Accounting for the Three Readings of the Causative Morpheme in Kîîtharaka*

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ABSTRACT

The Kîîtharaka causative morpheme (*-ith*) conveys three readings, a coercive reading, an adversative reading and an assistive reading. This paper argues that these three readings can be captured if it assumed that the causative morpheme itself, as stored in the lexicon, contains the three readings hierarchically ordered, and that whenever there is any of the readings in the syntax, the causative morpheme can be inserted under the superset principle of Nanosyntax (Starke class lectures; Caha, 2007; Starke, 2009).

Keywords: Bantu, causation, late insertion, superset principle.

1. THE STRUCTURE OF THE PAPER

The paper starts by comparing and contrasting the behaviour of the simple *i*-causative morpheme, the analytic TEMA (make) causative with the behaviour of –*ith* causative (section 2). This prepares the ground for a detailed description of the three readings of the synthetic *-ith* causative morpheme: the coercive reading (section 3), the adversative reading (section 4) and the assistive reading (Section 5). In section 6, I present the syntax that captures the three readings. Section 7 compares our analysis and others and section 8 provides a summary.

2. *-I,* TEMA VS. *-ITH* CAUSATIVES

Consider first the intransitive-inchoative *ûma* 'dry' in (1). This example contains no causer. Thus the drying event can be understood as taking place spontaneously, and a 'self adjunct' can be added.[1]

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[1] Glosses are as follows: hab (habitual), f (focus marker), fv (final vowel), crc (coerce causative), ic (inner causative), pas (passive), pfv (perfective), sa (subject agreement), sg (singular). In all the examples, a numeral on the gloss of a noun indicates noun class. Where the marker of noun class is clear, we separate the numeral indicating noun class, and the noun gloss by a dash (-). When it is not clear what the marker of noun class is, we separate the numeral marking noun class, and the noun gloss with a period (.). A numeral on subject

(1) Nguo   i-kû-ûm-a   ci-ongwa

      10.cloth   sa10-dry-fv   10-self

      'The clothes have dried by themselves.'

In (2), the morpheme *i* (which I refer to as the inner causative in this paper) is added to the verb stem *ûma* `dry', and this allows the addition of a causer that acts directly on the theme. There is no serious semantic restriction on the nature of the introduced causer. It can be an agent, 'John', or a natural cause, 'the sun's heat'.

(2) **Transitive *-i* causation**

a.   ✔John   a-kû-ûm-**i**-a   nguo

      1.John   sa1-tns-dry-ic-fv   10.cloth

      'John has dried the clothes.'

b.   ✔Mw-athû   û-kû-ûm-**i**-a   nguo

      3-sun heat   sa3-tns-dry-ic-fv   10.cloth

      'The sun's heat has dried the clothes.'

The morpheme *i* is a transitivizer. It allows an intransitive verb to add an external argument. In some studies, *i* could be said to be a realization of little v (cf. Harley 1995).

    The transitive sentences in (2) above with the agentive and natural cause subjects can further be embedded under the analytic TEMA causative without any effects in grammaticality, (3). I will sometimes refer to the initial agent of the embedded clause as the causee following common parlance.

(3) **Causation under analytic TEMA**

a.   ✔Maria a-gû-tem-a   John   a-ûm-**i**-a   nguo

      1.Maria sa1-tns-make-fv   1.John   sa1-dry-ic-fv   10.cloth

      'Maria has made John to dry clothes.'

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agreement, a pronoun or a nominal modifier gloss indicates agreement with a noun of a particular class. ^ on vowels indicates tense vowels, not tone. Thus *û* is used for phonetic *o*, and *î* for phonetic *e*. This is the orthographic style used in the Kîîtharaka bible and will be used here.

b.   ✓Maria   a-gû-tem-a   mw-athû   gû-ûm-**i**-a   nguo

      1.Maria   sa1-tns-make-fv   3-sun heat   sa3-dry-ic-fv   10.cloth

      'Maria has made the sun's heat to dry clothes.' (by putting the clothes

      outside)

Clauses with the TEMA clausative are biclausal (cf. Muriungi, 2008 for detailed evidence). The verb TEMA selects/embeds a clause at its complement. There are no strict semantic restrictions on the subject of the clausal complement of TEMA; it can be a natural cause or an agent.

     In sharp contrast to the behaviour of the TEMA causative, when the transitive sentences with the agentive and natural cause subjects are embedded under the causative *-ith*, only the sentence with the agentive subject 'John' is grammatical. The natural cause subject 'sun's heat' is impossible under the *-ith* causative.

