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Kâte *he* 'hit' and *qa* 'hit': a study in lexicology

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Abstract

A small number of monosyllabic verbs make up a large part of the verb occurrences in Kâte discourse. In this paper the focus is on two of them, the near-synonyms *he* 'hit' and *qa* 'hit'. These verbs play a prominent role in the formation of two types of complex predicates, namely predicate collocations and causative compounds. It is found that *he* 'hit' and *qa* 'hit' do not stand in semantic opposition to each other in these complex predicates. When used as independent main verbs, however, they do have different meanings. They suggest the use of a different instrument of hitting and a different result of the impact.

Keywords: Kâte language, lexicology, synonymy, high frequency verbs, predicate collocations, causative compounds

Introduction

A speaker of a European language learning Kâte will sooner or later catch himself using the basic verbs *he* and *qa* without having a very clear idea of their meaning.[1] They both seem to mean 'hit', but are they really synonyms? This is a puzzling experience as both of these verbs are among the ten most frequently used verb roots of the language. They turn up at every corner in any genre of speech, yet their meaning remains strangely elusive. Facing this problem while trying to learn to speak Kâte, I decided to investigate the matter. With the help of native speakers I soon found out that *he* and *qa* often occur in collocation with other words and it is the collocation as a whole that has a meaning. Instances of *he* and *qa* in discourse where they have their inherent lexical meaning are rarer than occurrences in collocations where their meaning is contextual. In this paper I want to describe the uses of *he* and *qa* in the formation of simple and complex predicates, explore their inherent lexical meaning and capture their semantic contribution to collocations including verb compounds.

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[1] I am indebted to Mupenarec Fârepe and John Kembarang for exploring the meanings of *he* and *qa* and discussing the example sentences in this paper with me. I thank Tom Dutton for his perceptive comments on a draft of this paper. The responsibility for all remaining errors is mine.

Kâte is a Papuan language spoken on the tip of the Huon Peninsula in Morobe Province. It is a member of the Huon Peninsula family within the Finisterre-Huon stock belonging to the Trans New Guinea phylum (McElhanon 1975). The Kâte dialects were part of a dialect chain extending from the Mape River to the Wamorâ area south of the Masaweng River. After 1892 Lutheran missionaries from Germany used the Wemo dialect of Kâte as a church and school language. Kâte became a *lingua franca* that spread over the whole interior of the Huon Peninsula and had as many as 75,000 active speakers in the 1970s (Renck 1977). In the meantime Kâte has given way to Tok Pisin as the *lingua franca* on the Huon Peninsula and knowledge of it among non-native speakers is fading. The Wemo dialect was originally spoken in eight villages around Sattelberg by 600 people (Pilhofer 1933). It is now gradually replacing the other dialects of the chain including Mape and Wamorâ and even the more distantly related Sene and Momare languages and has up to 20,000 native speakers.

Kâte is written in the Latin alphabet with a few special characters added. Apart from the five vowels for which there are Latin letters, Kâte has a sixth vowel written ‹â› (low back rounded [ɔ]). The letters ‹z› and ‹j› have the German values [ts] and [j]. The voiced counterpart of ‹z› [ts] is written ‹ʒ› [dz] in Kâte orthography. As [ts] and [dz] are in complementary distribution with [ts] occuring word medially and [dz] word initially, they are both rendered with ‹z› in this paper. The few loanwords in which [dz] occurs word medially are spelled with ‹dz›. The letter ‹q› is used to render the voiceless labio-velar stop [kp], and a variation of this letter stands for the voiced counterpart [gb]. Since the special character for [gb] is not available on any common font this sound is spelled ‹gb› in this paper. The velar nasal is written ‹ŋ›. The letter ‹c› symbolizes the glottal stop [ʔ] which only occurs in syllable final position. All other letters have their expected values.

The Finisterre-Huon languages have a small closed class of verbs that take pronominal object prefixes (Suter 2012). One of the two verbs that are in the focus of this paper belongs to this class of object verbs. The citation form *qa* 'hit him/her/it' is the third person singular form of this verb, the other person-number forms can be seen in Table 1. These forms are irregular and cannot be further analyzed synchronically than noticing that their first consonant recurs in the corresponding forms of the free personal pronoun. The verb *he* takes the regular suffixes indicating the person and number of the direct object. When these suffixes follow the root *he*, a final glottal stop is attached to it. As can be seen in Table 2, the suffixes are homonymous with the person-number forms of the object verb *qa* except in the third person singular.

Table 1: Object inflection of *qa* (Pilhofer 1933:39)

	Singular	Dual	Plural
1st person	*nu*	*nâfo*	*nâpo*
2nd person	*gu*	*ŋofa*	*ŋopa*
3rd person	*qa*	*jofa*	*jopa*

Table 2: Object inflection of *he* (Pilhofer 1933:41)

	Singular	Dual	Plural
1st person	*hec-nu*	*hec-nâfo*	*hec-nâpo*
2nd person	*hec-gu*	*hec-ŋofa*	*hec-ŋopa*
3rd person	*he*	*hec-jofa*	*hec-jopa*

In this paper, examples that have been taken from transcripts of recorded discourse begin with a capital letter and end with a punctuation mark. Elicited examples begin with a small letter and have no punctuation mark at the end. The sound recordings of Kâte texts were made between 1995 and 1998 in the villages around Sattelberg, most of them in Fioo and Masangko. Most of these recordings were transcribed by Mupenarec Fârepe and John Kembarang. The elicited examples all come from these two native speakers with exceptional linguistic skills.

Table 3: *He* and *qa* in the dictionary by Keysser (1925)

hezo trans. et intr. klopfen, schlagen, auf etw. aufschlagen, sich aufsetzen, sich niederlassen to knock, beat on s.th., to sit down on s.th. *kudzi ira hepie ŋeoc!* setzt den Topf hierher! put the pot here! *wipe jâcko hejec ŋekac* der Vogel liess sich auf den Baum nieder the bird sat down on the tree.	*qazo* intr. hinfallen, zu Boden fallen, aufschlagen to fall down, to fall to the ground, to fall violently; trans. jemd. od. etw. schlagen, hauen to beat s.b. or s.th. *qaqac ezo* einander schlagen, mit einander kämpfen, Krieg führen to beat each other, to fight with each other, to make war

In Table 3 the entries for the verbs *he* and *qa* in the Kâte dictionary by Keysser (1925) are reprinted. Only the part of the entries dealing with these verbs as independent main verbs is given, the collocations that follow are left away. Starting from this brief lexicographic account, I explore and describe the meanings of *he* and *qa* as main verbs in some detail in the following two sections. Then I compare and contrast the meanings of the two verbs. The

following two sections are devoted to the use of *he* and *qa* in complex predicates. First I describe their use in predicate collocations, then in causative compounds. The results of the study are summarized in the Conclusion. A list of the abbreviations used in the interlinear glosses of the Kâte examples is given at the end of the article.

The meanings of *he*

As we will see later in this paper, the verb *he* often forms a lexicalized unit with its direct object noun. In such a case the meaning of *he* is submerged in the collocation and cannot readily be extrapolated from its overall meaning. To discover the independent lexical meaning of *he* we must look for examples in which this verb is constructed with a direct object with which it does not form a lexicalized unit. As the object nouns with which *he* combines to form fixed collocations all have inanimate denotation, an obvious context to look into is the use of *he* with a human object referent, as in (1) and (2).

1   *Erâ*   *ro-zo*   *e-pie*   *ine*   *bagec-zi*   ***hec-jopa-me***

    SEQ:SS take-INF   do-SEQ:3p:DS   but   adze.handle-INSTR   hit-3p:DO-SEQ:3s:DS

    ŋetâtie-râ   *waha-râ*   *mocwâc*   *â.âsic*   *e-râ*

    tumble-SEQ:SS come.down-SEQ:SS   again   RECP.carry   do-SEQ:SS

    ɟe-ŋgopieŋ.

    go.up-PRES:3p

    'But when they were about to grab him, he hit them with the handle of an adze so that they went tumbling down. Then they climbed one on top of the other again to get up there.'

2   *Woraŋ-zi*   *ŋetara-râ*   *ŋic-ŋokac*   ***hec-jopa-me***   *mâmâc*

    mango-RH   topple-SEQ:SS   man-woman   hit-3p:DO-SEQ:3:DS   together

    sasawa   *hâmo-fâre-mbiŋ.*

    all   die-all-F.PT:3p

    'A mango tree toppled over and hit people. They all died.'

In (1) and (2) *he* carries a suffix that cross-references a human third person plural direct object. In (2) the object is additionally represented by a noun phrase in the clause whereas it is only coded in the verb in (1), the object referents of that clause being known from the preceding context. In both examples human patients suffer a blow that throws them off their feet: in (1), a man sitting on top of a tree hits his attackers with the handle of an adze so that they fall off the tree; in (2), a toppling tree hits bystanders and crushes them. As the two examples show, the subject of *he* 'hit' can either be a human agent (1) or an inanimate effector (2). If the subject is a human agent, an instrument is usually involved in the action. The impact of this instrument, or of the inanimate effector, has the potential to dislocate or destroy the target object. That is the basic meaning of *he* 'hit'.

In (3) we see two more instances of a transitive verb *he*, but in neither case does it have the meaning 'hit'. The second *he* in (3) is part of a transparent collocation: in *roŋgâŋ he* 'use a headrest' we find *he* 'put', which will be discussed later on. First we want to focus on the meaning of the first instance of *he* in (3).

3	*Mârâcjaha*	*kâcgbene*	*jaŋe*	*ine*	*jâc*	*dâkâ-ne*	***he-pie***
	long.ago	big	3p	but	tree	piece-3s:POSS	cut-SEQ:3p:DS

waha-huc		*ju-jec,*	*i*	*ro-râ*	*'ne*	*roŋgâŋ*
come.down-SIM:SS		be-N.PT:3	that	take-SEQ:SS	but	headrest

he-râ	*guŋ*	*fo-huc*	*ju-mbiŋ.*
put-SEQ:SS	sleep	lie-SIM:SS	be-F.PT:3p

'In the old days, our ancestors took the chunks of wood that came off when they cut [down a tree] and used them as headrests to sleep on.'

