

would be interpreted as 'I had someone make the director open the letter' and not as 'I had the director make someone open the letter' (another possible interpretation of a morphological double causative is as a single act of causation, with emphasis on its forcefulness—perhaps against the will of the causee—but this need not concern us here).

The same restrictions exist, predictably, in French:

- (51) **C'est à Jean que j'ai fait faire planter les choux au jardinier.*
'It was Jean that I made make the gardener plant the cabbages.'

is unacceptable, with *par* being required for the intermediary, and:

- (52) **C'est à Jean j'ai fait faire planter les choux.*

is interpreted as referring to Jean as the actual cabbage planter, and not as the intermediary who made some unspecified person(s) plant the cabbages.

Why should the dative be unsuitable for designating an intermediary?¹³ Is the dative more suitable for what we might call "centrally affected" than for "peripherally involved" entities [cf. the discussion of (27) and (28)]? Unfortunately, much more research into case semantics remains to be done before plausible answers to such questions can be formulated.

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¹³ There are, however, languages in which this unsuitability is not manifested. Thus, it is not found in Japanese. However, the Japanese dative (marked by the postposition *ni*) differs in some crucial respects from Turkish and French datives; for example, it marks agent NPs in passive sentences.

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LAHU CAUSATIVE CONSTRUCTIONS: CASE HIERARCHIES AND THE MORPHOLOGY/SYNTAX CYCLE IN A TIBETO-BURMAN PERSPECTIVE

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1. INTRODUCTION

Causation is a vastly ramified topic, both in philosophy and in linguistics. Sino-Tibetan (ST) is a vastly ramified language family, comprising Chinese, on the one hand, and the complex Tibeto-Burman (TB) family on the other (see Benedict, 1972).

Viewed diachronically, we find that the ST languages have used all sorts of grammatical devices to express the various semantic notions that we may lump together under the label "causative." Sometimes these devices are morphological—prefixes, suffixes, alternations in voicing, alternations between homorganic stop and nasal, alternations in tone. Equally often, the devices are syntactic—auxiliary verbs, particles, or subordinate clauses that carry a causative meaning. In a given language's history, we may often trace a tendency for the dominant causative-formation pattern to change from a morphological one to a syntactic one, or vice versa. There is a strong cyclic principle at work in these monosyllabic languages whereby separate words may come to acquire highly abstract grammatical meanings, to the point where they are often phonologically reduced and "cliticized," fusing with the neighboring head word (noun or verb) to form unitary words (syntax > morphology). Once this happens, the original semantic content of the clitic

may become obscured, so that the language is later forced to add another separate word to convey the desired increment of meaning (morphology > syntax).

Needless to say, linguistic changes do not take place neatly, or all at once. Viewed synchronically, an ST language is likely to support several different but coexistent devices for forming causatives, some of them morphological and some syntactic. Sorting out the relative antiquity of these constructions is the task of the historical linguist. The synchronic grammarian is more interested in gathering together all the constructions, whether morphological or syntactic, that play a role in the expression of causative meanings, and analyzing their interrelationships with other areas of the grammar of a given language at a given point in time. As we shall see, a detailed study of causatives in a single TB language, Lahu, forces us (or at least causes us) also to take into consideration such seemingly disparate syntactic and semantic issues as voice, transitivity, case hierarchies, resultatives, benefactives, purpose clauses, and serial verbs!

Let us start with a rapid survey of the kinds of morphological devices the ST languages have exploited to mark verbs as causative.

1.1. Syllable-Final or Suffixial Causation

T'sou (1974) presents several pairs of Cantonese verbs that exhibit an alternation between homorganic final stop and nasal:

廣 <i>kwɔŋ</i> 'be wide'	擴 <i>kwɔk</i> 'to widen'
散 <i>saan</i> 'be dispersed'	撒 <i>saat</i> 'to disperse'
堅 <i>gin</i> 'be solid, tight'	結 <i>git</i> 'to tighten'

The nasal-finaled verbs are stative intransitives, while the stop-finaled verbs are causatives (or at any rate, transitives).¹ The causative verbs seem clearly to be derived from the intransitives, as evidenced partly by the graphic shape of the characters themselves.²

This stop/nasal alternation in final position is a characteristic though puzzling variational phenomenon in TB as well (see Matisoff, to appear). It involves both nouns and verbs, and occurs with a variety of semantic functions—often with no clear meaning at all. It is attested specifically as a marker of a stative/transitive or stative/causative opposition in East Hima-

¹ The notions of "transitivity" and "causativity" are closely related. They share the feature of DIRECTIONALITY, such that the verbal action is channeled or directed toward an external thing or person.

² Note the addition of the signfic element 扌, the "hand radical," in the first two examples. This indicates that the idea of manipulation (> directionalization > causation) was superadded to a basic, "unmarked," stative concept.

layish languages like Bontawa and Bahing, as well as in North Kuki languages like Tiddim Chin (Henderson, 1965).

We may speculate that a now-lost suffix that began with a voiceless consonant (*-s, perhaps), carrying a causative meaning, caused the nasal-finaled verbs to assimilate to them by losing their voicing. Since voiceless nasals have never typically occurred in syllable-final position in TB, the closest thing the nasals could find to assimilate to were the homorganic stops (voiceless and unreleased in final position). That is, the nasals would have had to lose their nasality in order to lose their voicing.

1.2. Prefixial Causation

There is convincing evidence for a Proto-TB sibilant prefix, *-s-, that functioned along a broad spectrum in the causative domain as an intensifier, directionalizer, transitivizer, causativizer of the verbal idea (Wolfenden, 1929: 46ff; Benedict, 1972: 105-108).

1.2.1. PROTO-PREFIX REMAINS A PREFIX.

In Tibetan and Jinghpaw (= Kachin), the old sibilant prefix survived as such. Written Tibetan has many verb pairs like the following:

'gril-ba 'be twisted, wrapped around'	sgril-ba 'wind or wrap something around'
'khor-ba 'turn around'	skor-ba 'surround something'
riŋ-ba 'be long'	sriŋ-ba 'extend, stretch, postpone something'

In Jinghpaw, the sibilant causative prefix has palatalized to šə- (written shā- in Hanson, 1906), varying with džə- before an aspirated or sibilant root-initial:

dam 'stray'	šadam 'lead astray'
lot 'be free'	šalot 'set free'
thum 'be ended'	džəthum 'end something'
hpriŋ 'be full'	džəhpriŋ 'fill something'
su 'be awake'	džəsū 'arouse, awaken someone'

1.2.2. PROTO-PREFIX BECOMES AN "INFIX."

Benedict (1943) explains a curious phonological development in Lepcha, where the old *-s- prefix disappeared after palatalizing the root-initial, yielding verb pairs like the following:

nak 'be straight'	nyak 'make straight'
-------------------	----------------------

<i>thor</i> 'escape, get free'	<i>thyor</i> 'let go, set free, release'
<i>rop</i> 'stick, adhere'	<i>ryop</i> 'affix something, attach something'

This palatalization was apparently a blind phonetic process, which operated with noun roots as well as verb roots and with any sibilant prefix regardless of etymological origin. [PTB **za-mak* 'son-in-law' (**za* 'son, child') > Burmese *səmak*, Lepcha *myok*.]

1.2.3. PROTO-PREFIX AFFECTS VOICING, ASPIRATION, AND/OR TONE.

Modern Burmese has a productive syntactic way of forming causative VPs via the auxiliary verb *sei*.³ Thus, *thwa:-de* 'to go', *thwa:-zei-de* 'cause to go'. In addition, the language preserves well over 50 pairs of verbs (see Okell, 1969:I, 205–208) that directly reflect an earlier prefixial pattern. One verb in each pair, the "simplex," is semantically stative or intransitive and begins with a nonaspirated consonant. The other verb is causative or transitive, and begins with an aspirate (stop, affricate, sibilant, nasal, or liquid):

<i>pyei</i> 'be full'	<i>hpyei</i> 'fill something'
<i>ce?</i> 'be cooked'	<i>hce?</i> 'cook something'
<i>su?</i> 'be damp'	<i>hsu?</i> 'moisten, make damp'
<i>nwei:</i> 'be warm'	<i>hnwei:</i> 'make warm'
<i>lu?</i> 'be free, loose'	<i>hlu?</i> 'set free, liberate'

The older sibilant prefix is reflected in the aspiration of the initial of the causative member of each pair. Note that the tone of the verb is not affected by the transmutation of **s-* > *h-*.⁴

Tiddim Chin shows sporadic traces of an old causative prefix in verb pairs like the following:

<i>pú-k</i> 'fall'	<i>phú-k</i> 'fell, cut down'
<i>ka-i</i> 'be suspended'	<i>xa-i</i> 'hang something up'
<i>kia</i> 'fall'	<i>xia</i> 'drop something'
<i>ká-ŋ</i> 'raise oneself'	<i>xá-ŋ</i> 'lift something' ⁵

The tone of each verb still remains constant.

In Hayu (= Vayu), a Himalayan language closely related to Bahing (Michailovsky, 1973), the simplex verb begins with a voiced initial, while its

³ Cognate to the Lahu "delegative" auxiliary *ci* (see Section 2.3.4).

⁴ In contradistinction to the Lahu case discussed later. The fact that initial consonants of all articulatory manners (spirants and sonorants as well as stops) submitted to aspiration in later Burmese made it "unnecessary" for the causative verbs to also acquire a distinctively different tone to maintain contrast with the noncausative ones.

