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Causative and Applicative in Tangwang

Redouane Djamouri

1. Introduction

This chapter examines a notable feature of the Tángwāng 唐汪 language: the existence of two verbal suffixes, one causative and one applicative, both derived, through reanalysis, from the verb ki 给 ('to give'), with which they remain homophonous. This phenomenon is typical of the Hezhou subvariety of Northwestern Mandarin¹, to which Tangwang belongs, but is also present in other Sinitic varieties of the Gansu-Qinghai area, and to a lesser extent, in Modern Mandarin.²

The Tangwang sentence in (1) illustrates both the causative suffix -ki and the applicative suffix -ki following the same verb in an identical context, leading to two entirely different interpretations: (1.i) and (1.ii).

(1) 那 祖比德哈 饭哈 做给寨
nə tsupitə-xa fɛ̃-xa tsu-ki-tsɛ
3SG Tsupitə-OBJ meal-OBJ make-CAUS/APPL-IPFV
i. 'He makes Tsupitə prepare the meal.' ii. 'He prepares the meal for Tsupitə.'

After providing a brief overview of the key grammatical features of the Tangwang language, this contribution will be devoted to the analysis of the differences between the causative -ki and the applicative -ki in Tangwang. This will be followed by an introduction to the lexical use of ki as a double-object verb meaning 'to give'. In the next section, we will examine the use of the causative suffix -ki, starting with its role in causativizing transitive and ditransitive verbs, copular predicates, intransitive verbs, and adjectives. The following section will concentrate on the applicative suffix -ki, beginning with its use in ditransitive verbs to promote a benefactive, and then addressing cases where -ki promotes other participants, aside from the beneficiary, to object status. This will be followed by an examination of -ki as an applicative marker with quasi-objects of duration or measure. After analyzing these various functions and their associated meaning effects, we will provide further details to show that the distinction between causative -ki and applicative -ki extends beyond mere semantic or pragmatic differences, contrary to the argument considering that they represent two related or derived uses of a single polyfunctional suffix. This latter analysis is contradicted by evidence presented in Section 6 (examples (48)-(52)), which demonstrates that causative -ki and applicative -ki occupy distinct positions within specific syntactic constructions. This distinction alone supports the conclusion put forth in this paper that they must be considered two homophonous suffixes. Lastly, we will explore the origins of these two suffixes in Tangwang, aiming

¹ The term Northwestern Mandarin (西北官话 Xīběi guānhuà) broadly encompasses two major subgroups: Central Plains Mandarin (中原官话 Zhōngyuán guānhuà) and Lan-Yin Mandarin (兰银官话 Lán-Yín guānhuà), with the Hezhou dialects (河州话 Hézhōu huà) classified under the former. These dialects mainly include varieties spoken in Linxia (临夏 Línxià) and the surrounding areas, such as Tangwang (唐汪 Tángwāng). This classification primarily relies on phonetic and phonological features rather than syntactic ones. For further details on phonological classification of the Hezhou dialects, refer to Luò (2004, 2008).

 $^{^2}$ Note that in Modern Mandarin a wider range of grammatical items have been reanalyzed from the verb 给 $ki/g\check{e}i$ ('to give'): a dative/benefactive preposition, an agentive marker, a preverbal causative marker, a preverbal passive marker, and a postverbal applicative marker. For an overview of these different homophonous ki cognate with 给 $g\check{e}i$ in Standard Modern Mandarin, see the entry on $g\check{e}i$ in Lǚ (1980), and in Xióng (2014:250-264).

to differentiate between their development through internal mechanisms within Sinitic languages and external influences, particularly from Altaic languages. These influences may have contributed to the typological alignment that led to the morphological treatment of causative -*ki* and applicative -*ki* as suffixes.

2. Overview and Key Observations on Tangwang

The Tangwang language is spoken by fewer than 20,000 people in the village of Tangwang and its immediate surrounding areas. The village is situated on the west bank of the Tao River in northeastern Dongxiang County, within the Línxià Hui Autonomous Prefecture of Gansu Province. The mountainous region to the west of Tangwang is predominantly inhabited by Mongolic-speaking members of the Dongxiang minority³. According to official statistics from 2011, the village has a population of 14,107, comprising three different ethnic groups: 44% Han, 17% Hui, and 39% Dongxiang. Both the Hui and Dongxiang communities are Muslims, and intermarriages between Hui men and Dongxiang women are nowadays quite common.

The Tangwang language, along with other related Sinitic languages in the Hézhōu 河州 area on both sides of the Gansu-Qinghai border, exhibits some salient typological features which contrast, in nature or frequency of usage, with the common characteristics of other Northern Mandarin varieties. Several specialists, comparing some of these features with similar features in Altaic languages, suggest that their emergence or spread within the Sinitic languages of that region is likely the result of language contact between Chinese and Altaic languages.⁵

It is noteworthy that many of these features can be compared to those identified by Hashimoto (1986) as aligning Northern Chinese dialects more closely with Altaic languages, while differentiating them from Southern dialects. Consistent with this view, the Tangwang language has often been cited as a model of a highly Altaicized variety of Chinese and even as a representative example of a mixed language in Northwestern China (Wurm and Li 1988, 1996; Chén 1985).

Among the features that stand out as most notable, either by their nature or high frequency, in contrast to other Northern Chinese varieties, the following have attracted the greatest attention and are particularly worth mentioning:

i. The presence of a small percentage of Arabic, Persian or Altaic loanwords (about 5% of the total) alongside a vast majority of words of Chinese origin (about 95%). Among the Chinese-origin words, only a small percentage can be attributed to the independent development of several specific forms within Tangwang (e.g., the third-person pronoun no which derives from the

⁴ This count remains problematic, particularly with regard to the Dongxiang and Hui, whose intermarriages often lead to arbitrary nationality registration in civil records. Moreover, it fails to accurately represent the distinct settlements of the Han and the Muslim communities across the Tangwang territory.

³ For Western studies on Dongxiang, see Field (1997), Kim (2003), or Lefort (2012).

⁵ Some scholars consider part of the region spanning Gansu and Qinghai, where populations speaking Mongolic, Turkic, and Tibetan languages are still present today, to constitute a linguistic area (Sprachbund). Sinitic languages like Tangwang, along with the dialects of Gāngōu 甘沟, Zhōutún 周屯, Línxià 临夏, or Xīníng 西宁, are also part of this linguistic area. For discussions on the specific features of this linguistic area, see Dwyer (1995), Janhunen (2004), Slater (2001), Peyraube (2015), Szeto (2022), among others.

⁶ We will not delve into the complexities of defining a mixed language here. While the concept may hold a certain heuristic value by accounting for various observable phenomena — such as formal similarities and semantic analogies — it lacks predictive power and, even more so, explanatory significance. For further commentary and applications of the notion of "mixed language" in relation to the linguistic situation in Northwest China, refer to Claire Saillard's article in this volume.

- distal demonstrative $n \ni \mathbb{R}$, or the adverbial relator $n \tilde{u}_{\mathfrak{S} \mathfrak{I}}$ 弄是 'so, therefore' which results from the lexicalization and fusion of the expression 那样是 $n \ni \tilde{u}_{\mathfrak{S} \mathfrak{I}}$ that.way.be 'be that way').
- ii. Reduction of tones in both number and amplitude. Notably, there are to date no decisive studies on the number or even the existence of contrastive tones in Tangwang. The difficulty lies in the inductive methodology used so far, which tends to draw a regular analogy with Standard Mandarin's tones, disregarding the morphological complexity of words in Tangwang and the accentuation phenomena they exhibit. (For different analyses of tones in Tangwang and Linxia, see Ran et al. (2022), Li Lan (2022))
- iii. While the use of the plural suffix -men 们 in Modern Standard Chinese is limited to human nouns and personal pronouns, the Tangwang language displays more extensive usage of its cognate plural suffix, -mu 位, which can be applied to all types of nouns and pronouns, as shown in the following examples. For a comprehensive analysis of the plural marker's usage in the Gansu-Qinghai region, including Tangwang, refer to Li Xuping et al.'s article in this volume.

大仏 zỗ-mu man-PL 'people' 羊仏 jã-mu sheep-PL 'sheep' 我仏 wʊ-mu 1SG-PL 'we' 这仏 tṣəmu this-PL 'these' 过程仏 kʷʊtṣʰð-mu process-PL 'processes' 一些仏 jicʲɛ-mu some-PL 'several'

- iv. The reduction of the inventory of nominal classifiers has led to the almost exclusive use of $k\varepsilon/k^{j}\varepsilon$ \uparrow as a general classifier for all types of nouns.⁷
- v. A common tendency to create plurimorphemic words through grammatical suffixation. The elicited sentence in (2) illustrates the extent of morphological complexity a noun or a verb can achieve through the sequential addition (agglutination) of various suffixes.
- vi. Generalization of the use of the verbal suffix *-tṣə* 着 to indicate the syntactic dependency of the verb in an adjunct clause.
- vii. The assignment of nominal objects and adjuncts to the preverbal position often involves suffixation with case markers indicating different semantic roles. This is illustrated in example (2), where the use of the objective case marker -xa and the comitative case marker -la should be noted.
- viii. The Object-Verb dominant surface order, alongside a Modifier-Modified order for noun phrases. In fact, both OV and VO orders are attested in Tangwang: In (3a), the object *mɔmɔ* ('bun') marked with the objective case suffix -xa (or its elided form -a/-ə), appears in the preverbal position, as a definite patient object. In contrast, in (3b), san kɛ mɔmɔ ('three buns'), as a quantified indefinite object can only appear in the postverbal position. Additionally, in (3c), mɔmɔ is incorporated directly into the verb and can be directly suffixed with the perfective aspectual suffix -lʲɔ. Whereas the postverbal position by itself is wholly responsible for the

 7 This trend is generally observable across all Northern Mandarin dialects, but it is particularly pronounced in Tangwang and its neighboring Sinitic dialects in the Gansu-Qinghai region. The observations on classifiers in the Bǎodìng 保定 dialect of Hebei province by Na and Allassonnière-Tang (2021) are worth consulting.

(accusative) case licensing (ex. (3b) and (3c)), such a licensing in the preverbal position is only possible by means of a case suffix -xa (or its elided forms -a/-a) (ex. (3a)).

- (3) a. 我 馍馍哈 那哈 吃完給哈哈寮。
 wɔ mɔmɔ-xa nə-xa tṣʰ-t-wɛ̃-ki-xa-xa-ljɔ
 1SG bun-OBJ 3SG-OBJ eat-TERM-CAUS-RES-POT-PRF
 'I was able to get him/her to finish eating the bun.'
 - b. 我 那哈 吃完給哈哈寮 三 个 馍馍 wo nə-xa tgʰl-wɛ̃-ki-xa-xa-ljo sɛ̃ kɛ mɔmɔ 1SG 3SG-OBJ eat-TERM-CAUS-RES-POT-PRF three CLF bread 'I was able to get him/her to finish eating three buns.'
 - c. 我 那哈 吃給馍馍寮 wɔ nə-xa tgʰ-ki-mɔmɔ-ljɔ isG 3SG-OBJ eat-CAUS-bun-PRF 'I made him eat buns.'

The three examples above illustrate that the positioning of the object in Tangwang—whether preor postverbal—is governed by specific syntactic and semantic constraints. This contrasts with Mongolic languages, which consistently maintain an OV order. Consequently, the coexistence of both OV and VO orders in Tangwang challenges the view that its OV order is a contact-induced phenomenon influenced by Altaic languages (see Djamouri 2013, 2015; Djamouri and Paul 2018). As illustrated in example (3c) compared to (3b), the verb-object incorporation in Tangwang, imposes constraints on the number of suffixes a verb can carry. In the verb-object incorporation context (3c), aside from the obligatory tense marker, only the causative suffix -ki is permitted. This limitation corroborates the distributional restrictions that generally govern suffix usage in incorporated structures.