The first *he* in (3) describes a step in the process of chopping down a tall tree. Trees used to be felled by cutting wedges of wood out of the trunk until the center of the trunk was laid bare and could be cut through. The relevant part of (3) which states this is *jâc dâkâne hepie wahahuc jujec* 'they cut out pieces of wood and these would fall to the ground'. The object referent of *he*, the pieces of wood, change their location as a result of the action the verb expresses. Clearly, *he* means 'cut out, cut loose' in this example. The second instance of *he* is glossed 'put' in (3). People used to lay down on the ground the pieces of wood gained in

cutting down large trees in order to sleep on them like on a pillow. This meaning of *he* will occupy us later on. First we want to turn our attention to *he* 'cut'. (4) and (5) are further examples showing *he* with the meaning 'cut, sever'.

4   *So*   *aŋac-nu-me*   *sawac*   *hahaŋ-ko*   *fe-râ*   *sawac* *make*

     then   please-1s:DO-SEQ:3:DS   betelnut treetop-LOC   go.up-SEQ:SS   betelnut stalk

     moc   **he-râ**   *waha*   *râcne-po.*

     one   cut-SEQ:SS   come.down   give.him-F.PT:1s

     'Now I agreed. I climbed a betelnut tree, cut off a cluster of betelnuts and gave them to him.'

5   *Ra-râ*   *keŋgoŋ*   **he-râ**   *jâmu-me*   *kâdoc* *moc*

     go-SEQ:SS   k.o.vine   cut-SEQ:SS   twist-SEQ:3s:DS basket   one

     fusucma-wec.

     fill-F:PT:3

     'Then he cut vines and made enough rope of them to fill a basket.'

(4) and (5) describe two common activities, namely harvesting betelnuts and vines. The purpose of the actions expressed by *he* in (4) and (5) is thus to take possession of parts of a plant in order to put them to some use. *He* 'cut' describes the necessary step of separating the desired part from the whole plant. In both these examples *qa* 'hit' could not possibly be substituted for *he* 'cut'. In all of the examples of *he* 'cut' in (3) to (5) the cutting action predicated normally involves a hitting motion. The meanings 'hit' and 'cut' are therefore metonymically related.

The question arises as to how clearly separate these two meanings of *he* are. Is it possible to construct an ambiguous sentence which owes its ambiguity to the two possible readings 'hit' and 'cut' of *he*? In natural discourse such ambiguous sentences do not occur. In context, it is always clear whether we are dealing with *he* 'hit' or *he* 'cut', and usually the direct object alone provides enough information to suggest the correct identification. Remarkably, when we keep the direct object constant, as in (6), it is still difficult to generate a truly ambiguous sentence.

6a	*kare-zi*	*hec-nu-jec*	6b	*sâqe-zi*	*hec-nu-jec*
	car-RH	hit-1s:DO-N.PT:3		knife-RH	cut-1s:DO-N.PT:3

'I was hit by a car.'   'I cut myself with a knife.'

In (6a) and (6b) the meaning of the effector-subject (appended with the rhematic ergative marker *-zi*) provides the clue for the correct reading of *he*. Neither of these sentences is ambiguous. This is not too hard to understand in the case of (6a): it is difficult to think of a plausible scene in which a car comes into contact with a person with the effect of cutting him. As far as (6b) is concerned, however, one could imagine a scene in which a knife is thrown at a person, with its blade protected by a sheath so that it cannot inflict a cutting wound. The person would then be hit, rather than cut, by the knife. However, such a rather far-fetched scene would have to be described in more words in Kâte than the simple sentence (6b). Informants are not willing to recognize a potential ambiguity along these lines in (6b).

The effector-subject and the direct object must be carefully selected to fit *he* 'hit' and *he* 'cut' equally well if we want to construct an ambiguous sentence. The two sentences in (7) show that this is possible, though it requires some inventiveness.

7a	*kiruŋ-zi*	*hec-nu-jec*	7b	*kiruŋ-zi*	*hec-nu-jec*
	bottle-RH	hit-1s:DO-N.PT:3		bottle-RH	cut-1s:DO-N.PT:3

'A bottle hit me.'   'I cut myself on a bottle.'

The utterance in (7) has the two discrete readings (7a) and (7b), i.e. upon careful inspection it is perceived to be ambiguous.[2] The scene conjured up by (7a) is that of a bottle, which may have been thrown or fallen down from somewhere, flying towards the speaker and coming to an abrupt halt when it makes contact with him. (7b) describes, in one possible interpretation, a scene in which the speaker hurts himself when handling a broken bottle. It must be noted that the Kâte word *kiruŋ* 'obsidian, glass' primarily denotes a material that is known for its sharp-

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[2]In fact, (7) has no less than four possible readings as it contains yet another ambiguous morpheme. The case enclitic *-zi* can be interpreted either as a rhematic ergative marker, as presupposed by the glosses in (7), or as an instrumental. In the latter case, (7a) and (7b) would translate *He hit me with a bottle*, and *He cut me with a bottle*.

ness, but the meaning 'bottle' is a well-established metonymical use of this word. In (7b) *kiruŋ* refers to a bottle that has been damaged in some form so that a cutting edge is exposed.

Example (7) is as close as we can get to a sentence in which *he* is ambiguous between the meanings 'hit' and 'cut'. We note that the ambiguity of this sentence is primarily referential and that it depends on the two possibilities sketched above of construing the referent of *kiruŋ*. The semantic ambiguity of *he* is thus concomitant with the referential ambiguity of another word in the same sentence. It is impossible to construct a sentence in which *he* alone is ambiguous between the readings 'hit' and 'cut'. Therefore I conclude that the meanings 'hit' and 'cut' are interrelated. They are two different acceptations of *he* 'hit, cut' which as a rule do not collide with each other. This is best considered an instance of polysemy.

Now we want to turn our attention to what I will argue is a case of homonymy. As we saw in passing in (3), the verb *he* also occurs with the meaning 'put (down), place'. The following examples from spontaneous discourse further illustrate this meaning.

8   *Eme*   *rike-râ*   *ine*   *biac*   *ŋic-ŋokac*   *i*   *jahe-re*
    SEQ:DS   cook-SEQ:SS   but   already   man-woman   that   3d-GEN

    ineâ   *nânâ*   *qowi*   *oto*   *wâŋ,*   *ira*   *hâcne*   **he-râ**   *maŋfuŋ-jekic-ko*
    but   taro   game   bowl   one   there   indeed   put-SEQ:SS   vicinity-3d:POSS-LOC

    he-pie   *jahe*   *bâbâni*   *nânâ*   *qowi*   *i*   *nâ-pire*   *tâcne-me*
    put-SEQ:3p:DS   3d   first   taro   game   that   eat-SEQ:3d:DS   break-SEQ:3:DS

    inei   *kikefuŋ*   *jaŋe*   *zâhec*   *nâ-jumbieŋ.*
    but   community   3p   later   eat-HAB.PT:3p

    'When they had cooked the food they served it in one bowl and put it next to the bride and groom. Then the two of them ate first and when they had finished the relatives would eat.'

9   *Bank*   *gâcne*   *mu-fâre-wec*   *â*   *ANZ*   *ine*   *mi*   *mufua-wec.*
    bank   other   say-all-F.PT:3s   and   (name of bank)   but   not   disclose-F.PT:3s

Irec erâ	*moneŋ ira*	***he-râ***	*soŋke-râ*	*ju-wec.*
because.of.that	money there	put-SEQ:SS	hide-SEQ:SS	be-F.PT:3s

'He mentioned all the other banks, but didn't declare the ANZ—because he had been depositing and hiding the money there.'

There are two instances of *he* 'put' in (8), which is an extract from a description of a traditional wedding ceremony. The first instance of *he* 'put' shows a specialized use of this verb: 'put food (in a bowl)' is the idiomatic way to say 'serve food'. The action of taking the food to the consumers is not usually mentioned in connection with this use of *he* 'put', nor need the container be mentioned in which the food is served. It is, however, mentioned in (8) as the speaker wants to make the point that the bride and groom eat from one and the same dish. The second instance of *he* 'put' in (8) illustrates the basic meaning of the verb: the bowl with food is placed next to the bride and groom. Example (9) is taken from a discourse with a more modern topic, a discussion of the litigation in which a politician was involved. Here we find *he* 'put' used in the sense 'deposit (money in a bank)'. This use demonstrates that 'put' is a productive meaning of the verb stem *he*.

Again, we can try to construct an ambiguous sentence to see whether *he* 'put' is a lexeme of its own, different from *he* 'hit, cut'. As already mentioned in the discussion of (6) and (7) above, this is not an easy task as it requires finding a subject and a direct object that combine equally well with both homonymous verbs. I will limit the repeat of this exercise to the pair *he* 'put' and *he* in the subsense 'cut' as I have not been able to find a good example involving *he* 'hit'. The two sentences in (10) show the target structure, but still have different direct objects.

10a	*padi*	*he-tec*	*nâ-pe*	
	rice	put-SEQ:2s:DS	eat-N.HORT:1s	

'Serve me some rice!'

10b	*bo*	*moc*	*he-tec*	*nâ-pe*
	sugarcane	one	cut-SEQ:2s:DS	eat-N.HORT:1s

'Cut off a sugarcane stalk for me to chew!'

He 'put' is taken in its acceptation 'serve (food)' in (10a). This eliminates the problem of having to deal with a locative phrase that usually accompanies *he* 'put'. The two sentences in (10) both only have a single reading owing to the choice of the direct object noun. *He* cannot be interpreted in the sense of 'cut' in (10a) because its direct object, *padi* 'rice', refers to an amorphous mass rather than a solid divisible object. Similarly, *bo* 'sugarcane' is a foodstuff that is not normally served in a bowl, which makes it impossible to attribute the reading 'serve (food)' to *he* in (10b). Thus, again we find that the lexical content of an obligatory argument disambiguates *he* in context. That is the normal state of affairs, and the ambiguity we see in (11) is quite exceptional.

