express universal quantification is relatively uncommon; other more frequently occurring strategies for the expression of universal quantification include the dedicated lexical items *semua* 'all' and *tiap* 'every', reduplication of numerals as in *dua-dua*, *distr-two* or 'both', and the combination of an interrogative pronoun with a conjunctive operator as in *mana juga* 'which too' or 'any one' in example (65) below. Cross-linguistically, it is quite common for universal quantifiers to be formally related to conjunctions and/or additive focus markers; see for example Emeneau (1980), König (1991), Gil (1994a,b, 1995a,b, to appear a), Haspelmath (1995, 1997), and others. For example, in Hungarian, *minden* 'every' is formed from *mind*, an emphatic additive focus marker meaning 'also'. Indeed, in many languages of South, Southeast and East Asia, universal quantifiers are formed, like *mana juga* above, from the collocation of an interrogative pronoun and a conjunctive operator.

One of the most basic functions of *sama* is the expression of togetherness; this function is sometimes referred to as the **sociative:**

(42) **Sama pergi kita, Vid**
    SAMA go 1.2 FAM|David
    [Speaker and I planning to go out of house to different places; speaker suggests that we leave together]
    'Let's go out together'

In the above example, *sama* applies to *pergi* 'go' and qualifies the manner of going as involving the togetherness of the two agents referred to by the first-person inclusive pronoun *kita*. The above example bears a close semantic affinity to comitative constructions as in (9) and (10), but differs from them in an important way. Whereas in comitative constructions the entities that are semantically together are formally distributed over two expressions, *Damsir* and *si Man* in (9), *kita* and *bang Ai* in (10), here the entities are united within a single referring expression, the pronoun *kita*.

We are nearing the end of this extensive description of the variegated functions of the single macrofunctional word *sama*. What remains, however, is another of its most central functions, namely the expression of **sameness:**
(43) Hari yang sama Jakarta Jogja
day REL SAMA Jakarta Jogja
[Garuda airline office clerk typing booking into computer]
'The same day, Jakarta-Jogja'

(44) Sama dengan David tasnya
SAMA with David bag-ASSOC
[Watching movie, man appears with shoulder bag]
'His bag is the same as yours'

(45) Sama Arip bagus
SAMA Arip good
[Speaker wants to play game on laptop computer; I ask him which one; he refers to a game that his friend was playing just before]
'The same one that Arip was playing is good'

(46) Sama juga seperti ke Sungai Apit
SAMA conj.op as DIR Sungai Apit
[At village called Lalang; interlocutor asks how far is it from here to Buton; speaker answers with reference to a small town called Sungai Apit whose location he assumes the interlocutor must know]
'Same as from here to Sungai Apit'

(47) Sama sama aku
SAMA SAMA 1sg
[Speaker and I both leaving Batam, speaker for Padang, I for Kuala Lumpur; I tell speaker I'll only arrive the next day; speaker says]
'Same as me'

(48) Sama panjang, panjang ini lagi
SAMA long long DEM-DEM:PROX CONJ.OP
[Going through a collection of foreign currency notes and comparing their sizes]
'Just as long .. this one's longer'

(49) Besar sama?
big SAMA
[In graphics program on laptop computer, trying to select a line width that is identical to that used previously]
'Is it as thick?'

The word sama constitutes the primary means for attributing or predicking the notion of sameness of any kind, including sameness of reference and sameness of properties. Semantically, the notion of sameness is trivalent, involving the theme, or that which is the same, the standard of comparison, or that which the theme is the same as, and the criterial property, or that with respect to which the theme is the same as the standard of comparison. In the above examples, these three participants are marked, where present, with single underline, single wavy underline, and double wavy underline respectively. In (43), the theme alone is present. In (44) - (47) the standard of comparison alone is present; these examples illustrate the variety of ways in which the standard of comparison may be marked. By far the most common way is that exemplified in (44), involving the form dengan 'with' discussed in more detail in Section 4.3 below. Other, much less frequent strategies include zero-marking as in (45), use of the form seperti 'as' as in (46), and, interestingly, the use of sama as in (46), in its function as marker of standard of comparison, as previously exemplified in (35). Finally, in (48) and (49), the criterial property alone is present; in these examples, the English translation makes use not of 'same' but rather the preposition 'as'.

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The formal identity of sameness and several of the other functions of sama considered above has been reported in a variety of other unrelated languages. For example, Stilo (to appear) describes Persian ham and derived forms as expressing, among others, conjunction, reciprocal, additive focus, universal quantification, sociative and sameness, while McGregor (1990) characterizes Gooniyandi -nyali as expressing, inter alia, additive focus, universal quantification, sociative and sameness. The conceptual basis for such formal identity is quite clear. To say that two entities are "the same" is to say that they "go with each other" or are located "together" in some relevant conceptual space. For example, in (43), the two flights might be entered together into the same box in a calendar, reflecting their occurrence on the same day. Or, in (44), the two bags might appear together in a "map of bag types", such as, for example, airlines present to customers whose check-in luggage has been lost, in order to assist them in the identification of their bags. And so forth.

In the preceding pages, we have described, in some details, the range of functions exhibited by sama, following the semantic map in Figure 1. However, in order to complete the picture, it is necessary to dwell briefly on the interaction between sama and another important morphosyntactic device, reduplication.

4.2 Sama plus Reduplication

In Riau Indonesian, reduplication is a very frequently-occurring morphosyntactic device. Formally, reduplication is most often complete, though occasionally it may be partial; when partial, it is most frequently the initial (C)V sequence that is copied, though occasionally other initial sequences undergo copying. Most commonly, reduplication results in a single additional copy, though less frequently a larger number of copies are created. Semantically, reduplication is, not surprisingly, macrofunctional; while its basic meaning is distributivity, it has a number of other core meanings, including iterativity and negative polarity, plus a variety of other less basic meanings, including plurality, large amount, extent or number, universal quantification, concessivity, atelicity and playfulness. There exists no correlation between the forms and the meanings of reduplication: any of the possible forms can bear any of the possible meanings.

Reduplication and sama may interact in either of two ways. First, the form sama may itself be reduplicated, resulting in forms such as sama-sama and other less common variants. Alternatively, sama may occur between two copies of another expression X, resulting in a construction of the form X sama X.

The interpretation of sama-sama and its variants is, broadly speaking, compositional, combining the meanings of sama and of reduplication. However, many of the possible combinations are semantically incoherent and hence unattested. The meaning that reduplication most commonly confers on sama is its most basic meaning, namely distributivity. Since distributivity presupposes a plural entity, the distributive key, in the sense defined in Gil (1995b), the effect of reduplication is thus to reinforce the four functions of sama which presuppose a plural entity: reciprocal, universal quantification, sociative and sameness. Three of these functions are illustrated below, while the remaining one, universal quantification, for which there are no unambivalent examples in the corpus, is exemplified in Section 5.2, in the discussion of the ill-definedness of boundaries between functions.

The reciprocal function is illustrated by the following example:

(50) **Sama-sama** musuh
    DISTR—SAMA enemy
    [Viewing a drawing of two people pointing guns at each other]
    'They're each other's enemies'

For the expression of reciprocity, reduplicated sama, as in (50), is much more common than simple sama, shown in (39). In examples such as the above, reduplication expresses the distributivity that is inherent in the notion of reciprocity. The formal identity of reciprocal and distributive markings constitutes a recurrent cross-linguistic pattern; see, for example Lichtenberk (2000b) for several Oceanic languages. An
obvious example of such formal identity is provided by the English translation of (50) and the each in each other's.

The sociative function is instantiated by the following example:

(51) **Sama-sama** pergi
    DISTR—SAMA go
    [Speaker and interlocutor about to leave hotel, but in different directions]
    'Let's leave together'

In the case of sociative, both reduplicated sama, as in (51), and simple sama, as in (42), are commonly used. At first blush, sociative appears to involve a notion of collectivity contradicting the distributive meaning of reduplication. But this conflict is only apparent, since the collectivity and the distributivity are of different scope, that is to say, they pertain to different concepts. Thus, in the above example, togetherness applies collectively to the speaker and the interlocutor, as it makes no sense to say that each of the two, individually, is together. However, the activity of leaving distributes over the speaker and the interlocutor, since it is in fact the case that each of them, individually, is going to leave.

