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*Differential argument marking and the multifunctional case marker -ha in Wutun:
Between the argument structure and information structure*

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ABSTRACT

This paper discusses the various functions of the multifunctional case marker -ha in Wutun, a mixed Sinitic language with Northwest Mandarin lexicon and Amdo Tibetan syntax spoken in Tongren County, eastern part of Qinghai Province, Amdo Sprachbund. I will show that the use of -ha is connected to Differential Argument Marking and it is motivated partly by semantic factors and partly by information structure. The case marker -ha often occurs on the Recipient, Patient or Causee argument in clauses with two animate arguments and it can therefore be used to disambiguate arguments. Its use is also connected to affectedness, which can be operationalized in terms of definiteness and saliency. Patient arguments are more likely to be marked with -ha if they are totally affected (e.g. The dog ate the dumplings) than only partially affected (e.g. The dog ate some dumplings). However, the use of -ha cannot be explained solely on the basis of semantic factors and it is often connected to information structure, such as expressing contrastiveness, activating previously mentioned topic or differentiating between topical and focal parts of the sentence. In summary, -ha is used with highly affected non-Agent arguments that often play a special role in information structure.

KEYWORDS

Wutun language, Differential Argument Marking, argument structure, information structure

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Differential argument marking and the multifunctional case marker -ha in Wutun: Between the argument structure and information structure

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1 Introduction

One of the morphosyntactic features peculiar to the varieties of Northwest Mandarin spoken in the Amdo Sprachbund is the morpheme *[ha]/[xa]*, which optionally occurs on Patient and Recipient arguments. Cognates of *[ha]/[xa]* are distributed throughout most of the varieties of Northwest Mandarin of the Amdo Sprachbund, including Wutun, Linxia, Gangou, Tangwang, Xunhua, Huangshui (previously known as Xining dialect), Zhoutun and Bonan Han (see Zhou 2020: 193). In their discussion on Wutun, Lee-Smith and Wurm (1996: 887) analyze this morpheme as an accusative marker, and similar conclusions are made by Zhu et al (1997: 444) in their work on Gangou. A detailed discussion of *[xa]* in Gangou is provided by Yang (2014), who treats it as a multifunctional dative-accusative case marker expressing various semantic roles. According to Yang (2014), *[xa]* in Gangou can express different types of Patients and Recipients, as well as Benefactives, Causees, Addressees, Experiencers and Possessors, but not Agents, Malefactives or Sources. Lee-Smith has discussed *[ha]/[xa]* in Linxia (1996a: 866) and Chen (1985), Lee-Smith (1996b: 876) and Xu (2017) in Tangwang and they treat it as a dative-accusative marker. One of the challenges in providing a complete picture on the role of *[ha]/[xa]* in the grammar of Northwest Mandarin varieties is that in most of the varieties studied, *[ha]/[xa]* is not obligatory and does not occur systematically on all the arguments with the same semantic role and/or syntactic function. Some of the earliest publications already note that its use is also conditioned by information structure. In her preliminary paper on Xunhua, Dwyer (1995: 153) concludes that *-ha* has a highlighting function and treats it as a focus marker. Dede (2007) provides a detailed study of *[ha]/[xa]* in Huangshui Chinese. He analyzes this morpheme as an “anti-ergative” marker that marks Patient arguments in monotransitive clauses and Recipients or other non-Agent arguments in ditransitive clauses and can therefore serve to disambiguate between animate arguments. He notes that this marker also functions as a topic marker in some sub-dialects of Huangshui and hypothesizes that the meaning of *xa* may have extended from a topic marker to the “anti-ergative” marker that marks highly topical non-Agent arguments (Dede 2007: 875-877). According to Dede, the origins of *xa* has most probably been a Sinitic intonation unit boundary marker that was phonetically similar to Amdo Tibetan dative marker and therefore its extension

towards an “anti-ergative” marker has been triggered by language contact with Amdo Tibetan. Amdo Tibetan has a dative marker that marks animate non-Agent arguments (Recipients and Patients) with some verbs and therefore serves to disambiguate arguments (Wang 1995: 15). Similar theory about the origins of [*ha*]/ [*xa*] has been suggested by Xu (2015: 237), who suggests the following path of formation: Topic marker (after a noun at sentence initial position) > accusative/dative marker (after a preverbal object) > modal/final particle (in sentence-final position). A comprehensive overview of the case markers of the languages of the Amdo Sprachbund, including the cognates of [*ha*]/ [*xa*] is provided by Zhou (2019a, 2019b, 2020). According to him, the origin of this multifunctional case marker is the Chinese locative postposition *-eia*, which was firstly used as a dative marker under the Amdo Tibetan influence, and whose meaning was then further extended to accusative (Zhou 2019a).

In this paper, I will discuss the various functions of the case marker *-ha* in Wutun. On the semantic level, the use of *-ha* in Wutun is connected to semantic roles, animacy and affectedness, while on the pragmatic level it is associated with topicality and plays various functions in information structure, such as expressing emphasis or contrast or re-activating previously mentioned topic. I will therefore show that in Wutun, the use of *-ha* is intertwined with both argument structure and information structure. Wutun has many characteristics of Differential Argument Marking (DAM) in which non-Agent arguments are marked differently according to their semantic and pragmatic properties. I begin this paper with an introduction to Wutun language (section 2). I will then proceed to discuss core characteristics of *-ha* and typological features of Differential Argument Marking (section 3). I will provide a detailed discussion of semantic factors that condition the occurrence of *-ha* (section 4), as well as pragmatic factors related to information structure (section 5). Finally, I will provide some concluding remarks (section 6).

2 The Wutun Language

The Wutun language is spoken by ca. 4000 people in Wutun, a rural locality consisting of the three villages of Upper Wutun, Lower Wutun and Jiancangma located in Tongren County, Huangnan Autonomous Prefecture, Qinghai Province, in the eastern corner of the linguistic area Amdo Sprachbund. Our current understanding posits the genesis of the Wutun language as a product of both mixed marriages between partners from different linguistic groups, and long-term community bilingualism. According to Chen (1986) and Janhunen et al. (2008), the history of the Wutun language dates back to the 14th century, when the Upper Yellow River region formed a borderland between Chinese and Tibetan territory. During the Ming (1368-1644) and Qing (1644-1911) dynasties, inhabitants of certain local villages were organized into hereditary border guard units based on various parts of the Amdo area. The Wutun villages in the Tongren area were part of this border guard system and in this account, the Wutun language most probably emerged due to marriages between Chinese soldiers sent to the area from other parts of China and local Tibetan and Mongolian women. The local narratives of the Wutun people claim that the creation of the Wutun language was linked to the expansion of Tibetan empire during King Songtsen Gampo (605-650), whose troops came to the area to fight the Tang dynasty (618-907). Some of the Tibetan soldiers settled in the Tongren area and married local Chinese and Mongolian women, and the Wutun language was created in these bilingual families. The Wutun speakers adopted Tibetan Buddhism

and continued to use Amdo Tibetan as their lingua franca in communicating with neighboring linguistic groups. Today, almost all Wutun speakers are bilingual in Amdo Tibetan and the knowledge of both local Northwest Mandarin and Standard Mandarin is common among the younger generations.