11   *qâqâc*   *he-tec*   *na-na‾*

       chicken   [a]put/[b]cut-SEQ:2s:DS   eat-N.HORT:1p

       a   'Serve us the chicken!'

       b   'Cut the chicken up for us to eat!'

 (11) represents two sentences that are syntactically identical and homonymous. In contradistinction to (7), the example offering an ambiguity between *he* 'hit' and *he* 'cut', no referential ambiguity is involved between the two readings (11a) and (11b). The ambiguity is entirely a matter of giving *he* either the sense 'put' (11a) or 'cut' (11b). (11) is therefore an instance of lexical ambiguity in an identical context. This is the first piece of evidence that speaks in favor of considering the two meanings *he* 'put' and *he* 'hit, cut' an instance of homonymy.

The second piece of evidence comes in the form of the different valencies of *he* 'put', on the one hand, and *he* 'hit, cut', on the other. The subject of the transitive verb *he* 'put' is always a human agent whereas *he* 'hit, cut' can have either a human agent or an inanimate effector (as in (6) and (7) above) as subject. If the subject of *he* 'hit, cut' is a human agent, the clause often contains in addition an instrumental phrase. No provision is made for an instrumental phrase in the valency of *he* 'put', but this verb regularly occurs together with a locative phrase. The locative phrase can be missing when the verb has one of the specialized meanings 'serve (food)' (cf. (10a) above) and 'put on (clothes)' (cf. (14b) below), in a transparent collocation like *roŋgâŋ he* 'put down a headrest, use a headrest' (cf. (3) above) and when it forms a serial unit with a verb of rest (cf. 12a and 13a below). From the limited amount of data at hand it is not clear whether this exhaustively lists the conditions under which a locative phrase can be

absent. The valency of *he* 'put' must, however, allow for the occurrence of locative phrases of the kind we saw in (8) and (9) because of their semantic peculiarity. These phrases do not locate the action as a whole but rather specify the place where the object affected by the action ends up.

A third piece of evidence that *he* 'put' is a different lexeme from *he* 'hit, cut' is offered by a peculiar combinatorial restriction. As the examples (12) and (13) show, *he* can only have the meaning 'put' in combination with a verb of rest; if it is followed by a motion verb, the meaning 'hit, cut' must appear.

12a	*kise*	*he-tec*	*ŋe-oc*	12b	*kise*	*râe-tec*	*ŋe-oc*
	yam	put-SEQ:2s:DS	sit-N.HORT:3		yam	put-SEQ:2s:DS	sit-N.HORT:3

'Put the yam down!'   'Put the yam down!'

12c	*kise*	*he-tec*	*hu-oc*	12d	*kise*	*râe-tec*	*hu-oc*
	yam	cut-SEQ:2s:DS	go.down-N.HORT:3		yam	put-SEQ:2s:DS	go.down-N.HORT:3

'Slice the yam into [the pot]!'   'Put the yam in [the pot]!'

13a	*tase*	*he-me*	*ŋe-jec*	13b	*tase*	*râe-me*	*ŋe-jec*
	cup	put-SEQ:3s:DS	sit-N.PT:3		cup	put-SEQ:3s:DS	sit-N.PT:3

'She put the cup down.'   'She put the cup down.'

13c	*tase*	*he-me*	*hu-jec*	13d	*tase*	*râe-me*	*hu-jec*
	cup	hit-SEQ:3s:DS	go.down-N.PT:3		cup	put-SEQ:3s:DS	go.down-N.PT:3

'She knocked the cup down.'   'She put the cup in [the sink].'

In (12) and (13) *he* is compared with the verb *râe* 'put'. In all examples these verbs are followed either by a verb of rest (*ŋe* 'sit') or a verb of motion (*hu* 'go down, go in') which form a serial unit with them. The verb of motion or rest has the function of indicating the location of the object resulting from the action predicated by the first verb in the serial unit. It will be noted that the verb *ŋe* 'sit' indicates that the object comes to rest on a surface, while the

motion verb *hu* 'go down, go in' indicates either that it falls down or ends up inside another object.

Looked at from the vantage point of the (b) and (d)-examples in which *râe* 'put' has a constant meaning, we can see that the meaning of *he* in the (a) and (c)-examples alternates between 'put' (12a and 13a) and 'cut' or 'hit' (12c and 13c, respectively). This difference in meaning is triggered by the verb that follows *he*: if the verb of rest *ŋe* 'sit' follows, *he* has the meaning 'put' (a-examples); if the motion verb *hu* 'go down, go in' follows, then *he* has the meaning 'cut' or 'hit' (c-examples). Evidently, the meaning 'put' that the phonological entitiy *he* can have is incompatible with a verb of motion in the same serial unit. When *hu* 'go down, go in' follows it, *he* must have the meaning 'hit, cut'. This peculiar co-occurrence restriction effectively eliminates a common context of occurrence in which there would be a danger of a homonym clash. No such danger exists in the case of a serial unit with the verb *ŋe* 'sit', as an object affected by cutting or hitting is necessarily in motion as a result of that action. Therefore *he* 'hit, cut' is semantically incompatible with a verb of rest in a serial unit.

Interestingly, the co-occurrence restriction formulated above is not an absolute one. We see an exception in (14b).

14a   *du-ge*   *he-tec*   *ŋe-oc*
      hat-2s:POSS   put-SEQ:2s:DS   sit-N.HORT:3

      'Put your hat down!'

14b   *du-ge*   *he-tec*   *hu-oc*
      hat-2s:POSS   put-SEQ:2s:DS   go.down-N.HORT:3

      'Put your hat on!'

The serial unit consisting of *he* 'put' and *hu* 'go down, go in' is lexicalized and has the meaning 'put on (clothes)' (14b). If we take a piece of clothing of which it can easily be said that it is put down on a surface, like a hat (14a), we get a pair of sentences that we saw above to be normally proscribed. The meaning 'put on (clothes)' of *he* 'put' is best considered a special acceptation with its own valency, like 'serve (food)' where we noted that the locative phrase may be missing.

To sum up, we have seen that the phonological entity *he* actually hides two different lexemes: *he* 'hit, cut' and *he* 'put'. These two main verbs have different valencies and they are subject to a co-occurrence restriction in combination with a verb of motion which prevents a homonym clash. It is further possible to construct a lexically ambiguous sentence whose two readings depend only on the interpretation of *he* as 'hit, cut' or as 'put'. The last-mentioned test fails in the case of the two submeanings 'hit' and 'cut' of *he* 'hit, cut'. Therefore I conclude that 'hit' and 'cut' are two different acceptations of the same polysemous lexeme *he* 'hit, cut'.

The meanings of *qa*

The semantics of the verb *qa* is less varied than that of *he*. There is only one lexeme *qa* with the basic meaning 'hit'. *Qa* is an object verb with irregular forms cross-referencing the person and number of the direct object (see Table 1). As in the case of *he* 'hit', we will start our investigation of the meanings of *qa* with an example in which the direct object has human reference as this excludes the possibility that the verb and its object form a lexicalized collocation.

15   *Eme   gie   piic   piic   e-nâre-me   ba-ŋgopeneŋ. I   qaqazue*
       SEQ:DS work   little   little   do-1p:IO-SEQ:3s:DS   hold-PRES:1p   that   teacher 3s

       gie   biri-re   mu-me   mana-huc   no   fic-ko   ra-râ
       work   row-GEN   say-SEQ:3s:DS   hear-SIM:SS 1s   house-LOC   go-SEQ:SS

       huc   burec   e-râ   fo-huc   ju-po.   Fo-hape   'ne   biac
       sickness pretense do-SEQ:SS   lie-SIM:SS be-F.PT:1s   lie-SIM:1s:DS but   soon

       gie   biri   tara-me   ra-pe   ine   qaqazu-zi   irec
       work   row   finish-SEQ:3:DS go-SEQ:1s:DS   but   teacher-RH   therefore

       *bâtiŋ-nu-râ   **nu-huc**   ju-wec.   Dameŋ gâcne ine*
       discipline-1s:DO-SEQ:SS 1s:DO.hit-SIM:SS   be-F.PT:3s   time   some   but

       i-rec   mamac   jaza-me,   mamac-nane-zi   wâc
       that-GEN   father   3p:DO.tell-SEQ:3s:DS   father-1s:POSS-RH   too

irec	*bocjaha*	***nu-huc***	*ju-wec.*
therefore	much	1s:DO.hit-SIM:SS	be-F.PT:3s

'Then he gave us little chores. The teacher arranged the work, but I would go home and pretend to be sick. I slept until the work was done. When I went back the teacher would beat me to punish me. Sometimes he would tell my father and uncles, and my father beat me a lot, too, for it.'

In the extract from a biography in (15) we find two instances of *nu* 'hit me' with the meaning 'beat, give a hiding'. Here the bare hands are used for hitting. In (16), from an account of the Second World War on the Huon Peninsula, *qa* 'hit' refers to a shot from a rifle.

16   *Gbawe-ne*   *kec*   *sawa*   ***qa-mbiŋ.***   *Buhândâŋ-ne*   *mi*   *ro-mbiŋ.*

      shoulder-3s:POSS   lo!   only   hit-F.PT:3p   heart-3s:POSS   not   take-F.PT:3p

      Mâc   *kec*   *sawa*   ***qa-pie***   *ware-wec.*   *Eme*   *no*   *hone-po:*

      just   lo!   only   hit-SEQ:3p:DS   come-F.PT:3s   SEQ:DS   1s   see-F.PT:1s

      Zâic   *mana-huc*   *fo-wec.*

      pain   feel-SIM:SS   lie-F.PT:3s

'He was only shot here in the shoulder, the heart was not affected. He was brought with a wound just here. And I saw that he was suffering pain.'

The soldier talked about in (16) was wounded by a shot in the shoulder. The narrator pointed to his own shoulder to show where. The verb *qa* 'hit' here refers to the impact of a bullet. This is also the case in (17), but the result is different.