The sameness function can be observed in the following examples:

(52) **Sama-sama**
    DISTR—SAMA
    [Watching professional wrestling on TV, speaker commenting that the two players are evenly matched]
    'They're the same'

(53) **Sa-sama** warna hilang dia
    DISTR—SAMA colour disappear 3
    [Establishing reference to computer game in which the object is to shoot coloured disks at other coloured disks: when three disks of the same colour come into contact with each other, they disappear]
    'The one which when the colours are the same they disappear'

In (52) and (53), reduplication of sama adds emphasis, by underscoring that each and every one of the relevant items is the same; it is, however less frequent than the ordinary expression of sameness by means of simple sama, as in (43) - (49). Again, an apparent conflict between the collectivity inherent in sameness and the distributivity expressed by reduplication resolves itself under closer scrutiny: Whereas the relevant set of entities are collectively the same, each entity distributively participates in the sameness relation.

The second way in which reduplication interacts with sama is in the X sama X construction. In this construction X is typically a single word, though less commonly it may also consist of a closely-knit two-word expression. The X sama X construction is an instance of a more general construction type which might be referred to as **intercalated reduplication**, which takes the form X m X, where m is some typically grammatical marker. Intercalated reduplication occurs quite frequently across languages, though I am not familiar with any general discussion of the construction in the linguistic literature. Examples of intercalated reduplication in English include distributive numerals such as two by two, distributive manner adverbials such as suitcase after suitcase, and, interestingly, reciprocals such as man to man.\(^7\)

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\(^7\)In a variant form of intercalated reduplication, the marker m attaches to the second reduplicand, represented schematically as X m- X. In Riau Indonesian there is a single lexicalized example of this, the form adik beradik 'brothers and sisters', derived from adik 'younger sibling' and the middle voice prefix ber-. In Standard Indonesian there is a more productive construction involving the agent-oriented prefix meN-, yielding forms such as surat menyurat 'write to each other', from surat 'write'. Again, it is worthy of note that both examples involve a reciprocal meaning.
In Riau Indonesian, the X sama X construction is the only productive example of intercalated reduplication. Thus, unlike for ordinary reduplication, there is no independent source of evidence with respect to the function of intercalated reduplication in Riau Indonesian. Broadly speaking, the range of functions of the X sama X construction is similar to that of sama-sama discussed above, encompassing reciprocal, universal quantification, sociative and sameness. However, the relative weight of these four functions varies from one construction to another. By far the most common function of the X sama X construction is the expression of reciprocity. Thus, it would seem reasonable to suggest that whereas ordinary reduplication bears a basic meaning of distributivity, intercalated reduplication is inherently associated with a reciprocal interpretation.

The reciprocal function of the X sama X construction is evident in the following examples:

(54) Tembak sama tembak
      shoot sama shoot
      [Viewing a drawing of two people pointing guns at each other]
      'They’re shooting each other'

(55) KO sama KO, Vid
      knockout sama knockout FAM|David
      [Playing a video game; both fighters fall to the ground]
      'They knocked each other out'

(56) Ayo, main kuat sama main kuat
      EXHRT play strong sama play strong
      [During horseplay, interlocutor complains that speaker is playing hard while he's playing easy; speaker responds]
      'Come on then, let's both play hard'

(57) Kawan sama kawan mana boleh kaya gitu, 'kan?
      Friend sama friend which can similar like-DEM-DEM:DIST Q
      [About somebody who has just walked out, slamming the door]
      'Amongst friends you shouldn't do that, should you'

(58) Kalau henpon sama henpon banyak bayar
      TOP mobile.phone sama mobile.phone much pay
      [About the prices of telephone conversations]
      'One mobile phone to another costs a lot'

In examples (54) - (56), the reduplicated expression, underlined, denotes an activity, which the X sama X construction marks as being reciprocal. In contrast, in examples (57) and (58), the reduplicated expression denotes an object; here the effect of the X sama X construction is to characterize the object as being engaged in some contextually determined reciprocal activity. Thus, in (57) kawan sama kawan construction means 'friends doing things in each other's company', while in (58) henpon sama henpon means 'mobile phones being used to call each other'. As noted above, the X sama X construction may also express additional functions. However, such examples are of a considerably more ambivalent nature, and are accordingly discussed in Section 5.2 below.

4.3 Sama and Other Forms

Having concluded the description of sama, it is worth acknowledging, however briefly, the existence of other forms in Riau Indonesian whose functions intersect to various degrees with those of sama. Figure 2, based on the semantic map for sama provided in Figure 1, represents the range of functions of five other forms: deng'an, juga, and the three generalized voice affixes N-, di- and -kan. Since the focus of this paper
is on sama, Figure 2 only indicates those functions of these five forms which overlap with those of sama; additional functions, which some of these forms have, are not represented in Figure 2.

2: Sama and Selected Other Forms in Riau Indonesian

Of the forms represented in Figure 2, the one with the widest range of functions is dengan. In fact, the range of functions of dengan is identical to those enclosed by the round-cornered box within Figure 1, at the beginning of Section 4.1. For all of the functions enclosed within the box, dengan may freely replace sama, without any change in grammaticality or meaning. The only exception to this generalization, a marginal one, is that alluded to in the discussion of examples (44) and (47): in the context of sama meaning 'same', when marking the standard of comparison, dengan as in (44) is strongly preferred over sama as in (47). Presumably, the motivation behind this constraint is to avoid the repetition of sama in two different functions. Other than this, however, it is hard to identify any language-internal principles governing the choice between the two forms, sama and dengan. Rather, the choice between the two would seem, at least in part, to reflect sociolinguistic factors: the use of dengan is more closely associated with speakers of Malay ethnicity, and/or speakers aiming for a somewhat less colloquial register.

As pointed out in Section 4.1, the functions enclosed within the box for dengan share certain substantive properties. Two of them involve some kind of conjunction, while all of the remaining ones are commonly associated with adpositions or case-markers. In fact, the functions within the box are precisely those for which sama or dengan must be followed by an obligatory expression to which it assigns a certain
semantic role, either conjunct, or one of the thematic roles. Moreover, since for dengan, these are the only available functions, this entails that dengan must always be followed by an obligatory expression to which it assigns a semantic role.

This brings to the fore a crucial difference between sama and dengan pertaining to syntactic category membership. As suggested at the beginning of Section 4, sama belongs to the open syntactic category S: this reflects the fact that it can occur by itself as a complete non-elliptical sentence, or in construction with other S expressions with flexible word order. In contrast, dengan cannot stand on its own as a complete non-elliptical sentence; instead it must always occur in front of another expression belonging to the category S. As suggested in Gil (2000b), this property of dengan groups it together with a small set of other words in Riau Indonesian, which are characterized as belonging to the closed syntactic category S/S, that is to say, expressions which combine with an S to yield another S. Thus, sama and dengan provide a striking example of the autonomy of syntactic category membership vis-à-vis semantic function. Although exhibiting a great degree of semantic overlap with respect to the range of expressible functions, these two forms differ with respect to their distributional privileges, and accordingly belong to distinct syntactic categories.

Unlike dengan, the remaining forms represented in Figure 2 are never interchangeable with sama; although they overlap with sama with regard to their meanings, their grammatical behaviour is quite different. The conjunctive operator juga shares with sama the functions of conjunction, additive focus and universal quantification. Semantically, its basic meaning is 'too', 'also', or 'as well'. In addition, it is used to express emphatic conjunction, in which case it occurs after each of the coordinated elements. And in combination with interrogative pronouns, it forms universal quantifiers, such as mana juga 'where too' or 'any one', as in example (65) below. Syntactically, however, juga is a bird of a quite different feather. Unlike sama, but like dengan, it belongs to the category S/S; however, unlike dengan it invariably follows the element to which it attaches.