3. Verb of Giving 给 ki

The verb $\text{$\frac{c}{2}$}$ ki in Tangwang, like its counterpart $\text{$\frac{c}{2}$}$ $g\check{e}i$ in Standard Modern Chinese, primarily functions as a basic verb of giving 8 . In terms of argument structure, it has to be analyzed as a ditransitive verb, involving three core participants: the giver (agent), the thing given (patient), and the receiver (recipient or goal).

⁸ Example (i) below illustrates one of the earliest instances in Classical Chinese, dating back to the 3rd century BC, of the use of $\stackrel{.}{L}$ $\stackrel{.}{g}$ $\stackrel{.}{e}$ (rendered as ji in our example to reflect its variant reading in archaic texts) as a ditransitive verb with the clear meaning of 'to give' or 'to provide'.

⁽i) 若 殘 豎子 之 類, 惡 給 若 金? cán shùzĭ zhī lèi, wū néng jĭ ruò jīn? ruò feeble DET give gold remnant species how can you

You, such feeble remnants, how can I give you money?' (Lǚ shì chūnqiū 呂氏春秋)

It should be noted, however, that 200 became the primary verb for expressing the act of giving — equivalent to 'give' in English or 'donner' in French — in vernacular Northern Chinese relatively late. It gradually replaced 100 1

The patient and recipient can be positioned freely between the verb and the subject, and both, as arguments, must be marked in this position with the objective case $-xa^9$. Sentences (4a) and (5a) display a patient-recipient order, while (4b) and (5b) exhibit a recipient-patient order, without any noticeable variation in the intended meaning. Note that, as shown in (4c), the indefinite quantified theme must occupy the postverbal position.

- (4) a. 我 书哈 那哈 给寮 www.gu-xa nə-xa ki-l^jo 1SG book-OBJ 3SG-OBJ give-PRF 'I gave him the book.'
 - b. 我 那哈 书哈 给寮
 ww nə-xa şu-xa ki-lɔ
 1SG 3SG-OBJ book-OBJ give-PRF
 'I gave him the book.'
 - 我 那哈 给寮 书 c. ki-l^jɔ şu wγ nə-xa ji kε give-PRF one CLF book 1SG 3SG-OBJ 'I gave him one book.'
- (5) a. 那 舒坦哈 各人哈呢 给寨
 nə futʰɛ̃-xa kʷɤzj̃--xa-nə ki-tşɛ
 3SG comfort-OBJ self-OBJ-REFL give-IPFV
 'He makes himself comfortable.' (Lit. 'he gives himself comfort')
 - b. 那 各人哈呢 舒坦哈 给寨
 nə kʷxz੍ð-xa-nə futʰɛ̃-xa ki-tṣɛ
 3SG self-OBJ-REFL comfort-OBJ give-IPFV

'He makes himself comfortable.' (Lit. 'he gives himself comfort')

Note also that either the patient or the recipient can be extracted into a topic position to the left of the subject (6a, b), but extracting both is considered less acceptable (6c):

(6) a. 书哈 我 那哈 给寮 gu-xa ww nə-xa ki-ljɔ book-OBJ 1SG 3SG-OBJ give-PRF "The book, I gave it to him."

b. 那哈 我 书哈 给寮 nə-xa ww şu-xa ki-l^jɔ

0.4

⁹ Several hypotheses regarding the origin of the object marker -*xa* in Northwestern Chinese dialects have been proposed (see Djamouri 2015 for details). However, based on our data on -*xa* in Tangwang, it is difficult to favor any particular hypothesis. It should be noted that most, if not all, of these hypotheses remain speculative, as no convincing structural correspondences or changes have yet been identified to clarify the origin and development of this marker.

3SG-OBJ 1SG book-OBJ give-PRF 'To him, I gave the book.'

c. ? 那哈 书哈 我 给寮
nə-xa şu-xa ww ki-ljɔ
3SG-OBJ book-OBJ 1SG give-PRF
'To him, the book, I gave.'

4. The Causative Suffix -ki

In Tangwang, the canonical causative form of a verb is created by adding the causative suffix -ki, which functions as a morphemic component of the verbal predicate. This regular and productive morphological process, applicable to almost any verb in Tangwang, is also attested in several neighboring Sinitic languages including Gāngōu 甘沟, Zhōutún 周屯, Línxià 临夏, and Xīníng 西宁, among others.

The pair of examples below illustrates the causativization of four verbs with different semantic properties in Tangwang using the suffix -ki. In both cases, wr 'I' occupies the structural position of the subject but with two different semantic roles: in (7a), it corresponds to the agent performing the action, while in (7b), it acts as the causer, prompting someone else to carry out the action. In both instances, the subject wr 'I' appears in the nominative case, which is characterized by the absence of an explicit morphological marking.

```
(7) a. 我 {吃/看/走/睡}寮
ww {tṣʰŋ/kʰɛ̃/tsu/ṣʷi}-lʲɔ
isG {eat/see/go/sleep}-PRF
'I ate/saw/went/slept.'
```

```
b. 我 {吃给/看给/走给/睡给}寮
ww {tṣʰʔ-ki/kʰɛ̃-ki/tsu-ki/ṣʷi-ki}-lʲɔ
isG {eat-CAUS/see-CAUS/go-CAUS/sleep}-CAUS-PRF
(i) 'I made (someone) eat/see/leave/sleep.'
(ii) 'I fed/showed/chased/let sleep (someone)')
```

In Tangwang, there is no syntactically established analytic structure that uses specific control verbs to express causation. Unlike Modern Mandarin, which employs complex predicates with causative verbs such as shǐ (使 'dispatch'), ràng (让 'let'), and jiào (叫 'command') or English with verbs like make, cause, let or have, and French with compound predicates using the verb faire ('make'), Tangwang does not have a comparable set of 'grammaticalized' verbs specifically designated for analytic causative structures. Translations (7b.i) and (7b.ii) illustrate how English can express

¹⁰ Here is the example given by Li and Thompson (1981:602) to illustrate a causative sentence which "results from the juxtaposition of a verb meaning 'cause' and a clausal direct object". For a discussion of such a usage in Mandarin Chinese see Lemaréchal and Xiao (2018).

⁽i) zhèi-jiàn shìqíng shǐ/ràng/jiào wǒ hěn nánguò this-CLF matter cause 1SG very sad This matter makes me very sad.

causation either through a periphrastic structure involving a control verb, such as "make someone eat" or directly through intrinsic causative verbs, like "feed someone".

4.1. Causativization of Transitive Verbs

Three distinct cases can be identified here, based on the semantics of the verbs: 1) monotransitive verbs that are not inherently causative, where causativization by -ki increases their valency by introducing a third participant as causee, 2) monotransitive verbs that are inherently causative, where causativization by -ki does not increase their valency but instead reinforces agentivity, and 3) ditransitive verbs, where causativization cannot be achieved using the suffix -ki and instead requires a complex periphrastic construction.

4.1.1. Non-causative Transitive Verbs

As illustrated in (8), transforming a simple declarative sentence (8a) with the transitive verb $t_{\mathcal{E}}^{h} l_{l}$ to eat' involving two participants — the agent wr 'I' and the patient $f\tilde{\varepsilon}$ 'meal' — into a causative sentence (8b) results in a new structure with three participants: the causer (wr 'I') initiating the action of eating, the causee (nr 'he') being compelled to perform the action, and the patient ($f\tilde{\varepsilon}$ 'meal'). In the causative sentence, the causee (nr 'he') is treated as an additional object and, therefore, bears the same morphological marker as the patient ($f\tilde{\varepsilon}$ 'meal'), namely the objective suffix -xa. Furthermore, the verb ($t_{\mathcal{E}}^{h}l_{\mathcal{E}}$ 'to eat') is morphologically marked by the addition of the causative suffix -ki, which is mandatory. As we can see by comparing (8b-c) with (4a-b), the order of the causee and the patient in the preverbal position is as flexible as that of the patient and the recipient in a ditransitive double-object sentence:

```
c. 我 饭哈 那哈 吃*(给)寮
ww fē-xa nə-xa tşʰʔ-*(ki)-ljɔ
1SG meal-OBJ 3SG-OBJ eat-*(CAUS)-PRF
'I made him eat the meal.'
```

In an active sentence like (9a), where both core arguments (agent and patient) of the transitive verb are human, adding the causative suffix -ki to the verb, as in (9b), can lead to two different interpretations if no further context is provided. These interpretations reflect two distinct syntactic structures, where the object (na-xa) thim' takes on two different roles:

As translated in (9b.i), sentence (9b) can be interpreted as a simple causative structure with three arguments: *wr* 'I' as the causer, *na-xa* 'him' as the causee, and the patient, though not explicitly stated, can be inferred from the context.

As translated in (9b.ii), sentence (9b) can also be analyzed as a factitive (double-causative) structure. In this structure, there are three arguments: wr '1sG', the causer who initiates the action; na-xa 'him', the patient undergoing the action of beating; and the causee — the agent responsible for executing the action of beating — which, in this case, is an implicit argument not overtly mentioned in the sentence:

(9) a. 我 那哈 打寨
ww nə-xa ta-tşɛ
1SG 3SG-OBJ beat-IPFV
'I beat him.'

b.	我	那哈	打给寨
	wγ	nə-xa	ta-ki-tşε
	1SG	3SG-OBJ	beat-CAUS-IPFV

i. 'I let him beat.' ('I make him beat someone else')

ii. 'I let someone beat him.' ('I make him be beaten by someone.')

In a factitive sentence, the causee — who also represents the agent of the action — can be explicitly mentioned. This is illustrated in example (10), where both the causee-agent ($z\hat{\rho}te^{j}a$ 'someone', who performs the action of beating) and the patient (Metə, who undergoes the action of beating) are treated as object arguments and are marked with the objective suffix -xa. Crucially, the causative suffix -ki on the verb must not be omitted.

(10) 我 麦德哈 人家哈 打给哈哈寨
www metə-xa zə̂tcia-xa" ta-ki-xa-xa-tşɛ
1SG Metə-OBJ someone-OBJ beat-CAUS-RES-POT-IPFV
'I can let somebody beat Metə.'

Unlike in simple ditransitive sentences, where the order of the two objects (patient and recipient) in the preverbal position appears flexible (e.g. (4a, b) and (5a, b)), in factitive sentences, the order of the two arguments (both the patient and the causee-agent, marked with the objective suffix -xa/-a) in the preverbal position is fixed. As shown in the comparison between (10) and (11), the causee-agent consistently occupies the verb-adjacent position, while the patient, when explicitly mentioned, must precede it.

8

[&]quot;Note that in this context, \bigwedge \hat{z} \hat{z} \hat{z} \hat{t} \hat{c} \hat{t} \hat{c} \hat

(11) 我 人家哈 麦德啊¹² 打给哈哈寨
ww zậtc^ja-xa mɛtə-ə ta-ki-xa-xa-tşɛ
1SG someone-OBJ Mɛtə-OBJ beat-CAUS-RES-POT-IPFV
'I can let Mɛtə beat the guy.'

The distinction between the patient and the causee-agent is also evident in terms of topicalization. The patient can be topicalized to the sentence initial position (12a), whereas the same operation appears unacceptable for the causee-agent (12b):

(12) a. 人家哈 我 麦德啊 打给哈哈寨
zậtợa-xa wừ mɛtə-ə ta-ki-xa-xa-tṣɛ
someone-OBJ 1SG Mɛtə-OBJ beat-CAUS-RES-POT-IPFV
'The guy, I can let Mɛtə beat him.'

b. * 麦德啊 我 人家哈 打给哈哈寨
mɛtə-ə wx zə̂tcə́a-xa ta-ki-xa-xa-tşɛ
Mɛtə-OBJ 1SG someone-OBJ beat-CAUS-RES-POT-IPFV
Intended meaning: 'As for Mɛtə, I can let (him) beat the guy.'