17   *Ra-râ*   *ira*   *fisi-râ*   *bâfua-râ*   *ine*   *eatucke-pie*   *mafa*

      go-SEQ:SS   there   arrive-SEQ:SS   find-SEQ:SS   but   deceive-SEQ:3p:DS   goods

      hâpo-râ   *ju-ha*   ***qa-râ***   *ducke-mbiŋ.*   *Eme*   *qaqazu*

      carry-SEQ:SS   be-SIM:3s:DS   kill-SEQ:SS   bury-F.PT:3p   SEQ:DS   missionary

qa-mbiŋ	*i*	*zâŋe-ne*	*Adolf.*
kill-F.PT:3p	that	name-3s:POSS	(name)

'They got there and found him. They tricked him into carrying their loads and as he was carrying them they killed him and buried him. The missionary they killed was called Adolf.'

(17) has been taken from the same wartime narrative as (16). It reports how a German missionary who refused to be detained in Australia and went into hiding was tracked down by the Japanese and killed. As the example shows, *qa* can have the meaning 'kill'. This has never been observed for *he* 'hit'. If the act of hitting predicated by *he* 'hit' results in the death of the person or people hit, this must be stated in a separate clause containing the verb *hâmo* 'die' as in example (2) above. *Qa* 'hit', on the other hand, can signify a lethal outcome without such an addition. (18) is a further example of of *qa* with the meaning 'kill'.

18	*Erâ*	*'ne*	*qowi*	*fuŋne fuŋne*	*ira*	*fo-ŋgopieŋ*	*i*	***qa-râ***
	SEQ:SS	but	game	various	there	lie-PRES:3p	that	kill-SEQ:SS

na-naŋmunec.
eat-1p:FUT

'Then let's kill and eat the various game animals that are there.'

The verb sequence *qa-râ nâ* 'hit and eat' in (18) is a formula used in the description of a hunting event. Note that there is a lack of agreement between the relative clause (ending in the final verb *fo¯gopie¯* 'there are') and the main clause. The head of the relative clause, *qowi fu¯ne fu¯ne* 'various game animals', is treated as a plural in the relative clause, but is then resumed by the third person singular form of the verbs *qa* 'kill' (rather than the third plural form *jopa* 'kill them') and *nâ* 'eat' (rather than the non-zero form *nâc-jopa* 'eat them'). This is presumably due to the fact that the sequence of verbs *qa* 'kill it' and *nâ* 'eat it' is a fixed *formula for making a catch in hunting and does not allow a pluralization. In this formula the* concept of dying is evidently included in the meaning of *qa* 'kill it' and gets no separate lexical expression.

When the direct object of *qa* 'hit' is a noun with inanimate reference the collocation is very often lexicalized and the meaning of *qa* is submerged in the collocation. In the following two examples, however, *qa* 'hit' is combined with an object noun according to the rules of syntax and retains its inherent meaning.

19   *Woŋgâŋ*   **qa-huc**   *gae*   *he-pic.*
     drum   hit-SIM:SS   song   hit-F.PT:3d

'They beat the drums and sang.'

20   *Ehame biac*   *kofi*   *huc-ticne-zi*   *ware-râ*   **qa-wec**.   *Qa-râ*
     SIM:DS soon   coffee   disease-3s:POSS-RH   come-SEQ:SS   hit-F.PT:3   hit-SEQ:SS

     sasawa   *qâ-hâmo-fâre-wec.*
     all   hit-die-all-F.PT:3

'At the same time a disease afflicted the coffee plants and exterminated them.'

In (19) *qa* 'hit' has its basic meaning. In (20) we find a metaphorical extension of this meaning, a disease 'afflicts (literally 'hits')' coffee plants. Note that the verb *qa* 'hit' is not only repeated in the tail-head linkage at the beginning of the second sentence in (20) but also in the causative compound *qâ-hâmo* 'kill' (cf. the treatment of causative compounds later in this paper).

The verb *qa* 'hit' is transitive in most of its occurrences in discourse. But it can be used intransitively as well as in (21).

21   *Jâc*   *e*   *'ne,*   *biac*   *mu-pac,*   *e'ne*   *mujâfâ jâc.*   *Jâc*   *omane*
     tree   3s   but   already say-N.PT:1s 3s but   ghost   tree   tree   ordinary

     arictac.   *Irec*   *hefara-pie*   *rândiŋke-râ*   *waha-râ*
     not   therefore   cut.down-SEQ:3p:DS   topple-SEQ:SS   come.down-SEQ:SS

     mâreŋ-ko   *mi*   **qa-wec.**   *He-pie*   *ine*   *tâcne-râ*   *sawa-o*
     ground-LOC   not   hit-F.PT:3   cut-SEQ:3p:DS but   break-SEQ:SS   air-LOC

fahare-wec.

rise-F.PT:3

'As I have already said, it was a ghost tree. It wasn't an ordinary tree. So when they cut it down it toppled, but it did not fall on the ground. When they cut it, it snapped and took off into the air.'

22	*Â*	*qâqâc-zi*	*fururuc*	*qa-râ*	*Siki*	*mic-na-o*
	and	chicken-RH	flying	hit-SEQ:SS	(name)	mouth-3s:POSS-LOC

fitac	*fuŋ-ko*	**he-wec.**
calophyllum	base-LOC	hit-F.PT:3

'The chicken flew and landed at the base of a calophyllum tree near the mouth of the Siki River.'

When *qa* 'hit' is used intransitively, what is the object argument in the transitive use becomes the subject argument. The agent performing the act of hitting disappears and only the impact is predicated. The verb *he* 'hit' can be used intransitively in exactly the same manner (22). The lexical meaning of *he* 'hit' and *qa* 'hit' is the same in their transitive and intransitive uses, even though this cannot be imitated in an English translation. In English we must render these uses with intransitive verbs such as *fall* or *crash* (21) and *land* (22).

He 'hit' versus *qa* 'hit'

In the preceding sections we have seen that *he* and *qa* do not have identical lexical meanings. In this section I want to focus on the differences between them. I will only consider the lexeme *he* 'hit, cut' and disregard *he* 'put'. One of the differences we have already noted is that *he* can mean 'cut' whereas *qa* has not been observed with such a meaning in isolation. It comes as a surprise, therefore, that the concept of cutting down a tree can be expressed with either verb (23).

23a	*jâc*	*he-mbiŋ*		23b	*jâc*	*qa-mbiŋ*
	tree	hit-F.PT:3p			tree	hit-F.PT:3p

	'They felled a tree.'				'They felled a tree.'

24a	*meczâwâ*	*he-po*		24b	*?meczâwâ*	*qa-po*
	beard	cut-F.PT:1s			beard	hit-F.PT:1s

	'I cut my beard.'				?'I hit my beard.'

As we have seen above, when *he* has the meaning 'cut' a separable part is usually removed from a larger object. Presumably, a tree is too large an object to be thought of as a separable part. In (23a) *he* is not used in its sense 'cut' but rather in the sense 'hit'. Kâte conceptualizes the felling of a tree as a form of hitting rather than cutting. Consequently, both *he* 'hit' and *qa* 'hit' can be used to describe this action (23a and 23b). In (24a), by contrast, we have a clear instance of cutting where only *he* 'cut' can be used. Note that the motion involved in shaving is a scraping rather than a hitting motion. Replacing *he* with *qa* (24b) leads to an unidiomatic sentence that is hard to make sense of.

In the semantic domain of hunting there is a clear opposition between the use of *he* 'hit' and *qa* 'hit' depending on the weapon used.

25a	*qaŋ*	*he-jec*		25b	*qaŋ*	*qa-jec*
	cockatoo	hit-N.PT:3s			cockatoo	hit-N.PT:3s
	'He shot a cockatoo (with a slingshot).'				'He shot a cockatoo (with a shotgun).'	

26	*qaŋ*	*muru-jec*
	cockatoo	shoot-N.PT:3s
	'He shot a cockatoo (with bow and arrow).'	

In the description of a hunting scene where the direct object is a game animal the verbs *he* 'hit' and *qa* 'hit' carry different meanings. The use of *he* 'hit' signals that the weapon used was a slingshot (25a). If the speaker uses *qa* 'hit' instead, the hearer concludes that a shotgun was used (25b). *Qa* 'hit' is also used when the weapon employed is a spear; but that would be a rather exotic choice of weapon if the purpose is to kill a cockatoo. There is the further

possibility that a bow was used to kill the bird. In that case a separate verb, *muru* 'shoot', must be used (26). Note that in all three examples in (25) and (26) no overt mention is made of the weapon that was used, but it is rather the choice of verb which conveys that information. Perhaps the nature of the weapon used is only indirectly relevant—though it can be easily ascertained in elicitation that it governs the choice between the verbs. The question is whether there is a connection between the uses of *he* 'hit' and *qa* 'hit' in (25) and in (27).

27a   *me-zi*   *he-jec*   27b   *me-zi*   *qa-jec*

       hand-INSTR   hit-N.PT:3s   hand-INSTR   hit-N.PT:3s

       'He punched him.'   'He slapped him.'

In (27) the instrument of hitting is the unarmed hand. If the verb of hitting is *he*, the hand is interpreted to have formed a fist (27a); if the verb is *qa*, the hand is interpreted to have been open when hitting (27b). One might see a common denominator in the two uses of *he* 'hit' in (25a) and (27a) if one focuses on the impact rather than the instrument of hitting. The stone used as a projectile in a slingshot resembles a fist in that it is a roundish, blunt object. Consequently, the impact is distributed over a relatively large area. The problem with such an interpretation is the apparent lack of parallelism in the uses of *qa* 'hit' between (25b) and (27b). The first example draws our attention to the fact that the bullets of a shotgun as well as a spearhead are pointed objects that create a hole upon impact. But the example with the unarmed hand is hard to reconcile with these criteria.

The verb *qa* 'hit' is used in two further contexts which may be related. Only *qa* 'hit' can be used to describe hitting with a stick and kicking (i.e. hitting with the foot). In talking about a soccer match, the two verbs *he* and *qa* are clearly differentiated. *Qa* is used to express the normal way the ball is treated, namely kicked with the foot. *He* refers to the use of the head. Thus in the semantic domain of soccer we find an opposition between *qa* 'kick (the ball)' and *he* 'head (the ball)'.