Wutun represents a high degree of both lexical and grammatical mixing and among the Sinitic languages of the Amdo Sprachbund, it is most likely to be classified as an actual mixed language that represents a result of fusion of at least two identifiable contact languages, Northwest Mandarin and Amdo Tibetan (see Dede 2015; Sandman 2021). In addition, Wutun has also interacted with the Mongolic Bonan language. While most of the Wutun basic vocabulary and grammatical forms are of Northwest Mandarin origin, its phonology¹, morphology and syntax show heavy influence from Amdo Tibetan, and some of its grammatical morphemes have cognates in Bonan. Amdo Tibetan also contributes a significant amount of cultural vocabulary (Sandman 2016). Amdo Tibetan is the local lingua franca and the second language for almost all the Wutun speakers, while Bonan is spoken by ca. 4000 people in four villages located near the three Wutun-speaking villages (see Fried 2010). The present-day Wutun speakers are not bilingual in Bonan except some individuals, but shared grammatical features (notably number marking and comitative-instrumental case marking) suggest that the two languages must have been in a more intensive contact in the past. Unlike most of the Sinitic languages, Wutun has an agglutinative morphology with an elaborate system of number and case marking, aspect marking, egophoric marking and converbal constructions used for clause combining. Wutun has no tones, and the system of numeral classifiers is highly reduced and mainly restricted to *-ge*, a cognate to Mandarin Chinese general classifier. According to Janhunen (2007) languages of the Amdo Sprachbund can be divided into Tibetanized and Sinicized varieties and Wutun clearly represents Tibetanized variety whose grammar closely resembles Amdo Tibetan. On the other hand, Wutun has also retained some Sinitic grammatical features, such as topic-comment structures and the system of Chinese complement verbs. My data on Wutun is based on first-hand field data collected among the speech community in between 2007–2018 and it includes elicited data, descriptive and narrative texts as well as spontaneous conversations.²

3 Introduction to *-ha* and Differential Argument Marking

In this section, I will introduce some core characteristics of *-ha* in Wutun, as well as basic concepts of Differential Argument Marking. In section 3.1, I will briefly discuss *-ha* and provide some examples to illustrate its use. In 3.2 I will discuss Differential Argument Marking from a typological perspective.

¹ The Wutun examples are written by using a modified Pinyin romanization, originally introduced in Janhunen et al. (2008). Because Wutun has a larger consonant inventory than Modern Standard Chinese, some new symbols were necessary to introduce to be able to represent the consonant inventory in an accurate way. A summary of Wutun consonant and phoneme inventories, the orthographic conventions used in this paper, as well as the corresponding IPA symbols can be found in the Appendix.

² I have indicated in the paper whether my examples come from elicited data or from texts or conversations. The text data includes a folktale legend originally recorded by Dr. Yixiweisa Acuo (ELDP, corpus WT09_4, used by permission). All the other data I have collected myself.

3.1 Core Characteristics of *-ha*

In Wutun, *-ha* expresses a variety of functions on two different but interconnected linguistic levels: semantic and pragmatic. On the semantic level, *-ha* is associated with low degree of agentivity and it often highlights the most affected participant in the clause. However, the use of *-ha* is not restricted to transitive clauses; it can also be used with Experiencers in intransitive clauses. On the pragmatic level, *-ha* expresses functions associated with topicality, emphasis and contrast. Examples (1) and (2) illustrate some commonly attested uses of *-ha*. This marker is most often used with Patient arguments in monotransitive clauses (as in 1) and with Recipient arguments in ditransitive clauses (as in 2). Sometimes the variant *-a* is used instead of *-ha*, as illustrated by the example 2b:

- (1) a. *gek shai-ha nio-se-lio ze-li*
 dog snake-HA bite-die-PRF LINK-SEN.INF
 ‘The dog bit the snake to death.’ (Elicited)
- b. *gu Zhaxi-a yinyek jho-di-li*
 3SG PN-HA English teach-PROGR-SEN.INF
 ‘S/he is teaching Jiashe English.’ (Elicited)
- (2) *mize gejhai-de tiema pa-ha sung-gu-lio*
 little sister self-ATTR bike friend-HA give-COMPL-PRF
ze-li
 LINK-SEN.INF
 ‘Little sister gave her bike to the friend.’ (Elicited)

Both examples (1) and (2) have two animate arguments. We will see in section 4 that *-ha* is most often used in clauses with two animate arguments (notably Agent and Recipient) and it can be used to disambiguate arguments. However, *-ha* can also be used with inanimate arguments if they are topical and represent a high degree of affectedness. In (3) *-ha* occurs with an inanimate Patient argument:

- (3) *zhaɣwa-de ro-ha*
 disciple-ATTR corpse-HA
tu-li xaima-li mai-she-ma
 earth-LOC sand-LOC bury-RES.AO-COORD
 ‘The disciple’s corpse, (he) buried it into the sandy soil and then...’
 (ELDP, corpus WT09_4)

In (3) marks a Patient argument that has been totally affected by the action of the Agent. On the level of information structure, the Patient *zhaɣwa-de ro*, ‘disciple’s corpse’ is topical and plays an important role in advancing the plot of the story.

In most of the earlier studies on the cognates of *-ha* in the Sinitic languages of the Amdo Sprachbund, the occurrence of *-ha* has mainly been described with Patients and Recipients. In Wutun, the use of *-ha* appears to be most common with Patients and Recipients but is not restricted to them. Other non-agent arguments such as Causees (as in 4), Experiencers (as in 5):

- (4) *Zhaxi gu-ha cobua-ge-di-li*
 PN 3SG-HA sit-CAUS-PROG-SEN.INF
 ‘Jiashe is getting him seated.’ (Causee, elicited)
- (5) *gu-ha e-di-li*
 3SG-HA hungry-PROG-SEN.INF
 ‘S/he is hungry.’ (Experiencer, elicited)

In addition, *-ha* in Wutun can mark Possessors, as in (6):

- (6) a. *gu-ha gejbai-de she yek*
 3SG-HA self-ATTR house EXIST
 ‘S/he has his/her own house.’ (Possessor, elicited)
- b. *gu-n-de aɽwu-ha huaiqa-ge yek-li*
 3-COLL-ATTR boy-HA book-REF EXIST-SEN.INF
 ‘Their boy has a book.’ (Possessor, elicited)

While in some typologically transformed Sinitic languages of the Amdo Sprachbund (e.g. in Zhoutun, see Zhou 2019) the use of case marker *-ha* is obligatory with Possessors, it is optional in Wutun. In Wutun, *-ha* is used with definite or generic Possessors, while the Possessors newly introduced to the discourse are often unmarked. Consider:

- (7) *adia zhaɽwa-ge yek-de re*
 monk disciple-REF³ EXIST-NMLZ FACT
 Now there was a monk (who) had a disciple.’ (ELDP, corpus WT09_4)

Example (7) was uttered in a context of a folktale narrative and it introduces the two protagonists of the story, the monk and his disciple, to the listener. Because the Possessor *adia*, ‘monk’ is newly introduced to the discourse, it is not marked by *-ha*.