⁵ Henderson (1965:22, 82). The velar fricative [x] may be analyzed synchronically (and probably historically) as playing the systematic role of /kh/ in TC phonology. See also Hillard (1974).

causative counterpart begins with a voiceless one (either aspirated or not, unpredictably):

<i>guk</i> 'be bent'	<i>kuk</i> 'bend something'
<i>det</i> 'come undone'	<i>tet</i> 'release'
<i>dat</i> 'be finished'	<i>that</i> 'finish something off'
<i>bon</i> 'fly'	<i>phon</i> 'make fly'
<i>tun</i> 'drink'	<i>thun</i> 'give to drink'
<i>im</i> 'sleep'	<i>him</i> 'put to bed'
<i>wo</i> 'be white'	<i>ho</i> 'wash clothes'

Tone is not an issue here, since Hayu is a nontonal language.

In Lushai, an important Central Kukish language, tone has come into its own as the marker of grammatical relationships, including causativity (Bright, 1957):

<i>núy</i> 'laugh'	<i>nùy</i> 'laugh at'
<i>hér</i> 'be turning'	<i>hèr?</i> 'turn something'
<i>ʔáaw</i> 'shout'	<i>ʔàaw</i> 'call to'

The low-toned examples have directionalized or causative meanings, while their high-toned counterparts are intransitive. The initial consonant remains the same.

Finally, we come to Lahu, a key member of the Lolo-Burmese subgroup of TB. Like Burmese, Lahu has developed quite productive syntactic ways of forming causative VPs by means of auxiliary verbs. Yet there survive over a dozen pairs of verbs where the semantic feature of transitivity or causativity is signaled morphologically—principally by tonal changes from the simplex verb, but sometimes also by a devoicing of the initial consonant (Matisoff, 1973b:32–34):

(A) <i>dō</i> 'drink'	<i>tō</i> 'give to drink'
<i>dē</i> 'come to rest'	<i>tē</i> 'put down'
<i>mō</i> 'see'	<i>mō</i> 'show'
<i>mē</i> 'taste good'	<i>mē</i> 'well-cooked; ripe'
<i>nā</i> 'hurt, be sore'	<i>na</i> 'be cured, recover'
(B) <i>cā</i> 'eat'	<i>cā</i> 'feed'
<i>nō</i> 'be awake'	<i>nō</i> 'awaken, rouse'
<i>dū</i> 'dig'	<i>tū</i> 'bury (as a corpse)'
(C) <i>lē?</i> 'lick; eat (esp. of animals)'	<i>lē</i> 'feed an animal'
<i>və?</i> 'be wearing'	<i>fī</i> 'clothe, dress someone'
<i>và?</i> 'hide oneself'	<i>fā</i> 'hide something'
<i>tō?</i> 'catch fire'	<i>tū</i> 'set fire to, kindle'
<i>yī?</i> 'sleep'	<i>i</i> 'put to sleep'

The three patterns of tonal variation exemplified here have been accounted for in terms of a Proto-Loloish glottal causativizing prefix *ʔ-, which, in turn, descends from our old TB prefix *s- (Matisoff, 1970). Besides affecting the tone, the glottal prefix had the power to devoice the initial consonant.⁶ Semantically, most of the verbs in the right-hand column are real causatives: 'to show' (*mɔ*) is 'to cause to see,' 'to feed' (*cā*) is 'to cause to eat.' Others are merely transitive (*fā* 'hide something') as opposed to intransitive (*vā* 'hide oneself')—i.e., outer-directed as opposed to inner-directed. Still others have undergone semantic specialization of an idiosyncratic sort (*mɛ* 'well-cooked, ripe', *na* 'be cured' < *mè* 'taste good', *nà* 'be sore').

Maybe it is time to introduce some terminological distinctions.

A SYNTACTIC CAUSATIVE is one formed by the juxtaposition of two or more verbal elements that are separate words. In typological terms, we could call it "analytic." Examples of syntactic causatives are English *make* . . . VERB (*make Johnny run*), French *faire* + VERB (*faire courir Jean*), Burmese VERB + *sei* (*Johnny-kou thwa:-zei-de*), and Lahu VERB + *ci* (*Johnny thāʔ gay ci ve*).

A MORPHOLOGICAL CAUSATIVE is one where the causative idea is embodied in a verbal element that is a single word. In typological terms, we would call it "synthetic." Sometimes there is a phonological relationship between the simplex and the causative verb. This may involve a vowel alternation (English *full/fill*, *sit/set*), an affixation, a voicing alternation, or a tonal alternation. Sometimes there is a nonphonological or "suppletive" relationship between the verbs: English *fall/drop*, *eat/feed*, *die/kill*. The now widely used term LEXICAL CAUSATIVE seems to refer mostly to what we would call "suppletive morphological causatives" (*kill*) plus the vowel-alternating or ablauting subtype (*fill*).

Sometimes the meaning of a morphological causative diverges widely from the meaning of its underlying simplex verb. A classic example is English *drench*, which is historically a causative derivative of *drink*, following the same umlauting pattern as *sit/set*. We used to be able to say *I drenched my horse* in the sense of "I gave my horse to drink," "I gave my horse something to drink." Exactly parallel are the Lahu verbs *mɛ* 'be well-cooked' and *na* 'be cured.' As we have seen, these have the same tonal relationship to their underlying simplex verbs as do other Class A causatives like *tɔ* 'give to drink' and *mɔ* 'show'. Yet their meanings are no longer causative. To forms like these, we may give the name MERELY ETYMOLOGICAL CAUSATIVES.

Like all linguistic distinctions, that between syntactic and morphological

⁶ As explained in Matisoff (1972:48), the simplex verbs with Lahu voiced stop initial (like *dɔ* 'drink') reflect a TB intransitivizing or stativizing prefix, probably a nasal *N-, which had the opposite power of voicing an unvoiced initial.

causative formation is a fuzzy one. How could it be better defined than the notion of "word," on which it depends?

From now on, let us refer to the surviving Lahu morphological causatives (whether still semantically causative or now merely etymological) by the informal term FOSSIL CAUSATIVES. In the remainder of this study, we shall explore some of their semantic and syntactic interactions with other kinds of Lahu causative formations.

2. TOWARD A SYNTACTIC CAUSATIVE

The Loloish languages have shown a steady development toward a more and more analytical structure. This has gone hand in hand with phonological changes that have led to a simplification of the consonant combinations at the beginning and end of the syllable. This phonological degeneration has wrought havoc with the older prefixes and suffixes, and forced the languages to seek syntactic solutions to their semantic needs.⁷

✓ Like all the TB languages,⁸ Lahu is a verb-final language. The NPs of the sentence (the "arguments of the verb") all come before the verb, in a relatively free order. Before zeroing in on causative constructions, we should say something about the nature of the semantic bonds between a Lahu verb and its "associated NPs."⁹

2.1. Voice and Transitivity of Lahu Verbs: The "Ergativity" of Lahu¹⁰

The transitive/intransitive and active/passive distinctions are basically alien to Lahu grammar. It is certainly true that the meanings of some action verbs (V_{act} 's) are such (activities or mental states impinging on extrinsic things) that they are likely to be preceded by a noun referring to the person, place, or thing impinged upon (*dɔʔ* 'beat', *pɪ* 'give', *cá* 'eat', *táʔ* 'climb', *jūʔ* 'pierce', *bā* 'throw', *chɪ* 'lift up', *kɔʔ* 'fear', *māʔ* 'be hungry for'). This preceding noun may, but need not, be followed by a noun particle, *thāʔ* ~ *àʔ*, to which we give the label "accusative."¹¹ Thus, *cɛ̄-qō* (*thāʔ*) *dɔʔ* *ve* 'beat

N P_n V̇

⁷ The history of English is quite similar. The phonological demise of final -e ruined the inflectional paradigms, leading to a more rigid word order and other syntactic compensations for the morphological breakdown.

⁸ Except Karen. See Benedict (1972:129).

⁹ For a fuller treatment of some of the complex issues involved, see Matisoff (1973b (henceforth GL), 4.5:306–315).

¹⁰ The discussion here is based on GL:195–197.

¹¹ I return to this important particle in Section 2.2. It is discussed in greatest detail in GL 3.83 (pp. 155–157), with further information provided in 3.611a, 3.641, 3.84, 4.11, 4.351d, and 4.5.

a drum', *lā* (*thà?*) *kā?* ve 'fear tigers', *yà?*-*qə* (*thà?*) *tā?* ve 'climb up a road', *qhā?*-*ṣē* (*thà?*) *pī* ve 'give the headman'. With appropriate reservations, we may give the name TRANSITIVE to verbs that typically occur after NPs with *thà?*, or after NPs into which *thà?* may be inserted naturally and with no discernible difference in meaning.¹² All other action verbs, as well as adjectival or stative verbs, are INTRANSITIVE, with various further rough semantic subdivisions possible, including verbs that express modes of being or inward-looking actions or mental states (*chē* 'be in a place, dwell', *phē?* 'be, become, be able', *pī* 'be skillful at, be able', *há* 'spend the night', *hō* 'weep', *bū?* 'be satiated, do to satiety'); verbs of motion not affecting objects (*qay* 'go', *pō* 'fly', *gē* 'run'); resultative verbs that indicate the successful or unsuccessful completion of the action of a preceding main verb (*tō?* 'catch fire', *dō* 'fit into', *kī* 'melt');¹³ and others.