4.1.2. Causative Transitive Verbs

There are cases where the use of the causative suffix -ki on a verb does not, either explicitly or implicitly, introduce a causee as a new participant in the sentence. This is particularly evident for intrinsically causative verbs, where the addition of -ki is optional. This is illustrated in examples (13) and (14), where the lexical verbs $ts^h\tilde{u}$ 'to store' (ex. (13a)), tci 'to forbid' (ex. (13b)) and $ts\varepsilon$ 'to kill' (ex. (14a)) already subcategorize a causer (represented in all three examples by the subject $Xas\tilde{\varepsilon}$ who also fulfills the agent role). ¹³ In these cases, the (over)-causativization with -ki reflects a subjective judgment by the speaker, enhancing the agentive role of the subject and presenting this participant as deliberately assuming the causer role. From a cross-linguistic perspective, this has been noted as a common function of causative morphemes that do not increase the verb's valency (see Kittilä 2009).

(13) a. 哈三 吃底仫哈呢 存哈(给)寮
xasɛ̃ tṣʰʔ-tci-mu-xa-nə tsʰũ-xa-(ki)-lʲɔ
Xasɛ̃ eat-NMLZ-PL-OBJ-POSS store-RES-(CAUS)-PRF

12

¹² Some Tangwang speakers consider the use of the full form of the objective suffix (-xa) less acceptable (or even impossible) than its reduced form (-a) in this context. Such a distinction would make these two forms, for these speakers, not merely simple variants but distinctive morphological markers. This remains a point to explore further in the context of detailed research on case marking in Tangwang.

¹³ Not all transitive verbs that imply an agent are intrinsically causative. For instance, verbs like $t_s^h l_l$ 'to eat' (ex. (3)) or ta 'to beat' (ex. (9)) do subcategorize an agent, but this agent cannot be interpreted as a causer (i.e., '*I cause something to be eaten' or '*I cause someone to be beaten'). Adding the causative suffix -ki to such verbs results in their causativization by introducing an additional participant as the causee. In contrast, verbs like $ts^h\tilde{a}$ 'to store' or $ts\epsilon$ 'to kill' inherently feature an agent that functions as a causer: 'I cause something to become stored' and 'I cause someone to die'. For these verbs, the causative suffix -ki is optional and does not entail the introduction of an additional participant as the causee.

'Xasɛ̃ stored his food supplies.' ('Xasɛ̃ caused his supplies to be stored.')

哈三 那底 尕娃仫哈呢 沙沟里 去着 忌(给)寨 b. tchi-tsə $xas\tilde{\epsilon}$ nə-tci kawa-mu-xa-nə saku-li tci-ki-tsε child-PL-OBJ-POSS street-LOC go-CVB14 forbid-CAUS-IPFV Xasε̃ 3SG-GEN 'Xase forbids his own children to go into the street.'

In example (13a), the subject $Xas\tilde{\epsilon}$ is identified as the causer who initiates the action of 'storing' and simultaneously functions as the agent who voluntarily performs the action. Meanwhile, the inanimate noun $t \xi^h \eta t cimux a.na$ 'his food supplies' serves as the theme, undergoing the action, while also representing a causee, as it is the entity directly affected by the causation.

Similarly, in example (13b), $Xas\tilde{\epsilon}$ is identified both as the causer and the agent who voluntarily performs the action expressed by the verb tci 'forbid'. This verb subcategorizes both a patient-causee (natci kawamuxa.na 'his own.chidren') and a complement clause (sakuli tchitsa 'to go into the street').

As illustrated by example (14a), a verb such as $ts\varepsilon$ 'to kill', which is intrinsically causative (meaning 'cause to die'), can be used in a simple transitive construction with the optional addition of the causative suffix -ki. This does not introduce an external causee but rather serves to emphasize the agentivity of the agent $Xas\widetilde{\varepsilon}$. However, as shown in example (14b), it remains possible to introduce an external causee with a causative verb like $ts\varepsilon$ 'to kill'. This, however, can only be achieved through a complex periphrastic construction. Such a structure typically includes an adjunct clause featuring the verb \mathfrak{Sl} 'dispatch' or the verb \mathfrak{S}^w 'to tell', suffixed by the verbal adjunct marker - $t\mathfrak{S}^a$ and preceded by the object $Xas\widetilde{\varepsilon}$, which is marked with the objective case suffix -xa.

- (14) a. 昨个 哈三 羊哈 宰哈(给)寮 tswoke xasɛ̃ jã-xa tsɛ-xa(-ki)-lʲo yesterday Xasɛ̃ sheep-OBJ kill-RES(-CAUS)-PRF 'Yesterday, Xasɛ̃ killed the sheep.'
 - b. 昨个 羊哈 宰哈给寮 哈三 麦德哈 {使着 /说着} tswakε xasε̃ metə-xa {sŋ-tsə /s^wɔ-tsə} jã-xa tse-xa-ki-l^jɔ yesterday Xase Meta-obj {dispatch-CVB/tell-CVB} sheep-OBJ kill-RES-CAUS-PRF 'Yesterday, Xase had Metə kill the sheep.'

4.1.3. Causativization of Ditransitive Verbs

As illustrated in the following example, a ditransitive verb like ki 'to give' subcategorizes three arguments: the agent $ts^h\tilde{u}ts\tilde{a}$ 'mayor', which functions as the subject of the sentence in the unmarked nominative case; the theme $s\tilde{t}$ 'letter'; and the recipient Kasi, both of which are treated as objects and marked with the objective case marker -xa:

[&]quot;4 The marker 着 -tṣə in Tangwang, glossed here as CVB (Converbial marker), is suffixed to a verb to indicate the dependent nature of the clause (either subordinate or adjunct) in contrast to the main clause verb, which takes specific aspectual suffixes such as -liɔ (PRF), -tṣɛ (IPFV), or -li (PROSP)

(15) 昨个 村长 信哈 尕西哈 给寮 tswoke tshūtṣã cĩ-xa kaci-xa ki-ljo yesterday mayor letter-OBJ Kaci-OBJ give-PRF 'Yesterday, the village chief gave the letter to Kaci.'

The addition of a suffix -ki, often observed after ditransitive verbs of giving such as ki ('to give'), is possible (e.g., (16a)) but should not be confused with the causative suffix -ki discussed in this section. It must be interpreted as the homophonous applicative suffix -ki, which is the subject of a separate discussion in the next section. While the applicative suffix -ki here allows the recipient to be presented not merely as a simple object but as an applied object, the causative suffix -ki, which would structurally present $ts^h\tilde{u}ts\tilde{a}$ 'village chief' as the causer and Kaci not as the recipient but as the causee, is not possible in this context.

The causativization of such a sentence by simply adding the causative suffix -ki to the verb is problematic (e.g., (16b)). This transformation would introduce an additional participant (the causee), thereby increasing the verb's valency to four participants, three of these participants would need to be marked by the same objective case suffix -xa, leading to sentence saturation and greater ambiguity in distinguishing the respective roles, especially between the causee and the recipient.

- (16) a. 昨个 村长 信哈 尕西哈 给给寮 ts^wɔkɛ ts^hũtṣã cĩ-xa kaci-xa ki-ki-l^jɔ yesterday mayor letter-OBJ Kaci-OBJ give-APPL/*CAUS-PRF
 - (i) 'Yesterday, the village chief gave the letter to Kaçi.' (applicative)
 - (ii) *Yesterday, the village chief made Kaçi give the letter. (causative)
 - b. * 昨个 村长 信哈 尕西哈 (人家哈) 给给寮 tswakε tshũtsã çĩ-xa kaçi-xa (zə̃tc^ja-xa) ki-ki-l^jɔ vesterday mavor letter-OBI Kaçi-OBI (3SG-OBJ) give-CAUS-PRF Intended meaning: 'Yesterday, the village chief made Kaçi give the letter to someone.'

Introducing an additional causee in a causative sentence with a ditransitive verb like ki 'give' can only be accomplished through a complex periphrastic structure. This structure, as illustrated in (17), typically includes an adjunct clause featuring the causative verb \mathfrak{Fl} 'dispatch', which is suffixed by the verbal adjunct marker $-t\mathfrak{Fd}$ and preceded by its object ' $Ka\mathfrak{E}i$ ', semantically corresponding to the causee within the sentence. The theme $\mathfrak{E}i$ 'letter' and the recipient $z\tilde{\mathfrak{F}}te^{j}a$ 'someone' (which can be omitted), are treated as the object and applied-object of the verb ki 'to give', respectively. It is important to note that the causative meaning is conveyed by the verb \mathfrak{Fl} 'dispatch'. This also demonstrates, if needed, that the applicative suffix -ki on the main verb should not be confused with the causative -ki:

(17) 昨个 村长 尕西哈 使着 信哈 人家哈 给给寮 tswakε tshūtsã kaçi-xa çĩ-xa zə̃tc^ja-xa ki-ki-l^jə sy-tsə Kaçi-OBJ dispatch-CVB letter-OBJ mayor 3SG-OBJ give-APPL-PRF 'Yesterday, the village chief had Kaçi give the letter (to someone).' (Lit. 'Yesterday, the village chief, by dispatching Kaçi, gave (someone) the letter.'

Similarly, a more complex periphrastic structure with dual clausal adjuncts can be constructed to clarify the distribution of semantic roles among the participants (e.g., (18)). The main predicate 'give to Kaci' is preceded by an adjunct clause 'transmitting the letter' whose verb is further modified by another adjunct clause, 'dispatching me'. In this structure, $ts^h\tilde{u}ts\tilde{a}$ 'village-chief' acts as the agent-causer and serves as subject of all three verbs; ws 'I' functions as the theme of the causative verb st 'dispatch'; st 'letter' serves as the theme of the transfer verb $ts^hw\tilde{s}$ 'transmit'; and tast corresponds to the applied recipient of the verb ts 'give', marked with the applicative -ki.

(18) 昨个 村长 我哈 使着 给给寮 信哈 传着 尕西哈 tshwe-tsə ts^w2kε tshũtsã wy-xa cĩ-xa kaci-xa ki-ki-l^jɔ sŋ-tsə yesterday mayor 1SG-OBJ dispatch-CVB letter-OBJ transmit-CVB Kaçi-OBJ give-APPL-PRF 'Yesterday, the village chief had me deliver the letter to Kaçi.' (Lit. 'Yesterday, the village chief, dispatching me transmitting the letter, gave it to Kaçi.)

4.2. Causativization of Nominal Predicates

(19) 尕西 大夫(*哈) 当寨/晒 kaci tɛfu(*-xa) tã-tṣɛ/ ṣɪ¹⁵ Kaci doctor(*-OBJ) be-IMPF/be.ASS 'Kaci is a doctor.'

The causativization of a nominal sentence, as seen for example in (19), involves introducing an additional argument (the causer) and suffixing the causative marker -ki to the copular verb. While this causativization is *possible* with the copular verb $t\tilde{a}$, transforming it into a three-place causative-transitive verb, the basic copula $\mathfrak{s} I$ is not allowed in such a transformation. This is illustrated in (21a), where the subject argument Kaci represents the causer who initiates the action of making Tsupita a doctor. This transformation also implies a causee (Tsupita) and a theme (tefu 'doctor'), both of which are morphologically treated as arguments necessarily marked by the objective case marker -xa. Note that in the absence of an explicit subject (representing the causer), an indefinite null subject as causer can be pragmatically inferred, as illustrated in example (20b). This structure cannot be

¹⁵ Note that 晒 g_I is probably a contraction or fusion of the copula 是 g_I and an indeterminate sentence-final modal particle with an assertive value (roughly equivalent to Modern Mandarin 是啊 shi a or 是呀 shi ya).

¹⁶ Note that in French, copular verbs like *être* ('to be') and *devenir* ('to become') cannot be causativized using the control verb *faire* (e.g. *faire être/devenir docteur is ungrammatical). In contrast, English allows the causativization of copular verbs such as 'to be' and 'to become' (e.g., 'make John be quiet' or 'make John become a doctor').

¹⁷ The phenomenon of marking both the causee and the theme/patient with the same case—most often the accusative—is widely observed across various languages. This is particularly prominent in Modern Mongolian and Turkish, where, in a simple causative sentence such as 'I made John read the book', both 'John' and 'book' are marked with the accusative case, alongside causative marking on the verb.

analyzed as a passive, since both the causee (Tsupita) and the theme (tefu 'doctor') are morphologically marked as objects by -xa.