We will see in sections 4 and 5 that the use of *-ha* can be triggered by inherent argument properties, discourse properties of the arguments and event semantics alike. Before turning into a detailed discussion of Wutun data, let’s take a closer look to Differential Argument Marking from a typological perspective in section 3.2.

3.2 Differential Argument marking: A Typological Perspective

From the typological perspective, the use of *-ha* in Wutun is connected to Differential Argument Marking (DAM). Witzlack-Makarevich and Seržant (2018: 17) define DAM as “any

³ The referential marker *-ge* is common in indicating indefinite entities; however, it can also be used with certain definite entities (see Author 2016: 65-66) and therefore I will use the term ‘referential marker’ instead of ‘indefinite marker’.

kind of situation where an argument of a predicate bearing the same generalized semantic role may be coded in different ways, depending on other factors than argument role itself and/or the clausal properties of the predicate such as polarity, TAM, embeddedness etc.” The most carefully studied type of Differential Argument Marking is Differential Object Marking (DOM). Languages with DOM overtly mark some of their O arguments, but not others, according to semantic or pragmatic factors (Aissen 2003: 436). Other types of DAM include Differential Subject Marking (de Hoop & de Swart 2008), which is often referred as optional or pragmatic ergativity, and splits in ditransitive alignment. In addition to discussing grammatical relations of subject and object that cover a rather broad range of different arguments, typologies for more specific semantic roles have been established. Fauconnier (2011) has studied *Differential Agent Marking*, while Haspelmath (2007) and Kittilä (2008) have discussed *Differential Recipient Marking* or *Differential Goal Marking*, as well as *Differential Theme Marking*. In my discussion on Wutun, I have chosen to talk about specific semantic roles like Agent, Patient and Recipient, because they allow a more fine-grained analysis of different kind of alignment splits found in the data, and the grammatical relations of subject and direct object have not been fully grammaticalized in Wutun (as well as in other Sinitic languages) and it is therefore difficult to find rigorous syntactic criteria to define them. There are many different factors that condition DAM in the world’s languages. DAM can be triggered by inherent argument properties (such as animacy) or non-inherent, discourse-based argument properties, including definiteness, specificity and information structural factors, such as topicality and focality (for distinguishing between inherent and discourse-based triggers of DAM, see Sinnemäki 2014). Example (8) illustrates Differential Object Marking based on definiteness in Amharic. An indefinite object in 8a) is unmarked, while definite object in 8b) is marked by the accusative case:

(8) Amharic (Semitic, Ethiopia, Gasser 1983: 110)

- a. *Girma bet gäzza-ø*
 PN house buy.PAST-3SG.I
 ‘Girma bought a house’
- b. *Girma bet-u-n gäzza-ø(-w)*
 PN house-DEF-ACC buy.PAST-3SG.I(-3SG.II)
 ‘Girma bought the house’

In some languages, DAM cannot be explained on the basis of inherent or discourse-related properties of arguments, but is rather conditioned by event semantics, the way in which arguments are involved in an event (Næss 2004; Witzlack-Makarevich & Seržant 2018). The most important factors that constitute event semantics include affectedness and volitionality/control. Both of these factors are important properties of the participants in transitive events. In a prototypical transitive situation the Agent is volitional and controlling and performs on a Patient an action which has a physical and perceivable effect (DeLancey 1985, 1987). Different degrees of volitionality/control and affectedness of participants involved in an event may be reflected in Differential Argument Marking.

Differential Argument Marking has been studied extensively in Tibeto-Burman languages. It is often called “pragmatic” or “optional” case marking. Some scholars use the term “anti-ergative” (LaPolla 2004: 51), which usually refers to differential marking of Patients and Recipients based on

their animacy or overall saliency. In the Lolo-Burmese language Lahu, the object marker *thàʔ* is particularly common in ditransitive clauses with two animate arguments and one of its key functions is argument disambiguation in clauses with two potential Agents, while with inanimate nouns it is only used “for special contrast or emphasis” (Matisoff 2003: 212, 215). In Tibeto-Burman, it is also very common to have non-obligatory case markers whose functions extend beyond distinguishing arguments in the clause and they can denote a variety of semantic and pragmatic functions, such as agentivity, perfectivity, contrast and topicality (DeLancey 2012: 9). Differential Argument Marking based on exclusively pragmatic factors, such as topicality, is particularly common in East and South-East Asian languages (Iemmolo 2011: 210).

4 Semantic Factors and *-ha* in Wutun

In this section I will discuss some semantic factors that condition the occurrence of *-ha* in Wutun. The use of *-ha* is connected to animacy and semantic roles and these are discussed in section 4.1. In addition to marking Patients, *-ha* is often used to disambiguate Recipients and Themes in ditransitive clauses and Causees in causative clauses. Section 4.2 deals with event-semantic properties of affectedness and volitionality/control that have a profound role in argument marking in Wutun.