Yet to insist on a sweeping classification of Lahu V_{act} 's into "transitive" and "intransitive" is to exaggerate the importance of the distinction for the language as a whole. There are almost no repercussions elsewhere in the grammar, no other important phenomena that the distinction helps us explain. The class of verbs that qualify as "transitive" according to our definition differ widely among themselves in the ease and naturalness with which *thà?* may be inserted after a preceding noun. Most significantly, any transitive verb may be "used intransitively" in sentences whose topic focus is on the thing affected rather than on the initiator of the action. The best English translations of such sentences will have passive verbs, yet the impersonal or intransitive nature of the Lahu sentence is signaled by nothing in the verbal nucleus itself, but is inferred from the sentence as a whole. The "transitive" verb *kə* 'put into, insert' is translated differently in (1) and (2):

(1) *Lī? chi | mī-chə qhə | hā? kə mē.*
'Hurry and put these books into the shoulder bag!'

(2) *Lī? chi | mī-chə qhə | kə tā ve yò.*
'These books have already been put into the shoulder bag.'¹⁴

Sentence (1) is imperative, containing the hortatory final particle *mē* as well as the adverb *hā?* 'quickly', which typically occurs in commands. Since

¹² The reader will not fail to note the multiple hedges in this sentence. Note that the class of Lahu "transitive" verbs cannot meaningfully be defined in terms of their "closest English translations."

¹³ See Section 3.1 for the relationship between the notions "resultative" and "causative."

¹⁴ In diagramming Lahu sentences, we use a dotted vertical line to separate two NPs ($NP_1 \mid NP_2$); a solid vertical to separate an NP from a VP ($NP_1 \mid VP$); and a double vertical to separate clauses in a compound sentence ($Cl_1 \parallel Cl_2$).

lī? chi 'these books' is inanimate, it cannot be interpreted as the agentive NP but, rather, must be interpreted as the goal of the commanded action, and *kə* is naturally translated by an active English verb (*put*). But the VP of (2) contains the verb particle *tā*, indicating "previously completed action." The act of insertion is thus regarded as already accomplished, and *lī? chi* is taken as the topic, not the object, so that the English translation appropriately has a passive verb (*have been put*).

✓ In recent syntactic discussions of voice and transitivity among linguists concerned with exotic languages, the term ERGATIVE has been gaining wide currency.¹⁵ In its original, more restricted sense, a language was called ergative if it possessed overt case markings on its NPs, such that the object of a transitive verb was marked the same way as the subject of an intransitive verb—these being both viewed as INACTIVE or INEFFICACIOUS patients with respect to the verbal event—while the subject of a transitive verb was marked differently, as an active, efficacious, ergative (< Greek *ergátes* 'worker') entity. In a verb-final language, it would look like this:

- (3)
- | | | | |
|----|-------------|------------|----------|
| a. | NP_{subj} | V_{intr} | |
| | PATIENT | | |
| | CASE | | |
| b. | NP_{subj} | NP_{obj} | V_{tr} |
| | ERGATIVE | PATIENT | |
| | CASE | CASE | |

By way of contrast, an "accusative language" like Latin marks its subjects the same way, as "nominative" case, regardless of whether the verb is transitive or intransitive. The object of a transitive verb appears in a different case, the "accusative" or "objective" case:

- (4a)
- | | |
|-------------|------------|
| NP_{subj} | V_{intr} |
| NOMINATIVE | |
| CASE | |

(e.g., Latin *Puella | subridet* 'The girl is smiling') and:

- (4b)
- | | | |
|-------------|------------|----------|
| NP_{subj} | NP_{obj} | V_{tr} |
| NOMINATIVE | ACCUSATIVE | |
| CASE | CASE | |

¹⁵ See Comrie (1973). Egerod (1973) has applied this term to Akha, possibly Lahu's closest living Loloish relative. Abadie (1974) has studied the complex conditions for the occurrence of the ergative particle *le* in Nepali, an IE language influenced by coterritorial TB languages. At the recent First International Conference on Comparative Austronesian Linguistics (Honolulu, January 1974), several papers were presented on the ergativity of Austronesian languages. See Tchekhoff (1974) and Clark (1974).

(e.g., Latin *Puella | radicem edibilem | fellat* 'The girl is sucking on an edible root').

The marker of the patient case may be zero in an ergative language, as in Nepali, while the ergative case is overtly marked. Conversely, it could be the ergative case that went unmarked, while the two kinds of patient NPs received the same overt mark.¹⁶

If we are to call Lahu ergative, however, we must go further and adopt a looser definition. NONE of the three case relationships involved (subject of V_{intr} , subject of V_{tr} , object of V_{tr}) need be overtly marked in Lahu, and subject or object NPs are freely deletable in the surface grammar. That means that when a single NP unmarked for case is associated with a given potentially transitive verb, the NP may often be interpreted as either the subject (agent) or the object (patient), according to whether the verb is interpreted as transitive (active) or intransitive (passive). Consider *chɔ* 'person, people' and *dɔʔ* 'beat' in the following sentences:

- (5a)
$$\begin{array}{c|c} Chɔ & dɔʔ ve. \\ NP_{subj} & V_{tr} \\ \hline \text{'People beat [them].'} \end{array}$$

If we wish, we may insert an overt object (e.g., *yɔ-hi* 'they, them'):

- (5b)
$$\begin{array}{c|c|c} Chɔ & yɔ-hi (thàʔ) & dɔʔ ve. \\ NP_{subj} & NP_{obj} & V_{tr} \\ \hline \text{'People beat them.'} \end{array}$$

Alternatively, we may interpret the same phonological string as (5a) in the manner of (5c):

- $$\begin{array}{c|c} Chɔ & dɔʔ ve. \\ NP_{obj} & V_{tr} \\ \hline \text{'[Somebody] beats the people.'} \end{array}$$

This is equivalent to (5d), where the object relationship is overtly marked by *thàʔ*:

- (5d)
$$\begin{array}{c|c} Chɔ thàʔ & dɔʔ ve. \\ NP_{obj} & V_{tr} \end{array}$$

We may also translate the same phonological string as (5a) and (5c) with a passive verb, in which case *chɔ* again becomes the subject in the English translation, though it remains the semantic patient:

- (5e)
$$\begin{array}{c|c} Chɔ & dɔʔ ve. \\ NP_{subj} & V_{intr/pass} \\ \hline \text{'The people are beaten.'} \end{array}$$

¹⁶ No examples of such languages leap to mind, though they must exist.

2.2. Direct and Indirect Objects and the Hierarchy of Efficacy

In Lahu, the surface grammatical apparatus for marking case relationships is at a minimum. By far the most important case marker is *thàʔ* 'accusative'. Yet even *thàʔ* by no means occurs mechanically after every noun that is the "recipient of the verbal action." It is, in fact, used quite sparingly—only where clarity demands or when special emphasis is desired. When the accusative relationship of an NP to its VP is perfectly obvious (from either the linguistic or the extralinguistic context), especially when the NP occurs directly before the VP, *thàʔ* is normally left out. Inserting *thàʔ* in these cases either stamps the speaker as nonnative or else imparts a further nuance of meaning.

Consider the following sentences with the verb *cá* 'eat', a typical verb that takes a one-argument predicate:

- (6) a.
$$\begin{array}{c|c} Qhàʔ-sɛ & vàʔ | cá tù yò. \\ & DO \end{array}$$

 'The headman will eat the pig.'¹⁷
 b.
$$\begin{array}{c|c} Qhàʔ-sɛ & vàʔ thàʔ | cá tù yò. \\ & DO \end{array}$$

 'The headman will eat the PIG.'
 c.
$$\begin{array}{c|c} Qhàʔ-sɛ & vàʔ-sā | cá tù yò. \\ & DO \end{array}$$

 'The headman will eat the pork.'
 d.
$$\begin{array}{c|c} Qhàʔ-sɛ & vàʔ-sā thàʔ | cá tù yò. \\ & DO \end{array}$$

 'The headman will eat the pork!!'

Sentence (6a) is neutral and unemphatic. Headmen eat pigs in this world, while pigs rarely eat headmen. It is patently obvious who is eating whom, so that the addition of *thàʔ* [(6b)] conveys an emphatic or contrastive flavor—e.g., "It's the PIG he'll eat, not the chicken." In (6c) and (6d), we have an inanimate object [*vàʔ* 'pig' + *sā* 'meat' > *vàʔ-sā* 'pork'], so that the addition of *thàʔ* is even less necessary for clarity, and conveys even stronger emphasis.

In the TB languages, the verb is king. NPs are freely deletable when they are clear from the context:

- (7) a.
$$\begin{array}{c|c} Vàʔ & cá tù yò. \\ DO \text{ or } SUBJ & \end{array}$$

 i. '[Somebody] will eat the pig.'

¹⁷ For labeling case relationships, we use the convenient abbreviations in Comrie (1975): DO = direct object, IO = indirect object, MS = subject of matrix sentence, ES = subject of embedded sentence, EDO = direct object in embedded sentence, EIO = indirect object in embedded sentence.

- ii. 'The pig will eat [something].'
 b. $Và^? thà^? \mid cā\ tū\ yò.$
 DO
 '[Somebody] will eat the pig.'
 c. $Và^?-sā \mid cā\ tū\ yò.$
 DO
 '[Somebody] will eat the pork.'
 d. $Và^?-sā\ thà^? \mid cā\ tū\ yò.$
 DO
 '[Somebody] will eat the pork!'

If we delete the subject NP $qhā^?-sē$ 'headman' from (6a), we get (7a), which is now ambiguous, since $và^?$ 'pig' is an animate noun. Out of context, the pig could be interpreted as either the eater or the food. This ambiguity is avoided by using $thà^?$, which now comes into its own [(7b)], marking $và^?$ unambiguously as the object. However, even if we delete $qhā^?-sē$ from (6c), yielding (7c), no ambiguity results, since $và^?-sā$ 'pork' is inanimate and could not be interpreted as the subject. Adding $thà^?$ in this case [(7d)] now conveys a special emphasis, since it is a nonessential "luxury."