The remaining three forms, N-, di- and -kan are generalized voice markers, whose function is to denote a particular thematic role and by doing so assign it greater salience; see Gil (1999, 2002b,c) for more details. Each of the three thematic roles denoted by these markers overlaps in part with the thematic roles expressed by sama. The marker N- picks out the thematic role of actor, which, as indicated in Figure 2, includes experiencer, transitive agent and cause; however, it also includes intransitive agents, which cannot be marked with sama. An illustration of the overlap between N- and sama is provided by example (29) above, Nampar sama komandan 'They get slapped by the commander'; in this construction, the thematic role of komandan may be said to be doubly marked, once by sama and once by the actor-oriented voice prefix N- on tampar 'slap'. Similarly, the marker di- denotes the thematic role of generalized patient, which includes symmetric participant and animate goal, but also prototypical patients, which cannot be marked with sama. And the marker -kan refers to the thematic role of end point, which includes animate source, animate goal (again) and theme of cognition, but also roles such as patient of causation, which cannot be marked with sama. From a formal perspective, the marker N- is a prefix, while the markers di- and -kan, although typically written joined on to their host words, are actually clitics; see Gil (2002a) for some evidence with respect to -kan.

5 SAMA: ANALYSIS

The preceding section provided a detailed description of the usages of sama, in terms of 21 functions, represented in the semantic map in Figure 1. This was an exercise that was appropriate for expository reasons. However, it is now time to argue that the preceding description involved a fundamental misrepresentation of reality, and that in actual fact, sama is associated not with 21 functions but rather with one single function, expressed in various ways by all of the examples in (3) - (58). This single function is a generalization of the sociative function indicated in Figure 1, centered around the notion of togetherness.
In order to argue for a single unified meaning underlying the macrofunctionality of sama, the three diagnostic criteria set forward in (1) will be invoked in turn: Similarly macrofunctional forms will be adduced from other languages, the boundaries between the 21 would-be functions will be shown to be fuzzy, and the unified meaning of sama will be defined in a more rigorous manner.

5.1 Cross-Linguistic replicability

In accordance with (1a), sama may be associated with a single meaning to the extent that, in a variety of genealogically, geographically and typologically unrelated languages, there exists a single form associated with a similar range of meanings. In the course of the discussion in Section 4, note was repeatedly made of how patterns of formal identity exhibited by sama have common, well-known and well-documented counterparts in other languages. These cross-linguistic patterns accordingly provide support for a unified analysis of Riau Indonesian sama.

Four of the specific forms alluded to in Section 4 are represented, with reference to the same semantic map for sama, in Figure 3. Figure 3 represents the range of functions of English with, Persian ham and its derivatives (following Stilo to appear, personal communication), Gooniyandi -nyali (as described by McGregor 1990); and the Kabardian oblique case-marker -m (in accordance with Colarusso 1989, 1992). Note that for each of these four forms, Figure 3 represents just the subset of their functions that overlap with those of Riau Indonesian sama; each of these forms has additional functions not shared with sama and hence not represented in Figure 3. As is evident from Figure 3, these four forms differ greatly with regard to their range of usages; indeed, they were chosen in part because of their diversity. Nevertheless, each of these four forms covers a substantial number of functions associated with Riau Indonesian sama. In doing so, these forms, and many others like them, which considerations of space alone preclude from discussing here, suggest that the patterns of macrofunctionality exhibited by Riau Indonesian sama are cross-linguistically widespread, attested in a wide range of genealogically, geographically and typologically diverse languages. Accordingly, they support the claim that the macrofunctionality of Riau Indonesian sama is not accidental but rather the result of general principles underlying the organization of language.

---

8It should be acknowledged that Colarusso explicitly argues that the conjunction -m is distinct from the case-marker -m. However, his examples show merely that -m can be used to conjoin expressions that are in non-oblique cases; they do not impinge on the question whether the two functions are special cases of a more general function, as is suggested to be the case here.
5.2 FUZZINESS OF BOUNDARIES

In accordance with (1b), sama may be associated with a single meaning to the extent that the boundaries between the putative distinct alternative meanings are fuzzy and ill-defined. This is most certainly the case. Indeed, the 21 putative functions of sama described in the previous section were very much a Procrustean bed into which naturalistically occurring utterances containing sama had to be forced, whether or not they actually fit. In most of the cases discussed above they did manage to fit, more or less, but now is the time to examine a few of the many cases that did not.

In examples (59) - (66), an utterance containing sama may be characterized as expressing more than one of the 21 supposed functions of sama posited in the preceding section. In each example, alternative English translations are provided for each of the would-be functions. Examples (59) - (61) contain the simple form sama.⁹

⁹In example (60), sama is pronounced as samo; this is due to interference from the local variety of Malay, in which most instances of word-final -a are realized as -o.
59) **Sama** makan **sama** kopi

SAMA eat SAMA coffee

[At coffee shop, customer asks how much the bill is; woman in charge says 19,000, and then explains]

'It's for the food and the coffee'

'It's for the food and the coffee too'

---

60) Panjangnya, **samo** ini-**ni**, **samo** ini-**ni**, **samo** ini-**ni**

long-ASSOC SAMA DEM-DISTR-DEM-PROX SAMA DEM-DISTR-DEM-PROX SAMA DEM-DISTR-DEM-PROX

[Speaker teasing interlocutor, points to his nose and says how long it is, then points to his nipple, then to his other nipple, and then to his belly button]

'It's so long, and this, and this, and this'

'It's so long, this too, this too, this too'

'It's so long, same as this, same as this, same as this'

---

61) Abang pergi **sama**?

elder.brother go SAMA

[Group of people is about to leave; one asks the other]

'Are you coming too?'

'Are you coming with?'

'Are you coming, the same as us?'

---

Examples (62) and (63) contain reduplicated forms of **sama**.10

62) **Kurang** ajar, **sama-sama** meledak itu

deficient learn DISTR-SAMA AG-explode DEM-DEM:DIST

[Playing car-racing Nintendo game, speaker's car crashes into other one and both explode]

'Stupid, they exploded each other'

'Stupid, they both exploded'

'Stupid, they exploded together'

---

63) **Sa-sama-sama** ikut aku

dISTR-SAMA follow 1sg

[Interlocutor preparing to go out, speaker wants to come with]

'I'm also coming'

'I'm coming with'

'I'm coming the same as you'

---

And examples (64) - (66) contain the X **sama** X construction.

64) **Masuk** **sama** masuk syaitan semua

enter SAMA enter devil all

[Watching ghost story about western family living in Japan; two western men are engaged in fistfight, when one Japanese ghost enters one of the men and he starts using martial arts; then a second ghost enters the second man and he starts using martial arts as well]

'They're fighting each other with devils'

'They've both been entered by devils'

'They've been entered by devils the same way'

---

10Another similar example is provided by the use of reduplicated **sama-sama** as a conventionalized response to the expression terima kasih 'thanks', corresponding to the English 'you're welcome'. This use could also be considered as vague between various responses such 'the feeling is mutual' expressing the reciprocal, 'you too' expressing additive focus, and 'the same to you' expressing sameness.
(65) Hebat sama hebat mana juga mau masuk dia
great SAMA great which CONJ.OP want enter 3
[Watching TV sports program with digest of over one hundred of the best goals scored in world
cup competition: speaker observes that whoever has possession of the ball seems to be able to
get it in to the goal]
'They're all so good any one can score'
universal quantifier
'They're just as good, any one can score' sameness

(66) Bernang sama bernang
swim SAMA swim
[In swimming pool, speaker playing with friend; after uttering the above, they both submerge
themselves, facing each other]
'Let's swim facing each other' reciprocal
'Let's swim together' sociative
'Let's swim the same way' sameness

Crucially, for each of the above examples, the Speakers Intention Test, introduced in Section 2, suggests
that these sentences are not ambiguous with respect to the different putative functions and associated
English translations. Rather, each of these sentences was uttered in a normal every-day context in which
the speaker was clearly indifferent with respect to the distinctions implied by the different would-be
functions and corresponding English translations. Indeed, from the perspective of the Riau Indonesian
speakers, the different functions have no reality whatsoever; only when attempting to translate the
constructions into English is one forced to make arbitrary decisions, and to select one function at the
expense of the others. Thus, the Speakers Intention Test suggests that these sentences are vague, rather
than ambiguous, with respect to the different putative functions. Accordingly, the ill-definedness of
boundaries between such would-be functions provides further support for the existence of a single unified
meaning underlying the macrofunctionality of Riau Indonesian sama.