- (20) a. 尕西 祖比德哈 大夫哈 (*是/)当*(给)寨
 kaci tsupitə-xa tɛfu-xa (*ṣɪ/)tã-*(ki)-tṣɛ
 Kaci Tsupitə-OBJ doctor-OBJ (be/)be-*(CAUS)-IPFV
 'Kaci makes Tsupitə (his) doctor.' Or 'Kaci (mis)takes Tsupitə for a doctor)'
 - b. 祖比德哈 大夫哈 当*(给)寨 tsupitə-xa tɛfu-xa tã-*(ki)-tṣɛ Tsupitə-OBJ doctor-OBJ be-*(CAUS)-IPFV 'One makes Tsupitə a doctor.'
 - 4.3. Causativization of Intransitive Verbs:

As examples (21a-c) below illustrate, the causative suffix -*ki* can transform an intransitive unergative verb such as *tsu* 'leave' into a causative verb *tsu*-*ki* 'make leave; send'.

- (21) a. 尕西 走过寮 kaçi tsu-k^wɔ-l^jɔ Kaçi leave-RES-PRF 'Kaçi left.'
 - b. 尕西*(哈) 走过*(给)寮 kaçi*(-xa) tsu-kwɔ-*(ki)-lʲɔ Kaçi*(-OBJ) leave-RES-CAUS-PRF 'One let/made Kaçi leave.
 - c. 人家 尕西哈 走过*(给)寮 zə̃tçia kaci-xa tsu-kwɔ-*(ki)-lʲɔ someone Kaci*(-OBJ) leave-RES-CAUS-PRF 'Someone let/made Kaci leave.

The sentence in (21b) cannot be analyzed as a passive or middle construction equivalent to the English phrase 'Kaci was taken/sent away'. As shown in (21c), a causer ($z\tilde{a}tc^{j}a$ 'someone') can be explicitly stated as the subject in sentence-initial position. More importantly, in a true passive or middle construction, Kaci would function as the nominative subject and therefore remain morphologically unmarked. However, in this instance, it is suffixed with the objective casemarker -xa. In this context, -ki fully retains its morphological role as a causative suffix, and it cannot be concluded that it has been reanalyzed as a passive marker. Here are two additional examples of the causativization of an intransitive verb. In (22), the causative form tc^hi -ki (go-CAUS), when preceded by the imperfective negation mz, can be interpreted as either (non-)permissive ('did not allow them to go') or prohibitive ('forbade them to go').

哈三 那底 尕娃仫哈呢 沙沟里 没 去给 (22)tchi-ki xasε̃ nə-tci kawa-mu-xa-nə saku-li mэ Xasε̃ 3SG-GEN child-PL-OBJ-POSS street-LOC NEG.PRF go-CAUS 'Xasɛ̃ did not let his children go into the street.'

The frequent apparition of -ki in sentence-final position within an imperative context is also illustrated in (23), where the prohibitive negation p_{2} ('must not') appears before the causative verb $l\varepsilon$ -ki ('let come'). Some have proposed that -ki appearing at the end of a sentence might be a grammatical marker of the imperative'. However, this interpretation does not stand up to scrutiny, as these constructions are invariably causative and require the presence of an external causee. The imperative 'come!' is expressed simply with the bare verb $l\varepsilon$! ('come!') and cannot be conveyed by $l\varepsilon$ -ki, which can only mean 'let someone come!').

(23) 你 那仫哈 明早 一挂 嫑 来给。
ni nə-mə-xa mı̃tsɔ jikwa pɔ lε-ki
2SG 3-PL-ACC tomorrow all NEG come-CAUS
'Forbid all of them from coming tomorrow!'

Example (24) illustrates a specific case in which the causativization of the intransitive verb $l\varepsilon$ 'come' by -ki does not involve the addition of an external participant as a causee. Instead, the subject-agent Tsupita fulfills the dual roles of causer and causee, remaining in the unmarked nominative form. This construction conveys a specific subjective perspective on the event, a modality further emphasized by the sentence-final particle li, which reinforces the overall assertion. Notably, the causative -ki here demonstrates the same "agentivizing" function previously observed with certain transitive verbs, where it does not serve to increase valency, as discussed in §4.1.2. The resulting meaning can be paraphrased in various ways; such as: 'Tsupita has indeed made an appearance', 'Tsupita made herself visible', 'Tsupita made sure to be here' or 'Tsupita did indeed show up'.

(24) 祖比德 来过给寨 哩 tsupitə lɛ-kws-ki-tṣɛ li Tsupitə come-RES-CAUS-IPFV SFP 'Tsupitə showed up.'

The existential verb ju ('exist'), commonly used to express a relation of possession, can also be causativized resulting in a transfer verb ('exist/have' > 'provide'). As shown in the following examples, this causativization leads to a reallocation of roles between the two participants, 'each family' and 'sheep'. In (25a), these roles are locative and agent, respectively, while in (25b), they shift to recipient and theme.

(25) a. 兼个 家里 三 个 羊(*哈) 有 咧 tcjēke tcjāli sẽ ke jã-(*xa) ju li

¹⁸ The examples of the postverbal $\stackrel{\ {}_{\square}}{\not{\subseteq}}$ ($ki/g\check{e}i$), misinterpreted as a sentence-final injunctive modality in the Wulumqi dialect by Zhou Lei (2002, examples (78)-(80)), in fact represent valuable instances of applicative suffixation, implying an applicate recipient. These examples deserve closer examination for their linguistic significance within the scope of our current understanding.

each family three CLF sheep-OBJ have SFP 'In each family, there are three sheep.' (> 'each family has three sheep.')

```
b. 兼个 家里 三 个 羊*(哈) 有给寮
tcjēke tcjali sē ke jã-(*xa) ju-ki-ljo
each family three CLF sheep-(*OBJ) have-CAUS-PRF
'Each family was granted three sheep.' (Lit. 'One granted each family three sheep.')
```

4.4. Optionality vs. Obligatoriness of the Causative Suffix -ki

A similar observation can be made about unaccusative verbs, such as $k^h\varepsilon$ 'open' in example (26). In this case, the subject $t_{\xi}^{hw}\tilde{a}tsi$ 'window' represents the theme (the entity experiencing the action of opening) but cannot be assigned the objective case marker -xa. The ungrammaticality of -xa is a defining characteristic of unaccusative verbs in Tangwang.

$$(26)$$
 窗子(*哈) 开 寮 $t\xi^h alpha tsn(*-xa)$ $k^h \epsilon$ $l^j b$ window(*-OBJ) open SFP "The window opened."

In Tangwang, $k^h \varepsilon$ 'open' is, like the English verb 'open', an ambitransitive (or labile) verb that demonstrates flexibility in its argument structure, allowing it to function as both a transitive verb and an unaccusative verb. ¹⁹ Example (27a) illustrates the transitive $k^h \varepsilon$ 'open', where $t \varepsilon^{hw} \tilde{a} t s n$ 'window' functions as the object and therefore, must be marked with the objective marker -xa. In this active voice context, the agent subject (in this case, na 'he') may be omitted. When the agent is unknown or unspecified, this omission results in an impersonal interpretation while maintaining the sentence's active structure. ²⁰

b. {那/∅} 窗子*(哈) 开给寮
{nə/∅} tṣʰwãtsn(*-xa) kʰε-ki-lʲɔ
{3SG/∅} window(*-OBJ) open-CAUS-PRF
'He/One opened the window.' ('One made the window open.')

If it were possib

[&]quot;If it were possible to causativize this verb using the suffix -ki, it would lead to a passive interpretation in which -ki could potentially be analyzed as a passive marker: *窗子开给寮 tṣʰwātsī kʰe-ki lʲɔ [window open-CAUS SFP] Intended meaning: 'The window was made to open by someone'. For comparison, consider the presence of gĕi in Beijing Mandarin (somewhat analogous to -ki in Tangwang) as a pre-verbal passive marker, likely evolving from its original causative function: 窗户给开了 chuānghù gĕi-kāi le [window GEI-open-PRF] 'The window has been opened'. For the grammaticalization of the causee marker gĕi into a passive preposition in the Beijing dialect, similar to bèi 被 in Standard Modern Chinese, see Kimura (2005), Li and Chen (2005) and Xiong (2014:250-264).

The use of an impersonal pronoun is also possible in Tangwang, notably by employing a third-person proform such as 人家 zɔ̃teja 'someone' or its plural form 人家也 zɔ̃tejamu 'some people'. However, the usage of this proform implies a restriction on the extension expressed by the subject argument ('someone'/'some people among an indefinite number of persons').

In (27b), causativization with -ki does not introduce a significant interpretative difference compared to (27a). Unlike the examples provided in section 3.1. above, there is no increase in the valency of the verb $k^h \varepsilon$ 'open' by introducing an additional participant expected to perform the action. However, while both participants in the process retain their syntactic functions, their semantic roles are redefined to align with the new argument structure required by the causativization of the verb: the subject (na 'he') is assigned the role of causer, and the object ($ts^{hw} \tilde{a}tsn$ 'window') that of causee. This new role assignment emphasizes the agent's control and intentionality in the effective execution of the action; a possible paraphrastic meta-gloss of (27b) would be 'He intentionally performed the action that resulted in the window being effectively opened'.

The following example further illustrates how the causative suffix -ki can be applied to transitive verbs with non-agentive subject without introducing an external causee. In (28a), the suffix -ki on the verb $w\tilde{a}$ 'forget' or $te^{i}u$ 'lose' is optional; but its inclusion subtly shifts the sentence meaning. It frames Xas $\tilde{\epsilon}$ as both the causer and the agent, with $ts^h\eta teimuxana$ 'his food supplies' functioning as both the theme and the causee. This implies that $Xas\tilde{\epsilon}$ is seen as exercising some degree of control over his own forgetting or losing of the food supplies. In contrast, in (28b) and (28c), Tangwang speakers find the use of -ki infelicitous. This is likely because, in these two examples, the matters that have been forgotten ($amtsax^wita$ 'how to reply' and ϵisa 'everything') cannot be understood as events or entities over which the subject can exert direct causal influence.

```
(28) a. 哈三 吃底仫哈呢 \{ \bar{\Sigma}/ \bar{\Xi} \} \bar{U}(\hat{\Xi}) 寮 xas\tilde{\epsilon} t \xi^h \chi^- t ci-mu-xa-nə \{ w \tilde{a}/t c l u \} - k w \chi^- (ki) - l l z \} Xas\tilde{\epsilon} eat-NMLZ-PL-OBJ-POSS \{ forget/lose \} - RES-(CAUS) - PRF \} 'Xas\tilde{\epsilon} has forgotten/lost his food supplies.'
```

```
b. 哈三 啊么着 回答 是 忘哈(*给)寮
xasɛ̃ aṃtṣə xwita ṣī wã-xa(-*ki)-ljɔ
Xasɛ̃ how respond TOP forget-RES(*-CAUS)-PERF
'Xasɛ̃ has forgotten how to respond.'
```

```
c. 那 老汉家 新萨哈 忘过(*给)寮
nə lɔxɛ̃tcʲa c̃isa-xa wã-kʷɤ(-*ki)-lʲɔ
DEM old.man everything-OBJ forget-RES(*-CAUS)-PRF
'The old man has forgotten everything'.
```

Note that some intransitive verbs can be either unergative or unaccusative, depending on whether the subject is an animate, volitional agent (as in (30a)) or an inanimate, non-agentive entity (as in (29b)). Example (29a) illustrates the unergative use of the verb $k^h a$ 'lean', where the subject is a human agent voluntarily performing the action of leaning against the wall. In contrast, example (29b) demonstrates the unaccusative use of the same verb, where the subject is an inanimate, non-agentive entity: the pole being in the state of leaning against the wall. Therefore, a stative-descriptive interpretation is required, and the perfective aspect, which favors a dynamic active reading, is impossible, only the imperfective $t \not s \varepsilon$ being acceptable.

b. 棍子 墙上 靠寨/*寮
kũtsn tṣʰiṣ̃-ṣã kʰɔ-tṣɛ/*liɔ
pole wall-LOC lean-IPFV/PRF
'The pole is/was leaning against the wall.'

```
c. (那) 棍子*(哈) 墙上 靠*(给)寨/寮
(nə) kũtsn(*-xa) tṣʰjã-ṣã kʰɔ-ki-tṣɛ/lʲɔ
(3SG) pole(*-OBJ) wall-LOC lean-CAUS-IPFV/PRF
'He leans/leant the pole against the wall.'
```

It is also important to note that, unlike the ambitransitive verb $k^h\varepsilon$ 'open', (e.g. (26) and (27a)), the verb $k^h \sigma$ 'lean' can only be used intransitively. However, its causativization is possible through morphological derivation with the causative suffix -ki (e.g. (29c)). In this case, the sentence implies an animate agent ($n\sigma$ 'he') (who may remain implicit); the object $k\tilde{u}tsr$ ('pole'), interpreted as both the theme and causee, must be marked with the objective case marker -xa.