(4)   **Causation under *-ith***

a.   ✓Maria   a-kû-ûm-**ith**-i-a   John   nguo

      1.Maria   sa1-tns-dry-crc-ic-fv   1.John   10.cloth

      'Maria has made John to dry clothes.'

b.   *Maria   a-k-ûm-**ith**-i-a   mw-athû   nguo

      1.Maria   sa1-tns-dry-crc-ic-fv   3-sun heat   10.cloth

      'Maria has made the sun's heat to dry clothes.'

The semantics of the sentence in (4a) is such that what is caused is an event with an agent, Y in (5):

(5)   [X caused (ith) [Y to dry Z]].

Given this semantics, it is appropriate to claim that the causative morpheme *ith* embeds a clause with a subject, and that *-ith* requires this subject to have a specific semantics. Furthermore, given the mirror principle (cf. Baker 1985), *-ith* will embed the verb stem (and all the arguments the verb introduces) since it follows/is suffixed after the verb stem.

     The causative morpheme *–ith* that is the subject of discussion in this paper appears to be made of two parts *–ith* and *–i* in Kîîtharaka and in fact a number

other Bantu languages (cf. Good, 2005 and below). In most of the cases, when –*ith* is present, -*i* is also present (see (4) above).

In some other languages genetically unrelated to Kîîtharaka the morphemes that express similar nuances as Kiitharaka –*ith* seem to be an amalgam of two parts, one of the parts resembling the simplex morpheme expressing direct causation, or transitivization (cf. Saksena 1982; Svenonius, 2005).

Table 1: *Morphology of causatives.*

Language	Transitive causative	Near equivalent of -*ith*
Panjabi and Nepali	-aaw	w+aaw
Lithuanian and Latvian	-in	D+in
Hungarian	-et	t+et
Finnish	ta	tut+ta

Despite the temptation to treat the morpheme under discussion as being made up of two parts, -*ith* and *i,* in Muriungi (2008), I show that there is need to treat the –*ith* and –*i* parts as different morphemes. One reason for this is that the two morphemes can be separated by a number of morphemes for the example the perfective, the habitual and the applicative morphemes (cf. also Hyman, 2003). In (6) below I demonstrate a case where the two bits can be split by the applicative morpheme *î* and the perfective morpheme, *îr*.

(6) Maria   n-a-ûm-**th**-î-îr-**i**-e   John   nguo

     1.Maria   f-sa1-dry-crc-apl-pfv-ic-fv   John   10.cloth

     'Maria caused someone to dry clothes for John.'

While one could argue that the evidence in (6) above is not strong since *ith-i* could be a discontinuous morpheme, I will provide a second stronger argument: in the presence of some morphemes for example ABLE, -*ith* occurs alone, not in the company of *i.* ABLE is a morpheme that triggers passivization, and expresses and "easy" reading in addition (7).

(7) Maria   n-a-ûrag-i**th**-**îk**-ir-e   Mburi

     1.Maria   f-sa1-kill-crc-abl-pfv-fv   9.goat

     'Maria was easy to coerce to kill the goat.'

In (7) above, there is no phonological reason that should trigger deletion of -*i* when ABLE (îk) is presence. In this context, we have *ith* alone, and we still have

the semantics of *ith* (coercion) present. *–ith* alone therefore should be treated as the relevant morpheme.[2]

Summing up this section, the conditions that license *-ith* are unlike those that license the simplex-*i* causative and the analytic TEMA causative. For *-ith* to be licensed, the subject embedded under the complement of *-ith* has to have one of the following interpretations:

(8) a. Inappropriately used instruments

b. Defectively used instruments

c. Forced causees

d. Tricked causees

e. Adversely affected results

f. Assisted causees

I discuss these interpretations under the headings coercion, adversative and assistive.

3. COERCION

When *-ith* is licensed by embedded external arguments that are inappropriately used instruments, defectively used instruments, forced causees and tricked causees, its interpretation is that of *coercion*. Defective and inappropriate instruments are coerced to do something beyond their capacity, the animate causees forced and tricked into doing things against their will. Coercion is the predominant reading of the *–ith* causative morpheme in Kîîtharaka.

3.1 INAPPROPRIATELY USED INSTRUMENTS

Consider first (9). This sentence is interpreted as a neutral statement that the saw cut the tree.

(9) Mû-cumeno   n-û-git-ir-e   mû-tî

3-saw   f-sa3-cut-pfv-fv   3-tree

'The saw cut the tree.'

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[2]   This conclusion however does not exonerate us from the responsibility of explaining why in the majority of causes *–ith* comes in the company of *i*. I leave an exploration of this issue for further research.

When embedded under *-ith*, a possible interpretation is that the saw is used inappropriately (10).

