Layers and operators in Lakota

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Abstract Categories covering the expression of grammatical information such as aspect, negation, tense, mood, modality, etc., are crucial to the study of language universals. In this study, I will present an analysis of the syntax and semantics of these grammatical categories in Lakota within the Role and Reference Grammar framework (hereafter RRG) (Van Valin 1993, 2005; Van Valin and LaPolla 1997), a functional approach in which elements with a purely grammatical function are treated as ‘operators’. Many languages mark Aspect-Tense-Mood/Modality information (henceforth ATM) either morphologically or syntactically. Unlike most Native American languages, which exhibit an extremely complex verbal morphological system indicating this grammatical information, Lakota, a Siouan language with a mildly synthetic / partially agglutinative morphology, expresses information relating to ATM through enclitics, auxiliary verbs and adverbs, rather than by coding it through verbal affixes.

1. Introduction

The organisation of this paper is as follows: after a brief account of the most relevant morphosyntactic features exhibited by Lakota, Section 2 attempts to shed light on the distinction between lexical words, enclitics and affixes through evidence obtained in the study of this language. Section 3 introduces the notion of ‘operator’ and explores the ATM system in Lakota using RRG’s theory of operator system. After a description of each grammatical category, an analysis of the linear order exhibited by the Lakota operators with respect to the nucleus of the clause are analysed in Section 4, showing that this ordering reflects the scope relations between the grammatical categories conveyed by these operators. Finally, a summary of the most relevant findings obtained in this research concludes this paper.

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1.1. The Lakota language

Lakota is a Siouan language spoken in the Great Plains area of the United States of America (primarily in the states of North and South Dakota) and Canada by about 6,000 speakers. Despite being generally considered as a separate language, Lakota is mutually intelligible to speakers of two other closely-related languages, namely Dakota and Nakota.

Due to the complex morpho-syntactic features exhibited by Lakota, it would seem appropriate to include a brief account of their basic morphological and morpho-syntactic aspects, such as word order, argument type, marking, branching, and alignment.

According to conventional morphological typology, Lakota is considered a mildly synthetic, partially agglutinative language, since it exhibits a relatively high morpheme-to-word ratio, presents a fairly regular morphology and verb forms that tend to include morphemes, the function of which is to stand for the different arguments in a clause, for example:

(1) Owóžu-ta waŋ-wičha-bľ-áke
    field-LOC STEM-3PL.STA-1SG.ACT-see
    ‘I saw them in the field.’

With respect to word order, although this seems to be pragmatically conditioned, Lakota shows a tendency towards the order Subject + Object + Verb when third person participants are overtly expressed in the clause. As regards the parameter referred to as argument-type, ascertaining whether Lakota is a pronominal-argument or a lexical-argument language is very

\[\text{2} \] The first and second person singular forms of the verb waŋyáŋkA ‘see’ exhibit a loss of nasalization in the last syllable: waŋbláke ‘I see’ and waŋláke ‘you (SG) see’.

\[\text{3} \] This study is based on the material found in two primary sources: 1) the grammars, dictionaries, and texts listed in the references (after each example, its source will be noted), and 2) the examples provided by my anonymous native consultants. I wish to express my gratitude to these Lakota native speakers for kindly sharing their knowledge of their language with me. Needless to say, any mistakes are my own. Regarding the orthography, all the Lakota words and examples in this article are written using the Lakota Language Consortium (henceforth LLC)’s spelling system, namely the version described in LLC (2011: 747-748).
difficult, owing to the fact that, unlike first and second person participants, third person referents are not realised syntactically through an overt marker. It is, therefore, not easy to determine if third person markers are zero and, consequently, the true arguments of the predicates, with their correferential lexical nominal phrases being purely optional elements, or if they simply do not exist at all. This would lead us to consider the overt lexical nominals as the true arguments of the predicate. Lakota is, likewise, a head-marking language because all grammatical relations are coded within the verb, which is the head of the clause, rather than in the nominal phrases, although the latter may also occasionally mark a locative or instrumental adpositional case. As regards branching, Lakota is an example of a left-branching language owing to the fact that it tends to place dependents before heads, the only exception being the fact that adjectives follow nouns. Finally, Lakota can be classified as an active–stative language or a split intransitive language, since the only argument of an intransitive clause is sometimes marked in the same way as an agent of a transitive verb and sometimes in the same way as a patient.