A similar observation can be made about the verb $n^j \varepsilon$ 'to extinguish', which exhibits slightly different properties from $k^h v$ 'to lean'. In example (30a), $n^j \varepsilon$ 'to extinguish' functions as an unergative verb, with the subject $x^w v$ 'fire' presented as an agent acting in its own 'extinguishing' process, without the involvement of an external causer.

In contrast, in (30b), the verb $n^j \varepsilon$ 'to extinguish' is transitivized with the causative suffix -ki. This transformation allows an external causer to function as the subject, while $x^w \varepsilon$ 'fire' assumes the role of the patient-causee, which is obligatorily marked by the objective suffix -xa (appearing here in its reduced form -a).

Note that in Tangwang, the verb $n^j \varepsilon$, unlike the English verb 'extinguish', cannot be used transitively on its own; its transitivization requires the affixation of -ki. Consequently, the sentence in (30a) can not be analyzed as either a middle construction or a passive construction (e.g. 'the fire has been extinguished' in English). Instead, it is best understood as an active sentence in which the subject $x^w x$ 'fire' is not only the undergoer of the action but also primarily its performer, with $n^j \varepsilon$ 'extinguish' functioning as an unergative predicate. This analysis is further reinforced by the presence of the

reflexive pronoun k^watsi 'itself', which functions adverbially in this context, conveying a meaning roughly equivalent to 'the fire could not have extinguished itself', emphasizing the active role of the subject.

4.5. Causativization of Adjectives

In Tangwang, adjectives form a distinct grammatical class, separate from strictly intransitive verbs, and are subject to specific distributional constraints. They can function as predicates in descriptive sentences only when suffixed with 底很 -teix δ (< 'very') (e.g. (31a)) or when marked by a morphophonological assertive feature, which involves lengthening (or reduplication) of the final vowel accompanied by a rising intonation \nearrow (e.g. (31b)):

```
(31) a. 我 {服坦 /高兴 /红} 底很www {futhē /kɔcĩ /xũ} -tcixã isG {comfortable/happy/red} -tcixã 'I am comfortable/happy/red.'
```

```
b. 我 {服坦 ɛ̃ / 高兴 ǐ /红 ũ / 
ww {futhe.ɛ̃ / kɔcĩ.ĩ / xũ.ũ / 
usg {be.comfortable/be.happy/be.red} 
'I am comfortable/happy/red.'
```

Morphological causativization with -ki transforms an adjectival predicate (e.g., (32 a-d)) into a bivalent dynamic causative verb, subcategorizing both an agent and a causee as participants. The resulting causative verb, unlike its adjectival counterpart, cannot be suffixed with $-teix\tilde{s}$ nor realized with lengthened final vowel. Instead, it requires the aspectual markers typically assigned to verbal predicates (e.g., (32 a-c)). Additionally, as shown in (32c), such a causative verb can be modified by an adjunct clause. Moreover, it can itself be part of an adjunct clause preceding the matrix verb (e.g. (32d)):

```
(32) a. 那 我哈 服坦给寨
nə ww-xa futhɛ̃-ki-tşɛ
3SG ISG-OBJ relaxed-CAUS-IPFV
'He makes me feel comfortable.'
```

```
b. 我 那哈 宣着 高兴给寮
ww nə-xa çqɛ̃-tṣə kɔcĩ-ki-lʲɔ
1SG 3SG-OBJ chat-CVB happy-CAUS-PERF
'I made him happy (by) chatting with him.'
```

```
c. 我 头发哈呢 染着 红给咧ww t<sup>h</sup>ufa-xa-nə zã-tṣə xũ-ki-li 1SG hair-OBJ-REFL dye-CVB red-CAUS-PROSP 'I will dye my hair red.' (Lit. 'I will redden my hair by dyeing it.')
```

d. 你啊啦 话 气给着 人哈 不成 n^ja-la c^w a xwa zã-xa t¢^hi-ki-tsə puts^hõ kε SJ. say CLF word TOP people-OBJ angry-CAUS-CVB be.impossible 2SG-COM 'Talking to you makes one very angry.' (Lit. 'Saying a word with you, makes people angry to an impossible degree.')

5. Applicative 给 -ki

Another verbal suffix -ki, which also originates from reanalysis of the verb ki 'give', is the applicative morpheme mentioned at the beginning of this chapter. This suffix increases the verb's valency by allowing the adding of an object argument. The applied object associated with the applicative suffix -ki generally fulfills a recipient or benefactive role, which is the most common type among various languages worldwide (Polinsky 2013; Peterson 2007:46). However, the applied object can also take on other roles, such as an instrumental or a locative role (see above). 21

The obligatoriness of the applicative suffix -ki depends on the semantics of the verb. In example (33), -ki transforms the monotransitive verb $w\tilde{e}$ 'knit' into a ditransitive one, allowing for an additional recipient-benefactive object (here ata 'father'). In such context, the use of the applicative -ki is mandatory. It's important to note that the new argument is treated as an object and appears in the preverbal position, where it must be marked by the objective suffix -xa, just like the theme object mji 'sweater'. Note that, in this double-object construction, the order of the two objects in the preverbal position can be freely inverted.

(33) a. 我 毛衣哈 绾寮 ww mɔji-xa wɛ̃-lʲɔ 1SG sweater-OBJ knit-PRF 'I knitted the sweater'

我 (*饭) 筷子, 叉子。 (i) Wŏ (*fàn) chāzi chī kuàizi, tā chī fork eat chopsticks 3SG eat 1SG meal 'I eat with chopsticks, he eats with a fork.' (Lit. 'I eat chopsticks, he eats fork')

 $^{^{21}}$ In this regard, -ki functions as a true applicative marker in Tangwang. While Standard Mandarin also employs various methods to promote adjuncts to object status, these methods mainly rely on exploiting the post-verbal position assigned to object arguments. For instance, in (i), two adjuncts representing instruments ($ku\dot{a}izi$ 'chopsticks' and $ch\bar{a}zi$ 'fork') are promoted to objects by positioning them directly after the verb ($ch\bar{\iota}$ 'eat'), rather than in the adjunct pre-verbal position where they usually appear. Importantly, in this kind of construction the theme object of the verb (fan 'meal') is excluded, accordingly this cannot be considered an applicative construction, which typically increases a verb valency and requires morphological marking on the verb.

²² This type of double-object construction, where both the recipient and the theme bear the same case marker, is noteworthy given the differentiated encoding strategies displayed by other Sinitic and Altaic languages. Nonetheless, this phenomenon can also be observed in other languages around the world, as shown by this example from Panyjima (Western Australia) taken from Dench (1991:193) and cited by Haspelmath (2013):

⁽i) Ngatha yukurru-ku mantu-yu yinya-nha.

I.NOM dog-ACC meat-ACC give-PST
'I gave the dog meat.'

It is important to emphasize that due to the homophony between the causative suffix -ki and the applicative suffix -ki, sentence (33b) is inherently ambiguous without additional context. As illustrated in example (34), it could just as easily be interpreted as causative. However, as we will demonstrate in section 6 below, it is crucial to avoid conflating the two -ki suffixes.

As mentioned in section 2 (point viii), the theme or patient NP must appear in the postverbal position when it is quantified and indefinite. In contrast, all other participants, whether they are arguments or not, must appear in the preverbal position. This is also true for the applied recipient NP, which can only occupy the preverbal position, even when it is quantified and indefinite.

This is illustrated in the following examples in (35), where the indefinite quantified theme NP ($ji \, k^h u$ 'one mouthful (of saliva)') must appear in the postverbal position without any case marker. In contrast, both the definite applied NP (na-xa 'toward him') in (35b) and the indefinite quantified applied NP object ($ji \, k\varepsilon \, j\widetilde{a}$ 'one sheep') in (35c) must appear in the preverbal position, marked with the objective case -xa.

$$(35)$$
 a. 我 $\{*-$ 口哈} 唾寮 $\{-$ 口 $\}$ ww $\{*ji \quad k^hu-xa\} \quad t^{hw}$ 3- ji 0 $\{ji \quad k^hu\} \}$ 1SG $\{$ 0ne mouth-OB $\} \}$ spit-PRF $\{$ 0ne Mouth $\} \}$ 1 spat out a mouthful of saliva.'

As illustrated in example (35), the indefinite and quantified theme appears without a case marker in the postverbal position, whereas the applied-recipient, whether definite or not, remains consistently marked with the objective case marker in the preverbal position (ex. (35b-c)).²³

 $^{^{23}}$ This type is not accounted for by Haspelmath (2013) in his effort of establishing a typology of applicative constructions in the world's languages.

5.1. Ditransitive Verbs

As illustrated in (36), with ditransitive verbs such as ki 'give', k^ha 'hand over' or $m\varepsilon$ 'sell', the applicative marker -ki is not mandatory. The optional use of the applicative marker -ki is due to the fact that the presence of a recipient already grammatically expected, as these three verbs subcategorize both a patient and a recipient. However, it is important to note that the use of -ki, although optional, remains preferred in this context.

Optional use of -ki is also observable with other intrinsically ditransitive verbs that do not directly involve giving, transferring, or exchanging an object, as is the case with tsieso 'introduce (someone to someone else)' in the following example:

The optionality of the applicative suffix -ki allows one to determine whether a verb is categorized in Tangwang as intrinsically ditransitive or not. As illustrated in (38), the verb $m\varepsilon$ 'buy', which, unlike the homophonous verb me 'sell'²⁴ (see ex. (36) above), can only take a recipient when suffixed with -ki, is clearly monotransitive in Tangwang:

At first sight, 'make (a phone call)' in (39) has the status of a ditransitive verb because both the theme and the recipient are marked by -xa and appear in preverbal position and the applicative -ki is not present. However, the fact that the order between the theme and the recipient cannot be inverted clearly indicates that this is not a true ditransitive construction and that 'make (a phone call)' is not a genuine ditransitive verb. Secondly, when ki is added in (39b), it induces an aspectual interpretation in which the action of making a phone call is perceived as completed. This aspectual interpretation is absent in (39a), where -ki is missing:

²⁴ The tonal distinction observed in Modern Mandarin between $m\check{a}i$ 'buy' and $m\grave{a}i$ 'sell' does not operate in Tangwang, where $m\varepsilon$ 'buy' and $m\varepsilon$ 'sell' are not phonologically distinguished.

yesterday Kaçi DEM CLF person-OBJ phone-OBJ make-PRF 'Yesterday, Kaçi made a phone call to that person (but he was unable to reach her).'

b. 昨个 那 人哈 电话啊 打给寮 尕西 $ts^w \! \! > \! \! k\epsilon$ ta-ki-l^jɔ kaçi kε zã-xa t¢^j̃ex^wa-a nı vesterday Kaçi DEM CLF person-OBJ phone-OBJ make-APPL-PRF 'Yesterday, Kaçi had a phone call with that person (*but he was unable to reach her)

We have seen above that the applicative -ki is optional for genuine ditransitive verbs such as k^ha 'give', however when -ki is present it can only introduce the recipient subcategorized by the verb k^ha 'give', it cannot introduce a third participant, such as Kaci in example (40a). To express such a beneficiary, a periphrastic structure containing a dependent adjunct clause, as in (40b) or (40c), is required. Note that the adjunct clause headed by wili 'acting for' in (40b) results in two different benefactive interpretations: a recipient-benefactive (as translated in (i)) or a substitutive-benefactive (as in (ii)). To avoid this ambiguity, the substitutive meaning can be clarified by using another type of adjunct clause headed by the verb $p\tilde{a}$ 'help' (as in (40c)).