(10) Maria   n-a-git-th-iir-i-e   mû-cumeno   mû-tî

     1.Maria   f-sa1-cut-crc-pfv-ic-fv   3-saw   3-tree

     a. *Maria needed to cut the tree, she used an ordinary tree-cutting saw

     b. ✓Maria needed to cut the tree, she used a metal-cutting saw.

The fact that `the saw' is used inappropriately can be shown overtly by a PP showing that the saw used in not manufactured for cutting trees. Thus (11a) where the saw is a metal-cutting saw is appropriate, but (11b) where the saw is a tree-cutting saw is inappropriate.

(11) a.   ✓Maria   n-a-git-th-iir-i-e   mû-cumeno   *wa cuma* mû-tî

         1.Maria   f-sa1-cut-crc-pfv-ic-fv   3-saw   of metal   3-tree

         'Maria coerced a metal cutting saw into cutting a tree.'

     b.   #Maria   n-a-git-th-iir-i-e   mû-cumeno   *wa m*û-tî mû-tî

         1.Maria   f-sa1-cut-crc-pfv-ic-fv   3-saw   of 3-tree 3-tree

         'Maria coerced a tree cutting saw into cutting a tree.'

Inappropriately used instruments can be manipulated directly for example by physically forcing them to cut the tree (direct causation), or they can be manipulated indirectly - the metal-cutting saw could be one that operates on a remote system.

     We should also note that in the context of inappropriately used instruments, the coerced event does not have to obtain. Thus it is felicitous to say that Maria coerced the saw into cutting the tree but it didn't cut.

(12) Maria   n-a-git-th-iir-i-e   mû-cumeno   mû-tî   îndî

     1.Maria   f-sa1-cut-crc-pfv-ic-fv   3-saw   3-tree   but

     û-ti-ra-git-a

     sa3-neg-tns-cut-fv

     'Maria coerced a saw into cutting a tree but it didn't cut.'

3.2 DEFECTIVE INSTRUMENTS

(13) is a neutral statement to the effect that the machine sew the clothes.

(13) Macini   n-î-tum-ir-e   nguo

       3.machine   f-sa9-sew-pfv-fv   9.cloth

       'The machine sew clothes.'

With embedding under *-ith*, (14), the machine is interpreted as coerced into sewing, despite some shortcoming, (14a). The machine cannot be a regular cloth-sewing machine, (14b).

(14) Maria   n-a-tum-**ith**-iir-i-e   macini   nguo

       1.Maria   f-sa1-sew-crc-pfv-ic-fv 3.machine   9.cloth

       a. ✓Maria needed to repair her torn shirt; she worked on the faulty

       machine.

       b. *Maria needed to repair her torn shirt and she worked on the regular

       cloth-sewing machine.

As with the inappropriately used instruments, the defective nature of the machine can be syntactically expressed by a depictive predicate (a PP) that conveys that the machine is defective, but not a depictive that states the machine is in good state, (cf. (15) and (16)).

(15) Maria   n-a-tum-**ith**-iir-i-e   macini   nguo   îrî nthûku

       1.Maria   f-sa1-sew-crc-pfv-ic-fv 3.machine   9.cloth   be bad

       'Maria coerced a machine to sew clothes when spoilt.'

(16) #Maria   n-a-tum-**ith**-iir-i-e   macini   nguo   îrî mbega

       1.Maria   f-sa1-sew-crc-pfv-ic-fv 3.machine   9.cloth   be good

       'Maria coerced a machine to sew clothes while in good condition.'

We should emphasize here that the appropriate notion for instruments is that of a man-made instrument. Thus even though a stone can destroy a house, (17a), it cannot license *-ith*, (17b).

(17) a.   ji-iga   i-rî-omor-ir-e   nyomba

         5-stone   f-sa5-destroy-pfv-fv   9.house

         'The stone destroyed the house.'

     b.   *Maria   n-a-omor-**ith**-iir-i-e   ji-iiga   nyomba

         1.Maria   f-sa1-destroy-crc-pfv-ic-fv   5-stone 9.house

         'Maria coerced the stone into destroying the house.'

Klaus Abels (p.c) suggests that the coercive situation with defective and inappropriately used instruments could be understood as not using these instruments inappropriately or when defective, but going against the will of their manufacturers. This would account for the behaviour of glasses, machines and tractors on the one hand, and stones, branches and soil on the other. If Klaus' suggestion is right, then cases with inappropriately and defectively used instruments can be assimilated to other cases involving forced and tricked causees which involve overriding the will of an animate being (See below). Alternatively the coercive contexts with inappropriately used instruments could be taken to be as a result of using these instruments against the intended function. Both of these alternatives however underscore the coercive nature of the causative situation.