2. Lexical items, enclitics, and affixes

Enclitics can be defined as morphemes expressing grammatical information and are syntactically independent but phonologically dependent on their host. Yet, enclitics in Lakota show a remarkable heterogeneity with respect to their morphological, phonological and lexical characteristics; it is therefore not easy to decide if postverbal elements are affixes, enclitics or lexical items, more specifically the auxiliary verbs. Firstly, most presumed enclitics in Lakota, like hÁŋ, pi, kA, or šni, are very commonly written together with the preceding word, thus blurring the distinction between enclitic proper and suffix. Secondly, other elements that are normally considered enclitics, such as sêčA, kêyA, lâńčA, huwó, sêl, héči, yeló, kštó, ní, škhá or tkhá, as well as having syntactic independence, also show prosodic independence and, consequently, have their own stress. Finally, some other elements commonly referred to as enclitics, which appear in sentence-final position, such as sêča, nachéčA, héčhA, iyéčhečA, kêyA, s’eléčhecá/’eléča, or škhé, are formally identical and semantically related to stative verbs, which leads us to think of them more as auxiliary verbs. To summarize, this confusion could be better explained in terms of grammaticalization (Klavans 1995), a process which means that a lexically independent item in a specific context loses the properties of a fully independent word over time and acquires the properties of a morphological morpheme. At any intermediate stage of this evolutionary process, the element in question can be considered as a clitic which,
depending on its degree of grammaticalization, may resemble either a lexical word or a morphological affix, or even share a number of different characteristics with both of them.

3. Operators in Lakota

The existence of nine kinds of operator is recognized within RRG, namely aspect, negation (including nuclear negation and core/internal negation), directionals, event quantification, root modality, status (including the domain realis vs irrealis, external negation, and epistemic modality), tense, evidentials, and illocutionary force. Taking the study of Lakota enclitics made by De Reuse (1982) and Rood and Taylor (1996), an analysis of the different operators in this language is carried out below, category by category, in an order already determined by the result, namely from a relatively narrow scope to a relatively wide scope.

3.1. Aspect

Lakota makes a distinction between the two major aspectual categories, that is imperfective and perfective, by lexical, rather than morphological means. Thus, on the one hand, the presence of adverbs like ȟaŋniš ‘already’, eháŋtaŋ ‘already’, náka ‘just’ or léčheyaléčhalá ‘just now’ marks the perfective aspect:

(2) Náka wí mahél i-yá-ye
just sun inside arrive.there-3SG.ACT.leave.from.here-REDUP
‘The sun has just set.’

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4 According to LLC (2011: 799), this verb is compounded by the stems í ‘have arrived there’ and yÁ ‘be on the way from here’, which presents reduplication.

5 Abbreviations used in the glosses of the Lakota examples and discussion: 1 – first person, 2 – second person, 3 – third person; ACT – active series, ASP – aspect; CF – contrary-to-fact or counterfactual epistemic modality; CLM – complementizer; CONT – continuous aspect; DAT – dative; DECL – declarative illocutionary force; DEIC – deictic; DIR – directional; E.MOD – epistemic modality IMP – imperative illocutionary force; EQ – Event Quantification; EVID – evidentiality; IF – illocutionary force; INT – interrogative illocutionary force; LOC – locative; MOD – deontic modality; NEG – negation; OBL – obligation; PL – plural; POT – potential mood; REDUP – reduplication; REL – relative pronoun; SG – singular; STA – stative series; STAT – status; TNS – tense; VOL – volition.
Other types of aspect such as inceptive / ingressive, resumptive, completive or continutive, are also realised by means of adverbs, namely thóká ‘for the first time’, átaya ‘completely’, tanyéla ‘completely’, k’oyéla ‘completely’, nahánȟčiŋ ‘still’, or ečhéna ‘continuously’:

(3) K’oyéla wówapi kiŋ Ø-Ø-yuńléče-če
   completely letter the 3SG.ACT-3SG.STA-tear-REDUP
   ‘He tore up the letter.’

On the other hand, there are other aspectual distinctions, such as the continuous, conative imperfect, continuative, egressive and terminative/cessative aspect, which are expressed through periphrastic constructions involving the presence of auxiliary verbs like iyúthA ‘try’, khuwá ‘continue, keep on’, ayÁ ‘become gradually’, enákiyA ‘stop, quit’, and yuštáŋ ‘finish’:

(4) Psíl wa-khuwá
   jumping 1SG.ACT-keep
   ‘I keep jumping.’
(5) Itówapi o-Ø-wá mi-glúštaŋ
   picture STEM-3SG.STA-write 1SG.ACT-finish
   ‘I finished painting my picture.’

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6 Inceptive or ingressive aspect can also be expressed by means of the auxiliary verb iyáyA ‘go’:

E.g. Íya-Ø-š’a i-yá-ye
   STEM-3SG.ACT-shout arrive.there-3SG.ACT.leave.from.here-REDUP
   ‘She started shouting.’

7 The verb glúštaŋ derives from the verb yuštáŋ ‘finish’. It presents the possessive prefix ki-, which merges with the following y- into gl-.
An interesting example of grammaticalization occurs in the expression in Lakota of continuous aspect\(^8\). In this case, the enclitic \(hÁŋ\) derives from a specific postural verb like ‘stand’. \(HÁŋ\), which often occurs in the ablauted form \(hé\) and \(hít\), has always been used as a stative verb with inanimate subjects, especially with objects whose base is narrow when compared with their height, such as trees, posts, some houses, etc.:

\[
(6) \text{Čháŋthipi mith₃awa kiŋ pah₃ akáŋl O-hé}
\]
\[
\text{wood-house my the hill on 3SG.STA}-\text{stand}
\]
\[
\text{‘My log house stands on a hill.’ (LLC 2011: 146)}
\]

More recently it has been grammaticalized, becoming an enclitic marking duration or continuation of action (similar to the English suffix ‘-ing’), which may also be used with active verbs as well as with both animate and inanimate subjects:

\[
(7) \text{H(e)-éčhu-Ø-un-he}
\]
\[
\text{DEIC-STEM-3SG.STA-do-CONT}
\]
\[
\text{‘He is doing that.’ (lit. ‘He stands doing that.’)}
\]

In this example the active verb \(éčhu\) ‘do’ is modified by the enclitic \(hÁŋ\) conveying the notion of continuative aspect suggestive of an action currently in progress. This evidence, then, confirms the strong tendency for progressives to derive from locative expressions as a cross-

\(^8\) Lakota can also express continuous aspect through lexical means, that is, through the verbs \(yaŋká\) ‘sit’ and \(uŋ\) ‘be, exist, remain’:

E.g. a) \(Čhéya-y-aŋké\)
\[
\text{cry-3SG.ACT-sit}
\]
\[
\text{‘She was crying.’ (Boas and Deloria 1941: 104)}
\]

b) A-Ø-phé-wa-úŋ
\[
\text{STEM-3SG.STA-wait.for-1SG.ACT-be}
\]
\[
\text{‘I am waiting for it.’ (Buechel 1939: 282)}
\]

As we can see, the embedded verb cannot be inflected for the subject.