5.3 Unified Syntactic and Semantic representations

But the proof of the pudding is in the eating. In accordance with (1c), sama may be associated with a
single meaning to the extent that the meaning in question can be defined in a unified manner, without
recourse to disjunctions. As suggested at the beginning of Section 5, the single unified meaning of sama is
that of "togherness". However, in order to see how this single meaning may underlie all of the usages of
sama considered so far, we need to step back and look at sama within the context of the general syntactic
and semantic patterns of Riau Indonesian.

Let us return to sentence (2) Makan ayam, provided with the very general translation 'An association
of eating and chicken'. As suggested in Section 3, makan 'eat' and ayam 'chicken', are, like almost all other
words in the language, members of the category S. Thus, the syntactic structure of sentence (2) is that
given below:

(67) Syntactic Structure of (2):

S

S makan

S ayam
As represented in (67) above, the syntactic structure of sentence (2) is in fact a coordination of sentences, though without an overt coordinator. The characterization of sentence (2) as a coordination reflects that fact that the two constituent words are equally ranked: they belong to the same syntactic category, and there is no evidence for any structural asymmetry between them, such as might be induced, in other languages, by agreement, government, and other similar grammatical processes. Indeed, almost all sentences in Riau Indonesian are, like (2) above, built up from the coordination of sentences.11

But what about the meaning of (2)? As suggested by the translation provided, the meaning of (2) is in fact that of a conjunction. It may be represented as follows:

(68) Semantic Structure of (2):

```
A ( EAT, CHICKEN )
```

EAT       CHICKEN

The semantics of Riau Indonesian centers around the association operator, represented above with the letter A. In its monadic, or one-place guise, the association operator provides a semantic representation for markers of association, possession, and genitive case in many languages. For example, in English, in an expression such as John's, the possessive 's is interpreted as the association operator A, applying to the denotation JOHN, yielding the formula A ( JOHN ), which can be read as 'entity associated with John', where the detailed nature of the association is left unspecified by the grammar and is instead determined by context. However, in a typical Riau Indonesian sentence, the association operator applies polyadically, to a sequence of items, and without any overt morphosyntactic realization. For example, in (68) above, it applies dyadically to the two meaning components of the sentence, yielding the formula A ( EAT, CHICKEN ), which may be read as 'an association of eating and chicken', where the precise nature of the association is left unspecified, to be determined by context. Accordingly, sentence (2), Makan ayam, is endowed with a single unitary semantic representation which is indeterminate with respect to categories such as tense, aspect, number, definiteness, thematic roles and ontological categories.

One of the ways in which the range of possibilities may be reduced is by the imposition of headedness. In general, in a coordination of the form represented in (67) above, one of the daughter Ss may optionally assume the role of head, the other daughter S thereby being characterized as its modifier. Headedness bears semantic consequences: if a daughter S is head, some of its semantic properties project up to the mother S node, thereby becoming properties of the entire construction. For example, if in sentence (2) makan 'eat' assumes the role of head, then the resulting interpretation is one that might be represented as follows:

(69) Semantic Structure of (2), with makan as head:

```
EAT | A ( CHICKEN )
```

EAT       CHICKEN

In the above representation, boldface indicates that EAT is the head of the construction. As suggested by the double line, the head projects its identity up to the mother node of the construction, which accordingly assumes the denotation EAT. In other words, when makan 'eat' is head, the meaning of Makan

11The term coordination is being used here to denote a formal construction type, in contrast to conjunction, which pertains to semantic properties. This usage thus differs from that in Haspelmath (2000).
ayam is narrowed down in such a way that it must denote an activity of eating. However, it remains indeterminate with respect to other categories such as tense, aspect, number, definiteness, and thematic roles. Thus, when makan is 'head', what Makan ayam means is 'eating associated with chicken', where the nature of the association is unspecified, to be determined by context. This meaning is represented in the formula \( \text{EAT} \mid A(\text{CHICKEN}) \), where A is the association operator in its monadic guise, and the vertical line is to be read as "such that", as is customary in set-theoretical notation. Alternatively, if in sentence (2) ayam 'chicken' assumes the status of head, then the resulting interpretation is represented as in the following:

\[
\text{CHICKEN} \mid A(\text{EAT})
\]

In the above representation, it is now CHICKEN that projects up to the mother node, yielding the interpretation \( \text{CHICKEN} \mid A(\text{EAT}) \). Thus, when ayam 'chicken' is head, the meaning of Makan ayam is narrowed down in such a way that it must denote chicken: 'chicken associated with eating', where, as before, the nature of the association is indeterminate, left open to context. Thus, headedness contributes towards the reduction of indeterminacy in Riau Indonesian. However, such reduction is of limited scope, and besides, the occurrence of headedness is in any case far from universal, since, in many naturally occurring constructions, there is no evidence for its presence.

In addition to its semantic consequences, headedness also has an important effect on the syntax, and, in particular, the linear order of constituents. In order to appreciate this, it must first be noted that the syntactic and semantic tree diagrams provided in (67) - (70) above, and all of those proposed for sama below, are meant to be understood as unordered representations. For example, representation (67) should be read as saying that sentence (2), Makan ayam, is an S consisting of two daughter Ss, Makan and ayam; however, it should not be understood as encoding the relative order of the two daughter Ss, Makan and ayam. Indeed, representation (67) would be equally appropriate also for the sentence resulting from the interchange of the two words in (2), namely, Ayam makan. In other words, the fact that the nodes of tree diagrams appear in left-to-right order should be viewed as a mere artefact of the physical contingencies of the three-dimensional space we inhabit, and the resulting two-dimensionality of the paper on which we represent our thoughts. A number of scholars working within different theoretical frameworks have provided arguments in support of unordered syntactic and semantic tree structures and the representational separation of hierarchic structure and linear order; see, for example Sanders (1975), Keenan (1978), Keenan and Faltz (1986), Abels (2001) and Bury (2003).

Although, as pointed out in Section 3, Riau Indonesian has very flexible word order, there are still a variety of constraints on linearization running the gamut from weak to categorical. Three of the most important principles governing word order in Riau Indonesian are summarized in (71) below:
(71) Principles Governing Word Order in Riau Indonesian
   (a) *Left-Headedness*
       Heads precede modifiers;
   (b) *Iconicity*
       The linear order of expressions mirrors a conceptualized linear order of their referents;
   (c) *Information Flow*
       The linear order of expressions reflects the communicative strategies of speakers.

The above principles are formulated in extremely general terms. Not all of them apply in all circumstances; moreover, when two or more apply to the same domain, they may either converge in effecting the same order or else diverge in pointing towards conflicting orders. Thus, the actual word order of any given sentence is the product of a complex interplay of the above principles as well as others. These principles should accordingly be thought of as "preference rules" in the spirit of Lerdahl and Jackendoff (1983), or as constraints in the currently fashionable Optimality Theory. The first principle, Left-Headedness, places Riau Indonesian in the company of perhaps one-half of the world's languages for which a similar principle is operative, while distinguishing it from the remaining languages for which a mirror-image Right-Headedness principle is appropriate. However, within Riau Indonesian, Left-Headedness does not apply to the many constructions that are headless; moreover, even in cases where it does apply, it is occasionally conflicts with and is overridden by one or both of the other principles, resulting in right-headed constructions. The second principle, Iconicity, is probably universal; see, for example Haiman (1985b) and the papers in Haiman ed. (1985a). However, given the greater flexibility of word order in Riau Indonesian, its effect is perhaps more salient in Riau Indonesian than in many other languages. For example, in a sentence such as *Adi pukul Hendrik*, which can be understood either as 'Adi hit Hendrik' or as 'Hendrik hit Adi', iconicity is responsible for the former interpretation being more readily available than the latter one, since the former interpretation is one in which the linear order of referents, from agent through activity to patient, is echoed by the linear order of expressions. The third principle, Information Flow, is a cover for what are probably a variety of distinct though related principles governing the organization of information, such as old-precedes-new, the placement of certain expressions in focus position, and so on. Again, although such principles are probably universal, their application to Riau Indonesian may differ in some of the details from that in other languages.