- 书哈 卡给寮。 (40) a. * 我 尕西哈 那哈 kaçi-xa kha-ki-ljɔ wγ su-xa nə-xa book-OBJ give-APPL-PRF Kaçi-OBJ 3SG-OBJ Intended meaning: 'I handed him the book for Kaçi.'
 - b. 我 为了尕西着 书哈 那哈 卡给寮。 www.wil^jo-kaci-tṣə şu-xa nə-xa k^ha-ki-l^jo 1SG do.for-kaci-CVB book-OBJ 3SG-OBJ give-APPL-PRF
 - (i) 'I handed him the book for Kaçi.'
 - (ii) 'I handed him a book on behalf of Kaçi'
 - 我 尕西哈 帮着 书哈 那哈 卡给寮。 c. kha-ki-ljə kaci-xa wχ pã-tsə su-xa nə-xa help-CVB book-OBJ give-APPL-PRF kaçi-OBI 3SG-OBJ 1SG 'I handed him a book on behalf of Kaçi.' (Lit. 'Helping Kaçi, I gave him the book.')

5.2. Applicative -ki Promoting Other Participants than the Recipient-Benefactive:

The use of the applicative suffix -ki in Tangwang allows participants other than the recipient-benefactive to be promoted to the status of an object. Notably, this can occur with instruments or locatives, although such non-canonical usage remains rare and highly context-dependent, often making it difficult to elicit from speakers. We have observed that younger Tangwang speakers, particularly those in their twenties, are less likely than their parents and grandparents to accept this type of non-canonical applicative involving instruments or locatives. Nevertheless, this usage highlights the strongly grammatical function of the applicative suffix -ki in Tangwang.

5.2.1. Promoting an Instrument:

The following two sentences ((41a) and (41b)) illustrate how adding the applicative -ki to the verb $ts^h l$ 'eat' enables the promotion of the adjunct instrumental noun $k^{hw}etsn$ 'chopsticks' to the status of an argument object. In this context, the applied instrument is obligatorily marked with the objective case -xa, replacing the instrumental case marker -la used in its canonical adjunct form. Furthermore, it is worth noting that the applied instrument becomes the sole object that can appear within the sentence. This shift carries a particular semantic inference that emphasizes the event exclusively from the perspective of its instrumentation.

- 筷子啦 面片子哈 这 吃寮 趟 (41) a 那 khwetsa-la m^jɛ̃p^{hj}ɛ̃tsı-xa nə tşə kə tsh_J-lj₂ thã 3SG DEM CLF chopsticks-INS vermicelli-OBJ eat-PRF one time 'He once ate the vermicelli with these chopsticks.'
 - 那 这 筷子哈 (*面片子哈) 耥 b. (*m^jɛ̃p^{hj}ɛ̃tsı-xa) khwetsa-xa tsh-ki-ljo thã kə nə tsə (*vermicelli-OBJ) eat-APPL-PRF DEM CLF chopsticks-OBJ time 'He once ate with these chopsticks.'

5.2.2. Promoting a Locative

Similarly, a locative noun phrase can be promoted to the status of an object. In example (42a), the locative adjunct $tc^{hj}\tilde{\epsilon}tci$ 'field' is marked with the locative case marker -li when used with the verb tsu 'go'. However, in example (42b), when this locative adjunct is promoted to the status of an object, it takes the objective case marker -xa. In this case, the verb tsu 'go' must be affixed with the applicative suffix -ki.

(42) a 我 田地里 走(*给)寮 ww tc^{hj}ɛ̃tci li tsu(*-ki)-l^jɔ isg fields-Loc go(*-APPL)-PRF 'I went to the fields.'

> b 我 田地哈 走*(给)寮 ww tc^{hj}ɛ̃tci-xa tsu-*(ki)-l^jɔ isg field-obj go-*(APPL)-PRF 'I have roamed the fields.'

As illustrated in (43), the same pattern applies to an intransitive stative verb like g^{wi} 'sleep'. When suffixed with the applicative -ki, the verb g^{wi} can take the locative $tg^{hw}\tilde{a}$ 'bed' not as an adjunct but as a direct object.²⁵

²⁵ A similar phenomenon can be observed in Modern Mandarin, where a preverbal locative adjunct expressed by a postpositional phrase can be transformed into a postverbal direct object in the form of a noun phrase. Compare 大床 里睡 [[adjunctPostP dàchuáng-li] shùi] (big.bed-in sleep) 'sleep in a full-size bed' with 睡大床 [vp shùi [NP dàchuáng]] (sleep big.bed) 'use a full-size bed to sleep.'

```
(43) a. 那 床上 阿达 睡(*给)寨
nə tşʰwã-ṣã ata ṣwi(*-ki)-tṣɛ
DEM bed-LOC father sleep(*-APPL)-PRF
'Father is sleeping on that bed.'
```

```
b. 那 床哈 阿达 睡*(给)寨
nə tṣʰwã-xa ata ṣʷi-*(ki)-tṣɛ
DEM bed-OBJ father sleep-*(APPL)-PRF
'Father sleeps this bed.' ('Father uses this bed as a regular sleeping means.')
```

The English translations provided for examples (42b) and (43b) use paraphrasing to convey the transitivized forms of the verbs tsu 'go' and swi 'sleep'. These translations might suggest a semantic effect similar to the 'holism effect' discussed in the literature on German be-applicatives (cf. Creissels and Zúñiga 2024:1060-64). However, in Tangwang, this effect —if it indeed occurs in cases involving the promotion of a locative—does not appear in other contexts of applicativization with -ki. This suggests that the effect is better attributed to the inherent objective status of the applied locative, rather than to applicativization itself. This interpretation aligns with what Wachsler (2015:308-309) claims for German, as cited by Zúñiga and Creissels (2024:30).

5.2.3. Applicative -ki with Quasi-Object of Duration or Measure

Another optional use of the applicative -ki can be observed in Tangwang. This occurs in cases where, instead of true objects (subcategorized by the verb) or adjunct NPs promoted to object status, we find postverbal quantified NPs that provide additional information about the event or action, such as duration or measure. The mandatory postverbal position of these NPs, as shown in (44a), indicates that they are not adverbs but rather quasi-objects, similar to indefinite quantified themes/patients which must also occupy the postverbal position. As illustrated in (44b) it is also possible to suffix the verb with the applicative -ki, in which case the presence of the applied object (here yi ke eight one hour) is required. This is not the case in (44a), where the same duration expression can be omitted without rendering the sentence ungrammatical.

In such a case, the use of -*ki* bolsters the subject's agentivity and volitionality, while at the same time emphasizing the non-habitual aspect of the action. Once again, we observe that -*ki* has a significant

 $^{^{26}}$ We would like to thank one of the reviewers of this chapter for bringing this semantic effect to our attention.

impact on the aspectual reading of the sentence. In the sentence without -ki in (45a), the two aspectual adverbs $t_S{}^h\hat{a}\tilde{a}$ 'usually' and $t_S{}^i\hat{a}$ 'just' are compatible with both perfective and imperfective aspects. In contrast, as shown in (45b), while $t_S{}^i\hat{a}$ 'just,' which entails a resultative reading, remains compatible only with the perfective aspect, $t_S{}^h\tilde{a}\tilde{a}$ 'usually,' which entails a non-resultative reading, is incompatible with either aspect.

(45) a. 我
$$\{$$
常常/刚 $\}$ 睡 $\{$ 塞/寮 $\}$ 一 个 小时 ww $\{$ tṣʰâã/tɕʲâ $\}$ \S wi- $\{$ tṣɛ/-lʲɔ $\}$ ji kɛ ਫʲɔʂ੍l 1SG often/just sleep-IPFV/-PRF one CLF hour 'I often/just sleep for an hour.' / 'I often/just sleep for an hour.'

A similar pattern is observed with atelic transitive verbs that allow the addition of a duration. In (45a), the postverbal expression of duration is optional, but in (45b), when the verb is suffixed with the applicative -ki, the presence of the applied object expressing duration becomes obligatory.

In the two examples above, the definite theme NP $k\partial$ 'song' appears in the preverbal position and is marked with the objective case -xa. In contrast, when dealing with an indefinite and quantified NP like $l\partial \tilde{a}$, gu $k\partial$ 'two songs' in (46a), it must occupy the postverbal position. However, as shown in (46b), when the expression of duration is encoded as an applied object in the postverbal position, it saturates that position. As a result, the indefinite quantified NP $l\partial \tilde{a}$ gu $k\partial$ 'two songs' cannot follow the verb and must instead appear preverbally.²⁷

(46) a. 我 {*两 首 歌啊} 唱寮 {两 首 歌} wr {*liā şu kə-ə}
$$t_{\S}^{h}$$
ā-liɔ {liā şu kə} t_{\S}^{h} ā-lio {liā su kə} (T sang two songs.'

 27 Note that it is also the case in standard Mandarin where the direct object and the duration adverbial phrase cannot cooccur in the postverbal position.

Another grammatical strategy can be employed in Tangwang to convey the same meaning as in (46b). In (47) we have two instances of the verb $t_{\mathcal{S}}^h\tilde{a}$ 'sing' suffixed by the perfective aspect $l^i\sigma$; the second instance is obligatorily marked by the applicative morpheme ki licensing durative expression ($s\tilde{\epsilon}.k\varepsilon\,\epsilon^i\sigma_{\mathcal{S}_i}$ 'three hours') as an applied NP.

6. Distinction between the Causative Suffix -ki and the Applicative Suffix -ki

As shown above, the causative suffix -ki and the applicative suffix -ki have to be distinguished. This is evident in the following pairs of examples, where the two markers display different distributional patterns within a verb-object incorporation sequence. The incorporated object and both suffixes merge with the lexical verb to form a unified complex verb, functioning as a single morphosyntactic unit. As illustrated in examples (48a) and (49a), while the causative marker -ki is inserted between the verb and the incorporated-object, the applicative marker -ki follows the incorporated object (cf. (48b) and (49b)).

- (48) a. 我 那哈 做给饭寨 ww nə-xa tsu-ki-fɛ̃-tɛ̞ɛ 1SG 3SG-OBJ do-CAUS-meal-IPFV 'I let him prepare the meal.'
 - b. 我 那哈 做饭给寨 ww nə-xa tsu-fɛ̃-ki-tṣɛ isg ʒsg-obj do-meal-APPL-IPFV 'I prepare the meal for him.'
- (49) a. 阿达呢 我哈 写给信寨
 ata-nə wɤ-xa çiɛ-ki-çĩ-tṣɛ
 father-POSS 1SG-OBJ write-CAUS-letter-IPFV
 'My father makes me write a letter.'
 - b. 阿达呢 我哈 写信给寨 ata-nə wx-xa çiɛ-çĩ-ki-tṣɛ father-POSS 1SG-OBJ write-letter-APPL-IPFV 'My father writes me a letter.'

When the Causer, the Causee, and the Beneficiary all appear in a sentence featuring verb-object incorporation, either the applicative -ki, which follows the incorporated object (e.g. (50a)), or the causative -ki, which is inserted between the verb and the incorporated object, may be used.