\(^9\) Lakota has two different series of pronominal affixes: the active pronominal series and the stative pronominal series, corresponding roughly to the syntactic functions of subject and object (Corral Esteban 2014).
linguistic tendency (other lexical sources being motion verbs or auxiliary verbs meaning ‘continue’, ‘hold’ or ‘keep on doing something (Heine and Kuteva 2002: 157-158 & 185-186)).

Finally, there is an enclitic la ‘really, do so’ that is used with both nouns and verbs to indicate affection or sympathy, hence it could be considered as an instance of intensive aspect:

(8) Miš-eyá wa-škáte-la kte!
  me-too 1SG.ACT-play-really will
   ‘I do so want to play it too!’ (Rood and Taylor 1996: 473)

3.2. Negation

Negation is represented in Lakota by the enclitic šni and, like English, it can modify the nucleus, the core or the whole clause, leading then to three types of negation: nuclear, core (also narrow-scope or internal negation), and clausal negation (also wide-scope or external negation). The fact that these three types of negation are expressed using the same form, namely šni, makes it difficult to differentiate between them:

(9) Čhanťé-ma-wášte šni
   heart-1SG.STA-good not
   ‘I am unhappy’. (lit. ‘I not happy.’)
(10) Wówapi bl-awá šni éyaš wóťхаńįŋ wówapi čha
     book 1SG.ACT-read not CLM news book REL
     bl-awá 1SG.ACT-read
     ‘I don’t read a book but a newspaper.’ (lit. ‘I don’t read a book, but it is a newspaper that I read.’)
(11) Ȟtálehaŋ oťųŋwahe-ta blé¹⁰ šni éyaš wakpá kiŋ él
     yesterday town-LOC 1SG.ACT.go not CLM river the in o-wa-
     LOC-1SG.ACT-swim
     ‘Yesterday I didn’t go to town but I was swimming in a river.’ (lit. ‘Yesterday I

¹⁰ This is the first person singular form of the verb yÁ ‘go away from here’.
didn´t go to town but I swam in the river.

(12) Ošté-Ø-wa-gle šni, a-Ø-ma-phé
STEM-3SG.STA-1SG.ACT-call.names not STEM-3SG.ACT-1SG.STA-hit

‘I didn´t call him names, he hit me.’

As can be observed in (9), in Lakota, the enclitic šni affects only the basic meaning of the predicate čhaytéwašte ‘happy’, not the participant ‘I’ or the clause as a whole, and is thus an example of nuclear negation11 where the enclitic gives the predicate a negative meaning. However, as we can see in (10) it is possible to negate one specific argument of the core: in this sentence, rather than ‘I’ or ‘read’, the enclitic šni negates the core argument wówapi ‘book’, hence it must be considered an instance of core negation. Example (11) also represents an instance of core negation since it affects the whole core, that is the argument-adjunct othúŋwahe-ta and the predicate yÁ ‘go away from here’, but not the optional peripheral adjunct (i.e. non-argument) hàléhaŋ ‘yesterday’, which is outside the core. Finally, in (12) we can see that the enclitic šni modifies the whole proposition, thereby constituting an example of clausal negation.

3.3. Directionals

Directionals express the directional orientation of the action itself or the movement of one of the participants in the action. Lakota realises this grammatical category mainly through the use of free words functioning as both adverbs and postpositions, such as thankáł ‘outside’, mahél ‘inside’, waŋkáta ‘up’, khúta ‘down’, ektá ‘to, at, in’, etc. Dependent on their function, RRG is able to establish a distinction between nuclear directionals (13), that is, those directionals that modify the orientation of the action or the event itself without making reference to the

11 Another example of a construction involving nuclear negation could be one containing the enclitic kA ‘rather, somewhat, kind of’ which’, which, according to Rood and Taylor (1996: 474), attenuates the verbal meaning:

Eg. Hé Ø-wašté-ke (ye)ló
DEIC3SG.STA-good-rather DECL

‘He certainly is a nice guy!’ (lit. ‘He is certainly not a nice person.’)
participants, and core directionals (14), namely those directionals that express the orientation or motion of the participants with reference to each other:

(13) Thímá i-blá-ble
    inside arrive.there-1SG.ACT.leave.from.here-REDUP
    ‘I went in.’