    As with inappropriately used instruments, defectively used instruments can be manipulated physically (directly causation) or indirectly – the sewing machine could be one that operates on a remote system. Furthermore, the coerced event does not have to obtain in the contexts with defectively used instruments. Thus it is felicitous to say that Maria coerced the machine into sewing clothes but it didn't sew:

(18) Maria   n-a-tum-**ith**-iir-i-e   macini   nguo

     1.Maria   f-sa1-sew-crc-pfv-ic-fv 3.machine   9.cloth

     îndî î-ti-ra-tum-a

     but sa3-neg-tns-sew-fv

     'Maria coerced the machine into sewing clothes but it didn't sew.'

3.3 FORCED CAUSEES

(19) is interpreted as a neutral sentence that the thief drunk the poison.

(19) Mw-amba   n-a-nyu-ir-e   cûmû

  1-thief   f-sa1-drink-pfv-fv   9.poison

  'The thief drunk the poison.'

With embedding under *–ith* the interpretation is that the thief is coerced into drinking the poison (20).

(20) A-kûrû   i-ba-nyu-**ith**-iir-i-e   mw-ambacûmû

  2-men   f-sa2-drink-crc-pfv-ic-fv 1-thief   9.poison

  a. *The old men casually asked the thief to drink the poison and he drunk.

  b. ✓The old men beat the thief, and he drunk the poison.

  c. ✓The old men sent the thief a threatening message and he drunk the

    poison.

Here, the thief's will is overridden, directly, (20b) or indirectly, (20c). The presence of coercion is evident from the infelicity of the adverbial 'willingly', (21), in contrast to the appropriateness of 'unwillingly', (22). Note that the adverbials here unambiguously refer to the causees (the thief) since they are marked with class 1 singular subject agreement (the matrix subject is plural).

(21) #Akûrû   i-ba-nyu-**ith**-iir-i-e   mw-ambacûmû

  2-men   f-sa2-drink-crc-pfv-ic-fv 1-thief   9.poison

  a-ki-end-ag-a

  sa1-tns-like-hab-fv

  'The men coerced the thief into drinking the poison willingly.'

(22) ✓A-kûrû   i-ba-nyu-**ith**-iir-i-e   mw-ambacûmû

  2-men   f-sa2-drink-crc-pfv-ic-fv 1-thief   9.poison

  a-ta-ku-end-a

  sa1-neg-tns-like-fv

  'The men coerced the thief into drinking the poison unwillingly.'

As with the context with inappropriately used instruments and defectively used instruments, the coerced event does not have to obtain in contexts with coerced causes, as shown in (23).

(23) A-kûrû   i-ba-nyu-**ith**-iir-i-e   mw-ambacûmû

    2-men   f-sa2-drink-crc-pfv-ic-fv 1-thief   9.poison

    îndî a-ti-ra-nyu-a

    but   sa1-neg-tns-drink-fv

    'The old men coerced the thief to drink poison but he didn't drink.'

3.4 TRICKED CAUSEES

A sentence with a tricked causee can also license –*ith*. Consider the neutral sentence in (24).

(24) John   na-ciat-ir-e   nyomba

    1.John   f-sa1-sweep-pfv-fv   9.house

    'John swept the house.'

With addition of –*ith*, the embedded subject can be interpreted as tricked (25).

(25) A-ekûrû   i-ba-ciat-**ith**-iir-i-e   John   nyomba

    2-women   f-sa1-sweep-crc-pfv-ic-fv   1.John   9.house

    *The women casually ask John to sweep the house and he sweeps.

    ✓The women trick John that his girlfriend is coming, and he sweeps the house.

As with defectively used instruments, inappropriately used instruments and forced causees, the coerced event in contexts with tricked causes does not have to obtain:

(26) A-ekûrû   i-ba-ciat-**ith**-iir-i-e   John   nyomba

    2-women   f-sa1-sweep-crc-pfv-ic-fv   1.John   9.house

    îndî a-ti-ra-ciat-a

    but   sa1-neg-tns-sweep-fv

    'The women tricked John into sweeping the house but he didn't.'

We should note here that whenever a sentence contains a tricked reading, a forced reading is also possible and vice versa.

We summarize below the properties of the contexts when *–ith* is licensed by inappropriately used or defective instruments, by forced causees and tricked causees – the so called coercive contexts:

Table 2: *Properties of coercive contexts.*

	Direct causation	Indirect causation	Event may not result
Inappropriate instruments	✓	✓	✓
Defective instruments	✓	✓	✓
Forced causees	✓	✓	✓
Tricked causees	✓	✓	✓

All the four coercive contexts allow direct and indirect causation, and the coerced event doesn't have to result.

Lets us examine the adversative and assistive cases and check whether these properties hold.