4.1 Semantic Roles, Animacy and Definiteness

One of the most important inherent argument properties that trigger the occurrence of *-ha* in Wutun is animacy. The most common contexts for the occurrence of *-ha* in my data are ditransitive clauses and causative clauses, which contain two animate arguments. In ditransitive clauses, *-ha* marks the Recipient argument, as in (9) and (10):

- (9) *aba enian-ha yangtang yi*
 father child-HA candy one
poqia dai-lai-lio
 package bring-come-PRF
 ‘The father brought the child a package of candies.’ (Elicited)

- (10) *lama gejbai-ha longdan ka-ma*
 lama self-HA prediction give-COORD
 ‘A lama gave him a prediction.’ (ELDP, corpus WT09_4)

In causatives, *-ha* marks animate Causee arguments, as in (11). If the Causee is inanimate, *-ha* is usually omitted, as in (12):

- (11) *aba aga-ha qhichai*
 father elder brother-HA car
mai-ge-di-li
 sell-CAUS-PROG-SEN.INF
 ‘The father makes the elder brother sell his car.’ (Elicited)

- (12) *ngu je zhi qo-ge-di-yek*
 1SG this paper burn-CAUS-PROG-EGO
 'I am burning this paper.' (Elicited)

The use of *-ha* in clauses with two animate arguments is most probably motivated by the need to disambiguate arguments and it serves the purpose of distinguishing Recipient or Causee from the Agent. Further support for this analysis is provided by the data from ditransitive clauses that have an inanimate Goal argument instead of animate Recipient argument. Wutun ditransitive clauses have characteristics of Differential Goal Marking. Differential Goal Marking refers to a phenomenon in which Recipients and Goals are marked differently according to animacy (Kittilä 2008: 247-248). While Recipients in Wutun are systematically marked with *-ha*, Goals do not take *-ha*:

- (13) *ggaiggan payiwa-ha huaiqa-ge dai⁴-gu-lio*
 teacher friend-HA book-REF send-COMPL-PRF
 'The teacher sent a book to the friend.' (Elicited)

- (14) *ggaiggan xaitang kema huaiqa-ge dai-gu-lio*
 teacher school side book-REF send-COMPL-PRF
 'The teacher sent a book to the school. (Elicited)

In (13), the Recipient *payiwa*, 'friend', is marked by *-ha*. The Goal *xaitang*, 'school' in (14) is inanimate and therefore does not take *-ha*. Goals can sometimes be marked by the postposition *kema*, 'side', as in (14).

In addition to Differential Goal Marking, Wutun also has Differential Theme Marking. Themes in Wutun are marked differently according to their definiteness. Definite Themes are often marked by *-ha*, while indefinite Themes are often marked by the referential marker *-ge* (which is a cognate for the Mandarin Chinese general classifier *-ge*)⁵. In (15), the Theme *yegai*, 'letter' is definite and is therefore marked by *-ha*. However, in (14), repeated here as (16), Theme is indefinite, and it therefore occurs with *-ge*:

- (15) *Duojie yegai-ha zhungo dai-gu-lio*
 Duojie letter-HA China send-COMPL-PRF
 'Duojie sent the letter to China.' (Elicited)

- (16) *ggaiggan xaitang kema huaiqa-ge dai-gu-lio*
 teacher school side book-REF send-COMPL-PRF
 The teacher sent a book to the school. (Elicited)

⁴ This word is a cognate to Mandarin Chinese verb *dài* (帶), 'to bring, to carry'; in Wutun it can also mean 'to send'.

⁵ Unlike in Mandarin Chinese, in Wutun the referential marker *-ge* does not have indefinite, non-referential uses (e.g. indicating certain unspecified individual).

It is also possible to use *-ha* twice in the same sentence. If a ditransitive clause has both Recipient and definite Theme, they can both be marked by *-ha*. However, my consultant noted that in this case the marking of Theme is optional. Consider:

- (17) *Duojie* *yegai(-ha)* *pa-ha* *dai-gu-lio*
 Duojie letter(-HA) friend-HA send-COMPL-PRF
 ‘Duojie sent the letter to the friend.’ (Elicited)

We have seen that in ditransitive and causative clauses *-ha* is used to disambiguate non-actor arguments from the Agent. In addition, *-ha* participates in Differential Goal Marking and Differential Theme Marking and its occurrence is conditioned by animacy and definiteness of the respective arguments. Recipients and Goals are coded differently due to their animacy, while Themes can be marked differently based on their definiteness. However, when we turn into Patient arguments of monotransitive clauses, animacy seems to be irrelevant in explaining the occurrence of *-ha*. It is necessary to turn into event semantics and look at the relationship between the Agent and the Patient in terms of affectedness, volitionality and control. This is the topic of section 4.2.

4.2 Event Semantics: Affectedness, Volitionality and Control

Patients (and Patient-like arguments) in Wutun can occur both with and without *-ha*. While in ditransitive clauses *-ha* is systematically used with Recipients and it distinguishes Recipients from inanimate arguments, its use seems to be optional with Patient arguments of monotransitive clauses. In addition, *-ha* can be used with both animate and inanimate Patients. I argue that a crucial factor in conditioning the use of *-ha* with Patient arguments is affectedness. I follow the definition of affectedness proposed by Næss (2004: 1202), who argues that affectedness can be operationalized in terms of part-whole relations and definiteness on the one hand and salience on the other hand. An entity that is affected as a whole is more affected than entity whose subpart is affected. For example, a totally broken cup is more affected than a partially broken cup. Expressing part-whole relations is often connected to definiteness. Totally affected entities are usually coded as definite, while partially affected entities are coded as indefinite. Another factor that is crucial in assessing affectedness is salience. Salience refers to events that are more perceptible and more of an interest than others. In many languages with DAM, arguments that are given and/or animate are most likely to receive case-marking, because they are more perceptible than others. In addition, effects on animate/human participants (e.g. *Peter killed John*) are more of an interest than effects on inanimate participants. I argue that *-ha* in Wutun is most likely to occur with Patients that are totally affected and highly salient, such as definite and topical.

Examples (18) – (20) illustrate the use of *-ha* with totally affected Patient arguments that are all coded as definite. Total affectedness and definiteness are also connected to topicality, which is part of encoding the argument as salient. All the Patients in (18) – (20) are topical and they therefore occupy a clause-initial position:

- (18) *haha-ha* *qhichai nia-se-gu-lio* *ze-li*
 dog-HA car press-die-COMPL-PRF LINK-SEN-INF
 ‘The dog was crushed to death by a car.’ (Elicited)

- (19) *qho-ha qelok-liangge gang-gu-lio ze-li*
 bridge-HA flood-INS flush-COMPL-PRF LINK-SEN.INF
 ‘The bridge was flushed away by the flood.’ (Elicited)

- (20) *bianshe-ha gek qe-she-lio ze-li*
 dumpling-HA dog eat-RES.AO-PRF LINK-SEN.INF
 ‘The dumplings were (completely) eaten by a dog.’ (Elicited)

Wutun word order is very much connected to topicality so that (pragmatically unmarked) clauses with topical Agent follow Agent-Patient-Verb word order, while clauses with topical Patient follow Patient-Agent-Verb word order, as in (18) – (20). Example (21) illustrates a clause with topical Agent and partially affected, non-topical and indefinite Patient. The Agent occupies the clause-initial position, while the Patient occurs without *-ha*:

- (21) *ngu rek qe-di-yek*
 1SG meat eat-PROG-EGO
 ‘I am eating meat.’ (Elicited)

In my data, *-ha* is not used with partially affected, indefinite Patients. Typical contexts for less affected, indefinite Patients that do not take *-ha* are habitual sentences (as in (22)) and irrealis situations (as in (23)):

- (22) *gu-jhege jjhende cai qe-di-li*
 3-PAUC usually vegetable eat-PROG-SEN.INF
 ‘They usually eat vegetables.’ (Elicited)

- (23) *nga-mu qhichai mai be-qhe-li*
 1-COLL car buy NEG-be able-SEN.INF
 ‘We are not able to buy a car.’ (Elicited)

We have seen that *-ha* in Wutun occurs with Patients that are highly affected and therefore coded as definite and topical. Only partially affected, indefinite Patients are not likely to occur with *-ha*. Prototypical transitive events typically include a highly affected Patient, so in transitive clauses *-ha* highlights the affectedness of the Patient and contributes to the construal of an event as highly transitive.