The preceding couple of pages provided a brief and rather dense sketch of the major syntactic and semantic patterns of Riau Indonesian, with numerous details left to be filled in. However, it is sufficient for the task at hand, which is to provide a characterization of the single unified meaning of the Riau Indonesian form *sama*.

As suggested at the beginning of Section 4, *sama*, too, belongs to the category S. Thus, in terms of its distributional privileges, *sama* is completely interchangeable with both *makan* 'eat' and *ayam* 'chicken'. Accordingly, when *sama* occurs in construction with an expression X, the resulting syntactic structure is identical to that in (67):

(72) **Syntactic Structure of Constructions Containing Sama:**

```
  S
   /\n  S  S
   \ /  X
    sama 
```
Like (67), then, the above construction is a coordination of sentences, though without an overt coordinator. A corollary of the above is that, in terms of its formal properties, sama has no specific idiosyncratic characteristics that would support its characterization, within the language itself, as a "grammatical item" as opposed to a "content word".

We come now to the unified semantic analysis. Again, in complete analogy to (68), the semantics of constructions containing sama may be assigned the following unified representation:

(73) **Semantic Structure of Constructions Containing Sama:**

\[
A \ ( \ \text{TOGETHER, M} \ )
\]

In the above representation, TOGETHER is the fundamental meaning of sama, while M is the meaning of the expression X. What the above says, then, is that the meaning of the construction sama X is A (TOGETHER, M), which may be read 'an association of togetherness and M', where, as with the eating and the chicken above, the precise nature of the association is unspecified, left open to the context. All of the usages of sama in (3) - (66) are accounted for as particular instances of the above representation. In the remainder of this section, we shall examine a few exemplary cases.

Syntactic and semantic representations for the expression Doni sama Amat 'Doni and Amat' in example (3) are provided in (74) and (75) below:

(74) **Syntactic Structure of (3)**

\[
S \leftarrow S \leftarrow S
\]

Doni

\[
S \leftarrow sama \leftarrow Amat
\]
As suggested in (74), the syntactic structure of Doni sama Amat is right-branching. Examination of (74) reveals some rather piquant differences between Riau Indonesian and languages such as English. While in English, Doni and Amat is a coordination of Doni and Amat, with and playing the role of coordinator, in Riau Indonesian, Doni sama Amat is not a coordination of Doni and Amat, and sama is not a coordinator. However, Doni sama Amat is a coordination of Doni and sama Amat, without an overt coordinator; moreover, as already suggested previously, sama Amat is itself a coordination of sama and Amat, again without an overt coordinator. This is of course no more than a striking instance of a well-known fact, namely that formal construction types such as coordination are not necessarily preserved under translation from language to language.\(^{12}\)

Moving on to the semantics, as suggested in (75), the structure of Doni sama Amat is left-headed, following the principle of linearization in (71a). Thus, in accordance with (75) the interpretation of sama Amat is together | A ( AMAT ), to be read as 'togetherness associated with Amat', while the interpretation of Doni sama Amat is Doni | A ( TOGETHER | A ( AMAT ) ), or 'Doni associated with togetherness associated with Amat'. This interpretation is still considerably broader than that of the English translation 'Doni and Amat', allowing for a variety of ways in which Doni might be associated with togetherness, and togetherness associated with Amat. But this is precisely how it should be, given that in different syntactic environments and real-world contexts, constructions such as Doni sama Amat may indeed have different kinds of meanings. What this means, then, is that in Riau Indonesian, Doni sama Amat does not express conjunction, even in those contexts where its most appropriate translation into English is 'Doni and Amat'. Thus, when put alongside with similar accounts for other constructions, for example Doni dengan Amat, which also translate into English conjunctions, the above analysis leads towards the conclusion that Riau Indonesian is a language without a dedicated means for the expression of conjunction. In this respect, the present paper may be viewed as a sequel to Gil (1991), which reaches a similar conclusion, concerning the absence of 'and', for a language of a very different syntactic profile, namely Maricopa.

In (76) and (77) below, syntactic and semantic representations are provided for example (27) Minum sama abang 'elder brother drink'.

\(^{12}\) It should, however, be acknowledged that there is some evidence for right-branching structure also in coordinations such as the English Doni and Amat; see, for example Haspelmath (2000). So perhaps the differences between Riau Indonesian and English on this score are not as great as suggested above.
As is clearly evident, the representations in (76) and (77) are completely parallel to those in (74) and (75). What this means is that in terms of syntactic and semantic structure, the expression Minum sama abang 'elder brother drink' in (27) is indistinguishable from the expression Doni sama Amat 'Doni and Amat'. Both are right branching; both are left-headed; and in both, sama, bearing an abstract meaning of togetherness, provides a conceptual glue connecting the items on either side. What sets them apart, other than the obviously different words they contain, is entirely within the bounds of the vagueness inherent within the meaning of the association operator.

Let us explore the bounds of this vagueness in somewhat more detail. Given a left-headed expression of the form sama X, with a left-headed interpretation, the meaning of the construction is TOGETHER | A ( M ), to be read as 'togetherness associated with M'. How this corresponds, in different contexts, to translations such as 'and M' or 'with M' should be obvious. But what about some of the other thematic roles within the round-cornered box in Figure 1, such as instrumental, experiencer, or, as in (27) and (77), transitive agent? A moment's reflection should reveal that here, too, one can conceive of the relevant activity as being conceptually together with an instrumental, experiencer or transitive-agent participant. Thus, for example, in (27) and (77), a drinking is characterized as being together with an elder brother: not together in the comitative sense of somebody else's drinking being in the company of the elder brother, but rather together in the more abstract sense of drinking and elder brother appearing together on the stage provided by the event. With the precise nature of the elder brother's involvement in the drinking left open to context.

But what, now, of the other thematic roles that sama cannot express: how does the above analysis rule out the use of sama in these cases? Here there are two different answers, for core and peripheral roles respectively. With respect to the former, recall that the two main core roles not expressible with sama are patient and intransitive agent. Observe now that these are the two core roles that are most closely
connected with the activity; this shared property provides the semantic motivation underlying the existence of absolutive case markers. What this suggests, then, is that the notion of togetherness conveyed by sama presupposes a certain degree of conceptual distance which the attribution of togetherness subsequently partially mitigates: in the case of patients and intransitive agents, this distance is lacking, and hence the precondition for the usage of sama is not met. Turning now to the peripheral roles, here the explanation is of a different and somewhat more ad hoc nature. Essentially, sama cannot be used in those cases where its function would appear to be usurped by a more semantically specific form. Thus, as noted in Section 4.1, in the case of locatives, the form di is most commonly used, while in the case of instrumentals, the word pakai 'use' is available. However, this account cannot be the whole story, since in other cases, mentioned in Section 4.3, alternative forms coexist side-by-side, without one form replacing the other; one such example is provided by dengan 'with'. Ultimately, it would seem unrealistic to seek a completely principled explanation for why, when words encroach on each other's semantic space, sometimes one forces the other one out, while in other cases the two manage to coexist. One just has to recognize competition from other words as a complicating factor in any account of macrofunctionality.