4.   ADVERSATIVE RESULTS

In adversative results, the embedded subject is interpreted as affected to a negative result. Consider (27), a neutral transitive clause. The Kenyan players won the game.

(27) A-cethi   ba Kenya   i-ba-cind-ir-e   mû-biira

  2-player of Kenya   f-sa2-win-pfv-fv   3-ball

  a. ✓The Kenyan players won the game.

  b. *The Kenyan players lost the game.

When *–ith* is inserted, we get the reading that the Kenyan players were made to be defeated (28-a). The sentence cannot mean that Maria made the Kenyan players to win the game (28-b).

(28) Maria   n-a-cind-**ith**-iir-i-e   a-cethi ba Kenya   mû-biira

      1.Maria   f-sa1-win-crc-pfv-ic-fv   2-player of Kenya   3-ball

      a. ✓Maria made the Kenyan players to be defeated in the game.

      b. *Maria made the Kenyan players to win the game.

In order to convey the meaning in (28-b) above one would need to use the analytic TEMA causative (29).

(29) ✓Maria   n-a-tem-ir-e   a-cethi ba Kenya   ba-cind-a   mû-biira

      1.Maria   f-sa1-make-pfv-fv   2-player of Kenya   sa2-win-fv   3-ball

      'Maria made the Kenyan players to win the game.'

The behaviour of *-ith* is therefore unlike the behaviour of TEMA. One defining property of adversative results is that the complement of cause of *ith* sounds like a concealed passive: The reading usually is that X caused Z to be V-ed, not X caused Y to V Z.

    Experiencer verbs in Kîîtharaka show this systematic change in interpretation of arguments in the presence of the *-ith* causative in that the immediately postverbal object is the patient, and the second object the initial agent. In (30), we have a sentence with an object experiencer verb 'disturb'.

(30) A-ritwa   i-ba-tang-ir-e   mw-arimû

      2-student   f-sa2-disturb-pfv-fv   1-teacher

      'The students disturbed the teacher.'

When *-ith* is added, (31), the object which undergoes the adverse effect of being disturbed (the direct object) has to be immediately post-verbal. The second object is interpreted as the initial agent.

(31) Maria   n-a-tang-**ith**-iir-i-e   mwa-rimu   a-ritwa

      1.Maria   f-sa-disturb-crc-pfv-ic-fv   1-teahcer   2-student

      a. ✓Maria caused the teacher to be disturbed by the students.

      b. *Maria caused the teacher to disturb the students.

We get the same pattern with the experiencer verb "hate".

(32) Maria   n-a-men-**ith**-iir-i-e   Jane   nthaka   îno

    1.Maria   f-sa1-hate-crc-pfv-ic-fv 1.Jane   man   this

    a. ✓Maria caused Jane to be hated by this young man.

    b. *Maria caused Jane to hate this man.

The adversative result can be achieved through direct and indirect causation. For example Maria can cause the Kenyan players to loose, by felling the goalkeeper (Maria is a referee), or she can cause the Kenyan players to lose by giving the opponent an undeserving penalty.

    With adversative results also, the caused event must obtain. Thus it is infelicitous to say that Maria caused the Kenyan players to loose but they didn't lose, or that Maria caused Jane to be hated by this young man, but she was not hated.

5. ASSISTED CAUSEES

-ith can also be licensed if the embedded external argument is assisted. The assistive contexts have two varieties. In one variety, the embedded initial agent is physically assisted. (33) is a basic transitive clause. There is no interpretation here that the goat was assisted seeing the sentence allows a 'self adjunct'.

(33) Mbûri   n-i-ciar-ir-e   ka-bûri   j-ongwa

    9.giat   f-sa9-bear-pfv-fv   12-goat   9-self

    'The goat bore the kid itself.'

With the introduction of –*ith*, the reading is that the goat is assisted.

(34) Maria   n-a-ciar-**ith**-iir-i-e   mbûri   ka-bûri

    1.Maria   f-sa1-bear-crc-pfv-ic-fv 1.Jane   12-goat

    'Maria helped the goat to bear a kid e.g. by pulling the kid out.'

The other assistive cases contain verbs such as 'arrive', and 'run'. When the causative attaches to them, there is the meaning of giving friendly accompaniment to the causee to some place. The location has to be obligatorily indicated, although it is not obligatory in the simplex monotransitive verb.

(35) a.   Maria   n-a-kiny-ir-e   (barabara-ni)

        1.Maria   f-sa1-arrive-pfv-fv road-loc

        'Maria arrived.'

   b.   John   n-a-kiny-**ith**-iir-i-e   Maria   barabara-ni

           1.John   f-sa1-arrive-crc-pfv-ic-fv   1.Maria   road-loc

           'John walked Maria to the road. (so that Maria would not fear.)