The effect of *-ha* on transitivity turns into opposite when we look at its use with involuntary Agents. In rare cases, *-ha* in Wutun can be used with Agent-like arguments. However, when used with Agents, *-ha* marks them as involuntary Agents that do not fulfill all the features of a typical Agent. Consider:

- (24) *enian (cakara) gu chapi da-pe-gu-lio*
 child (on purpose) that teacup hit-get broken-COMPL-PRF
 ‘The child broke that teacup on purpose.’ (Elicited)

- (25) *enian-ha mi-jedo-ma gu chabi da-pe-gu-lio*
 child-HA NEG-know-COORD that teacup hit-get broken-COMPL-PRF
 ‘The child broke that teacup accidentally.’ (Elicited)

In (24) the child broke the teacup for a purpose and is therefore construed as an Agent that receives no overt case marking. In (25), on the other hand, the child broke the teacup accidentally and is therefore construed as an involuntary Agent that does not fulfill all the properties of a prototypical Agent. Therefore, it is marked by *-ha*. In a prototypical transitive event, the Agent is volitional and controls his/her action (DeLancey 1984, 1987). The use of *-ha* on the Agent *enian*, ‘child’ in (25) expresses unexpected lack of volition and control and contributes to decreased transitivity of the event.

The effects of volitionality and control on DAM has been demonstrated in cross-linguistic studies. Holinsky (1987) discusses the effect of volitionality and control on Differential Agent Marking (pragmatic ergative) in Nakh-Daghestanian language Tsova-Tush. In Tsova-Tush, Agents of the events that involve at least some degree of speaker’s control are marked by ergative case (as in 26a), while Agents of the events that are totally beyond speaker’s control are marked by the nominative case (as in 26b):

- (26) Tsova-Tush (Nakh-Daghestanian, Georgia, Holisky 1987: 105)
- a. (*As*) *vuiž-n-as*
 1SERG fall-AOR-1SERG
 ‘I fell (It was my own fault that I fell down.)’
- b. (*So*) *vož-en-sO*
 1SNOM fall-AOR-1SNOM
 ‘I fell, by accident.’

In both Wutun and Tsova-Tush involuntary Agents are more marked than prototypical Agents and they receive case-marking that does not occur with volitional, controlling Agents. Lack of volitionality and control are also possible factors that explain the use of *-ha* with Experiencers. Animate arguments of the verbs expressing cognition, emotion and bodily sensations are often marked by *-ha*. These arguments have the semantic role of Experiencer rather than intentional Agent. Consider:

- (27) *nia-ha ke-di-li=a*
 2SG.OBL-HA thirsty-PROG-SEN.INF=Q
 ‘Are you thirsty?’ (Elicited)

We can conclude that in terms of event semantics, *-ha* in Wutun is connected with high degree of affectedness and low degree of volitionality and control. With Patient arguments *-ha* is connected with high degree of affectedness, assessed in terms of definiteness and salience. Because *-ha* highlights the affectedness of the Patient, it contributes to a high degree of transitivity of the denoted event. On the other hand, *-ha* can also be used with involuntary Agents that lack the high degree of volitionality and control of a prototypical Agent. With involuntary Agents, *-ha* downgrades the Agent and therefore constructs the event as less transitive.

5 Information Structure

Although semantic properties of arguments and event-semantic properties play important role in conditioning the use of *-ha*, its occurrence is not determined exclusively by semantic factors and it is necessary to examine the role of information structure as well. As already noted in section 4.2, one of the main factors that condition the occurrence of *-ha* is topicality. Following Lambrecht (1994: 118), I will define topic as “the thing which the proposition expressed by the sentence is about”. The topic is an element, whose referent is definite or generic and therefore pragmatically accessible for the addressee, as well as a matter of current concern or interest. A statement about the topic conveys information, which is relevant with respect to topic and increases the addressee’s knowledge about it.

An argument that has been introduced and integrated into discourse, and is therefore definite and easily identifiable, is more likely to be marked by *-ha* than an argument that is newly introduced:

- (28) *zhaɣwa ta ra qhi-zhe sho-de kuli*
 disciple 3SG also go-PROSP say-ATTR time
zhaɣwa-ha ra nia xakmo-ge
 disciple-HA also 2SG.OBL pearl-REF
ssek-la-ge ze-ma
 see-INCOMPL-REF do-COORD
 ‘When the disciple said that he would also go, they asked (the lama) to also look at the divination ball for him...’ (ELDP, corpus WT09_4)

In (28) the Beneficiary argument *zhaɣwa*, ‘disciple’ on the second line has been already introduced and is therefore accessible to speech act participants. It fulfils the properties of a topical argument and is therefore marked by *-ha*. Another example of a definite and given, topical argument marked by *-ha* is provided in (29). The Patient-topic *xan*, ‘cord’ in (29) has been introduced in the folktale narrative already before so it is easily accessible. In addition, manipulation of the Patient-topic represents a dramatic turning point in the folktale narrative and has an important role in advancing the plot of the story:

- (29) *xan-ha*
 cord-HA
adia daijhe-liangge xian getan-ljo
 monk knife-INS cord cut-PRF
 ‘The cord, the monk cut the cord with a knife.’ (ELDP, corpus WT09_4)

In the folktale narrative that represents the context for (29), a monk has been harassed by an evil zombie. A high Tibetan lama living in Lhasa instructs him to tie a cord to his door and put another half of the cord under his pillow. Then he has to cut the cord when zombie comes to the door. First the monk does not have the courage to cut the cord, but later he performs the ritual and gets rid of the zombie. Therefore, the Patient-topic *xan*, ‘cord’ has a crucial role in the turning point of the story. Topical arguments that play an important role in story-telling condition DAM also in many other Tibeto-Burman languages. For example, Genetti (1997:44) has observed that non-

human animate Patients in Dolakha Newar receive object marking in contexts where they are topical, that is “the manipulation of these animate patients [is] crucial to the plot resolution”.