I remarked earlier that the ordering of the NPs in a Lahu clause was relatively free. Still, in the stylistically most neutral case, subject NPs tend to occur before object NPs, as in (6). To emphasize the subject, we may move it closer to the verb—closer to the power center of the sentence. If we try this with (6a), we get:

- (8a) $[*] V\grave{a}^? \mid qh\grave{a}^?-s\grave{e} \mid c\grave{a}\ t\grave{u}\ y\grave{o}.$

This sentence is now susceptible of two interpretations, both of them dubious. If $v\grave{a}^?$ is the subject and $qh\grave{a}^?-s\grave{e}$ is the object, we get 'The pig will eat the headman,' which is a semantic clinker. If $v\grave{a}^?$ is interpreted as a preposed object, the sentence is semantically normal but quite unclear without special intonation. This is a job for $th\grave{a}^?$:

- (8b) $V\grave{a}^?\ th\grave{a}^? \mid qh\grave{a}^?-s\grave{e} \mid c\grave{a}\ t\grave{u}\ y\grave{o}.$
 DO SUBJ
 'The headman's the one who'll eat the pig.'

Again we observe the clarificatory or disambiguating function of the particle.

The situation becomes more complex when we consider verbs that take two-place predicates, like $p\grave{a}$ 'send'. In the simplest case, the indirect object is not expressed, so that $th\grave{a}^?$ is available for use with the direct object, as in (9a):

- (9a) $Qh\grave{a}^?-s\grave{e} \mid l\grave{i}^? (th\grave{a}^?) \mid p\grave{a}\ t\grave{u}\ y\grave{o}.$
 DO
 'The headman will send a/the letter.'

The $th\grave{a}^?$ is not essential to the meaning here. Headmen send letters, but letters do not send headmen. Use of $th\grave{a}^?$ conveys something extra to the meaning of $l\grave{i}^?$ 'letter', either a nuance of definiteness (THE letter, as opposed to A letter), or one of contrast to something else (a LETTER, not a package).

When the indirect object is expressed, it preempts the $th\grave{a}^?$:

- (9b) $Qh\grave{a}^?-s\grave{e} \mid C\grave{a}-l\grave{s}\ th\grave{a}^? \mid l\grave{i}^? \mid p\grave{a}\ t\grave{u}\ y\grave{o}.$
 SUBJ IO DO
 'The headman will send Jalaw a letter.'

If we were to attach $th\grave{a}^?$ to the direct object instead, the sentence would be unnatural and hard to understand:

- (9c) $*Qh\grave{a}^?-s\grave{e} \mid C\grave{a}-l\grave{s}\ l\grave{i}^? th\grave{a}^? \mid p\grave{a}\ t\grave{u}\ y\grave{o}.$

If we attach $th\grave{a}^?$ to both the indirect and the direct object, the sentence is clear but clumsy, or else heavily insistent, as if one were painfully explaining something to someone who was not getting the point:

- (9d) $(*)Qh\grave{a}^?-s\grave{e} \mid C\grave{a}-l\grave{s}\ th\grave{a}^? \mid l\grave{i}^? th\grave{a}^? \mid p\grave{a}\ t\grave{u}\ y\grave{o}.$
 IO DO
 'The headman will send Jalaw (not Jamaw) a letter (not a package, dummy!).'

It is even worse to go to the opposite extreme and not use $th\grave{a}^?$ with either object:

- (9e) $**Qh\grave{a}^?-s\grave{e} \mid C\grave{a}-l\grave{s} \mid l\grave{i}^? \mid p\grave{a}\ t\grave{u}\ y\grave{o}.$

Here we have a piling up of three consecutive naked NPs, and the sentence is even harder to understand than (9c).

The most natural version, then, is (9b), where $th\grave{a}^?$ appears with the indirect object only. This fact is explicable in terms of the notion "hierarchy of efficacy."¹⁸ Datives are typically animate nouns. As such, they refer to potential initiators or instigators of actions. I may be sending the letter to Jalaw, but Jalaw could just as well be sending the letter to me. Animates are higher on the scale of efficacy than inanimates. The particle $th\grave{a}^?$ is best viewed as an "efficacy depressant,"¹⁹ a grammatical device used to indicate that the accompanying noun is a receiver of the action in spite of the fact

¹⁸ I first heard this term at Columbia in 1968 or 1969 from my former colleague Erica García, who used it in discussions of McKaughan's analyses of Maranao, a Philippine language. See, e.g., McKaughan (1958).

¹⁹ Ugly as it is, this phrase is certainly more euphonious than "de-eflicizer"! Etymologically, I believe $th\grave{a}^?$ derives from the spatial noun $th\grave{a}^?$ 'on top of; above and in contact with'. NPs like $y\grave{e}\ th\grave{a}^?$ ($y\grave{e}$ 'house'), $C\grave{a}-l\grave{s}\ th\grave{a}^?$, must originally have had concrete spatial meanings ('on the top of the house', 'on top of Jalaw') which gradually became more abstract, developing into the notion of being "covered" or "topped" (i.e., affected passively by) the action of the verb.

that it might well be, under other circumstances, the initiator of the action.²⁰

This all becomes clearer if we consider various permutations and deletions of the basic structure exemplified in (9b):

- (9f) Cà-l̥ thà? | qhâʔ-ʃɛ | l̥iʔ | pə tù yò.
 IO | SUBJ | DO
 'The headman will send the letter to JALAW.'

This is the same as (9b), with the indirect object preposed to initial position, where it acquires emphasis. Here *thàʔ* is absolutely necessary for clarity—without it, we would be as badly off as in (9e), and certainly would never know that Jalaw was meant to be the IO and not the SUBJ.

Similarly, deletion of the subject makes it essential to retain *thàʔ* on the indirect object, or else the meaning will change. Thus, deleting *qhâʔ-ʃɛ* 'headman' from (9b), we get:

- (9g) Cà-l̥ thà? | l̥iʔ | pə tù yò.
 IO | DO
 '[Somebody] will send the letter to Jalaw.'

This is still perfectly clear. But look what happens if we should omit *thàʔ*:

- (9h) Cà-l̥ | l̥iʔ | pə tù yò.
 SUBJ/IO | DO
 i. 'Jalaw will send a letter.'
 ii. '[Somebody] will send a letter to Jalaw.'

This sentence is now ambiguous, with the more likely interpretation taking Jalaw to be the subject (though the other interpretation is by no means excluded). The moral is: When an animate noun comes at the beginning of the sentence, you had better depress its efficacy if you do not want it to be interpreted as the subject. This is even more necessary if the direct object is also deleted from (9b):

- (9i) Cà-l̥ thà? | pə tù yò.
 IO/DO
 i. '[Somebody] will send [it] to Jalaw.'
 ii. '[Somebody] will send Jalaw.'

With *thàʔ* present, we at least know that Jalaw is some kind of object, though we could not tell out of context whether it is dative or accusative

²⁰ Something similar seems to be going on in Spanish, where an animate direct object must be preceded by the dative preposition *a*: *Yo mató al hombre* 'I killed the man' (literally, "I killed to the man"). It is as if an animate Spanish noun is viewed as so efficacious that its potency must somehow be depressed in order to reconcile it to the role of action receiver rather than that of action initiator.

in this sentence, since *pə* 'send' happens to be a verb that can take animate as well as inanimate direct objects. Without *thàʔ*, Jalaw can only be taken as the subject:

- (9j) Cà-l̥ | pə tù yò.
 'Jalaw will send [it].'

2.3. Causative Auxiliary Verbs in Lahu

A number of verbs seem to have vied with one another through the history of Lahu for the honor of taking up the slack left by the demise of the old causative prefix. The undisputed winner was the verb *ci*, which originally meant 'send on an errand'. *Ci* may now be used after any verb (V_{act} or V_{adj}) to express either a coercive or a permissive causative, according to context: *gay ci* 'make [someone] go'/'let [someone] go'. We shall look at the syntactic properties of *ci* clauses in Section 2.34, after briefly discussing the more restricted causativizing and transitivizing roles played by its sister auxiliaries *te* 'do, make', *yù* 'take', and *pi* 'give'. The coexistence of so many causative auxiliaries in Lahu need not raise any eyebrows. Look at English *make him go*, *force him to go*, *have him go*, *get him to go*. As in English, the various Lahu auxiliaries have staked out slightly different semantic domains for themselves, which partially overlap each other and simultaneously interact with certain purely syntactic constraints.²¹

2.3.1. THE FACTIVE AUXILIARY TE 'DO, MAKE' (GL: 244–246).

The semantic effect of *te* depends on the particular type of main verb it is modifying:

1. Before intransitive stative verbs, *te* serves as a transitivizer:

$$te + V_{intr} > VP_{tr.} \\ \text{stat}$$

Thus, *nà* 'be sore, ache', *te nà* 'hurt someone':

- (10) Nə ʒ-ni-pā thà? | tã te nà.
 DO
 'Don't hurt your little brother!'

²¹ Some Lahu auxiliary verbs precede their V_h ("pre-head versatile verbs"), while others follow the main verb ("post-head versatile"). This brute syntactic fact does not correlate, so far as I can see, with any overall meaning shared by the members of the pre-head, as opposed to the post-head, class. The complex syntax and semantics of Lahu serial verb combinations or "verb concatenations" is one of the major topics treated in GL (pp. 199–265). See also Matisoff (1969, 1974).

An alternative English translation could be a passive or impersonal causative ('Don't cause your little brother to be hurt').