The third and final example whose analysis we shall consider here is the construction peri sama, part of example (61) Abang peri sama. Recall that this example was provided three alternative English translations corresponding to three distinct putative functions: 'Are you coming too?' expressing additive focus, 'Are you coming with?' expressing the sociative, and 'Are you coming the same as us?' expressing sameness. However, it was argued that these three translations and associated functions are the artefact of an Anglocentric perspective, and that in reality, the construction has but a single general meaning that is vague with respect to the above distinctions. We are now in a position to define that single unified meaning more explicitly:

(78) Syntactic Structure of (61)

```
( S ( S Abang ( S peri ( S sama ) ) ) )
```

(79) Semantic Structure of (61)

```
( TOGETHER | A ( GO ) ) | A ( ELDER BROTHER )
```

```
ELDER BROTHER
```

```
TOGETHER | A ( GO )
```

```
GO
```

```
TOGETHER
```
As in the preceding examples analyzed in this subsection, sama heads the construction it occurs in; however, unlike the preceding constructions, the construction is right-headed, and sama follows its sister constituent pergi 'go'. Similarly, at the higher level, pergi sama heads the construction it occurs in, and this construction is right-headed, with pergi sama following Abang. As shown in (79) the expression pergi sama is interpreted as TOGETHER | A ( GO ), or 'togetherness associated with going', while the expression Abang pergi sama is interpreted as ( TOGETHER | A ( GO ) ) | A ( ELDER BROTHER ), or 'togetherness associated with going associated with elder brother'. In the given context, that of a group of people about to leave, the relationship of togetherness is understood as holding between two distinct agents of the going activity: speaker plus his companions, and the overtly expressed abang, or elder-brother addressee. Alas, however, it is a fact about English that there is no easy and unawkward way to say all of the above. English forces the would-be translator of sentence (61) to choose between one of a number of translations with different and more specific shades of meaning, expressing different putative functions. Choosing 'too' adopts the perspective of an additive focus marker: 'Are you coming too (in addition to us)?'. Choosing 'with' expresses the sociative, while underscoring the close affinity between sociative and comitative functions: 'Are you coming with (us)?'. (One could imagine a generative grammarian positing a null pronoun following sama and characterizing the construction as "comitative-drop"): And choosing 'same' sets up a same-or-different comparison between speaker plus companions and addressee with regard to their respective activities: 'Is your going the same (as ours)?'. So much the worse for our would-be English translator; but that is his or her problem, most definitely not ours. As argued above, the Riau Indonesian sentence (61) Abang pergi sama is actually vague with respect to the distinctions forced upon the unfortunate translator; it has a single unified meaning, that represented in (79) above.\footnote{The reader may be wondering why the semantic representation given in (79) makes no reference to the understood 'us', together with whom the addressee is invited to go. This is because (79) is a representation of the sentence-level semantics of example (61), without reference to context, or to other general cognitive factors influencing the understanding of the utterance. Obviously, a deeper and more general representation of the meaning of the utterance would involve reference to the speaker and his friends, as well as to other relevant entities.}

Limitations of space preclude the presentation of further analyses of constructions containing sama; however, by now the pattern should be clear, since, in effect, all of the usages of sama considered in this paper are analyzed in the same way, as shown in (72) and (73). These syntactic and semantic representations constitute the unified analysis of sama, as specified in criterion (1c). This, then, is what sama really means.

Unfortunately, experience suggests that some readers may feel uncomfortable with the discussion of the last few pages, which might seem like so much loose verbiage, involving the fast and easy weaving of nebulous metaphors. True, most of the English paraphrases offered for the various unified meanings are extremely awkward and ungainly; but they are provided only as a crutch for those readers who are adverse to trees, brackets, and other formal symbols. Indeed, it is these formal symbols that constitute the actual representations for the syntax and semantics of sama. However, with regard to the metaphorical nature of the discussion, no apology is necessary. As Lakoff and Johnson (1980), Lakoff (1987) and many others have told us, all meaning is metaphorizing. And the challenge facing any linguist dealing with other languages is that different languages construct their metaphors in different ways, and then conventionalize these metaphors into their grammar and lexicon, at which point they cease to be metaphors. To close our eyes to such processes and their outcomes is to ignore one of the most important aspects of linguistic diversity, and to impose our own language's world view and modes of expression on languages that have different world views and different ways of saying things. So when analyzing another language, there is no alternative but to try to break free from the straitjacket of one's native language, exercising the imagination in order to gain access into the target language's metaphors, and by doing this to come closer to the language's true spirit.
6 MONOSEMY AND POLYSEMY

As shown in the preceding section, all three criteria proposed in (1), cross-linguistic replicability, fuzziness of boundaries, and the availability of a single unified meaning, lead inexorably towards a monosemic analysis of sama, underlying its entire range of usages as exemplified in (3) - (66). Accordingly, the analysis proposed in the preceding section characterizes sama as a member of the syntactic category S with a single broad meaning of 'togetherness'.

However, as suggested in Section 2, monosemy is the end point of a continuum which stretches though polysemy all the way to ambiguity. Thus, the unified analysis proposed above does not preclude the possibility that the single general function associated with sama be endowed with internal structure involving the existence of two or more distinct subfunctions, thereby entailing a certain degree of polysemy. At present, though, I am aware of no clear evidence in support of the existence of such internal structure within the range of usages of sama. In particular, I have not yet found any reason to believe that the semantic map in Figure 1 with its 21 putative functions says anything real about sama and how it should be represented in the grammar of Riau Indonesian.

Nevertheless, it should be acknowledged that the present account of sama does leave a number of important issues unanswered, and it is not beyond the realm of possibility that some of these answers might involve the positing of a certain amount of polysemy. In conclusion, we shall briefly address what is perhaps the most important outstanding question: How does the unified analysis of sama proposed above account for the numerous minute details of its semantic range, in order to specify which usages are included and which others excluded?

The cogency of this question is most evident when viewed from a cross-linguistic perspective. As suggested previously, many languages possess macrofunctional forms whose ranges of usages overlap partially but not completely with that of Riau Indonesian sama. Presumably, for many such cases, arguments analogous to those presented here could be developed in support of a similar unified analysis in terms of a single general meaning involving togetherness. But then how is it possible to explain why togetherness results in one range of usages for Riau Indonesian sama but in other ranges of usages for other forms in another languages?

This question may be sharpened through the consideration of a specific example in more detail. The form sama occurs also in the Jakarta dialect of Indonesian, where it is associated with a nearly but not quite identical range of usages.14 Two of the differences of which I have had occasion to observe between sama in the Jakarta and Riau dialects are the following: (a) for expressing the standard of comparison following sama meaning 'same', sama is rarely used in Riau Indonesian, as in (47), but is frequently used in Jakarta Indonesian; and (b) for marking the inclusory construction, sama is used in Riau Indonesian, as in (8), whereas Jakarta Indonesian lacks an inclusory construction, and uses ordinary conjunction instead. These differences are minor, and indeed, I could have chosen to have written an almost identical paper, with the same conclusions, about sama in Jakarta rather than Riau Indonesian. However, if sama has the same meaning in Jakarta and Riau Indonesian, how then can the differences between the two forms be accounted for?

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14Jakarta Indonesian is the general colloquial language used in Jakarta, the capital and largest city of Indonesia, in most everyday contexts, for inter-ethnic and increasingly also intra-ethnic communication; in addition, it is gaining in currency as an informal lingua franca throughout Indonesia. Jakarta Indonesian is distinct from Betawi Malay, the native dialect of the indigenous ethnic community of Jakarta, now a small minority of the total population of the city. Some recent descriptions of Jakarta Indonesian include Wouk (1989, 1999), Cumming (2002) and Sneddon (2002a,b).
Three possible modes of explanation suggest themselves:

(80) Modes of Explanation for Variable Patterns of Macrofunctionality

(a) Polysemy

Macrofunctional forms with different ranges of usages may or may not have identical unified meanings; however, they are associated with different sets of submeanings;

(b) Monosemy sharpened

Macrofunctional forms with different ranges of usages have different unified meanings, though the differences may be subtle;

(c) Monosemy contextualized

Macrofunctional forms with different ranges of usages have identical unified meanings; however, interaction of these identical meanings with the different grammatical systems of the respective languages results in different ranges of usages.

In general, there is no reason to believe that one of the above modes of explanation should be appropriate to the exclusion of the others; rather, all three modes of explanation might be relevant with respect to a certain subset of the observable facts.

In accordance with a polysemy explanation, as in (80a), the grammars of individual languages would make reference to various designated submeanings or subfunctions, with respect to which the range of usages of individual forms would be delimited. Thus, for example, while sama may share the same unified meaning in Riau and Jakarta Indonesian, additional stipulations would specify that Riau Indonesian sama may mark the inclusory construction while Jakarta Indonesian sama may not.