In (50a), the applicative V-ki governs the recipient-beneficiary natci ata 'his father', while in (50b), the causative V-ki governs the causee $Xas\tilde{\epsilon}$. Although the joint use of both -ki suffixes on the same verb is not permitted in Tangwang (*V-ki-DO-ki), this does not indicate functional syncretism, as the positions of the causative -ki and the applicative -ki differ with respect to the incorporated object. Additionally, the positions of the causee and the recipient are subject to syntactic constraints. In example (50c), reversing their order leads to an inversion of their semantic roles and may even affect participant identification. In this example, 'his father' refers not to $Xas\tilde{\epsilon}$'s father, as in (50a) and (50b), but to the teacher's father.

Therefore, the sequence of constituents in both constructions can be represented as follows: $[NP_{CAUSER} \ NP_{CAUSER} \ (NP_{INS}) \ NP_{RECIPIENT} \ V\{-ki_{CAUS}\}-N_{THEME}\{-ki_{APPL}\}].$

- (50) a. 老师 哈三哈 毛笔啦 那底 阿达哈 写信给寨 lɔɛ̣̣̣̣̣̣̣ xasɛ̃-xa mɔpi-la nə-tci ata-xa cjɛ-cī-ki-tɛ̞ɛ teacher Xasɛ-OBJ brush-INS 3SG-GEN father-OBJ write-letter-APPL-IPFV 'The teacher let Xasɛ̃; write a letter to his; father with a brush.'
 - 老师 哈三哈 毛笔啦 那底 阿达哈 写给信寨 b. ləşı xasẽ-xa məpi-la nə-tci ata-xa ç^jε-ki-çi -tsε teacher Xase-OBJ brush-INS 3SG-GEN father-OBJ write-CAUS-letter-IPFV same meaning as in (50a)
 - 老师 那底 阿达哈 毛笔啦 哈三哈 写{给}信{给}寨 c. losi nə-tci məpi-la xasẽ-xa ç^jε-{ki}-çĩ-{ki}-tsε ata-xa Xase-OBJ write-{CAUS}-letter-{APPL}-IPFV teacher 3SG-GEN father-OBJ brush-INS 'The teacher_i let his_i (own) father write a letter to $Xas\tilde{\epsilon}_i$ with a brush.'

Based on our investigations with Tangwang speakers, in sentences involving multiple participants, they prefer to use a complex periphrastic structure similar to the one used for introducing an additional causee in a causative sentence with a ditransitive verb like ki 'give' (see section 4.1.3. above). This structure, as shown in (51), features an adjunct clause with the causative dependent verb \wp_l - $t\wp_l$ 'dispatching', preceded by its object causee Xas $\tilde{\varepsilon}$.

老师 哈三哈 使着 毛笔啦 那底 阿达哈 (51)losj xas̃-xa չղ-tşə məpi-la nə-tci ata-xa teacher dispatch-CVB brush-INS father-OBJ Xasε̃-OBI 3SG-GEN

写{*给}信*{给}寨 clε-{*ki}-cĩ-*{ki}-tṣε write-{*CAUS}-letter-*{APPL}-IPFV

'The teacher let Xase write a letter to his father with a brush.'

It is important to note that the causative denotation is conveyed by the adjunct clause ($xas\tilde{\epsilon}$ - $xas_{\tilde{\epsilon}}$ - $ts_{\tilde{\epsilon}}$ 'dispatching Xas $\tilde{\epsilon}$ '), making the use of the causative suffix -ki on the matrix verb ungrammatical. However, the applicative suffix -ki on the matrix verb ($e^{j}\epsilon$ - $e\tilde{\iota}$ 'write-letter') is mandatory, as the applied recipient (natei ata 'his father') is explicitly expressed. This also clearly demonstrates that the applicative suffix -ki on the main verb should not be confused with the causative -ki.

Positional asymmetry in the use of the causative -ki and the applicative -ki is also observable in sentences that involve an instrumental participant. In a sentence such as (52a), the animate object (na-xa 'him') can only be interpreted as the causee, because the instrument ($k^{hw}\varepsilon tsr$ 'chopsticks') is clearly marked as an adjunct with the instrumental case marker -la.

In (52a), the suffix -ki on the verb $t\xi^h l$ 'eat' can only be interpreted as causative. An applicative interpretation is not possible because $n\partial -xa$ 'him' would have to be interpreted as a recipient, resulting in an incongruous reading: ?'I ate once with these chopsticks for him'.

In contrast, in (52b), the instrument ($k^{hw}etsn$ 'chopsticks'), marked as an object, can only be interpreted as an applied instrument, with -ki functioning as an applicative suffix. This excludes the possibility of adding na-xa 'him' as a causee. If -ki were interpreted as a causative suffix, allowing na-xa 'him' to be included as a causee, it would again lead to an equally inappropriate reading: ?'I made him eat these chopsticks.

7. Origin of the Causative -ki and the Applicative -ki in Tangwang

7.1. Sinitic Inner Development

The causative and applicative affixes -ki in Tangwang are clearly etymologically linked to the homophonous verb ki, which serves as the basic lexical verb for 'give' in all Northern Sinitic languages, appearing in similar phonetic forms such as ki^{2i} , kut^{44} , $k\partial t^{2i4}$, and others. These affixes, along with the related verb, are also found in the neighboring Sinitic languages of Northwest China²⁸.

 $^{^{28}}$ For comparable instances of syncretism between causative ki and applicative ki in neighboring Northwestern dialects, refer to Zhou Chenlei's monograph on Zhoutun (2022:53–57) and Zhao Lüyuan's studies (2019, 2024) on causative and applicative constructions in Gangou. Both Zhoutun and Gangou are situated approximately 100 miles west and northwest of Tangwang, in Qinghai Province. These works examine the postverbal use of the suffix ki/ki, emphasizing its role as a "valency-changing" or "valency-increasing" marker. However, they consistently analyze the suffix as a single morpheme without adequately addressing the critical functional distinction between the causative and the applicative roles—a differentiation that is essential for understanding the homophonous relationship between these two morphemes in Tangwang and, more broadly, as argued here, in other Northern Chinese dialects where such syncretism is observable.

Chappell (2024), addressing the "syncretism" between causative and applicative forms in these languages, ²⁹ argues that the causative represents a further stage of grammaticalization of the applicative, outlining the following developmental process: "GIVE > applicative > causative". This challenges the perspective of Shibatani and Pardeshi (2002), who, based on general observations from other languages worldwide, favor the process: 'GIVE > causative > applicative'.

Without engaging in a detailed examination of the validity of the arguments presented by these authors to support their respective hypotheses, I would like to provide additional reasoning in favor of the alternative perspective discussed in this chapter. This perspective specifically emphasizes the synchronic coexistence of two distinct homophonous suffixes — causative and applicative —both of which have diachronically emerged from two independent (and not necessarily simultaneous) reanalyses of the same verb, ki 'to give', with which they share the same phonetic form.

Given the interpretative ambiguity in the following Tangwang example, one might be tempted to conclude that the sentence represents a single construction, where the role of Tsupitə — whether as a causee (53.i) or as a recipient (53.i) — is determined solely at a pragmatic level. However, beyond the challenge of formulating a unified semantic analysis to account for this variability, maintaining such a claim would also require overlooking the syntactic observations discussed earlier in this chapter, particularly the different positions of the applicative -ki and the causative -ki with regard to the incorporated object (see (48a) vs. (48b)).

```
(53) 那 祖比德哈 饭哈 做给寨
nə tsupitə-xa fɛ̃-xa tsu-ki-tşɛ
3SG Tsupitə-OBJ meal-OBJ make-CAUS/APPL-IPFV
i. 'He makes Tsupitə cook.' / ii. 'He cooks for Tsupitə.'
```

Although the distinct positioning of the causative -ki and the applicative -ki within the verb-object incorporation morphological structure in Tangwang provides strong evidence for their independent or parallel reanalysis, analyzing data from a broader range of Northern Sinitic languages to further validate this hypothesis remains important. Extensive studies on $\frac{ki}{l}$ $\frac{ki}{g}$ across these different varieties reveal that both causative and applicative uses of ki are commonly found. However, in many of these languages, including the Beijing dialect and Modern Standard Chinese, these uses are distinguished by their position relative to the verb: the causative ki precedes the verb, while the applicative ki follows it.

The following two examples illustrate this difference in Standard Modern Chinese: in example (54), the verb $k \grave{a} n$ 'see' is combined with $g \check{e} i (=ki)$, glossed 'GEI', which creates the causative meaning 'let see'. Similarly, in example (55), the verb $g \check{a} i c h \acute{e} n g$ 'change' is causativized by the prefixed $g \check{e} i$, resulting in the meaning 'make change'.

```
你
           那
                      书
                             给看
                                     不
                                           给看?(Lü 1980:196, glosses are mine)
(54)
                            gěi-kàn
     nĭ
          nèi
                běn shū
                                    bù
                                          gěi kàn
          DEM
                CLF
                      book GEI-see
                                     NEG GEI-see
     2SG
      'Are you going to let (me) see the book or not?'
```

 $^{^{29}}$ Chappell's (2024) observations of the applicative and causative marker $ki/g\check{e}i$ in Northwestern Sinitic languages draw significantly from several key sources. These include Janhunen et al. (2008) and Sandman (2016) for the Wutun language, Jia (2016) for the Lanzhou dialect, Lin (2012) for the Ningxia dialect, Shen (2002) for the dialect of Taiyuan, Song (1990) for the Xining dialect, Djamouri (2015), Xu (2017) and Xu and Ran (2019) for the Tangwang language, and Zhu et al. (1997), Yang (2014), Yang et al. (forthcoming) and Zhao (2019) for the Gangou language.

民族 给改成 了。 我 爸爸 给 这 汉族 (55)bàba gěi-gǎichéng Hànzú wŏ gěi zhè mínzú le ge PREP **GEI-change** 1SG father DEM CLF nationality Han SFP 'My father had his nationality changed to Han nationality.' (Chirkova 2008, with slight modifications of the glosses)

In example (54), the causee is not explicitly stated and remains indefinite, not referring to any specific person or entity. The use of the object pronoun me in the English translation, is a pragmatic reinterpretation and does not have a direct syntactic reflection in Tangwang. This analysis somewhat challenges the pro-drop argument occasionally proposed for such examples in the literature³⁰. In contrast, in example (55), the causative verb $g\check{e}i$ - $g\check{a}ich\acute{e}ng$ 'make change' identifies the causee ($zh\grave{e}$ ge $m\acute{n}z\acute{u}$ 'this nationality') through a prepositional phrase headed by the preposition $g\check{e}i$.³¹

As for the postverbal applicative $g\check{e}i$ in Modern Mandarin illustrated in examples (56) and (57), we follow Paul and Whitman's (2010) analysis that " $g\check{e}i$ in 'V- $g\check{e}i$ ' finally is neither a verb nor a preposition, but the realization of the head Applicative (in the spirit of Pylkkänen 2002, 2008) [...] the functional head Applo selects a VP headed by a donatory verb. [...] the sequence 'V- $g\check{e}i$ ' is not a V-V compound formed in the lexicon, but is built in syntax". This use of $g\check{e}i$ is illustrated in the following two examples, where the recipient/beneficiary—construed as an applied object—appears in the postverbal position, the unmarked (canonical) position for argument objects not only in Modern Standard Chinese but also in Chinese as documented since the 13^{th} century B.C. (see Djamouri and Paul 2018).

- (56) 后卫 把 球 传给了 中锋 (Lü 1980:197, glosses are mine)
 Hòuwèi bǎ Qiú chuán-gěi-le zhōngfēng
 defender bǎ Ball pass-GIVE-PRF center
 'The defender passed the ball to the center forward.'
- (57)我 卖给了 *(玛丽) 手表 (Paul and Whitman 2010, ex. (18)) wŏ mài-gěi-le *(Mǎlì) shǒubiǎo yī-ge sell-GEI-PRF 1SG *(Mali) 1-CLF watch 'I sold Mali a watch.'

In certain Mandarin dialects, such as that of Lanzhou, it should be noted that the applicative form V- $g\check{e}i$ does not necessarily require an applied recipient in postverbal position. Instead, this function can be expressed by a prepositional phrase headed by the preposition $g\check{e}i$, further highlighting the incongruity of analyzing the applicative -ki as a preposition.