2. Before adjectives, *te* is a productive causativizer:

$$te + V_{adj} > VP_{adj}^{caus}$$

Thus, *chu* 'be fat', *te chu* 'fatten'; *mē* 'be ripe, cooked', *te mē* 'cook until done; ripen'.²² Once an adjective has been causativized by *te*, it may be used in either a transitive or an intransitive way:

- (11) a. $\bar{5}$ -*chī* *chī* | *mā* *te* *mē* $\bar{5}$.
'This curry isn't cooked done yet.' (intransitive)
b. $\bar{5}$ -*chī* *chī* *thà?* | *a-cī* *te* *mē* *mē*.
'Please cook this curry until it's done.' (transitive)

3. Before verbs that are already transitive, *te* (like *cī*) is a true causativizer, specifying that somebody is being caused to perform the transitive action in question. The causee (= embedded subject or ES) is usually marked by our friend *thà?*:

$$te + V_{tr} > VP_{caus}$$

Consider the following:

- (12) a. $Y\bar{5}$ *thà?* | *tē* *chē* *ve*.
DO |
'[Somebody] is crushing him.'
b. $Y\bar{5}$ *thà?* | *te* *tē* *chē* *ve*.
ES |
'[Somebody] is making him crush [something].'
c. *Chō* *chī* | *hō* *thà?* | \bar{v} | *te* *tē* *ve*.
MS | ES | EDO |
'This man made the elephant crush a snake.'

In (12a), $y\bar{5}$ *thà?* 'him' is the object of the transitive verb *tē* 'crush'. In the causativized version, (12b), $y\bar{5}$ *thà?* is the underlying subject of 'crush'. In (12c), the object of the embedded transitive verb is overtly expressed (\bar{v} 'snake') and is not followed by any particle, since *thà?* has been preempted by the causee, which stands higher on the hierarchy of efficacy.

We return to the role of *thà?* as marker of the causee in our discussion of *cī* causation.

²² It will be remembered that *mē* is already an etymological causative (see Section 1.2.3). Having lost its original causative force, it is now eligible for "recausativization" by syntactic means.

2.3.2. THE INSTRUMENTAL AUXILIARY YŪ 'TAKE' (GL: 246–247).

Before transitive verbs indicating actual manipulations of objects, *yū* has the concrete sense of "take and *V_h*" (*take and cut*, *take and twist*, *take and raise*, etc.). However, the use of *yū* has been extended to situations where the manipulation is merely figurative, or at any rate only the automatic prerequisite to the really significant action of the main verb, which may in fact be truly intransitive. Thus, \bar{x} 'die', *yū* \bar{x} 'kill someone' (literally, "take [and do so that he will] die"); *ce* 'fall from a height', *yū ce* 'cause someone to fall from a position of power' ("take-fall"). In cases like these, *yū* shows signs of developing into a causativizer.

The connections between the notions of transitivity, ergativity, and instrumentality are fascinating, though we cannot really go into them here. The verb *yū* has real instrumental force in Lahu, often appearing in sentences where its direct object is the instrument with which the verb of the following clause is performed:

- (13) $L\bar{a}^? - n\bar{o}$ *thà?* | \bar{a} -*thō* | *yū* *le* || $\bar{s}\bar{5}^?$ *ve*.
DO | INST |
'He cut off the finger with a knife.'
(Lit. "Taking a knife, he cut off the finger.")

In modern Mandarin, the word *baa* 把, originally a free verb meaning 'take', is now used prepositionally to signal that the following noun is a direct object:

- (14) *Ta* | *baa* *fann* | *chy* *wan.le* *mei* *yeou*.
| DO | *V_h* *V_v*
'Has he finished eating the rice yet?'
(Lit. "Taking the rice, has he finished eating it yet?")

In many ergative languages, both TB (e.g., Tibetan) and non-TB (e.g., Nepali), the marker of the subjects of transitive verbs is the same as the marker of instrumentality.

2.3.3. THE BENEFACTIVE AUXILIARY PĪ 'GIVE' (GL: 247–248, 324–330).

The verb *pī* 'give' is systematically used along with the verb particle *lā* to exhaustively cut up benefactive semantic space. Both of these morphemes follow the main verb. *Lā* indicates that the action of the verb impinges upon or affects a non-third person ('I hit you', 'you hit me', 'he hits me', 'he hits you'), while *pī* shows that the verbal action affects a third person ('I hit him', 'you hit him', 'he hits her', 'she hits him') (see the following diagram, reproduced from GL: 325):

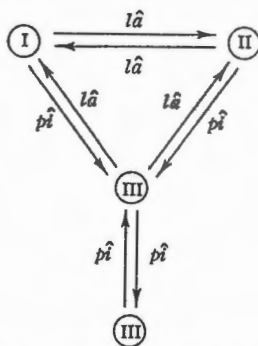


FIGURE 1 The Lahu benefactive apparatus.

When the main verb is transitive, the semantic contribution of *pī* is limited to the benefactive/directional realm (*tē pī* 'crush him', *qō? pī* 'tell him', *dō? pī* 'hit him', *mā pī* 'teach him'). When the main verb is intransitive, *pī* has the effect of causativizing it. The causee may be either third-person animate (*nā* 'be sore', *nā pī* 'hurt him'; *sī* 'die', *sī pī* 'make him die'; *chē* 'be in a place', *chē pī* 'make him stay') or an inanimate object or situation (*pā* 'be finished', *pā pī* 'bring something to an end'; *ce* 'fall from a height', *ce pī* 'drop something'; *pō* 'be perforated', *pō pī* 'pierce something'). Similarly with adjectives: *chu pī* 'make him fat', *qē pī* 'make it wide'.

The causation here is of a more indirect sort than that conveyed by *cī* (see next section). Thus, *sī cī* 'make someone die' implies that the death was a direct consequence of a purposeful action, whereas *sī pī* may indicate merely that a chain of events had been set in motion that eventuated in the death.²³ Note also that *pī* is unavailable as a causativizing option if the causee is not a third person.

The notions of benefaction and transitivity/causativization are more closely related than is generally realized. They all share the feature of DIRECTIONALITY, a channeling of the verbal event into a particular path, onto a particular object.

2.3.4. THE "DELEGATIVE" AUXILIARY *CĪ* 'SEND ON AN ERRAND' (GL 4.331D, 4.341, 4.35, 6.01).

The most important Lahu causative auxiliary verb, *cī*, has either a coercive or a permissive meaning, and typically requires a human (or at any rate animate) causee. This affinity for humankind is to be explained by its

²³ Purpose clauses may also be used to convey such an indirect causative meaning (see Section 5): *sī tū te* 'do so that [somebody] dies'.

basic meaning 'send on an errand, dispatch, entrust with a commission' (hence our label DELEGATIVE).²⁴

Syntactically, *cī* belongs to the class of "variable post-head versatile verbs" (GL: 237–238, 240–242), which have the property of occurability in various alternative positions in multiverbal concatenations, with concomitant changes in the meaning of the string. Thus, with the main verb *cā* 'eat', the auxiliary *phē?* 'be able', and *cī*, we have two possible orderings, each imposing a (predictably) different semantic interpretation:

- (15) a. *cā phē? cī* 'make [someone] able to eat'
 V_h V_v V_v
 b. *cā cī phē?* 'able to make [someone] eat'
 V_h V_v V_v

In the simplest case, the verb in the embedded sentence is intransitive, with no accusative or dative arguments to complicate the sentence:

- (16) a. *Qhā?-sē | vā? thā? | phō e cī tū yò.*
 MS | ES | V_h
 'The headman will make the pig run away.'
 b. *Qhā?-sē | vā? | phō e cī tū yò.*
 MS | ES

The version with *thā?* affixed to the causee [(16a)] is clearer, but we can still get away with leaving it out [(16b)]. A nit-picker might claim that (16b) is ambiguous with (16c):

- (16c) (*) *Qhā?-sē | vā? | phō e cī tū yò.*
 ES | MS
 'It's the PIG that will make the headman run away.'

Under this interpretation, *qhā?-sē* is treated as an extraposed causee, and *vā?* 'pig' is taken as the subject of the higher sentence. This is forced, however, since if this meaning were intended, the speaker would be sure to hitch *thā?* onto 'headman' to depress its efficacy in the "strong" position at the beginning of the sentence.

At any rate, the important fact to note is that the two strongholds of *thā?* are the dative (animate recipient of the action) and the causee (animate recipient of the causation). These are both case slots where the animate

²⁴ *cī* is clearly cognate to Burmese *sei*, which functions very similarly (Okell, 1969: II, 403–406). It also appears to be cognate to Chinese *shy* 使. All these verbs basically meant 'send on an errand', yet all have developed the more abstract causative meaning. Whether this semantic development is an independent innovation in the various languages or whether it goes back to PST itself remains an open question.

noun must acknowledge itself to be in a position of depressed efficacy if the meaning of the sentence is to be clear.

When the verb in the embedded sentence is transitive, but does not admit indirect objects, we get sentences like these:

- (17) a. $C\grave{a}-l\check{s}$ | $qh\grave{a}^?-\check{s}e\ th\grave{a}^?$ | $v\grave{a}^?$ | $\left\{ \begin{array}{l} b\check{s}^? \\ c\grave{a} \end{array} \right\} ci\ t\grave{u}\ y\grave{o}.$
 MS | ES | EDO | V_h
 'Jalaw will make the headman shoot/eat the pig.'
 b. $\check{s}-pa$ | $\check{s}-y\grave{a}-p\grave{a}\ th\grave{a}^?$ | $\check{s}\check{i}^?-c\check{e}$ | $thu\ ci\ t\grave{u}\ y\grave{o}.$
 MS | ES | EDO | V_h
 'The father will make his son chop down the tree.'