One specific application of this method, proposed by Croft (2003) and perhaps also implied by Haspelmath (2003), involves the use of semantic maps. In accordance with this approach, the grammars of individual languages would contain semantic maps like those in Figures 1-3, with respect to which the range of functions of individual forms would be stated. Thus, for example, while sama may share the same unified meaning in Riau and Jakarta Indonesian, each dialect would, in addition, contain a specification of the range of functions expressed by sama; in effect a replication of the semantic map in Figure 1 and its counterpart for Jakarta Indonesian. This, then, would provide the locus for representing the different range of functions of sama in the two dialects.

However, the method of semantic maps faces some difficult, perhaps even intractable challenges. Foremost among these is the problem of deciding which functions to include in the map. Haspelmath suggests a cross-linguistic criterion: two functions will be considered distinct if there is a form in some language that distinguishes between them, by expressing one but not the other. However, this criterion is clearly problematical. First, it presupposes that there is a single set of functions that is common to all languages, essentially universal, with respect to which all of the relevant forms in all of the world’s languages are mapped. For example, one such universal function might be the inclusory. Whereas Riau Indonesian sama would be marked as expressing the inclusory, Jakarta Indonesian sama would be marked as not expressing it, as would many other forms, including English and and with. However, neither Riau nor Jakarta Indonesian have a dedicated marker for the inclusory; nor for that matter does English. One wonders, then, how speakers of Riau and Jakarta Indonesian, and speakers of English, gain knowledge of the existence of the inclusory function, in order to mark the relevant forms in their languages as either expressing it or not expressing it, whatever the case may be. The usual solution to such quandaries is to say that the knowledge was there all the time, that is to say, it is part of an innate Universal Grammar. Although such a state of affairs cannot be ruled out on a priori grounds, it should be kept as an analytical last resort, for when all other, better motivated accounts fail.

An even more severe problem with the cross-linguistic criterion for the construction of semantic maps is that by looking at more and more forms in more and more languages, one is rapidly overwhelmed with an arbitrarily large number of arbitrarily specific "small" functions. Begin, for example, with conjunction. Even a cursory perusal of Haspelmath’s (2000) cross-linguistic survey reveals languages that distinguish
between natural and accidental conjunction, for example Erzya Mordvin (Wälchli 1988); normal and representative conjunction, for example Koasati (Kimball 1991); normal and oppositional conjunction, for example Ponapean (Rehg 1981); and the list is open-ended, containing any number of additional distinctions made by at least one of the world's five or six thousand languages. And, by assumption, all of the above distinctions, in fact all possible combinations of the above distinctions, would end up being part, in fact just a small part, of the universal semantic map accessed by, among others, English and and Riau Indonesian sama. But this is clearly wrong; it is obviously both impractical and implausible to attribute to a single form tens, hundreds or perhaps even thousands of distinct microfunctions.

However, there is a third and more principled problem with the use of semantic maps to represent the meanings of individual forms in individual languages. By definition, semantic maps make reference to lattices of disjoint functions of an atomic nature. This is fine for the purpose for which semantic maps were originally introduced, namely, providing a means for representing cross-linguistic implicational universals. However, for the representation of the meaning of individual forms in individual languages, the atomic nature of the individual functions renders such maps inadequate. Whichever way one looks at it, the architecture of meaning is inherently hierarchical. All current theories of semantics reflect this hierarchical organization, with more specific meanings contained within more general ones in a recursive manner. For example, in model-theoretical semantic theories based on Ajdukiewicz and Montague, the hierarchical nature of meanings is captured in the set-theoretical relation of inclusion defined on Boolean algebras; see, for example, Keenan and Faltz (1986). Similarly, in computational theories of lexical semantics, hierarchical structure is manifest in nonmonotonic inheritance networks, as in, for example, Evans and Gazdar (1996). Even in the realm of clause structure and thematic roles, recent work has suggested that thematic roles are not atomic but rather form tree structures containing "hyperroles" of increasing generality; see, for example Foley and Van Valin (1984), Dowty (1991) and Kibrik (1997). Thus, according to Van Valin (1999), a hearer is a kind of perceiver, a perceiver a kind of experiencer, an experiencer a kind of actor. Within such a hierarchical organization, there is no one privileged level which is a priori the right level at which to draw semantic maps. This is why, at the beginning of Section 4.1, it was stated that the semantic map for sama could just as easily have contained 7 functions or 63, rather than the arbitrarily chosen figure of 21.

Returning now to sama, if indeed it turns out to be polysemous, it would be nothing more than a coincidence if one of its submeanings turned out to be coextensive with one of the 21 functions of the semantic map in Figure 1. Moreover, it is extremely unlikely that one of its submeanings would be coextensive with one of the multitude of microfunctions that one would arrive at through the method of cross-linguistic comparisons. Indeed, a potential subfunction of sama could be of any size whatsoever, ranging from very small to very large. And if several such subfunctions were shown to exist, they would not have to be disjoint; they could easily stand in more complex relations involving overlapping and inclusion. What this means then, is that the problems posed by macrofunctionality are recursive in nature. If a certain form is polysemous, its constituent meanings will themselves present the same kinds of questions, involving choices between monosemic and polysemic analyses. It's turtles all the way down, which is why atomic semantic maps are inadequate for the task at hand, and independent motivation must be sought for the positing of polysemy.

Such motivation is most appropriately obtained from the syntactic and semantic patterns of the language itself. This might involve either specific grammatical properties of the form in question that distinguish between different subfunctions, or else independently motivated patterns that make reference to such distinctions. In the case of sama there are, perhaps, some suggestive leads which may point towards a partitioning of sama into two distinct subfunctions, one enclosed by the round-cornered box in Figure 1, the other comprising its complement set. One source of evidence pertains to the relative order of sama and its sister constituent. Whereas for some of the functions in the semantic map of Figure 1 sama may occur either before or after its sister constituent, in others, in fact, for those enclosed within the box in Figure 1, sama invariably precedes its sister constituent. This suggests a division of the usages of sama
into two subfunctions, one allowing flexible word order, the other forcing *sama* to precede its sister constituent.\(^{15}\) A second source of evidence involves the interaction of *sama* and reduplication as discussed in Section 4.2. Both reduplicated *sama* and the X *sama* X construction cover a range of functions that is coextensive with those that lie outside the box in Figure 1. A third and final source of evidence is provided by the form *dengan* discussed in Section 4.3. As observed there, *dengan* may substitute for *sama* in precisely those usages where *sama* obligatorily precedes its sister constituent; thus, the map of *dengan* in Figure 3 yields a box that is coextensive with the box in Figure 1. Accordingly, a monosemic analysis of *dengan* might posit a single unified meaning that would then constitute one of two submeanings in a polysemic analysis of *sama*. So there would seem to be some prima facie evidence for a modest amount of polysemy, involving the existence of two distinct subfunctions of *sama*; however, the evidence is hardly overwhelming.

But polysemy does not provide the only mode of explanation for variable patterns of macrofunctionality. As suggested in (80b), monosemy sharpened, a second mode of explanation allows for the maintaining of purely monosemic analyses, while pointing towards the fine-tuning of the unified meanings, in ways that will account for the different usages of different forms. Obviously, both within and across languages there exist different forms with different unitary meanings underlying different patterns of macrofunctionality. However, in cases involving forms with similar ranges of usages, this mode of explanation becomes implausible. For example, it might just be possible to propose a unified meaning for *dengan* that is wholly contained within the unified meaning of *sama* proposed in Section 4.3, and which accounts in a principled way for the more limited range of usages of *dengan*. However, it is hard to imagine how one might tweak the unified meaning of Riau Indonesian *sama* proposed above in order to come up with an almost but not quite identical unified meaning for its Jakarta Indonesian counterpart, one that would account for the similar but not identical range of usages of the latter form. Clearly, in such cases, a sharpened monosemic analysis will not do, and instead a different mode of explanation is called for.