That the nature of the impact plays a role in the choice between *he* 'hit' and *qa* 'hit' is suggested by the following pair of examples.

28a	*rambe waha-râ*	*mâreŋ-ko*	*he-jec*
	lamp come.down-SEQ:SS	ground-LOC	hit-N.PT:3

'The lamp fell down and hit the ground.'

28b	*rambe waha-râ*	*mâreŋ-ko*	*qa-jec*
	lamp come.down-SEQ:SS	ground-LOC	hit-N.PT:3

'The lamp fell down and smashed on the ground.'

The sentences in (28) were elicited in the presence of a petrol lamp that was hung up with a hook on a roof beam. If one envisages that the lamp comes off its hook and falls on the ground either (28a) or (28b) can be said. The difference between the two variants is that the use of *qa* 'hit' implies that the lamp got broken as a result of the impact on the ground (28b) whereas the use of *he* 'hit' carries no such implication. The lamp may either be damaged or whole (28a).

The same verb sequence *waha* 'come down' and *qa* 'hit' can be applied to human beings (29).

29	*kogoc*	*tebo-onec*	*waha*	*qa-jec*	/	**he-jec*
	toddler	table-ABL	come.down	hit-N.PT:3s	/	hit-N.PT:3s

'The toddler fell from the table (and got hurt).'

In the case of a human being falling from some height only *qa* 'hit' can be used in sequence with *waha* 'come down' as in (29). The implication is that the impact on the ground was painful and that the toddler who fell down probably got hurt. This corresponds well with the difference between *he* 'hit' and *qa* 'hit' we saw in (28). There *qa* 'hit' implied that the falling object got damaged. Thus, *qa* implies that the person or object that was hit was adversely affected. We recall that only *qa* can have the meaning 'kill' whereas it must be explicitly stated if the act of hitting predicated by *he* has such an adverse effect.

The semantic oppositions we have seen in (25) to (29) represent only a limited range of the uses of *he* 'hit' and *qa* 'hit'. It has proved impossible to arrive at a constant semantic factor that differentiates between these two main verbs through elicitation. In general, it can be said that

both the instrument of hitting and the result of the impact condition the use of one or the other of these verbs when they are in opposition. But it does not appear to be possible to reduce this to binary semantic features. The following extract from a conversation shows that the semantic criteria we have found are far from being rules of usage which would allow us to predict when to use which of these verbs in discourse.

30   S: *Babahasic-ko bahasicke-hame   'ne   biac   tepe   hâcne*
            corner-LOC   turn.around-SIM:3s:DS but immediately gun   indeed

            qa-wec.   Qa-râ   'ne   sahac qaŋqaŋ   i   riri-wec.
            hit-F.PT:3s   hit-SEQ:SS   but   skin   white   that   miss-F.PT:3s

            'When he came around the corner, [the robber] shot at him with a gun. But he missed that white man.'

        D: *Erâ   aeŋ-ko   **qa-wec**.*
            SEQ:SS metal-LOC   hit-F.PT:3

            'The metal was struck.'

        S: *Erâ   'ne   biac   motâc aeŋ   ira   hâcne **qa-wec**.*
            SEQ:SS but   immediately door   metal there indeed hit-F.PT:3

            'And the metal part of the door was struck.'

        F: *Aeŋ-ticna-o   **he-huc**   he-fâucke-wec,   katres.*
            metal-3s:POSS-LOC   hit-SIM:SS   hit-split-F.PT:3   bullet

            'As it hit the metal, the bullet split.'

        S: *Ira   **he-wec**.   Ehuc   'ne   biac ...*
            there hit-F.PT:3   SIM:SS but   immediately

            'It hit it, and at the same moment ...'

D: ...   *fâucke-wec.*

        split-F.PT:3

'... it split.'

S: ...   *tâtie-wec,*   *katresi.*

        disperse-F.PT:3   bullet

'... the bullet burst.'

(30) is an extract from a conversation about a shop robbery. During the robbery a shooting incident occured. In (30) the two eye-witnesses to the robbery, S and F, talk about a stray shot. D, who has heard this story before, suggests that the bullet hit the metal frame of a door. S confirms this statement, using the verb *qa* 'hit' like D before him. Then F continues to talk about what happened to the bullet. Presumably this shift of focus plays a role in F's decision to switch to *he* 'hit'. When S confirms that the bullet burst as a result of the impact he, too, uses *he* 'hit'.

However one might want to account for the shift from *qa* 'hit' to *he* 'hit' in this conversation extract, it hardly fits together with any of the criteria we met in (25) to (29). If anything, example (28) in which *qa* 'hit' signified damage to a lamp that fell to the ground would have made us expect to find *qa* 'hit' rather than *he* 'hit' in the passage that describes what happened to the bullet. From observations such as this I must conclude that I have no access to the criteria that condition the choice between *he* 'hit' and *qa* 'hit' in natural discourse. In some cases, as in (25) to (29), a clear difference in meaning between these two verbs can be observed. In other cases, as in (30), however, informants are hard put to find a reason for the use of one or the other of these verbs.

Predicate collocations

He 'hit' and *qa* 'hit' are used in the formation of a great number of complex predicates consisting of one of these verbs plus an object noun. The overall meaning of such predicates is determined by the lexical content of the noun with which one or the other of them combines, whereas their own semantic contribution is hard to discern. Examples (31) to (38) illustrate the range of meanings complex predicates of this type can express.

31a   *tapa   he-kac*
      lid   hit-PRES:3s

      'She puts the lid on.'

31b   *fitec   qa-kac*
      stopper hit-PRES:3s

      'She puts the stopper in.'

32a   *ho-ne   he-kac*
      guts-3s:POSS hit-PRES:3s

      'She washes the intestines.'

32b   *qinziŋ   qa-kac*
      grass   hit-PRES:3s

      'She cuts the grass.'

33a   *oc   he-kac*
      spike hit-PRES:3s

      'He sets spikes (in a pit).'

33b   *zâki   qa-kac*
      pole   hit-PRES:3s

      'She plants poles (for beans).'

34a   *ufic   he-kac*
      net   hit-PRES:3s

      'He makes a hunting net.'

34b   *masec   qa-kac*
      handle   hit-PRES:3s

      'She makes the handle of a netbag.'

35a   *gae   he-kac*
      song   hit-PRES:3s

      'She sings.'

35b   *nemu   qa-kac*
      primeval.being hit-PRES:3s

      'He tells a nemu tale.'

36a   *arec   he-kac*
      shoulders   hit-PRES:3s

      'She shrugs her shoulders (in disbelief).'

36b   *nameŋ   qa-kac*
      tongue   hit-PRES:3s

      'She sticks her tongue out (in defiance).'

37a   *riŋ   he-kac*
      phoning hit-PRES:3s

      'He makes a phone call.'

37b   *biŋe   qa-kac*
      allocation   hit-PRES:3s

      'He has it earmarked.'

38a	*nakafe he-kac*		38b	*kisiec*	*qa-kac*
	breath	hit-PRES:3s		sneezing	hit-PRES:3s

'She pants.'   'She sneezes.'

 As the pairs of examples in (31) to (38) show, *he* 'hit' and *qa* 'hit' are used in the formation of semantically similar complex predicates. There is no obvious difference between the conceptual domains in which they operate. (31) through (33) describe routine activities in the household, the garden, or the hunting ground: (31a) and (31b) are the common expressions referring to the closing of pots and water containers; (32a) and (32b) refer to cleaning work involving the intestines of a butchered animal and unwanted grass, respectively; and the expressions in (33) describe steps in the procedures of making an animal trap (33a) and raising beans (33b). A great many verb-object collocations express simple activities of this sort. But there are some, like those in (34), (36) and (38), that go beyond the expression of a simple activity. In (34) the object noun does not refer to the object affected by the activity the whole predicate expresses – as is the case in (31) to (33) – but rather to the object that is produced as a result of this activity. In (36) the activities of shrugging one's shoulders and sticking one's tongue out stand for the emotional attitudes of disbelief and defiance. The expressions in (38), finally, cannot be considered activities at all. Rather, they describe involuntary bodily processes.

The expressions in (31) to (38) are fixed collocations, i.e. they are conventionalized as a whole in the exact form of the two lexical items that make them up. It is not possible, therefore, to replace either the noun or the verb in one of these complex predicates with a synonym without destroying its meaning. If we try to replace *he* 'hit' in one of the (a)-examples above with *qa* 'hit', for instance, the result is not a synonymous or near-synonymous expression but rather a syntactic combination of words for which no ready semantic interpretation suggests itself. It is strange and unusual to talk about beating the lid of a pot, or the intestines of an animal, or a bamboo spike, though these things can be said in Kâte and indeed are what *tapa qa* (cf. 31a), *hone qa* (cf. 32a), and *oc qa* (cf. 33a) are taken to mean. The same holds true quite generally for predicate collocations of the type presented in (31) through (38). As a rule, the idiosyncratic overall meaning of a verb-object collocation disappears if one replaces either of its parts with anything else.

There is one exception to this rule to be noted among the examples given above. In (31a) *ba* 'hold' can be substituted for *he* 'hit' without producing a change of meaning. Both *tapa he* (lid hit) and *tapa ba* (lid hold) mean 'put the lid on (the pot)'. The two expressions have the same antonym *tapa ro* (lid take) 'take the lid off' and are synonymous. There is only a handful of collocations that display variability of this sort in Kâte. In the case of these collocations, common usage exceptionally permits the variable use of two different verbs without accompanying difference in meaning.