 $^{^{3\}circ}$ The pro-drop analysis is frequently advanced by various authors. Notably, Chirkova (2018) considers that the preverbal $g\check{e}i$ in examples such as the one cited here in (55) "is essentially an indirect object marker with an omitted pronoun."

 $^{^{31}}$ It is worth noting that the preposition $\frac{1}{2}$ $ki/g\check{e}i$ is not attested in Tangwang. For the use of $\frac{1}{2}$ gĕi as an "object-marking preposition" in preverbal position, see Bennet's (1981) observations on the Luoyang dialect, or those made by Wang Jian (2004) regarding the Beijing dialect.

To further support our argument, there are instances where both the causative and applicative $g\check{e}i$ can be attached to the verb simultaneously. This illustrated by the example (59) from the Lanzhou dialect, where three instances of ku (a dialectal variant of $g\check{e}i/ki$) are attested. As the examples shows, the transfer verb tei 'send' is preceded by the causative ki and followed by the applicative ki. It is important to note, however, that both the causee (ein 'letter'), associated with the preverbal ki, and the applied object (na 'him', representing the recipient), associated with the postverbal ki, can be omitted. Additionally, the first ku must be analyzed as a dative preposition, which is not attested in Tangwang.

The diachronic scenario that can be proposed as a hypothesis must primarily consider the fact that Chinese, as evidenced in historical written documents, has consistently shown an unmarked VO order for argument NPs or PPs, while progressively imposing constraints on adjunct NPs and PPs, which, by the Han period (2nd century BC), were predominantly confined to the preverbal position. In this context, Tangwang, along with many dialects of the Gansu-Qinghai region, underwent significant syntactic restructuring, leading to a dominant head-final order that affects both verb phrases and adpositional phrases (as evidenced by the use of postnominal case markers). This phenomenon is often interpreted as evidence of influence from contact with Altaic languages (such as Turkic or Mongolic) or Tibetan languages (Janhunen 2004, Szeto 2022).

It can be observed that this restructuring did not occur uniformly across Northwestern Sinitic languages and dialects. For instance, some languages, like Gangou, exhibit only an OV order, with all types of arguments and adjuncts positioned preverbally and licensed by case suffixes (see Yang et al. forthcoming). In contrast, other languages, such as Tangwang, display both an OV order similar to Gangou and a VO order that applies to three specific types of objects: 1. indefinite and quantified patient objects, 2. incorporated patient objects, and 3. quasi-objects expressing verbal quantification, such as quantity or duration (see Djamouri 2015).

Without delving into the diversity and complexity of the data on the causative uses of $g\check{e}i$ in Northern Sinitic languages, we propose the following reanalysis for Tangwang (as well as the surrounding languages and dialects of the Gansu-Qinghai region), likely derived from Early Mandarin at the end of the Yuan Dynasty (1271–1368) and the beginning of the Ming dynasty (1368–1644). This evolution involves a shift from a head-initial VP, where the causee is represented by an adjunct prepositional phrase in the pre-verbal position and the causativized verb is headed by $g\check{e}i$ as a grammaticalized causative control verb, to a head-final VP in Tangwang. In this head-final structure, $g\check{e}i/ki$ functions synchronically as a suffix attached to the main verb, while the causee, now

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³² This example was shared by Wei Xingzhou (personal communication).

³³ Idem.

represented as a postpositional phrase (with the case marker following the noun), remains in its initial preverbal position:

(60)
$$PREPP_{CAUSEE} GEI-V_{caus} > POSTP_{causee} V-KI_{caus}$$

In the case of the applicative, the scenario differs significantly, with changes occurring in a nearly symmetrical but opposite manner, resulting in a superficially identical structure. In the earlier stage, as outlined in (69), when combined with a transfer verb, the applicative head $g\check{e}i$ positions its applied object—the recipient—in a postverbal position, typically reserved for argument objects. In Tangwang, however, the applicative suffix -ki ($=g\check{e}i$) remains in the postverbal position, while the applied object shifts to the preverbal position, where it is marked by the objective case marker (-xa). While the applicative primarily concerns applied recipients or beneficiaries of transfer verbs, as is the case in Standard Modern Mandarin, its use has broadened in Tangwang to include a wider range of applied objects, as demonstrated in our analysis.

(61)
$$V_{transfer}$$
- GEI_{appl} NP_{appl} > NP - XAV - KI_{appl}

The fact that both the causative $-ki/g\check{e}i$ and the applicative $-ki/g\check{e}i$ originate from the same verb of giving $-ki/g\check{e}i$, and that other languages around the world exhibit similar reanalyses, is likely due to the inherent dual meaning of the verb GIVE which conveys both a causative sense ('make someone have something')³⁴ and a dative sense ('give something to someone'). However, it should be noted that these two reanalyses of a 'GIVE' verb, as seen in Tangwang and northern Sinitic languages, are often carried out independently in other languages, with one possibly occurring without the other being realized as well.

7.2. Altaic External Influence

It is beyond the scope of this work to detail the full range of morphological processes employed in the Turkic and Mongolic languages, believed to have interacted with Northern Chinese, to convey causative and applicative forms.

In Mongolic languages, causative forms are typically constructed by attaching a specific causative suffix to a verb stem. Data from Middle Mongolian reveal a fundamental distinction between two key suffixes: -*ga* and -*gul*, both of which undergo various variations depending on the surrounding phonemic environment and vowel harmony (see Rybatzki 2003:65).³⁵

Concerning the external influence on the causative and applicative uses of -ki in a language closely related to Tangwang, specifically Gangou, the hypotheses put forward by Yang et al. (forthcoming) are worth considering. The authors draw a comparison with Mangghuer, a Mongolic language spoken by various groups along the Gansu and Qinghai borders. They highlight the use of

³⁴ As (Yang et al.) reminds us, "considering the internal development of the language, the shift from 'give > causative' is a common grammaticalization process (Heine and Kuteva 2002:152). Matisoff (1991) cites examples such as $p\hat{i}$ in Lahu, pun in Yao, cho in Vietnamese, qaoy in Khmer, and $g\check{e}i$ in Mandarin, suggesting that these forms simultaneously encompass meanings of giving, benefaction, and causation." (our translation)

 $^{^{35}}$ In modern Mongolic languages, either both suffixes or one of the two has been retained, with only minor phonological changes. The extensive range of forms across these languages can be broadly summarized as follows: [ga], [y\alpha], [Gə], [lya], [lga], [lga], [lga] for the first suffix, and [yul], [gül], [uul] for the second. (For various descriptions of Mongolic languages, reference can be made with interest to Buhe and Liu (1982), Janhunen (2003), Lefort (2012, 2024) Slater (2003), and Yang et al. (forthcoming)).

a similar suffix (-gha), which functions both to causativize a verb (e.g., (62)) and to mark the verb when a recipient-beneficiary is introduced (e.g., (63)).

- (62) Jie-ni aguer-du tuosi.kaker di-gha-ku ger-du sao-gha-lang self-poss daughter-dat fried.bun eat-Caus-ipfv house-loc stay-caus-ipfv 'He gave his daughter fried buns to eat and a house to live in.' (Yang et al. forthcoming, glosses are mine)
- (63) ningger-du yama china-gha-jiang (Slater 2003:131, glosses are mine) grandma-DAT food make-APPL-PRF 'Make some food for Grandma.'

Despite the functional similarity between the suffix -gha in Mangghuer and -ki in Gangou, the authors do not postulate a genetic link between them since -ki results directly from the reanalysis of the Chinese verb for 'give', whereas -gha in Mangghuer originates from a comparable suffix in Middle Mongol with no connection to a verb meaning 'give'. However, they do not rule out the possibility of contact-induced influence, proposing that local bilingual speakers, having established a correspondence between the Chinese beneficiary marker \marker (ki, \marker) and the Mangghuer beneficiary/causative marker -gha, might have analogically extended the use of -ki into the causative structure.

Given the causative and applicative uses of -ki in Tangwang and, as we have previously shown, in various Northern Chinese Sinitic languages, it seems unlikely that the hypothesis proposed by these authors is well-founded. While the evidence for contact between Chinese and Mangghuer in the case of Gangou remains debatable, extending this contact-based hypothesis to Tangwang and, furthermore, to the other Northern Chinese Sinitic languages where the causative and applicative are represented by $\frac{ki}{g}ki/g\check{e}i$, appears more than merely speculative.

We note with interest that in Dongxiang, the Mongolic language spoken by the eponym ethnic group whose geographic area overlaps with that of the Tangwang speakers and with whom they maintain significant bilingual interactions (see Lefort 2012, 2024), the causative suffix (which also functions as a passive suffix) is realized as -gva. This form clearly appears to be related to the Mongolic causative suffix -gha found in Mangghuer. Notably, in Dongxiang, this suffix is never used to mark the applicative (with a recipient-beneficiary as the applied object). Its usage is illustrated by the following example (64). This observation suggests that the 'beneficiary' use of -gva in Mangghuer (see example (63) above) is likely an extension of its causative function, rather than the other way around.

(64) mini puse boyi-zhi xian-de bao-gva-wo (Ma and Chen 2012:48) ISG.ACC again reaffect-SIM village-DAT fall-CAUS-PFV 'I was sent down to the countryside again.'

³⁶ Min and Du (2018), building on the perspective of Song Jinlan (1990), propose a more radical and speculative interpretation, suggesting that the postverbal causative suffix $\frac{2}{3}$ - $\frac{ki}{-g}$ observed in several dialects of Gansu and Qinghai (including Tangwang) is, in some cases, a borrowing from the Mongolic quotative verb ge- ('to say') and, in others, derived from the quotative suffix commonly attested in Mongolic languages (- $\frac{ge}{-g}$ - $\frac{gi}{-g}$ - $\frac{gi}{-g}$). However, this

viewpoint cannot be supported in light of the observations and analyses presented here.

8. Conclusion

The separate reanalysis of the verb $\frac{d}{dt}$ $ki/g\check{e}i$ as either a causative suffix or an applicative suffix in Tangwang should be considered not only in relation to neighboring Sinitic languages and dialects where this phenomenon also occurs, but within the broader context of Northern Chinese. A closer examination of Standard Mandarin reveals the diverse reanalyses that the verb $g\check{e}i$ 'give' has undergone. In addition to an applicative $g\check{e}i$ as a suffix and a causative $g\check{e}i$ as a prefix, we also find the passive marker $g\check{e}i$ and the preposition $g\check{e}i$ (with various semantic roles). Importantly, all these items coexist synchronically.

After detailing the different functions of the causative -ki and the applicative -ki in Tangwang, we have provided evidence that the homophonous causative ki and applicative ki are two distinct morphemes, highlighting their syntactic differences.

We demonstrated that the causative -ki and the applicative -ki in Tangwang stem from an earlier internal evolution within Northern Chinese. The changes observed in Tangwang followed a major constraint applied to this language, as well as to typologically similar neighboring Sinitic languages: the head-final constraint within the verb phrase. This adjustment involved uniform pre-verbal marking of all objects (such as patients, themes, recipients, causees, and applied objects) and the consolidation of various structural and aspectual markers into genuine verbal suffixes. As a result, a notably distinctive affixal concatenation emerged for this Sinitic language.

Finally, in assessing the hypothesis of external influence on the use of the causative -ki and applicative -ki in Tangwang (and in the Gansu-Qinghai region), we have ruled out direct borrowing or calques from neighboring Mongolic languages. If external influence is present, it pertains specifically to the reinforcement of object-verb order, the obligatory marking of objects in preverbal position, and the reanalysis of both causative ki and applicative ki as true verbal derivational suffixes.

Conventions and abbreviations

Specific abbreviations and conventions not listed in the Leipzig glossing rules are given below: POT Potential, EXP experiential, PROSP Prospective, TERM Terminative, ASS Assertive, SFP Sentence Final Particle, SIM Simultaneous

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