This brings us to the third and final mode of explanation for variable patterns of macrofunctionality proposed in (80c), monosemy contextualized. In accordance with this approach, two forms in different languages could be associated with the same unified meaning; however, their range of usages would differ for other reasons, pertaining to the overall grammatical systems of the respective languages. One could imagine any number of such reasons. For example, the two forms could have different formal properties in the respective languages: one could be an independent word and the other an affix, or both could be independent words but belonging to different syntactic categories. Or, alternatively, the two forms might find themselves competing with a different array of functionally adjacent forms in their respective languages. As emphasized by Saussure, forms do not exist in isolation, but only in the context of all of the other forms that are present in the language.

Returning one last time to the minor differences in usage evinced by the form *sama* in Riau and in Jakarta Indonesian, it is not hard to see how a monosemic analysis might be contextualized in plausible ways, in order to account for these patterns of variation. Consider the first difference, namely the use of *sama* to mark the standard of comparison following *sama* meaning 'same', which is rare in Riau but common in Jakarta. As noted in the discussion of examples (43) - (49), in Riau Indonesian *dengan* is usually used in such contexts, as exemplified in (44). One might speculate that *sama* is dispreferred because it creates an awkward sequence of two consecutive occurrences of the same word, as is the case in the rare (47). So why are things different in Jakarta Indonesian? Two reasons. First, in Jakarta Indonesian the form *dengan* is very infrequently used; as a result it is not a readily available alternative to *sama* in such contexts. Secondly, in Jakarta Indonesian *sama* occurs in two distinct variants, *sama* and

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\(^{15}\)However, under an alternative approach, such a partitioning would not be necessary. Given the unified analysis of *sama* proposed in Section 5.3, the chain of causality could be construed as pointing in the opposite direction: of the variety of syntactic configurations that are available, only a subset would give rise to the relevant interpretations.
ama.\textsuperscript{16} And in fact, in the context under consideration here, the second of the two occurrences of sama will often assume the form ama, resulting in constructions such as Sama ama aku, corresponding to (47), and thereby mitigating the undesirable occurrence of two identical forms in sequence. Thus, the differences between Riau and Jakarta Indonesian with respect to sama in the construction in question can be straightforwardly accounted for in terms of their interaction with other grammatical features: the competition of sama with dengan in Riau but not in Jakarta, and the applicability of s-deletion to sama in Jakarta but not in Riau.

The second difference between the two forms involves the availability of sama for the inclusory construction in Riau but not in Jakarta Indonesian. In this case, an obvious difference between the two dialects leaps to the eye: whereas Riau Indonesian has a dedicated exclusive first-person plural pronoun kami, as evident in the inclusory construction in (8), Jakarta Indonesian has no such pronoun, and instead uses the first-person plural pronoun kita with either inclusive or exclusive meaning. But the story is not that simple. In many languages which, like Jakarta Indonesian, lack an inclusive/exclusive distinction, the unmarked first-person plural pronoun does participate in an inclusory construction; one example of such a language is Russian. Interestingly, however, Riau Indonesian also has the form kita, which, like in Jakarta, can have either inclusive or exclusive meaning. But crucially, in Riau, like in Jakarta, kita cannot enter into an inclusory construction. So what is going on here? The key to the puzzle is provided by various cross-linguistic studies of the inclusory construction, such as Schwartz (1985, 1988) and Moravcsik (to appear), which demonstrate the existence of a "focal referent hierarchy" of pronouns with respect to the inclusory construction (as well as other constructions). At the top of the hierarchy are first-person plural pronouns: if only one pronoun can enter into an inclusory construction it is a first-person plural pronoun. Next in the hierarchy are second-person plural pronouns, then finally third-person plural pronouns. Note, however, that whereas exclusive first-person plural pronouns such as Riau Indonesian kami are purely first person, inclusive or unmarked first-person plural pronouns such as Riau and Jakarta Indonesian kita may be construed as combining first- and second-person features. Thus, the focal referent hierarchy may be expanded to read as follows: exclusive first-person plural pronouns > inclusive or unmarked first-person plural pronouns > second-person plural pronouns > third-person plural pronouns. The relevant facts may now be accounted for by stating that for both dialects of Indonesian, the cut-off point on the focal reference hierarchy is between exclusive first-person plural pronouns and all the other pronouns. Indeed, neither dialect of Indonesian has an inclusory construction for the general first-person plural pronoun kita, or for any second or third person plural pronouns. And now we are in a position to conclude that the reason only Riau Indonesian has an inclusory construction with sama is that only Riau Indonesian has an exclusive first-person plural pronoun. Here too, then, the differences between Riau and Jakarta Indonesian with respect to the usage of sama can be accounted for in terms of their interaction with other aspects of the grammar, in this case the presence or absence of an exclusive first-person plural pronoun licensing the inclusory construction.\textsuperscript{17}

Thus, it would seem that in many cases, the contextualization of monosemy offers a more promising mode of explanation for variable patterns of macrofunctionality. Nevertheless, it also comes replete with its own set of challenges. Emerging out of the dictum that a language is a system "ou tout s'entend", this approach entails that in order to construct the most appropriate analysis of a single form in a language, it

\textsuperscript{16}In both Riau and Jakarta Indonesian, there is a optional rule of initial s-deletion which applies to a small set of high frequency words; however, only in Jakarta does this set of words include sama. Whereas in many cases forms with and without initial s are in free variation, work in progress suggests that in Jakarta Indonesian, the distribution of sama and ama might be different. If this turns out to be the case, that it is possible that this will provide additional support for a polysemic analysis of sama in the Jakarta dialect.

\textsuperscript{17}Of course, this account just pushes the puzzle one step further back, since it does not explain why, for both Riau and Jakarta Indonesian, the cut-off point on the focal reference hierarchy is above inclusive or unmarked first-person plural pronouns: it could just as easily have been below inclusive or unmarked first-person plural pronouns, as it is in Russian, or, for that matter, right at the bottom of the hierarchy, as in fact is the case in the Lampung dialect of Indonesian, which forms inclusory constructions even with the third person plural pronoun dia orang. But this is another story for another paper.
is necessary to have a clear picture of the entire language within which the form is embedded. Although the practical consequences of such a methodological moral are far-reaching and possibly discomforting, this is perhaps a conclusion worth bearing in mind.

**ABBREVIATIONS**

This interlinear glosses in this paper make use of the following abbreviations: AG 'agent orientation'; ASSOC 'associative'; CONJ.OP 'conjunctive operator'; CONTR 'contrastive'; DEIC 'deictic'; DEM 'demonstrative'; DIR 'direction'; DIST 'distal'; DISTR 'distributive'; EP 'end-point orientation'; EXHRT 'exhortative'; FAM 'familiar'; FILL 'filler'; FUT 'future'; LOC 'locative'; NEG 'negation'; PAT 'patient orientation'; PERS 'personal'; PFCT 'perfect'; PROX 'proximal'; PST 'past'; Q 'question'; REL 'relative'; SG 'singular'; TOP 'topic'; 1 'first person'; 2 'second person'; 3 'third person'

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**REFERENCES**


Casparis, J.G. de (1997) "Sanskrit Loan-Words in Indonesian: An Annotated Check-List of Words from Sanskrit in Indonesian and Traditional Malay", *NUSA, Linguistic Studies of Indonesian and Other Languages in Indonesia*, Universitas Katolik Indonesia Atma Jaya, Jakarta.


Riau Indonesian Sama: A Unified Analysis


Gil, David (to appear b) "Intonation and Thematic Roles in Riau Indonesian", in M. Gordon, D. Büring and C.M. Lee eds., *Topic, Focus and Intonation* [tentative title], Kluwer, Deventer.

Gil, David (to appear c) "Intonation Does Not Differentiate Thematic Roles in Riau Indonesian", in *AFLA 9 Proceedings* [tentative title].


Jakovlev, Nikolaj and D. Ashxamaf (1940) *Grammatika adygejskogo literaturnogo jazyka*, Izdatel'stvo AN SSSR, Moscow.
Riau Indonesian Sama: A Unified Analysis


Stilo, Don (to appear) "Coordination in Selected Western Iranian Languages", in M. Haspelmath ed., *Coordinating Constructions*, John Benjamins, Amsterdam.