Though their number is limited, these pairs of synonymous collocations are noteworthy as they offer us an insight into the internal semantics of collocations. If it is possible for two collocations containing verbs with such different meanings as *he* 'hit' and *ba* 'hold' to be synonymous, as in the example just given, this suggests that the verbs in question do not bring their full lexical meaning with them when they enter into collocations. What is more, synonym pairs have been found to embrace any possible combination of the four verbs *e* 'do', *ba* 'hold', *he* 'hit', and *qa* 'hit' which form the bulk of predicate collocations in Kâte. It must be stressed that the semantically similar verbs *he* 'hit, cut' and *qa* 'hit, kill' are not more prone to form pairs of synonymous collocations than two verbs with divergent basic meanings, such as *he* 'hit' and *ba* 'hold'. Apart from *tapa he / ba* 'put the lid on', the two last-mentioned verbs can be used interchangeably in *aka he / ba* 'forbid, hinder' (*aka* 'obstacle'), *bâruŋ he / ba* 'be eager, zealous' (*bâruŋ* 'flame'), and *hae he / ba* 'found a village' (*hae* 'place'). There is a comparably small number of synonym pairs where *he* 'hit' and *qa* 'hit' are interchangeable: *gitec he / qa* 'sprout' (*gitec* 'shoot'), *madu he / qa* 'dig a lair' (*madu* 'pig lair'), and *gbicsac he / qa* 'make a sustained effort' (*gbicsac* 'force') are all such pairs that I am aware of. Thus, there are not more synonym pairs with *he* 'hit' and *qa* 'hit' than with *he* 'hit' and *ba* 'hold' or, for that matter, any other combination from among the four verbs mentioned above.

Obviously, the inherent lexical meaning of the two verbs that can be substituted for each other in a pair of synonymous collocations is immaterial. The synonymy of the collocations is independent of the identity of the verbs in them. There does not appear to be any semantic property common to the set of synonymous collocations. Synonym pairs have a wide variety of meanings, just like predicate collocations in general. It is just a peculiarity of usage that some collocations are not entirely fixed but permit the variable use of two different verbs in them. Significantly, informants do not try to find a semantic difference between the two variants when confronted with such variable collocations, but rather try to find out whether one of the two variable verbs can be said to be used more properly than the other in a given

collocation. If Kâte were a standardized language, no doubt the correct usage would be prescribed.

Whenever common usage permits the variable use of two different verbs in the same collocation the resulting expressions are synonymous. It is not possible to vary the meaning of a collocation by replacing its constitutive verb with another one. The only candidates that could plausibly be analysed as instances of such a semantic operation are pairs of antonyms such as *tapa he* 'put the lid on' and *tapa ro* 'take the lid off'. Since there is no other semantic relation apart from antonymy, however, that connects two complex predicates containing the same noun in this manner, I prefer to count such pairs of antonymic predicates as two different collocations rather than variations of a single one.

Pairs of synonyms and antonyms are marginal exceptions to the abovementioned rule that verb-object collocations cannot be manipulated by exchanging either of their constitutive parts. In general, to vary or alter the meaning of a given collocation one must resort to syntax and expand the whole complex predicate or one of its components with added lexical material. For instance, the noun in a verb-object collocation can be freely modified by means of an adjective, as in (39b).

39a	*tapa*	*he-c*		39b	*tapa*	*bâbâroŋne*	*he-c*
	lid	hit-N.HORT:2s			lid	red	hit-N.HORT:2s

'Put the lid on!'   'Put the red lid on!'

40	[*kudzi* _{DO}]	[*tapa*	*he-po* _{PRED TR}]
	pot	lid	hit-F.PT:1s

'I put the lid on the pot.'

Example (40) shows that the collocation *tapa he* 'put the lid on' can be used transitively taking the noun *kudzi* 'pot' as its direct object. For some syntactic theories it is a problem that there seem to be two direct objects in such sentences as (40), *tapa* 'lid' and *kudzi* 'pot'. But I am not concerned with syntax in this paper.

The interchangeability of two verbs with different basic meanings in collocations such as *tapa he / ba* 'put the lid on' shows that the inherent lexical meaning of the verb in verb-object collocations is faded or, rather, submerged in the overall meaning of the complex predicate it helps form. The inherent meaning of the object noun, on the other hand, is clearly present. Indeed the meaning of the noun often so dominates the meaning of a collocation that the verb appears to be little more than a semantically blank carrier of the predicate inflections. Whatever meaning the verb seems to have is contextually derived from the noun with which it forms a collocation. This is particularly obvious in the examples (35) and (36) given above.

There is no simple verb in Kâte that expresses the concept 'sing'. Rather, this basic cultural activity is denoted by the collocation *gae he* 'sing' (35a) in which *gae* 'song' contributes all the lexical information and *he* 'hit' merely serves the purpose of turning this noun into a predicate. Singing it is the natural thing to do with a song, hence the meaning of the collocation. The collocation *nemu qa* 'tell a nemu tale' (35b) denotes a cultural activity that took place during the yam harvesting season (Keysser 1925, s.v. *nemu*). The *nemu* are primeval beings that one only encounters in tales. The semantic information that the collocation refers to a form of talking does not derive from the meaning of *qa* 'hit' but rather from the object noun. The inherent lexical meaning of *he* and *qa* does not enter these collocations.

The two collocations in (36) are built around body part terms. There is an element of semantic idiosyncrasy in the fact that they denote emotive gestures, but upon reflection it is clear that this collocational meaning derives almost as straightforwardly from the meaning of the nouns as in the previously discussed examples of (35). The gestures signalling astonishment or disbelief (36a) and childish defiance (36b) are performed with the shoulders and the tongue, respectively, and neither of these body parts lends itself to another common meaningful gesture. Thus, the gestures are uniquely associated with the body parts. This illustrates the basic semantic principle in the formation of verb-object collocations. Such collocations denote conventional activities in which the entity referred to by the object noun features prominently. Incidentally, verb-object collocations are a perfectly economic lexical means of expressing such object-centered predications as 'shrug one's shoulders'. A language that has them can do without the luxury of verbal lexemes with such an extreme restriction in the selection of their object as English *shrug* which only allows *shoulders* as its object.

All the predicates in (31) through (38) have in common that they require a human subject. This is typical of true verb-object collocations, i.e. collocations in which the carrier of the

lexical information can be clearly identified as a noun. As we have seen in the foregoing discussion, the meanings of these complex predicates cluster around household activities and work (31 to 34) and other cultural activities (35, 37). A much smaller number of them express physical, emotional or cognitive states (36, 38). In the latter semantic area, however, we encounter yet another kind of collocation which can be difficult to distinguish from verb-object collocations.

The word *kisiec* in (38b) can only occur in the collocation *kisiec qa* 'sneeze', but never on its own. It is therefore not a noun. The word *riŋ* in *riŋ he* 'make a phone call' (37a) is equally restricted in its syntactic distribution. The word *nakafe* in (38a) is a borderline case. *Nakafe* is arguably a noun meaning 'breath', but it is doubtful whether sentences in which this word is used in a nominal function other than as a complement of *he* are idiomatic. Words like *kisiec* are usually called verb adjuncts in Papuan linguistics, and the corresponding predicates can be labeled verb-adjunct collocations. There are as many verb-adjunct collocations as verb-object ones in Kâte, to wit hundreds of them. Both types of collocation are built with the aid of the same four verbs and have the same superficial structure. They differ, however, in the semantic ground they cover, despite a partial overlap. In particular, verb-adjunct collocations can denote a wide variety of actions and events associated with non-human subjects. (41) and (42) are examples of this.

41a *qaqec fuc   he-ekac*   41b *wipe fururuc   qa-ekac*
     frog   leaping hit-HAB.PRES:3   bird   flying   hit-HAB.PRES:3

     'Frogs leap.'   'Birds fly.'

42a *qâto farac farac   he-kac*   42b *jâc   qiriŋ   qa-kac*
     dog   wagging   hit-PRES:3   tree   swaying hit-PRES:3

     'The dog is wagging the tail.'   'The tree is swaying.'

The verb adjuncts in (41) and (42) cannot be used outside of the predicate collocations given and lack most of the properties of nouns. Borrowing a term from African linguistics we could call them ideophones. A considerable number of them are sound symbolic whereas the nouns that occur in verb-object collocations usually have an arbitrary sound shape. The verb adjunct *fuc* 'leaping' in (41a), for instance, evokes a single sudden leap wheras *fururuc* 'flying' (41b)

conjures up the idea of repeated flapping of the wings. The actions and events that these ideophone-like verb adjuncts describe leave a vivid impression on the observer which is often given sound symbolic expression.

There is yet another type of predicate collocation in which the verbs *he* 'hit' and *qa* 'hit' can be met. The examples in (43) illustrate verb-subject collocations. There is only a small number of them in Kâte and most of them are meteorological expressions.

43a	*hoe*	*he-kac*		43b	*zoaŋ*	*qa-kac*
	rain	hit-PRES:3			sun	hit-PRES:3
	'It is raining.'				'The sun is shining.'	

Predicate collocations are a productive type of concept formation in Kâte. This is clear from example (37a) *riŋ he* 'make a phone call' which must be a relatively recent addition to the Kâte lexicon. It is noteworthy that the decision to treat this concept as a predicate collocation lies with the Kâte language, the Australian English source word as well as its Tok Pisin equivalent being simple verbs.

Causative compounds

The verbs *he* 'hit' and *qa* 'hit' serve an important role in the formation of another type of complex predicate. They are part of a small group of verbs that can fill the first position in a kind of resultative or causative compound consisting of two verb stems (see 44 to 47). The second verb stem in these compounds carries the lexical information describing the action denoted by the complete compound, while the first verb stem specifies the manner in which this action is performed.

44	*bo*	*ki-tâcne-po*		45	*muc*	*bâ-tâcne-po*
	sugarcane	bite-break-F.PT:1s			vine	hold-break-F.PT:1s
	'I bit off a piece of sugarcane.'				'I broke off a vine.'	

46	*bo*	*he-tâcne-po*	47	*muc*	*qâ-tâcne-po*
	sugarcane	hit-break-F.PT:1s		vine	hit-break-F.PT:1s

'I cut off a stalk of sugarcane.'   'I cut off a vine.'