(14) Mąs’óphiye kiŋ thímá i-blá-ble
    shop the inside arrive.there-1SG.ACT.leave.from.here-REDUP
    ‘I went into the shop.’

In Lakota, in addition to this method, there is also a set of prefixes\(^\text{13}\) which are attached to the left edge of the verb complex, whose basic meaning is instrumental (e.g. na- ‘with the foot’, pa- ‘with the hands’, etc.) or locative (e.g. a- ‘on’ or o- ‘in’, e- ‘towards’, etc.):

(15) Hél čhánŋ é-ňǒ-ō-kšu-pi
    there wood LOC-STEM-3.ACT-haul-PL
    ‘They hauled wood there.’

The use of these affixes is not very widespread nowadays and it is perhaps indicative of an ancient synthetic way of expressing locatives that is gradually falling into disuse in favour of a more analytical way of using postpositions or adverbs.

### 3.4. Event quantification

\(^{12}\) This is the first person singular form of the verb iyáyA ‘leave a place going there’.

\(^{13}\) Furthermore, there is a nominal suffix, namely –ta ‘to, at, in’, which is attached to nouns to indicate location, for instance: mąhpíya-ta ‘to/in the sky’, otháŋwahe-ta ‘to/in town’, owóži-ta ‘to/in the field’ (see example (17), pahá-ta ‘to/at the hill’), etc.
Event quantification (henceforth EQ) indicates the frequency of an entire event, for example: habitual, resumptive, repetitive, distributive, frequentative, etc. Lakota marks this grammatical information mainly through the use of adverbs such as óhiŋniyŋ ‘always’, īžéhaŋ ‘often’, khitȟála ‘frequently’, šna ‘regularly’, akhé ‘again, back’, phiyá ‘again’, ákta ‘again’, phiphíya ‘again and again’, aktákta ‘repeatedly’, etc.:

(16) Ohiŋniyŋ owáčhekiye thípi kíŋ él
always church house the at
wa-čhé-wa-ki-ye ló
ABS-STEM-1SG.ACT-DAT-pray DECL
‘I always pray in the church.’

Nevertheless, Lakota also uses enclitics, namely s’a ‘usually’ and tkȟá’ ‘used to’ in order to express habitual aspect:

(17) Aŋpétu iyóhila owóžu-ta uŋ-yáŋ14-pi s’a
day every field-LOC 1.ACT-leave.from.here-PL usually
‘We usually go to the field every day.’

(18) Blóng óta o-Ø-O-ʒú-pi tkȟá’
potato many LOC-3.ACT-3.STA-plant-PL used.to
‘They used to plant many potatoes.’

3.5. Modality

RRG distinguishes between root modality and epistemic modality. On the one hand, this approach uses the term ‘modality’ to refer to what is called the root sense of modality and therefore includes ability, capacity, permission15, obligation and volition. Lakota expresses ability, capacity and permission through the auxiliary verb okíhi, realises obligation by means of the enclitics kta héčha, kta iyécheča, or kta (iyéchečaiyéčetu) tkȟá, and conveys the notions

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14 The verbal root yÁ ‘go’ becomes nasalized owing to the presence of a nasal vowel in the preceding syllable.

15 Lakota often expresses permission by means of the imperative enclitics ye or yo.
of volition and necessity through the auxiliary verbs \textit{wačhíŋ}\textsuperscript{16} ‘intend’ and \textit{kiníča} ‘need’ respectively:

(19) Šünkawakȟáŋ mitháwa ičázop s’ę Ŭ-įŋ-į-yąŋke\textsuperscript{17} \\
    horse my streak like 3SG.STA-STEM-3SG.ACT-run \\
    o-Ō-khi \\
    STEM-3SG.ACT-be.able.to \\
    ‘My horse can run very fast.’ (lit. ‘My horse can run like a streak.’)