(36) a.   Maria   n-a-ugii-ir-i-e   (barabara-ni)

           1.Maria   f-sa1-run-pfv-ic-fv   road-loc

           'Maria run (to the road).'

   b.   John   n-a-ugith-**ith**-iir-i-e   Maria   barabara-ni

           1.John   f-sa1-run-crc-pfv-ic-fv   1.Maria   road-loc

           'John ran Maria to the bus (so that she would not miss the bus).

Assistive readings are only possible with direct causation. Thus while one can run/walk one to the road by carrying him/her on a bicycle, one cannot run one to the road by reminding them that they will be late. With assistive readings, the caused event must result. Thus one cannot assist another person to run/walk to the road, but they fail to reach the destination. The assistive reading is the least productive reading of the *–ith* causative morpheme in Kîîtharaka.[3]

    Below we summarize the properties of all the causative contexts that license *–ith.*

Table 3: *Properties of all causative contexts.*

	Direct causation	Indirect causation	Event may not result
Inappropriate instruments	✓	✓	✓
Defective instruments	✓	✓	✓
Forced causees	✓	✓	✓
Tricked causees	✓	✓	✓
Adversative	✓	*	*
Assistive	✓	*	*

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[3]   The causative morpheme also expresses an assistive reading in Zulu (cf. Buell 2005, p. 12).

6.   ACCOUNTING FOR THE READINGS

The causative morpheme in Kiitharaka conveys three readings – the coercive reading (the predominant one), the adversative reading (less productive) and the assistive one (least productive). How do we best account for these readings?

Across languages, single morphemes are witnessed to convey a variety of meanings. Consider for example the English *–ed* morpheme. This morpheme can occur in an adjectival stative form (37a), in a resultant adjective form (37b) or in an eventive passive form (37c) (cf. Starke Class Lectures, Starke 2009).
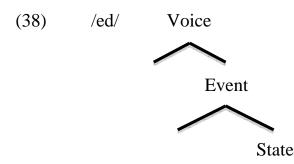
(37) a. The door is still clos**ed** (*at ten o'clock) (*by Peter)

   b. The door is now clos**ed** (*at ten o'clock) (*by Peter)

   c. The door was clos**ed** (at ten o'clock) (by Peter)

(37a) is a stative passive. There are no event implications – the door could have been bought closed. The adverb *still* picks this state. (37b) is a resultant state adjective which describes a state resulting from a prior event. The adverb *now* helps to capture 'the job done event nuance'. (37c) is a verbal eventive passive, with punctual characteristics and therefore the adverbial `at ten o'clock' can be added. This passive also has agentive properties, and an agentive `by phrase' can be added.

In the three contexts above, we have the same morpheme *-ed*. Is it the same morpheme, or three different morphemes? An emerging attractive analysis (cf. Starke class Lectures, Starke 2009, Caha, 2009) is to assume that we have a single morpheme *–ed.* In addition *–ed* is a complex morpheme in the lexicon that can spell out/realize in the overt syntax a head that is related to states/adjectives (A), a head related to event (E) and another one related to agentivity (voice =V). These three heads are hierarchically ordered:

(38)   /ed/   Voice

             Event

             State

The logic for the ordering is that structurally the lowest adjectives are simplex denoting a state. Resultant states are formed by adding an event to a state, and eventive passives add the agent to an event+state.

(39) a. Adjective: State

  b. Resultant state: Event+State

  c. Eventive passive: Voice+Event+State

The three readings of the *–ed* morpheme are captured given a number of other assumptions. One is that lexical insertion (the replacement of syntactic nodes with phonological content) happens late. Syntax manipulates features by the usual mechanisms of merge and remerge (Chomsky 1995), and replacement of these features with phonological content happens post-syntactically (Halle and Marantz, 1993). Syntax therefore will combine features such as A (for adjective/state), E for (event), and V (for voice). Only later, after syntax, at spell-out do these features acquire phonological reality (as *–ed* in our context).

  The other assumption is that the lexicon, like syntax is made up of phrase markers or syntax trees. Furthermore the trees in the lexicon are fairly like the tree in the syntax, except that the trees in the syntax do not contain phonology. The lexicon therefore could be taken as chopped chunks of the hierarchy of the clause (Abels and Muriungi, 2008), but with the phonology in addition.