It is possible, but clumsy and unnecessary, to attach $th\grave{a}^?$ to the embedded direct object as well as to the causee:

- (17c) $C\grave{a}-l\check{s}$ | $qh\grave{a}^?-\check{s}e\ th\grave{a}^?$ | $v\grave{a}^?\ th\grave{a}^?$ | $b\check{s}^?/c\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 MS | ES | EDO |
 'Jalaw will make the headman shoot/eat the pig.'

In the most complex case, the verb of the embedded sentence takes both an accusative and a dative argument. We now have the possibility of four NPs in a row—the MS, ES, EIO, and EDO. If we refuse to use any efficacy depressants at all, the sentence is totally unintelligible:

- (18a) $*C\grave{a}-l\check{s}$ | $qh\grave{a}^?-\check{s}e$ | $\check{s}\grave{a}l\grave{a}$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 V_h
 Jalaw headman teacher pig send

Four naked NPs in a row just do not make it semantically.

There are two possibilities for $th\grave{a}^?$ attachment: the causee (ES) and the embedded indirect object (EIO). If we are stingy with $th\grave{a}^?$ and use it on only one of these nouns, the sentence is better than (18a), but still quite unclear:

- (18b) $(*)C\grave{a}-l\check{s}$ | $qh\grave{a}^?-\check{s}e\ th\grave{a}^?$ | $\check{s}\grave{a}l\grave{a}$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 ES

- (18c) $(*)C\grave{a}-l\check{s}$ | $qh\grave{a}^?-\check{s}e$ | $\check{s}\grave{a}l\grave{a}\ th\grave{a}^?$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 EIO

The only really good way to convey a meaning here requires us to attach $th\grave{a}^?$ both to the ES and to the EIO. Here the repetition of $th\grave{a}^?$ is not felt to be clumsy. On the contrary, this is the case where clarity REQUIRES a double marking. Two of the nouns must have their efficacy depressed. Of the remaining two, the one that appears sentence-initial will be interpreted as the MS, while the one coming directly before the verb will be the EDO:

- (18d) $C\grave{a}-l\check{s}$ | $qh\grave{a}^?-\check{s}e\ th\grave{a}^?$ | $\check{s}\grave{a}l\grave{a}\ th\grave{a}^?$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 MS | ES | EIO | EDO |
 'Jalaw will make the headman send the pig to the teacher.'

With a little good will, one could find an ambiguity in (18d), reading the sentence so that $qh\grave{a}^?-\check{s}e\ th\grave{a}^?$ is the EIO, while $\check{s}\grave{a}l\grave{a}\ th\grave{a}^?$ is the ES, giving the meaning 'Jalaw will make the teacher send the pig to the headman.' Without special intonational shenanigans, however, in any sequence of two $th\grave{a}^?$ -NPs it will be the leftmost one that will be interpreted as the causee. That is, in general, the closer an NP is to the beginning of the sentence, the more efficacious it appears. Causees are more efficacious than datives. EVEN THOUGH THE CAUSEE IS THE SLAVE OF THE SUBJECT OF THE HIGHER SENTENCE, AT LEAST HE IS STILL MASTER IN HIS OWN HOUSE. Put another way, 'tis better to be an embedded agent than not to be an agent at all.

The double $th\grave{a}^?$ marking is even more essential if the subject of the higher sentence is deleted. Omitting the MS from (18d), we get:

- (18e) $Qh\grave{a}^?-\check{s}e\ th\grave{a}^?$ | $\check{s}\grave{a}l\grave{a}\ th\grave{a}^?$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 ES | EIO | EDO |
 '[Somebody] will make the headman send
 a pig to the teacher.'

This is still clear as it stands. But if we omit the $th\grave{a}^?$ from either the ES or the EIO (or a fortiori, from both), deleting the MS drastically changes the original meaning of (18d) and (18e):

- (18f) $Qh\grave{a}^?-\check{s}e\ th\grave{a}^?$ | $\check{s}\grave{a}l\grave{a}$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 ES | MS | EDO |
 'The TEACHER will make the headman send a pig.'

- (18g) $Qh\grave{a}^?-\check{s}e$ | $\check{s}\grave{a}l\grave{a}\ th\grave{a}^?$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$
 MS | ES/EIO | EDO |

- i. 'The headman will make the teacher send a pig
 [to somebody].'
 (ii) 'The headman will make [somebody] send a pig
 to the teacher.'

- (18h) $*Qh\grave{a}^?-\check{s}e$ | $\check{s}\grave{a}l\grave{a}$ | $v\grave{a}^?$ | $p\grave{a}\ ci\ t\grave{u}\ y\grave{o}.$ (almost unintelligible)

Sentence (18f) is interpretable only as having an extraposed ES, so that $\check{s}\grave{a}l\grave{a}$ becomes the MS, acquiring contrastive emphasis in the immediate preverbal position. In (18g), the first NP can be read only as the MS. The remaining $th\grave{a}^?$ NP, $\check{s}\grave{a}l\grave{a}$, will almost certainly be interpreted as the ES—though reading it as the EIO is also not excluded, given the proper context. In this latter case, it would be the causee that was left unexpressed. This sort of ambiguity between ES and IO is much more pronounced if the VP has a lexical causative rather than a ci causative (see next section).

3. THE MORPHOLOGICAL SURVIVAL: BEHAVIOR OF THE LEXICALIZED "FOSSIL CAUSATIVES"

The surviving lexical causatives listed in Section 1.2.3 behave very much like causatives, with one important difference. Since the fossils have the causative feature incorporated within themselves, they tend to be treated semantically like unitary, unanalyzable lexical items. This means that whenever you have a fossil causative in the VP, there will always be an NP that is susceptible of either of two basically equivalent interpretations: It is taken as either the IO of the "undecomposed" lexical causative or the ES of the underlying simplex verb. Consider (19a):

- (19a) $Qh\acute{a}^?-\acute{s}\acute{e} \mid v\acute{a}^? th\acute{a}^? \mid \acute{s}ama-q\acute{u} \mid c\bar{a} (p\acute{i}) t\acute{u} y\acute{o}.$ ²⁵
 MS | ES/IO | DO
 i. 'The headman will feed the pig cornhusks.'
 ii. 'The headman will cause the pig to eat cornhusks.'

Let the grammarian worry about whether there is (ii) or is not (i) an embedded sentence here. For the Lahu, the sentence is unambiguous, and everybody understands who is doing what to whom. [This is quite different from Comrie's ambiguous French sentence,

J'ai fait envoyer la lettre au jardinier,
 DO ES or IO

where there is a genuine ambiguity according to whether *jardinier* 'gardener' is taken to be the indirect object ('I had the letter sent to the gardener') or the causee ('I had the gardener send the letter [to somebody]').]

Returning to (19a), we may apply various deletions to the basic structure that will erase any of the nominal arguments of the verb while leaving the original overall meaning intact. Omitting the DO, we get:

- (19b) $Qh\acute{a}^?-\acute{s}\acute{e} \mid v\acute{a}^? th\acute{a}^? \mid c\bar{a} (p\acute{i}) t\acute{u} y\acute{o}.$
 MS | ES/IO
 'The headman will feed the pig.'

Omitting the MS, we get:

- (19c) $V\acute{a}^? th\acute{a}^? \mid \acute{s}ama-q\acute{u} \mid c\bar{a} (p\acute{i}) t\acute{u} y\acute{o}.$
 ES/IO | DO
 '[Somebody] will feed the pig cornhusks.'

²⁵ The sentence is more natural if the benefactive verb *p\acute{i}* is included in the VP to show that the verbal action is impinging on a third person (see Section 2.3.3). The *p\acute{i}* does not have causative force here.

If we omit the ES/IO, we are then free to attach *th\acute{a}^?* to the DO:

- (19d) $Qh\acute{a}^?-\acute{s}\acute{e} \mid \acute{s}ama-q\acute{u} (th\acute{a}^?) \mid c\bar{a} p\acute{i} t\acute{u} y\acute{o}.$
 MS | DO
 'The headman will feed [it] cornhusks.'

Once we delete this important NP, it becomes more essential to include benefactive *p\acute{i}* in the VP to specify somewhat the directionality of the action.

When the context is clear enough, more than one NP may be omitted. If somebody asks you $V\acute{a}^? th\acute{a}^? \mid \acute{a}-th\acute{o}^?-ma \mid c\bar{a} p\acute{i} t\acute{u} le$ 'What will [he] feed the pig?', you might well answer without expressing either the ES/IO or the MS:

- (19e) $\acute{s}ama-q\acute{u} (th\acute{a}^?) \mid c\bar{a} p\acute{i} t\acute{u} y\acute{o}.$
 DO
 '[He] will feed [it] cornhusks.'

If somebody asks you $\acute{s}ama-q\acute{u} chi \mid \acute{a}-th\acute{o}^?-ma \mid te t\acute{u} le$ 'What will [he] do with these cornhusks?', you would probably leave out both the MS and the DO:

- (19f) $V\acute{a}^? (th\acute{a}^?) \mid c\bar{a} (p\acute{i}) t\acute{u} y\acute{o}.$
 ES/IO
 '[He] will feed [them] to the pig.'

Here the *th\acute{a}^?* may safely be omitted, since there is little possibility of interpreting the pig as being the MS (*'The pig will feed [them] [to somebody]').

If we like, we can topicalize the DO rather than deleting it:²⁶

- (19g) $\acute{s}ama-q\acute{u} t\acute{i} qo \mid v\acute{a}^? (th\acute{a}^?) \mid c\bar{a} (p\acute{i}) t\acute{u} y\acute{o}.$
 DO TOPIC | ES/IO
 MARKERS
 'As for the cornhusks, [somebody] will feed [them] to the pig.'