Another important information structural factor that conditions the occurrence of *-ha* is expressing contrast:

(30) *ya ngu nia din-yek*
 INTJ 1SG 2SG.OBL wait-EGO
 ‘Ok, I will wait for you (asserting a plain fact).’ (Elicited)

(31) *ngu nia-ha din-di-yek*
 1SG 2SG.OBL-HA wait-PROG-EGO
 ‘I am waiting for *you* (and not somebody else).’ (Elicited)

Example (30) is a pragmatically neutral statement in which the speaker is merely stating a fact that s/he is waiting for the addressee, while in (31) the speaker emphasizes that s/he is waiting for the addressee and not somebody else. A related example is (32) is from a descriptive text that describes the customs of the Wutun locality. The speaker first describes how thanangka painting was earlier taught from master to apprentice, but nowadays it is also taught to children at school. The morpheme *-ha* on the topic *yidaze*, ‘everybody’ expresses contrast with the situation before:

(32) *jhang menzai xaitang-li conjena da*
 nowadays school-LOC as for this then
yidaze-ha arwo-jhege la lha da gu ra
 everyone-HA boy-PAUC also deity then that also
jho-di-de-li
 teach-PROG-NMLZ-SEN-INF
 ‘As for today, thanangka painting is also taught to all the children at school (before it was not taught to everybody at school).’ (Wutun texts 1_The Wutun village)

A slightly different example of contrastive use of *-ha* is (33), in which *-ha* is used in self-repair:

(33) *yidaze-ha*
 all-HA
nga-ha zzonlada gu gu-duru
 1SG.OBL-HA for someone that that-PL
xaige xiang~xiang-de-ge hai-de
 very delicious ~delicious-NMLZ-REF EQU-NMLZ
mende-ge hai-li da
 like that-REF EQU-SEN-INF then
 ‘All the people, or at least me, find this kind of traditional food very delicious.’
 (Wutun texts 2_Traditional Food)

In (33), the speaker first starts telling that all the people in her village like traditional food. She emphasizes the Experiencer *yidaze*, ‘everyone’, with *-ha*. However, the speaker decides to correct

herself while talking (she later explained to me that she suddenly realized that she cannot know whether everybody likes the same dishes as she does, and she can only tell her own opinion). She then uses *-ha* to contrast her opinion with other people's potentially different opinions.

The effects of contrast on DAM has been demonstrated in other Tibeto-Burman languages as well. Kurtöp has Differential Agent Marking (pragmatic ergative) that is conditioned by topicality, emphasis or contrast. Ergative case is used only when the argument is pragmatically marked, while pragmatically neutral arguments receive absolutive marking. In (34a) the identity of the person who left was expected. The argument is therefore pragmatically neutral and receives absolutive marking. However, in (34b) there was some confusion about the person who left, and the speaker uses ergative marking to contrast the referent from other possible referents:

- (34) Kurtöp (Tibeto-Burman, Bhutan, Hyslop 2010: 13)
- | | | | |
|----|---------------|-----------------|-------------|
| a. | <i>tshe</i> | <i>ge-shang</i> | <i>khit</i> |
| | DM | go-PFTCV.EGO | 3.ABS |
| | 'So he left.' | | |
| b. | <i>khi</i> | <i>ge-shang</i> | |
| | 3.ERG | go-PFTCV.EGO | |
| | 'She went.' | | |

In Wutun topics can be either arguments of the verb, or elements that are not semantically and grammatically integrated into predicate-argument structure, and whose relation to the proposition is pragmatically construed. So far, our examples have concerned argument-topics that are integrated into predicate-argument structure and bear a semantic role like Patient or Recipient. However, *-ha* can also be used with non-argument topics that are not part of the argument structure of the verb. Example (35) illustrates the use of *-ha* with non-argument topic:

- (35)
- | | | |
|------------------------|---------------------|----------------|
| <i>gu-liangge</i> | <i>jhang menzai</i> | <i>conjena</i> |
| that-DIST | nowadays | as for this |
| <i>je-de</i> | <i>hua je-ge-ha</i> | |
| this-ATTR | speech this-REF-HA | |
| <i>xijjek</i> | <i>ze-di-de</i> | <i>ren ra</i> |
| research | do-PROGR-ATTR | person also |
| <i>zaiige do-li</i> | | |
| some (be) many-SEN.INF | | |
- 'Therefore, nowadays, this language, as for it, there are quite many people doing research on it.' (Wutun texts 1_The Wutun village)

The topic *je-ge*, 'this' is an element that the proposition expressed by sentence is about, but it is not an argument of the verb and the sentence represents topic-comment structure rather than predicate-argument structure. Another example of non-argument topic is (36) from a naturally occurring conversation:

- (36)
- | | |
|--------------------|---------------------------------|
| <i>gu-jhege-ha</i> | <i>yanza-la-di-li</i> |
| 3-PL-HA | surprised-INCOMPL-PROGR-SEN.INF |
- 'She is very surprised of seeing them (lit. Them, surprised.)' (Wutun Conversation 3_ Babies)

Example (36) is uttered by a relative of an 8-month old baby girl. She commented the behavior of the baby who looked surprised when seeing my colleague and me when we were interviewing her family. The sentence represents a topic-comment structure in which *gu-jhege*, ‘they’ represents topical part, but is not integrated to predicate-argument structure.

My data from everyday conversation also contains one example in which the topic marked by *-ha* is place after the verb as an afterthought:

- (37) A: *agu bai-la gungbe*
 lady EQU.NEG-COND things to eat
quandi mi-de bara ni
 whole EXIST.NEG-NMLZ only 2SG
 ‘Without the aunt you wouldn’t have anything to eat.’
- B: *awo nong-la-ma gu-liangge-ha*
 boy look after-INCOMPL-COORD 3SG-two-HA
 ‘They two must look after the baby boy (so they don’t have time to cook).’ (Wutun Conversation 3_ Babies)

Example (37) is from a conversation between the aunt of a young baby boy and another relative. The relative (A) comments that young boy’s parents wouldn’t have anything to eat if the aunt wouldn’t help them with cooking. The aunt (B) answers that the young couple must look after their child, implying that they therefore do not have time to cook. The topic *gu-jhege*, ‘they’ is marked by *-ha* and placed as an afterthought after the verb.