(20) Mní eyá Ŭ-l-atkáŋ o-wá-kíhi he? \\
    water some 3SG.STA-2SG.ACT-drink STEM-1SG.ACT-be.able.to INT \\
    ‘Can I drink some water?’

(21) Nitȟá-oyate ohó-wičha-ya-kila-pi kta héčha\textsuperscript{18} \\
    your-people STEM-3PL.STA-2.ACT-respect-PL POT must \\
    ‘You must respect your parents and grandparents.’

(22) Čhéye Ŭ-kiníča-pi \\
    cry 3.ACT-need-PL \\
    ‘They need to cry.’

\textbf{3.6. Status}

The terms mood and modality have been used many times in studies of grammatical categories in overlapping ways. RRG does not use ‘mood’ as a theoretical term because it is a complex

\textsuperscript{16} This auxiliary verb seems to have been grammaticalized from the main verb \textit{čhíŋ} ‘want’, more specifically from the first person singular form of this verb, namely \textit{wačhíŋ} ‘I want’. This fact is especially noted in its conjugation, since the auxiliary verb now presents the first person singular form \textit{wačháŋmi}, which retains the original first person pronominal prefix \textit{wa} ‘I’ and adds an irregular nasal pronominal suffix standing for the person.

\textsuperscript{17} The verb \textit{įnyąŋkA} ‘run’ is very irregular since it presents two correferential pronominal affixes within the verbal complex: \textit{wa-įŋ-mm-ąŋke} ‘I run’, \textit{ya-įŋ-n-ąŋke} ‘you run’, etc.

\textsuperscript{18} See page 27 for a more accurate analysis of this expression.
category whose composition in terms of more basic operators may vary crosslinguistically and, within this theoretical framework, it is considered important to keep these concepts distinct. Thus, under the umbrella term ‘mood’ Foley and Van Valin (1984: 213) include status, which in turn includes the expression of the realis vs irrealis distinction or ‘grammatical mood’ (i.e. indicative, subjunctive, etc.), external negation and epistemic modality or ‘grammatical mood’, and IF or ‘speech act mood’ (i.e. declarative, imperative, and interrogative).

3.6.1. Epistemic modality

As mentioned above, the set of grammatical distinctions termed ‘epistemic modality’, which specifies the speaker’s commitment to the truth of what is being related, is included in RRG’s operator system under status. Lakota expresses epistemic modality through both enclitics and adverbs. For instance, some enclitics like huŋšé, itékA, načhéčA, huŋšé, s’e, čhél, and lakȟa that convey the meaning of certainty, séčA ‘maybe, perhaps, probably’ and sél ‘perhaps, possibly, might’, which indicate probability and possibility, and tkȟá’, which express contrary-to-fact assertions. Some adverbs that express probability and possibility19, such as wičákȟeya ‘truly, certainly’, itéšniyáŋ ‘truly, for sure’, ečháš ‘for sure’, takómní ‘definitely’, tokȟáš ‘maybe, perhaps’, ungáň(š) ‘maybe, perhaps, possibly’, ókini ‘might, maybe, perhaps, possibly’, owékinaháŋš ‘might, maybe, perhaps, possibly’, etc.:

(23) Hokšíčala kiŋ  O-čhéye huŋšé
    baby   the  3SG.ACT-cry surely
    ‘I am sure that the baby is crying.’ / ‘The baby must be crying.’

(24) Ø-hiŋȟápáya itéke
    3SG.STA-fall be.evident
    ‘He must have fallen.’