The predicates in (44) through (47) all denote instances of a tangible object breaking apart or becoming separate owing to the intervention of a human being. The main descriptive information in these predicates is provided by the verb stem *tâcne* 'break in two, break off' which, used on its own, is intransitive. To turn *tâcne* 'break' into a transitive predicate it must be compounded with a causativizing verb such as *ki* 'bite', *ba* 'hold', *he* 'hit', *qa* 'hit', *mu* 'say', *âke* 'pierce', *âte* 'tread', *za* 'burn', or one of a few others that can perform this function. The resulting compound denotes an action rather than a self-contained event and has a cause-and-effect meaning. The first verb in the compound, the causative verb, specifies the instrument used by the agent or, more generally speaking, the way in which the agent proceeds to bring about the result of the action. Thus, in (44) the causative verb *ki* 'bite' makes it clear that the agent used his or her teeth to break off a piece of sugarcane, whereas in (46) the causative verb *he* 'hit' suggests that a knife or some other sharp tool was used. Similarly, in (45) the use of the verb *ba* 'hold' as the first part of the compound indicates that the agent's hands were crucially involved in the action: he pulled a vine with his bare hands and thus broke it off. In (47), on the other hand, the use of *qa* 'hit' again points to the use of a suitable tool, such as a machete or an axe. The two last-mentioned verbs *ba* 'hold' and *qa* 'hit', it may be noted in passing, change their vowel to *â* in causative compounds unless the immediately following vowel is an *a*, in which case they retain *a*.

There are hundreds of verb stems in Kâte from which causative compounds can be derived. Although this type of word formation is highly productive, usually only a selection of causative verbs can be found to combine with a particular verb stem. There is a small number of verbs like *tâcne* 'break' for which the whole array of possible combinations is attested. But most verb stems are semantically less adaptable. Their lexical meaning is so specific as to preclude the combination with certain causative verbs. Semantic incompatibility thus reduces the range of use of individual causative verbs. This is particularly true for those of them that have a narrow and rather inflexible meaning, like *za* 'burn (= result caused by fire)' or *ki* 'bite (= result caused through use of the teeth)'. Only a small minority of verb stems that can form the nucleus of causative compounds have been found to combine with either of the aforementioned causative verbs. The most widely used causative verb is *ba* 'hold (= result caused

by means of the hands / directly)', followed by *he* 'hit' and *qa* 'hit' (both = result caused by means of a tool / indirectly). As a rule, if a verb stem can enter into causative compounds, at least one of the causative verbs *ba* 'hold', *he* 'hit', and *qa* 'hit' will be found to form a lexicalized compound with it. Rather few eligible verb stems do not form a compound with *ba* 'hold'.

New causative compounds are easily formed when the necessity arises. From the lexicographic point of view it can be difficult to tell whether a newly encountered compound with a transparent, compositional meaning only serves a momentary need of expression or captures a sufficiently well-known action to warrant being considered a lexical concept of the language. It is even more difficult to tell whether a certain unusual compound that can be formed from a verb stem is an acceptable word, i.e. whether it may be felicitously used in discourse. Consider the following examples featuring the causative verbs *he* 'hit' and *qa* 'hit'.

48a	*eebapa*	*he-gbâre-wec*	48b	**eebapa*	*qâ-gbâre-wec*
	custom	hit-be.alive-F.PT:3s		custom	hit-be.alive-F.PT:3s

'She revived the custom.'

49a	**papia he-ratie-wec*		49b	*papia*	*qa-ratie-wec*
	book hit-unfold-F.PT:3s			book	hit-unfold-F.PT:3s

'She opened the book.'

50a	*he-tumaŋ-nâpo-wec*	50b	*ʔqâ-tumaŋ-nâpo-wec*
	hit-assemble-1p:DO-F.PT:3s		hit-assemble-1p:DO-F.PT:3s

'He called us together.'   ('He called us together.')

51a	*ʔhe-turec-nâpo-wec*	51b	*qâ-turec-nâpo-wec*
	hit-be.joined-1p:DO-F.PT:3s		hit-be.joined-1p:DO-F.PT:3s

('He united us.')   'He united us.'

Examples (48) through (51) illustrate the relatively infrequent case in which a compound formed with the aid of *he* is not matched by one involving *qa*, and vice versa. The compounds *he-gbâre* 'revive' (48a) and *qa-ratie* 'open (a book)' (49b) are well established lexical items with several conventional interpretations, of which one is given here. That these are analyzable forms is corroborated by the existence of corresponding compounds formed with the aid of *ba* 'hold': *bâ-gbâre* 'renew, reinvigorate' and *ba-ratie* 'open up, expose'. Yet it is impossible to exchange *he* and *qa* in (48) and (49): the resulting forms **qâ-gbâre* and **he-ratie* do not only sound awkward and unnatural, but it is also not immediately obvious how their meaning should be computed. By contrast, the marked forms in (50) and (51), $^{?}qâ$-tumaŋ and $^{?}he$-ture, are spontaneously interpreted as being synonymous with their lexicalized counterparts, *he-tumaŋ* 'call together' and *qâ-ture* 'unite'. At the same time, these compounds sound decidedly odd and it is doubtful whether they would ever be heard in discourse.

The difference in acceptability between the marked forms in the two sets of examples given above is only a matter of degree. In all of the examples (48) to (51) only one of the causative verbs *he* and *qa* forms a readily interpretable compound with the verb stems concerned, while the alternative compound is not part of the Kâte lexicon.

It was mentioned above that many possible causative compounds are unacceptable because the meaning of a certain verb stem may be incompatible with the meaning of a certain causative verb. In the case of pairs of compounds formed with the aid of *he* 'hit' and *qa* 'hit', however, we can hardly invoke semantic reasons to account for the unacceptability of one of them when the other is a perfectly acceptable lexical item. Note that the lexicalized compounds *he-tumaŋ* 'call together' (50a) and *qâ-ture* 'unite' (51b) take a different causative verb even though they have similar meanings. A look at further examples in which only one of the causative verbs *he* 'hit' and *qa* 'hit' is commonly used yields no evidence of a semantic factor that might be responsible for this skewed distribution. The two groups of verb stems involved in these compounds have nothing in common except for the fact that they prefer *he* 'hit' over *qa* 'hit', respectively vice versa.

More often than the distribution illustrated in (48) to (51) we find the following situation:

52a   *boze   he-ropie-wec*   52b   *boze   qâ-ropie-wec*

    hut   hit-collapse-F.PT:3s   hut   hit-collapse-F.PT:3s

    'He tore the hut down.'   'He tore the hut down.'

53a   *waha   he-hâpo-wec*   53b   *waha   qâ-hâpo-wec*

    torch   hit-extinguish-F.PT:3s   torch   hit-extinguish-F.PT:3s

    'She put the torch out.'   'She put the torch out.'

54a   *nombâŋ   he-mase-wec*   54b   *nombâŋ   qa-mase-wec*

    pit   hit-fill.up-F.PT:3s   pit   hit-fill.up-F.PT:3s

    'He filled up the pit.'   'He filled up the pit.'

55a   *ŋokac   he-nusuc-jopa-wec*   55b   *ŋokac   qâ-nusuc-jopa-wec*

    woman   hit-gather-3p:DO-F.PT:3s   woman   hit-gather-3p:DO-F.PT:3s

    'She gathered the women.'   'She gathered the women.'

There is no semantic difference detectable between the (a) and (b)-examples in (52) through (55). As far as can be ascertained, these compounds formed with the aid of *he* 'hit' or *qa* 'hit' can always be exchanged one for the other without giving rise to a change of meaning or acceptability. In other words, the pairs of compounds in (52) through (55) are synonymous. All of them have conventional interpretations and idiomatic uses, i.e. they are lexicalized. They differ, however, in the degree to which they are semantically transparent.

The least transparent of them are the compounds in (55) which, as will have been noticed, are conceptually similar to the ones presented above in (50a) and (51b). In (55) the causative verbs *he* and *qa* can be said to have a grammatical rather than a lexical meaning. They express indirect causation, but there is no hint of the concept of hitting present in them. The compounds in (54) represent an intermediate case. The default interpretation of *he-mase* 'fill up' (54a) and *qa-mase* 'fill up' (54b) draws on the assumption that these actions are performed by means of a suitable tool. The concept of using a tool, in turn, is an established metonymic extension of the basic meanings of both the causative verbs *he* 'hit' and *qa* 'hit'.

The tool-use interpretation of these verbs in causative compounds often coincides with a concrete interpretation of them as verbs of hitting: that is the basis for the metonymic extension. Example (52) is a case in point. Although the destruction of a hut predicated in (52) can be pictured in different ways, the causative verbs *he* and *qa* in the compounds *he-ropie* 'tear down' (52a) and *qâ-ropie* 'tear down' (52b) narrow the possibilities down in that they suggest that the hut fell apart as a result of the forceful impact of a solid object. It is natural to think that this object is a tool wielded by an agent, hence that the act of destruction involved some form of hitting.

Finally, of all the examples under discussion the compounds in (53) are the most transparent. The standard way of putting out a bamboo torch is to beat it on the ground so that the flames are smothered and the burning parts come off. Thus the concept of hitting is an integral part of the meaning of *he-hâpo* 'put out' (53a) and *qâ-hâpo* 'put out' (53b) which capture this scene. Note that in this example the torch is the affected object, and there is no instrument involved.

As we have come to see, the pairs of synonymous compounds in (52) to (55) include transparent members in which *he* 'hit' and *qa* 'hit' have their concrete basic meaning. Others are partially transparent, and yet others are lexically opaque. By contrast, the isolated compounds in (48) through (51) all cluster around one end of this scale: in them, *he* and *qa* express indirect causation, but the concept of hitting is not part of their meaning. When we take this finding together with the observation that the symmetric pattern of (52) to (55) is found considerably more often throughout the lexicon of Kâte than the asymmetric pattern illustrated in (48) to (51), we must conclude that the symmetric pattern is the regular one. The synonymous pairs of causative compounds in (52) through (55) are formed according to the productive rules of composition.

The occasional asymmetry in the distribution of the causative verbs *he* and *qa*, as seen in (48) through (51), is nothing but a side-effect of demotivation. It only manifests itself in lexically opaque compounds, and only in some of them. By contrast, when *he* and *qa* have their concrete basic meaning, forming transparent compounds, we always find a symmetric distribution, as in (52) and (53). It stands to reason that the transparent compounds are at the heart of the rules of composition and that their ready analyzability keeps them in line with the productive pattern.