It can be concluded that the occurrence of *-ha* is conditioned by several information structural factors, such as topicality and contrast. The importance of information structure is particularly evident when the use of *-ha* is examined in naturally occurring data, such as descriptive and narrative texts and everyday conversations. The importance of information structure in conditioning the use of *-ha* suggests that this marker has most probably originated as a topic marker, as suggested by Dede (2007) and Xu (2015) in earlier studies on case marking in the Sinitic languages of the Amdo Sprachbund. Topic is a part that is already identified in the discourse and this forms a natural link to DOM based on definiteness and Patient affectedness (see Li & Thompson 1981: 465; Iemmolo; Iemmolo 2011; Iemmolo & Arcodia 2014). As illustrated in Section 4, both of these factors play an important role in conditioning Differential Argument Marking in Wutun. Another theory suggests that the case marker [*ba*]/ [*xa*] in Amdo Sprachbund is based on the Chinese locative postposition *-eia*, which was firstly used as a dative marker under the Amdo Tibetan influence, and whose meaning was then further extended to accusative (Zhou 2019a). However, this theory does not explain the use of *-ha* as a topic marker in Wutun.

6 Conclusions

We have seen that the use of *-ha* in Wutun is conditioned by multiple semantic and pragmatic factors, including inherent semantic properties of arguments, the role that arguments play in event structure, as well as discourse properties of arguments. On the semantic level, *-ha* is associated with low degree of agentivity. In ditransitive clauses and causatives with two animate arguments, it is used

on animate non-Agent arguments and has an important role in argument disambiguation. In transitive clauses inherent argument properties alone cannot explain the use of *-ha* and it is necessary to look at the role of arguments in the event structure. In transitive clauses, *-ha* is used on highly affected Patients. It can also be used on involuntary Agents to indicate the lack of volitionality and control over the event. In addition to argument properties and event semantics, the occurrence of *-ha* is often triggered by information structural factors, such as topicality and contrast. While *-ha* is most often used with topical arguments of the verb that are part of the predicate-argument structure, it is also possible to use *-ha* with non-argument topics that have not been integrated into the argument structure of the verb.

To conclude, use of multifunctional case marker *-ha* in Wutun grammar is a constellation of several factors and this marker brings together argument structure and information structure in a unique way. It is my sincere hope that this study will facilitate future research on semantic and pragmatic meanings of the various cognates of [*ha*]/ [*xa*] in Sinitic languages of the Amdo Sprachbund, as well as their shared origins and history of spread in the region.

ABBREVIATIONS

1	first person	INTJ	interjection
2	second person	LOC	locative
3	third person	LINK	linker
ATTR	attributive	NEG	negative
CAUS	causative	NMLZ	nominalizer
COLL	collective	OBL	oblique
COMPL	completive	PAUC	paucal
COND	conditional	PL	plural
COORD	coordinative	PN	proper name
DIST	distal	PRF	perfective
EGO	ego	PROG	progressive
EQU	equative	PROSP	prospective
EXIST	existential	REF	referential
FACT	factual	RES.AO	agent-oriented resultative
IMP	imperative	SEN.INF	sentory-inferential
INCOMPL	incompletive	Q	question marker
INS	instrumental		

REFERENCES

- Aissen, Judith. 2003. "Differential object marking: Iconicity vs. economy". *Natural Language and Linguistic Theory* 21: 435-483. <https://people.ucsc.edu/~aissen/PUBLICATIONS/dom.pdf> (Accessed 26 July 2020)
- Chen, Naixiong. 1986. "Guanyu Wutunhua" 关于五屯话 (An outline of Wutun linguistic structure). *Journal of Asian and African Studies* 31: 33-52.

- Chen, Yuanlong (A. Ibrahim). 1985. "Gansu jingnei Tangwanghua jilüe" 甘肃境内唐汪话寄略 (Sketch of the Tangwang Language of Gansu Province). *Minzu Yuwen* 6: 33-47.
- Dede, Keith. 2007. "The origin of the anti-ergative [xa] in Huangshui Chinese". *Language and Linguistics* 8.4: 863-881. http://www.ling.sinica.edu.tw/files/publication/j2007_4_02_8426.pdf (Accessed 07 July 2020)
- Dede, Keith. 2015. "Mixed languages". In: Sybesma, Rint (ed.), *Encyclopedia of Chinese language and linguistics*. http://dx.doi.org/10.1163/2210-7363_ecll_COM_00000271 First published online: 2015. (Accessed 07 July 2020)
- de Hoop, Helen; and de Swart, Peter (eds.). 2008. *Differential Subject Marking*. Dordrecht: Springer.
- DeLancey, Scott. 1984. "Agentivity and syntax". In: *Papers from the Parasession on Causatives and Agentivity at the 21st Regional Meeting of the Chicago Linguistic Society*, 1-12. Chicago: CLS.
- DeLancey, Scott. 1987. "Transitivity in grammar and cognition". In: Tomlin, R. S. (ed.), *Discourse relations and cognitive units*. 53-68. Amsterdam: John Benjamin [Typological Studies in Language 11].
- DeLancey, Scott. 2012. "'Optional' ergativity in Tibeto-Burman languages". *Linguistics of the Tibeto-Burman Area* 34.2: 9-20.
- Dwyer, Arienne M. 1995. "From the Northwest China Sprachbund: Xúnhuà Chinese dialect data". *Yuan Ren Society Treasury of Chinese dialect data*. Vol. 1. 148-182.
- Fauconnier, Stefanie 2011. "Differential agent marking and animacy". *Lingua* 121.3: 533-547.
- Fried, Robert Wayne. 2010. *A grammar of Bao'an Tu, a Mongolic language of Northwest China*. Ph.D. diss, the University of Buffalo, State University of New York.
- Gasser, Michael. 1983. "Topic continuity in written Amharic narrative". In: Givón, Talmy (ed.), *Topic continuity in discourse: A quantitative cross-language study*, 99-139. Amsterdam: John Benjamin.
- Genetti, Carol. 1997. "Object relations and dative case in Dolakha Newari". *Studies in Language* 21.1: 33-62.
- Haspelmath, Martin. 2007. "Ditransitive alignment splits and inverse alignment". *Functions of Language* 14.1: 79-102. <https://zenodo.org/record/1133886#.YPPoay9DxQI> (Accessed 06 July 2020)
- Holisky, Dee-Ann. 1987. "The case of the intransitive subject in Tsova-Tush (Batsbi)". *Lingua* 71: 103-113.
- Hyslop, Gwendolyn. 2010. "Kurtöp case: the pragmatic ergative and beyond". *Linguistics of the Tibeto-Burman Area* 33.1: 1-40.
- Iemmolo, Giorgio 2011. *Differential object marking*. Ph.D. diss, University of Pavia.
- Iemmolo, Giorgio and G. F. Arcodia. 2014. "Differential object marking and identifiability of the referent: a study of Mandarin Chinese". *Linguistics* 52.2: 315-354.
- Janhunen, Juha. 2007. Typological interaction in the Qinghai linguistic complex. *Studia Orientalia* 101: 85-103.
- Janhunen, Juha; Peltomaa, Marja; Sandman, Erika & Xiawu Dongzhou. 2008. *Wutun*. Muenchen: Lincom Europa [Languages of the World/Materials 466].
- Kittilä, Seppo. 2008. Animacy effects on differential goal marking. *Linguistic Typology* 12: 245-268. <https://www.degruyter.com/document/doi/10.1515/LITY.2008.038/html> (Accessed 08 July 2020)