  The third assumption is that replacement of syntactic nodes/tree with phonological content is guided by the superset principle (cf. Caha 2007, Caha 2009):
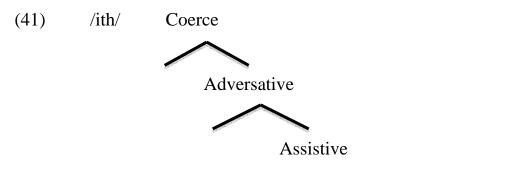

(40) **The superset principle**

  Insert a tree in the lexicon for a (sub)tree in the syntax if the tree in the lexicon matches all the features of the (sub)tree in the syntax. Do not insert a tree from the lexicon if it does not contain all the features in the syntax. When lexical items compete for insertion, insert the tree with the least unused features.

Consider again the morpheme *–ed*. We have seen that this morpheme can be used for a stative adjective, resultant state adjectives and for eventive passives. When we have only a stative adjective, *-ed* will be inserted post-syntactically to lexicalize the A node in the syntax – *ed* carries this feature in the lexicon (cf. (38)). When we have a resultant state adjective which combines a state and an event, *-ed* will be inserted because it carries these features (cf. (38)). When we have an eventive passive which combines a state, an event and an agentive feature, *-ed* will be used to lexicalize this complex item, by the superset principle – *ed* in the lexicon will contain all the features in the syntax (see (38)).

  The spell-out mechanism in (37) together with the other assumptions therefore ensure that a single morpheme, for example *–ed* can convey several meanings.

  Turning to our context, suppose *–ith* the causative morpheme as stored in the lexicon is syntactically complex expressing a coercive node, an adversative node and an assistive node. This structure is given in (41):

(41)   /ith/   Coerce

                      Adversative

                              Assistive

Stating the causative morpheme this way in the lexicon is important because we will capture in direct way all the readings of the morpheme.

The arrangement of the causative heads as in (41) above is based on two considerations. One is productivity – assistive readings are the least productive, adversative reading a bit more productive and coercive reading the most productive. We can assume that a node inherits the productivity levels of the nodes that it dominates. The other pointer to the arrangement in (41) above is idiom formation. The assistive reading and the adversative reading are kind of idiomatic. When we combine –*ith+walk,* the reading we get is that assisting one to reach a destination, not assisting to walk. Furthermore when you combine *ith+win,* the meaning is that of causing to lose, not to win – this is uncompositional. In the tradition of generative grammar, it has been argued that such uncompositional meanings are robustly possible at the very low levels of the hierarchy of the clause.[4] Given what we have said, that the lexicon is composed of chopped chunks of the hierarchy of the clause, then we expect the lexicon also to portray this kind of uncompositionality, by having the adversative and the assistive heads lower than the productive coercive head.

The second reason is semantics. There is a sense in which from the assistive reading, we have an adversative node with an adversative reading which changes the assistive reading to an adversative reading. The coercive reading is also necessarily adversative given that instruments are used inappropriately or when defective, and that the will of an animate is overridden – there is a clear adverse effect in all these contexts. There is therefore some semantic compositionality in (41).

Following the system for the insertion of –*ed*, we can assume that the causative morpheme as given in (38) conveys the three readings given in (39) because already in the lexicon, it is specified with these readings.

(42) a. **Assistive**: Assistive

   b. Adversative: Adversative+Assistive

   c. Coercive: Coerce+Adversative+Assistive

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[4]   See however Lexico-Functional grammar for an alternative view (Dubinsky and Simango, 1996).

The insertion of *–ith* for the three contexts in (42) would be guided by the superset principle given (40) as already demonstrated with *-ed*.

7. OUR ANALYSIS AND OTHERS

There are two main approaches to causative ambiguities. On the LFG approach adopted by Alsina (1992), Alsina and Joshi (1993), the causative morpheme has three arguments: a causer, an event argument and a patient. The patient argument of the causative must fuse with an argument of the base predicate. If it fuses with the initial agent, we get an obligation, or kind of coercive reading on the causee. If it fuses with the embedded patient, we get a non-obligation context. In this latter context the causer just wants to bring about the causative situation, and the causee is just an intermediary. As far as I can see, the fusion approach cannot capture the difference between the adversative and assistive contexts since the bipartition is between fusion with the initial agent and fusion with the patient.[5] What other argument would the patient of the causative have to fuse with to bring out the three readings?

The other family of approaches whose vocal representatives are Harley (1995), Folli and Harley (2004), Pylkkänen (2002) claim that the ambiguity with a single morpheme depends on the size of the complement of that morpheme. For Folli and Harley (2004) for example, FI causatives in French and Italian differ from FP causatives in that in the former case the causative morpheme embeds a vP, and a VP in the latter. When the causative embeds a vP, with an agent, we get an obligation, kind of coercive reading, otherwise an non-obligations reading. This approach still suffers the bipartition problem. Furthermore, non-obligation is not a very clear term. In addition, while the approach adopted here somehow also arrives at the system where the size of the complements of various heads realized by a single morpheme are different, the size of the complement is not the crucial ingredient for the system. What is crucial is the interaction of the superset set spell out mechanism and functional heads in the extended projection of the clause. The superset approach also has the advantage of ensuring that the different heads realized by a single morpheme are contiguous. There is no way to force this contiguity in the Harley-Folli-Pylkkänen approach. Yet the contiguity is real.