(25) Hokšíčala kiŋ  O-čhéye séče

19 Possibility in Lakota can also be expressed by the auxiliary verb phičA ‘be possible to’, which is inflected for the subject:

E.g. Iyá-Ø-ůppe-ma phiča
    stem-3SG.STA.blame.for-1SG.ACT-be.possible not
    ‘I cannot be blamed for it.’ (Buechel 1939: 297)
baby the 3SG.ACT-cry maybe
‘I gather that the baby is crying.’ / ‘Maybe the baby is crying.’

(26) Ókini Ø-khúže
maybe 3SG.STA-sick
‘He might be sick.’

3.6.2. External negation

The Lakota enclitic šni can modify not only the nucleus or the core, but also the whole clause, leading then to an example of clausal, wide-scope, or external negation, which is analysed by RRG under the status operator:

(27) Ḥtálehaŋ šúŋkawakȟáŋ waŋ akáŋ(l)-Ø-m-aŋke šni
yesterday horse a LOC-3SG.STA-3SG.ACT-sit not
éyaš héktà okó k´uŋ héhaŋ šúŋkawakȟáŋ waŋ
CLM back week aforesaid then horse a
a-káŋ-Ø-m-aŋke
LOC-3SG.STA-3SG.ACT-sit
‘I didn’t ride a horse yesterday but last week.’ (lit. ‘I didn’t ride a horse yesterday but it was last week that I rode a horse.’)

Unlike the example in (12), where the negative enclitic šni affected the whole clause, in (26) this element only affects the adjunct Ḥtálehaŋ ‘yesterday’ but, as this peripheral element lies outside the core but inside the clause, it is also an instance of clausal negation.

3.6.3. Realis vs irrealis

Lakota does not present different modal paradigms (e.g. indicative, subjunctive, conditional, hortative, etc.), but the actuality of an event is distinguished very clearly. This language uses the enclitic ktA to this end in a wide range of constructions, such as future time, subjunctive, conditional, desiderative, potential, jussive, optative or hortative, where a hypothetical
meaning is present. Consequently, in Lakota, the dichotomy realis vs irrealis is realised as a binary morphological distinction: it does not mark morphologically when the action has been realised, but it does mark when the action has not been realised:
### REALIS:

| Tense  | Form                  | Translation       |
|--------|-----------------------|-------------------|
| Indicative (declarative) | Ø-wašté | ‘He is good.’ |

### IRREALIS:

| Tense               | Form                                    | Translation                               |
|---------------------|-----------------------------------------|------------------------------------------|
| Conditional         | Ø-wašté kinháŋ, …kte                   | ‘If he is good, …’                         |
|                     | Ø-wašté (e)háŋtánš, …kte                | ‘If he were good, …’                       |
|                     | Ø-wašté yunjkháŋš, …(kta) tkhá          | ‘If he had been good, …’                  |
| Desiderative        | Ø-wašté (kte) Ø-chítŋ                  | ‘He wants to be good.’                    |
| Dubitative          | Itȟó Ø-wašté kte                       | ‘I guess he is good.’                     |
| Hortative           | Unŋ-wašté-pi kte                       | ‘Let’s be good!’                          |
| Hypothetical        | Ø-wašté kta tkhá                       | ‘He could be good.’                       |
| Optative            | Ø-wašté kte ní                         | ‘I wish he would be good.’                 |
| Potential           | Ø-wašté kte načhéča                    | ‘He will probably be good.’               |

Table 1: The distinction realis vs irrealis in Lakota

### 3.7. Tense

Lakota shows no morphological indication of tense; hence it could be claimed that it is, in fact, tenseless. However, despite the fact that Lakota has no grammaticalized reference to time, time is intimated by means of the addition of time adverbials such as waŋná ‘now’, waŋná leháŋl ‘right now’, h̄tálehaŋ ‘yesterday’, húnŋaŋni kín ‘tomorrow’, waníyetu tópa imáhel ‘within four years’, hékta waníyetu núŋpa k’únŋ héhaŋ ‘two years ago’, eháŋk’éhaŋ ‘in the old days, long ago, formerly’, etc.:

(28) Aŋpétu kín lę Jimmy na Maggie unŋ-thípi él
day the DEIC Jimmy and Maggie our-tipi to Ø-hí-pi
3.ACT-arrive.here-PL
‘Jimmy and Maggie come to our house today.’