- Lambrecht, Knud. 1994. Information structure and sentence form: Topic, focus, and the mental representation of discourse referents. Cambridge: Cambridge University Press [Cambridge Studies in Linguistics 71].
- LaPolla, Randy J. 2004. On nominal relational morphology in Tibeto-Burman. In: Lin, Ying-chin et al. (eds.), *Studies on Sino-Tibetan languages: Papers in honor of Professor Hwang-cherng Gong on his seventieth birthday*, 43-73. Taipei: Institute of Linguistics, Academia Sinica.
- Lee-Smith, Mei W. 1996 a. "The Hezhou language". In: Wurm, Stephen A.; Mühlhäusler, Peter & Tryon, Darrell R. (eds.), *Atlas of languages of intercultural communication in the Pacific, Asia and the Americas*, 865-873. Berlin: Mouton de Gruyter [Trends in Linguistics, Documentation 13, vol. II (2)].
- Lee-Smith, Mei W. 1996 b. "The Tangwang language". In: Wurm, Stephen A.; Mühlhäusler, Peter & Tryon, Darrell R. (eds.), *Atlas of languages of intercultural communication in the Pacific, Asia and the Americas*, 875-882. Berlin: Mouton de Gruyter [Trends in Linguistics, Documentation 13, vol. II (2)].
- Lee-Smith, Mei W. and Stephen A. Wurm. 1996. "The Wutun language". In: Wurm, Stephen A.; Mühlhäusler, Peter & Tryon, Darrell R. (eds.), *Atlas of languages of intercultural communication in the Pacific, Asia and the Americas*, 883-897. Berlin: Mouton de Gruyter [Trends in Linguistics, Documentation 13, vol. II (2)].
- Li, Charles N. & Thompson, Sandra A.. 1981. *Mandarin Chinese. A functional reference grammar*. Berkeley, Los Angeles and London: University of California Press.
- Matisoff, James 2003. "Lahu". In: Thurgood, Graham & LaPolla, Randy J. (eds.), *The Sino-Tibetan languages*, 208-221. London and New York: Routledge [Routledge Language Family Series 10].
- Næss, Åshild. 2004. "What markedness marks: the markedness problem with direct objects". *Lingua* 114: 1186-1212.
- Sandman, Erika. 2016. *A grammar of Wutun*. Ph.D. diss, University of Helsinki.
- Sandman, Erika. 2021. "Wutun as a mixed language". In: Sippola, Eeva & Mazzoli, Maria (eds.), *New perspectives on mixed languages: From core to fringe*, 325-359. Berlin: Mouton de Gruyter [Language Contact and Bilingualism 18].
- Sinnemäki, Kaius. 2014. "A typological perspective on differential object marking". *Linguistics* 52. 2: 281-313.
- Wang, Qingshan. 1995. *A grammar of spoken Amdo Tibetan*. Chengdu: Sichuan Nationality Publishing House.
- Witzlack-Makarevich, Alena and Ilja Seržant. 2018. "Differential argument marking: Patterns of variation". In: Witzlack-Makarevich, Alena & Seržant, Ilja (eds.), *Diachrony of differential argument marking*, 1-40. Berlin: Language Science Press [Studies in Diversity Linguistics 19].
- Xu, Dan. (徐丹)2015. "Sinitic languages of Northwest China: Where did their case marking come from?" In: Cao, Guangshun; Diamouri, Redouane & Peyraube, Alain (eds.), *Languages in Contact in Northwestern China*, 217-244. Paris: Monograph series of the EHESS-CRLAO.
- Xu, Dan. 2017. *The Tangwang language. An interdisciplinary case study in Northwest China*. Springer.
- Yang, Yonglong. (杨永龙) 2014. "Qinghai Minhe Gangouhua de duogongneng gebiaoji ha" 青海民和甘沟话的多功能格标记 '哈' (The multi-functional case marker [xa] in Gangou Chinese

- dialect in Minhe Hui and Monguor Autonomous County, Qinghai Province). *Fangyan* 方言 (Dialect) 2014.3: 320-341.
- Zhou, Chenlei 2019a. "A special case marking system in the Sinitic languages of Northwest China". *Journal of Chinese Linguistics* 47.2: 425-452.
- Zhou, Chenlei (周晨磊) 2019b. "Ganqing fangyan gebiaoji 'xa' de lai yuan" 甘青方言格标记“哈”的来源 (The origin of the dative-accusative marker [xa] in Gan-Qing dialects). *Language and Linguistics* 20.3: 494-514.
- Zhou, Chenlei 2020. Case markers and language contact in the Gansu-Qinghai linguistic area. *Asian Languages and Linguistics* 1.1: 168-203.
- Zhu, Yongzhong, Üjjiyediin Chuluu, Keith W. Slater and Kevin Stuart. 1997. Gangou Chinese dialect: A comparative study of a strongly altaicized Chinese dialect and its Mongolic neighbor. *Anthropos* 92: 433-450.

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APPENDIX: WUTUN PHONOLOGY

The consonant inventory of Wutun is given in Table 1. IPA symbols are given in square brackets, while orthographic representations used in this paper are given without square brackets.

	Labial	Dental	Retroflex	Palato-alveolar	Palatal	Velar
stops	[b] bb [p] b [p ^h] p	[d] dd [t] d [t ^h] t				[g] gg [k] g [k ^h] k
affricates		[dʒ] zz [tʃ] z [tʃ ^h] c	[dʒ] zzh [tʃ] zh [tʃ ^h] ch	[dʒ] jj [tʃ] j [tʃ ^h] q	[tʃ] jjh [cç] jh [cç ^h] qh	
fricatives	[f] f	[z] ss [s ^h] s	[ʃ ^h] sh	[z] xx [e] x		[ɣ ~ ʁ] gh [x ~ h] h
nasals	[m] m	[n] n				[ŋ] ng
liquids		[l] l [l ^h] lh	[ɭ] r			
glides	[w] w				[j] y	[ɣ] xh

Table 1. Wutun consonant phonemes

The Wutun vowel paradigm consists of six basic vowels. Wutun vowel phoneme inventory is given in Table 2.

	front	central	back
high	[i] i		[u] u
mid	[e] ai	[ə] e	o [o]
low	[a ~ ɑ] ɑ		

Table 2. Wutun vowel phoneme inventory