When the causative verbs *he* and *qa* are devoid of lexical content the paradigmatic bond that links them with the simple verbs *he* 'hit' and *qa* 'hit' is weakened. It is instructive to see that the language only reacts to the redundancy of having synonyms at this stage: the redundancy may be cancelled, as in (50) and (51); alternatively, it may be tolerated as in the conceptually related example (55). Whether the redundancy is tolerated or cancelled and, in the latter case, which of the causative verbs *he* and *qa* is chosen to form the established compound appears to be an arbitrary matter.

 To sum up, causative compounds in which *he* and *qa* only serve a grammatical function (as indicator of indirect causation) but to which they contribute no lexical information can escape the productive rules of composition which draw on a set of simple verbs, including the causative verbs *he* 'hit' and *qa* 'hit', as their input. When this happens, the symmetry of the regular output of these rules is destroyed. Note that there need not be an absolute lexical gap when we find a demotivated compound that has no regular counterpart. According to the account just given, the following examples illustrate the same phenomenon as the isolated compounds in (48) to (51).

56a   *opâ*   *sic*   *he-sie-me*   *hu-wec*

water   broth   hit-dislocate-SEQ:3s:DS   go.down-F.PT:3

'She poured hot water in [the mug].'

56b   *ˀopâ*   *sic*   *qâ-sie-me*   *hu-wec*

water   broth   hit-dislocate-SEQ:3s:DS   go.down-F.PT:3

ˀ'She yanked hot water down.'

57a   *ˀdâŋ-jeŋic*   *he-zu-nare-wec*

speech-3p:POSS   hit-break-1s:IO-F.PT:3s

ˀ'He cut up their language for me.'

57b *dâŋ-jeŋic*   *qa-zu-nare-wec*

speech-3p:POSS   hit-break-1s:IO-F.PT:3s

'He taught me their language.'

In (56) and (57) we see causative compounds with an isolated acceptation: only the compounds *he-sie* (56a) and *qa-zu* (57b) can convey the meanings 'pour' and 'teach', respectively, whereas their counterparts *qâ-sie* and *he-zu* cannot. The latter compounds can only have a regular, motivated reading: *qâ-sie* 'dislocate, tear off' and *he-zu* 'cut up, break up'. The resulting sentences (56b) and (57a), as well as their English translations, are arguably grammatically well-formed and comprehensible. They are, however, not synonymous with their formal counterparts in (56a) and (57b) and, in contradistinction to them, they are completely unidiomatic and sound nonsensical.

The causative compounds *he-sie* 'dislocate; pour' and *qa-zu* 'break up; teach' have developed a special acceptation that sets them apart from their counterparts *qâ-sie* 'dislocate, tear off' and *he-zu* 'cut up, break up'. They are synonymous with the latter only in their transparent readings. Note that the causative verbs *he* and *qa* do not have their concrete meanings in the acceptations 'pour' (*he-sie*) and 'teach' (*qa-zu*) but are mere indicators of indirect causation. Again we see that the grammaticalization of the causative verbs *he* and *qa* goes hand in hand with the demotivation of the causative compounds of which they are a part.

In causative compounds we never find a semantic opposition between *he* and *qa*. In motivated formations the compounds built with the help of the causative verbs *he* 'hit' and *qa* 'hit' are synonymous. In unmotivated compounds only one of the two possible forms may be lexicalized. The other possible form then either does not exist or does not have the meaning of the lexicalized counterpart. There is yet another reason why only one of the two causative verbs *he* 'hit' and *qa* 'hit' may be encountered in certain causative compounds. This happens when the causative compound stands in a relationship of lexical solidarity with a predicate collocation. The examples (58) to (60) illustrate this.

58a *gae*   *he-wec*   58b *gae*   *he-fua-wec*

song   hit-F.PT:3s   song   hit-appear-F.PT:3s

'She sang.'   'She composed a song.'

59a	*zoaŋ*	*qa-kac*	59b	*ŋaqi*	*qâ-kereŋke-kac*
	sun	hit-PRES:3		shirt	hit-become.dry-PRES:3s

'The sun is shining.'   'She is drying shirts (in the sun).'

60a	*hohose-nane*	*he-pac*	60b	*hohose-nane*	*he-tara-pac*
	pants-1s:POSS	put-N.PT:1s		pants-1s:POSS	put-drop-N.PT:1s

'I put my pants on.'   'I took my pants off.'

The compound *he-fua* 'compose (a song)' (58b) has no counterpart *qâ-fua*. The reason for this can be seen in the common expression for 'sing' (58a), which is the collocation *gae he*. The same verb as occurs in this collocation must also figure in the causative compound for 'compose (a song)'. In (59b) we see the compound *qâ-kereŋke* 'dry sth (in the sun)'. This compound has no counterpart formed with *he*. The reason why *qa* has become lexicalized in this compound is to be sought in the meteorological expression *zoaŋ qakac* 'the sun is shining' (59a). There is a semantic link between the compound and the meteorological expression, mediated by *qa* 'hit'. The compound *qâ-kereŋke* makes tacit reference to the sun; it cannot be used for other methods of drying. Finally, we see the antonyms for putting on clothes and taking them off in (60). Again, there is no counterpart formed with *qa* to the compound *he-tara* 'take off (clothes)'. Rather, the same verb is used which as a main verb can mean 'put on (clothes)'. In all three cases above the causative compounds in the (b)-examples stand in a relationship of lexical solidarity with the simple expressions in the (a)-examples. This predetermines the choice of the causative verb.

Conclusion

The verbs *he* 'hit' and *qa* 'hit' are used very frequently in Kâte discourse, yet their meaning is hard to grasp for a foreigner learning the language. It is particularly difficult to tell whether they are synomyms or have different meanings. Part of the reason for this is that they often form a collocation with their object noun in which their inherent meaning is submerged. Examples (61) and (62) recapitulate the difference between syntactic combination and collocational synthesis.

61a	*sahac-ticne*	*he-jec*		61b	*sahac-ticne*	*qa-jec*
	skin-3s:POSS	hit-N.PT:3s			skin-3s:POSS	hit-N.PT:3s
	'He has recovered.'				'He has commited suicide.'	

62a	*qâreŋ*	*he-kac*		62b	*qâreŋ*	*qa-kac*
	sign	hit-N.PT:3s			sign	hit-N.PT:3s
	'She is typing.'				'She displays her emotions.'	

The examples in (61) and (62) superficially differ only in the final verb, *he* 'hit' or *qa* 'hit'. Semantically, however, they are radically different inasmuch as two of them are instances of free syntactic combinations of words whereas the two others are fixed collocations with a single overall meaning. In (61b) *qa* has the meaning 'kill' and the direct object noun *sahac* 'skin' has a reflexive meaning. The two words combine to mean 'commit suicide'. The meaning of *sahac he* 'recover (from an illness)' (61a), on the other hand, cannot be computed in a similar manner. It is simply a lexical fact that this collocation exists and has the meaning indicated. The same can be said about (62b). *Qâreŋ qa* is a predicate collocation that means 'perform a mimetic dance', and then in figurative use 'display one's emotions'. *Qâreŋ he* (62a) is the standard expression for using a typewriter. Typing is literally conceived of as 'hitting signs', thus the meaning of this expression can be computed following the rules of syntax.

What is unusual about the examples in (61) and (62) is that a fixed collocation can be paired with a free syntactic expression. As a rule, it is lexically determined which of the two verbs *he* 'hit' and *qa* 'hit' occurs in a predicate collocation. If one tries to replace that verb with the other one, a nonsensical expression will usually result. The situation in causative compounds is the reverse. Here compounds formed with *he* 'hit' and *qa* 'hit' as their first component are usually synonymous. There are, however, quite a few exceptions in which only one of these verbs is lexicalized in a compound. Often no reason can be found for the choice of the causative verb. But sometimes a given compound stands in a relationship of lexical solidarity with a collocation or a free syntactic expression containing the same verb as the compound. Thus in complex predicates—predicate collocations and causative compounds—*he* 'hit' and *qa* 'hit' never stand in semantic opposition to each other. To find out about their inherent lexical meaning one must turn to their use as independent main verbs.

On closer inspection, the main verb *he* turned out to be two lexemes: *he* 'hit, cut' and *he* 'put'. This analysis leads to the tricky problem of deciding which of these verbs figures in a given

predicate collocation. Most often the question cannot be decided as *he* acquires a contextual meaning in a collocation that has nothing to do with its own lexical meaning but rather derives from the noun with which it forms the collocation. As a practical solution, I have glossed all instances of *he* in opaque collocations with 'hit'.

The main verbs *he* 'hit, cut' and *qa* 'hit, kill' usually have contrastive meanings when used in similar contexts. Thus, in the semantic domain of hunting *he* has the meaning 'shoot with a slingshot' whereas *qa* means 'shoot with a spear or a shotgun'; in the domain of playing soccer *qa* means 'kick the ball' whereas *he* means 'head the ball'; and when talking about a battery *he* means 'punch with the fist' while *qa* means 'slap with the flat of the hand'. Only *he* has the meaning 'cut' and only *qa* can mean 'kill' in isolation. The instrument of hitting and the result of the impact both play a role in these differential uses. However, I have not been able to find a constant semantic factor that differentiates between these two verbs in all of their uses in discourse. Describing the lexical knowledge of native speakers that manifests itself in their use of *he* 'hit, cut' and *qa* 'hit, kill' in discourse is a task that has only been partially solved in this paper and remains a challenge.

Abbreviations

ABL	ablative	N.HORT	near hortative
d	dual	N.PT	near past tense
DO	direct object	p	plural
DS	different subject	POSS	possessive
F.PT	far past tense	PRED	predicate
FUT	future tense	PRES	present tense
GEN	genitive	RECP	reciprocal
HAB.PRES	habitual present tense	RH	rhematic ergative
HAB.PT	habitual past tense	s	singular
INF	infinitive	SEQ	sequential
INSTR	instrumental	SIM	simultaneous
IO	indirect object	SS	same subject
LOC	locative	TR	transitive

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