If we delete all the sentence's NPs but one, keeping only the efficacious $qh\acute{a}^?-\acute{s}\acute{e}$ 'headman', true ambiguity results:

- (19h) $Qh\acute{a}^?-\acute{s}\acute{e} \mid c\bar{a} p\acute{i} t\acute{u} y\acute{o}.$
 MS or ES/IO

Taking $qh\acute{a}^?-\acute{s}\acute{e}$ as the MS, so that ES/IO and DO are deleted, we get the reading 'The headman will feed [it] [something]'. Taking $qh\acute{a}^?-\acute{s}\acute{e}$ as the

²⁶ For an interesting (though somewhat dogmatic) application of Fillmorean case grammar to topicalization phenomena in Lisu (a close Loloish relative of Lahu), see Hope (1972, 1973).

ES/IO, so that MS and DO are deleted, we get '[Somebody] will feed the headman [something]'. We may disambiguate in favor of this second interpretation by adding *thà?*:

(19i) *Qhâ?-šē thà? | cā pī tū yò.*

Finally, there is nothing stopping us from suppressing ALL the NPs in the sentence, leaving us with:

(19j) *Cā pī tū yò*
 '[Somebody] will feed [it] [something].'

Causative structures of higher degrees of complexity may be achieved by combining syntactic and morphological causatives in the same sentence. But first, a word about "resultatives."

3.1. Resultative versus Causative

A result is the opposite or mirror image of a cause.²⁷ Thus, many of the simplex verbs listed in Section 1.2.3 function resultatively with respect to their fossil causative counterparts. 'To eat' (*cā*) is resultative with respect to 'feed' (*cā*). Even though I feed you, you may or may not actually eat that which I give you to eat. ("You can lead a horse to water, but you can't make him drink.")²⁸ You may kindle something (*tú* CAUSE), but it may or may not catch fire (*tò?* RESULT). You may rouse someone (*nō* CAUSE), but he may or may not actually wake up (*nō* RESULT). Lahu, along with many other TB languages, Thai, and of course Chinese,²⁹ makes frequent use of a two-verb construction where the main verb is followed by another verb (the "resultative complement" or C_r) that specifies the successful or unsuccessful completion of the verbal event. In Lahu, if the action is not successfully carried out, the negative adverb *mā* intervenes between the main verb and the resultative: *tú mā tò?* 'kindle [it, but it] doesn't catch fire'; *cā mā cā* 'feed [him, but he] doesn't eat'; *nō mā nō* 'rouse [him, but he] doesn't wake up'.

Different verbs select different C_r 's. Some C_r 's are quite general in meaning, and may occur after an unlimited number of main verbs (e.g., $V + cī$ 'V so it sticks', $V + tō?$ 'V so it comes out'). Other C_r 's are restricted to only one or two main verbs. Thus, *mi* 'catch' goes only with *gā?* 'chase'; *kī* 'be melted' goes only with *tō* 'melt something'; *dō* 'fit' goes only with *kā* 'insert' or *dō?* 'pack into'.

²⁷ Resultative constructions are discussed in GL 4.314, 4.331A–B, 4.312, 4.411.

²⁸ More archaically, "You can drench your horse, but you can't make him drink!"

²⁹ For the clearest account of Chinese resultatives, see Chao (1968). Li and Thompson (1973) refer to sequences of main verb plus resultative complement as COMPOUND VERBS, a term that does not capture their semantic structure.

4. COEXISTENCE AND INTERACTION OF LAHU SYNTACTIC AND LEXICAL CAUSATIVES

Lahu causatives provide us with a striking example of how two different historical layers of a language's grammar can coexist and cooperate to perform tasks that neither could accomplish on its own. By using a combination of modern, syntactic *cī* causation and archaic, morphological fossil causation in the same VP, Lahu achieves a double degree of embedding. This is accomplished with the absolute minimum of formal machinery—with no rattling of grammatical hardware, just a deceptively simple sequence of two verbs, the FOSS CAUS + *cī*, as in (20)–(22):

(20) *Qhâ?-šē | š-yā-pā thà? | vā? thà? | šama-qú | cā cī tū yò.*
 MS | ES₁ | ES₂/IO | DO | 2 1
 'The headman will have his son feed the pig cornhusks.'

(21) *Mī-cī-tà?nò? | Kālā-phu thā? | kú-chā-yā thā? | fī | tō cī*
 MS | ES₁ | ES₂/IO | DO | 2 1
tū yò.
 'The border police will make the foreigner give the communist opium to smoke.'³⁰

(22) *š-e | yā-mī thà? | š-ē thà? | á-pò? | fī cī tū yò.*
 MS | ES₁ | ES₂/IO | DO | 2 1
 'The mother will have her daughter dress the baby with a shirt.'

The quadruple nominal arguments of sentences like (20)–(22) make them look superficially like (18d), which we repeat here:

(18d) *Cā-tō | qhâ?-šē thà? | šālā thā? | vā? | pā cī tū yò.*
 MS | ES | IO | DO |
 'Jalaw will make the headman send the pig to the teacher.'

The verb *pā* 'send' in (18d) may take an indirect object, so that in combination with *cī* the sentence can support four NPs. In (20)–(22), none of the underlying simplicia of the lexical causatives (*cā* 'eat', *dō* 'drink', *vā?* 'wear') may take an indirect object. Therefore, the NP "gained" by the extra degree of embedding in (20)–(22) is counterbalanced by the fact that the LOWER CAUSEE IS NOT DISTINGUISHABLE FROM A DATIVE (the ES/IO syndrome). Both

³⁰ *Kú-chā* 'communist' (*yā* = 'person') is from Chinese *gong-chaan* 共產. *Tā?nò?* 'police' is from Thai *tamruad*. The word *Kālā-phu* literally means "white Indian," and is applied to Caucasian foreigners. Black Americans are referred to in Lahu as *Kālā-phu-nā?*, i.e., 'black white Indians'. The verb *tō* 'give to drink' is also used for 'give to smoke'. The simplex verb *dō* 'drink' is also used for smoking tobacco. Cf. Japanese *nomu*, *nomaseru*.

sentence types, then, end up with the same number of nominal constituents: two *thà?* NPs, an MS, and a DO.

If it is desired to have two degrees of causative embedding where there is no fossil causative available for the lower causee (i.e., with any verb in the language except for the 13 in Section 1.2.3!), one must use a purpose clause (see next section).

Generally speaking, whenever there is a formal difference between two utterances, it is likely to be accompanied by a semantic difference, however slight. *Kingly*, *royal*, and *regal* are almost perfect synonyms of each other, yet they cannot be used interchangeably in all environments. A sock cannot be “regal blue” in color, and we do not drink “Kingly Crown Cola” or get “regal straight flushes” in poker. Likewise, a fossil causative is very similar syntactically to the corresponding simplex verb plus *ci* (e.g., *cā* ‘feed’ and *cā ci* ‘cause to eat’). The same deletions and topicalizations of nominal arguments that are possible with the lexical causatives (19b–j) also work with the corresponding simplex verbs plus *ci*. Semantically, however, there is a slight difference between the two constructions, with the syntactic causative having either a coercive flavor (‘force him to eat’) or else a quite different permissive meaning (‘let him eat’), while the lexical causative seems more like an ordinary transitive verb (‘feed him’) and, in fact, may be used even in situations where the action is not necessarily successfully carried out by the causee (‘try to make him eat’—see Section 3.1). The lexical causative seems never to carry a permissive meaning.

5. PURPOSE CLAUSES AND CAUSATION

Purpose clauses (GL 6.2: 461–465) are embedded sentence-like entities, marked usually by the verb particle signaling unreal, future, purposive, or hypothetical action: *tù*. Diagrammatically, we set them off from the higher sentence by inward-pointing arrows. Any verb of suitable meaning may occur in the higher sentence, e.g., *jū?* ‘thrust, pierce, stick into’:

(23) → $\begin{array}{c} \acute{e} \\ \text{ES} \end{array} \left| \begin{array}{c} h\grave{o} \text{ } \acute{g}a \text{ } t\grave{u} \leftarrow \\ \text{LOC} \end{array} \right. \begin{array}{c} m\grave{o} \text{ } \acute{q}\acute{o} \text{ } qh\acute{o} \\ \text{DO} \end{array} \left| \begin{array}{c} \acute{a}\text{-}ph\grave{e} \text{ } \acute{s}\acute{i} \\ \text{DO} \end{array} \right. \left| \begin{array}{c} j\acute{u} \text{ } p\acute{i} \text{ } ve \text{ } y\acute{o}. \\ \text{MS} \end{array} \right.$

‘In order to get the baby to cry, [we] stick hot peppers into its mouth.’³¹

Very often, however, the higher verb is *te* ‘do, make’, which we have already seen functioning as a causative auxiliary (Section 2.31). The meaning of sentences of the form

³¹ This Lahu practice is not observed out of sadism, but is used like the Western spank on the bottom to make a hesitant newborn take its first breath.

→ purpose clause $\leftarrow + te$ ‘do in such a way that purpose clause’

often shades into the causative realm:

(24) $\begin{array}{c} Y\acute{s} \\ \text{MS} \end{array} \left| \begin{array}{c} \rightarrow \text{ } \acute{c}\acute{a}n\text{-}p\acute{a} \\ \text{ES} \end{array} \right. \left| \begin{array}{c} \acute{s}\acute{i} \text{ } t\acute{u} \leftarrow \\ \text{DO} \end{array} \right. \left| \begin{array}{c} te \text{ } g\acute{a} \text{ } ve. \\ \text{MS} \end{array} \right.$

‘He wants to make the enemy die’ (‘He wants [*gā*] to do [*te*] in such a way that the enemy dies”).