8. SUMMARY

This paper makes two important contributions. First, it makes a much more thorough description of the *ith* causative morpheme in Kîîtharaka, descriptions

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5   Independently, Simango (1995) has demonstrated that the claim that a causative morpheme has to fuse with an embedded DP is inaccurate since the complement of the causative can be a clause in Chichewa and Chinsenga.

that are usually missing when it comes to under-researched languages. Secondly the paper shows that the different meanings conveyed by a single morpheme can be easily captured if we assume that a morpheme in the lexicon has a structure that carries those meanings, and that ambiguity arises because such morphemes can be used to realize structures of varying sizes under the superset principle. It is hoped that further detailed studies of the causative morpheme and other morphemes in Bantu can be used to assess the validity of this approach initiated by Michal Starke known as the Nanosyntax.

REFERENCES

Abels, K., and Muriungi, P. 2008.
>*The focus marker in Kiitharaka: Syntax and semantics.* **Lingua** 118: 687–731.

Alsina, Alex. 1992.
>*On the argument structure of causatives.* **Linguistic Inquiry** 23: 517–555.

Alsina, Alex, and Joshi, S. 1993.
>Parameters in causative constructions. In: Lise M. Dobrin, Lynn Nichols, and Rosa M. Rodriguez (eds.), *Papers from cls 27*, pp. 1–15. Chicago, Illinois: Chicago Linguistic Society.

Baker, Mark. 1985.
>*The mirror principle and morphosyntactic explanation.* **Linguistic Inquiry** 16: 373–415.

Buell, Leston. 2005.
>*Issues in Zulu morphosyntax.* Ph.D Thesis, University of California, Los Angeles.

Caha, Pavel. 2007.
>*The shape of paradigms.* Talk GLOW XXX.

  2009   *The Nano-syntax of case.* Ph.D Thesis, University of Tromsø.

Chomsky, Noam. 1995.
>*The Minimalist Program.* Cambrudge, Ma.: MIT Press.

Dubinsky, Stan, and Simango, Silvestor Ron. 1996.
>*Passive and stative in Chichewa: Evidence for modular distinctions.* **Language** 72: 749–781.

Folli, Raffaella, and Harley, Heidi. 2004.
>On obligatory obligation: The composition of Italian causatives. In: Ana Castro, Valentine Hacquard, and Pablo A. Salanova (eds.), *Collected papers in Romance syntax: MIT working papers in linguistics 47*, pp. 87–113. Cambridge, Ma.: MIT Press.

Good, Jeff. 2005.
>*Reconstructing morpheme order in Bantu: The case of causativization and applicativization.* **Diachronica** 22: 3–57.

Halle, Morris, and Marantz, Alec. 1993.
> Distributed morphology and the pieces of inflection. In: Kenneth Hale
> and Samuel Jay Keyser (eds.), *The view from building 20: Essays in
> linguistics in honor of Sylvain Bromberger*, pp. 111–176. Cambridge,
> Ma.: MIT Press.

Harley, Heidi. 1995.
> *Subjects events and licensing*. Ph.D Thesis. Cambridge, Ma.: MIT
> Press.

Hyman, Larry M. 2003.
> *Sound change, misanalysis and analogy in The Bantu causative*.
> **Journal of African Languages and Linguistics** 24: 55–90.

Muriungi, P. 2008.
> *Phrasal movement inside Bantu verbs: Deriving affix scope and order
> in Kĩĩtharaka*. Ph.D. thesis, Universitetet i Tromsø, Tromsø, Norway.

Pylkkänen, Liina. 2002.
> *Introducing arguments*. Doctoral Dissertation, MIT.

Saksena, A. 1982.
> *Contact in causation*. **Language** 58: 820–831.

Simango, Sylvester Ron. 1995.
> *The syntax of Bantu double object constructions*. Doctoral
> Dissertation, University of South Carolina, Columbia SC.

Starke, M. 2009.
> Nanosyntax: A short primer to a new approach to language. In: Peter
> Svenonius, Gillian Ramchand, Tarald Taraldsen, and Michal Starke
> (eds.), *Special issue on Nanosyntax*, pp. 1–6. University of Tromsoe:
> Norway.

Svenonius, P. 2005.
> *Two domains of causatives*. Handout of a talk, University of Tromsø.

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