(25) → $\begin{array}{c} Y\acute{a}\text{-}p\acute{a} \text{ } \acute{c}hi \\ \text{ES} \end{array} \left| \begin{array}{c} k\acute{s} \text{ } t\acute{u} \leftarrow \\ \text{DO} \end{array} \right. \left| \begin{array}{c} t\acute{a} \text{ } te. \\ \text{MS} \end{array} \right.$

‘Don’t make this boy be afraid!’

(26) $\begin{array}{c} \eta\acute{a} \\ \text{MS} \end{array} \left| \begin{array}{c} \rightarrow \text{ } qh\acute{a} \text{ } \acute{s}\acute{e} \text{ } th\acute{a} \text{ } ? \\ \text{ES} \end{array} \right. \left| \begin{array}{c} C\acute{a}\text{-}l\acute{s} \text{ } th\acute{a} \text{ } ? \\ \text{IO} \end{array} \right. \left| \begin{array}{c} kh\acute{a} \text{ } t\acute{e} \text{ } m\acute{a} \\ \text{DO} \end{array} \right. \left| \begin{array}{c} p\acute{i} \text{ } t\acute{u} \leftarrow \\ \text{DO} \end{array} \right. \left| \begin{array}{c} te \text{ } t\acute{u} \text{ } y\acute{o}. \\ \text{MS} \end{array} \right.$

‘I’ll get the headman to give Jalaw a crossbow.’

Therefore, purpose clauses may be utilized as a device to form more complex causative structures. By embedding (a) a simple *ci* causative or (b) a lexical causative into a purpose clause, you can get TWO causees; by embedding (c) a lexical causative plus *ci* into a purpose clause, you can get THREE causees (by one analysis).

5.1. *Ci* Clause Embedded Within Purpose Clause

In sentences containing the structure,

→ NP_x | V_h + *ci* + *tù* ← te . . . ,

there are three nested clauses, with the subject of the highest (purpose) clause being the MS, while the subjects of the lower two clauses are causees. Consider (27)–(29):

(27) $\begin{array}{c} \acute{g}\acute{a}\text{-}\acute{s}\acute{a} \\ \text{MS} \end{array} \left| \begin{array}{c} \rightarrow \text{ } n\acute{e}\text{-}h\acute{a}y \text{ } th\acute{a} \text{ } ? \\ \text{ES} \end{array} \right. \left| \begin{array}{c} \acute{s}\text{-}y\acute{a}\text{-}p\acute{a} \text{ } th\acute{a} \text{ } ? \\ \text{ES} \end{array} \right. \left| \begin{array}{c} ph\acute{i} \\ \text{DO} \end{array} \right. \left| \begin{array}{c} th\acute{e} \text{ } \acute{c}i \text{ } t\acute{u} \leftarrow \\ \text{V}_h \end{array} \right. \left| \begin{array}{c} te \text{ } ve. \\ \text{MS} \end{array} \right.$

1 2 3 3 2 1
‘God (1) did [in such a way that] the evil spirit (2) made the boy (3) kick the dog.’³²

(28) $\begin{array}{c} \acute{s}\text{-}e \\ \text{MS} \end{array} \left| \begin{array}{c} \rightarrow \text{ } y\acute{a}\text{-}m\acute{i} \text{ } th\acute{a} \text{ } ? \\ \text{ES} \end{array} \right. \left| \begin{array}{c} \acute{s}\text{-}y\acute{a}\text{-}p\acute{a} \text{ } th\acute{a} \text{ } ? \\ \text{ES} \end{array} \right. \left| \begin{array}{c} \bar{5} \\ \text{DO} \end{array} \right. \left| \begin{array}{c} \acute{c}\acute{a} \text{ } \acute{c}i \text{ } t\acute{u} \leftarrow \\ \text{V}_h \end{array} \right. \left| \begin{array}{c} te \text{ } t\acute{u} \text{ } y\acute{o}. \\ \text{MS} \end{array} \right.$

1 2 3 3 2 1
‘The mother (1) will have her daughter (2) make her son (3) eat rice.’

³² There is a beautiful tree diagram of this sentence in GL (p. 437).

- (29) $\delta\text{-}e \mid \rightarrow y\hat{a}\text{-}m\hat{i} \text{ th}\hat{a}^? \mid \delta\text{-}y\hat{a}\text{-}p\bar{a} \text{ th}\hat{a}^? \mid \check{s}\bar{a}l\bar{a} \text{ th}\hat{a}^? \mid l\hat{i}^? \mid p\delta \text{ } \check{c}i$
 MS | ES | ES | IO | DO | V_h
 1 | 2 | 3 | | | 3 2

$t\hat{u} \leftarrow te \text{ } t\hat{u} \text{ } y\hat{o}$.

1

'The mother (1) will have her daughter (2) make her son (3) send a book to the teacher.'

In (29), the main verb within the purpose clause, *pδ* 'send', can take a dative argument, so that the sentence ends up with five consecutive NPs, three of them marked with *thā*[?] (the two causees and the IO). This triple *thā*[?] marking is essential for clarity in a sentence of such complexity.

5.2. Lexical Causative Embedded Within Purpose Clause

In sentences containing the structure,

$\rightarrow NP_x \mid V_h + t\hat{u} \leftarrow te \dots,$
 FOSS
 CAUS

the VP of the purpose clause includes a lexical causative that syncretically incorporates within itself the two verbs whose underlying subjects are the causees. Thus, (30) is exactly analogous to (28):

- (30) $\delta\text{-}e \mid \rightarrow y\hat{a}\text{-}m\hat{i} \text{ th}\hat{a}^? \mid \delta\text{-}y\hat{a}\text{-}p\bar{a} \text{ th}\hat{a}^? \mid \bar{c}\bar{a} \text{ } t\hat{u} \leftarrow te \text{ } t\hat{u} \text{ } y\hat{o}$
 MS | ES | ES/IO | DO | V
 1 | 2 | 3 | 2/3 | 1

'The mother (1) will have her daughter (2) feed her son (3) rice.'

5.3. Lexical Causative Plus *ci* Causative Embedded Within Purpose Clause

A causative embedding to the third degree may be achieved with the following construction:

$\rightarrow NP_x \mid V_h + \check{c}i + t\hat{u} \leftarrow te \dots$
 FOSS
 CAUS

Here the double morphological/syntactic causative described above (Section 4) is embedded within a purpose clause, so that we get four nested clauses and three causees (if we decompose the lexical causative):

- (31) $\delta\text{-}e \mid \rightarrow y\hat{a}\text{-}m\hat{i} \text{ th}\hat{a}^? \mid \delta\text{-}y\hat{a}\text{-}p\bar{a} \text{ th}\hat{a}^? \mid m\acute{e}\text{-}ni \text{ (th}\hat{a}^?) \mid \bar{c}\bar{a}$
 MS | ES | ES | ES/IO | DO |
 1 | 2 | 3 | 4 |

$\check{c}\bar{a} \text{ } \check{c}i \text{ } t\hat{u} \leftarrow te \text{ } t\hat{u} \text{ } y\hat{o}$.

V_h

3/4 2 1

'The mother (1) will have her daughter (2) make her son (3) feed the cat (4) rice.'³³

The grammarian may amuse himself by concocting even deeper piles of nesting causatives, e.g., by adding *ci* to the *te* of the highest (purpose) clause. Such structures are unintelligible, however, and sentences like (31) are about as much as the traffic can bear.³⁴

6. CONCLUSION: COMPLEMENTARITY AND REDUNDANCY IN GRAMMAR

The synchronic picture in any given semantic area, even so relatively well-defined an area as causation, is extremely complex. Layers of grammatical apparatus from different historical stages of a language's development co-exist in the present, sometimes reinforcing or complementing each other and sometimes getting in each other's way. Where alternative formal devices are available to express the same meanings, semantic specialization is bound to occur sooner or later.

We cannot view so rich an area as causation in isolation, but must bring in chunks of related phenomena from several other subsystems in the grammar. We have examined a few of these in this chapter: voice, transitivity, benefaction, purpose, result, verb concatenation, case hierarchy. Before a general theory of causation can be developed, these and other related matters must be studied in a wide variety of typologically different languages.

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³³ This sentence is also enshrined in a dendrogram in GL (p. 439).

³⁴ Similarly, if you were to pile up English *-ing* complements, you would reach the limits of intelligibility after about three:

JOE: *I keep stopping working.*

MOE: *Are you finished keeping stopping working?*

JOE: *Yes, I like finishing keeping stopping working . . .*

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THE CAUSATIVE MECHANISM IN JINGHPAW

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The purpose of this chapter is to examine the causative mechanism in Jinghpaw, a Tibeto-Burman language spoken in Northern Burma.¹ It will be shown that there are a number of apparent anomalies in this mechanism in present-day Standard Jinghpaw that can be understood only in terms of historical processes. In addition, it will be claimed that the motivating factor behind at least one of these processes was a basic change in the cognitive-semantic structure of the native speaker.

1. THE CAUSATIVE MECHANISM IN MODERN JINGHPAW

The effects of causativization in Jinghpaw can be seen by referring to the following two simple sentences:

- (1) a. *Ma Gam tsap ai².*
stands
'Ma Gam stands up.'

¹ This language, to our knowledge, has not been studied by any modern linguist. It was not reduced to writing until the last decade of the nineteenth century. Although "language handbook" grammars were prepared for the British Colonial Government and foreign missionaries, none of the linguistically interesting features of this language were reported until 1971 (Maran), when tonal aspects of Jinghpaw phonology were considered.

² In this chapter, all examples will be given in the orthography proposed by Hanson (1913) for Jinghpaw. Tones, then, will not be shown, although they are very real in the language.