(29) Ḣtálehaŋ Jimmy na Maggie unŋ-thípi él
yesterday Jimmy and Maggie our-tipi to Ø-hí-pi
3.ACT-arrive.here-PL
‘Jimmy and Maggie came to our house yesterday.’

3.8. Evidentiality

The grammatical system for coding the source of information is commonly referred to as evidentials. Lakota reflects the different sources of information (e.g. hearsay, inference, conjuncture, or personal eyewitness) through the use of enclitics like škȟÁ ‘it is said’, or ké(yA)20 ‘it is said’:

(30) Hokšíčala kiŋ Ø-čhéye škȟé
baby the 3SG.ACT-cry it.is.said
‘It is said / They say that the baby is crying.’

(31) Hokšíčala kiŋ Ø-čhéye Ø-kéya-pi
baby the 3SG.ACT-cry 3.ACT-say-PL
‘It is said / They say that the baby is crying.’

20 Although kéyA is nowadays considered an enclitic (LLC 2011: 299), it continues to behave as a verb, since it can be marked for plural. Nevertheless, unlike the verb kéya ‘say’, kényapi used as enclitic does not make reference to a third person plural definite participant:

E.g. Hokšíčala kiŋ Ø-čhéye Ø-kéya-pi
baby the 3SG.ACT-cry 3.ACT-say-PL
‘It is said that the baby is crying.’
3.9. Illocutionary force

The illocutionary force (henceforth IF) of an utterance reflects the speaker's intention when producing that utterance. This grammatical information is universal since all languages have ways of distinguishing statements, questions, and commands, whether by grammatical markers, intonation, or a combination of the two. In order to signal IF, Lakota uses a great number of enclitics, which vary according to the type of IF, the gender and number of the speaker, and the ending of the preceding word. The following chart shows the different markers used in Lakota to indicate the IF of an utterance:

| Illocutionary Force | Male speaker | Enclitic | Female speaker |
|---------------------|--------------|----------|----------------|
|                      | Singular     |          | singular       |
| Declarative         | a, an, e, i, iy -> -yeló | -peló | a, an, e, i, iy -> -ye |
|                     | o, u, uy -> weló | -peló | o, u, uy -> we |
|                     | e-ablaut -> ló |         | e-ablaut -> le |
| Interrogative 21     | -he, -hwo (formal) |         | -he |
| Imperative 22        | a, an, e, i, iy -> -yo | -po | a, an, e, i, iy -> -ye |
|                     | o, u, uy -> wo |         | o, u, uy -> we |

(32) Lakȟótiyapi na-Ø-wá-h’unį Weló
Lakota.language STEM-3SG.STA-1SG.ACT-hear DECL
‘I understand the Lakota language.’

(33) Thálo ópȟe-Ø-ya-thuŋ ya-čhį’ hwo?

21 In order to express an informal question, especially when the questioner does not expect an answer or when the person being asked is not assumed to know the answer, -so (male speakers) and -se (female speakers) are used instead of -he.

22 Concerning the imperative IF, there is a difference regarding whether the command is addressed to one (singular) or more than one speaker (plural). In order to mark informal commands, -yethó (male speakers) and -nithó (female speakers) are used, rather than -yo and -ye. Furthermore, when the imperative conveys an entreaty rather than a command, both men and women use -ye.
meat STEM-3SG.STA-2SG.ACT-buy 2SG.ACT-want INT
‘Do you want to buy meat?’

(34) Waháŋpi kiŋ Ø-yatkaŋ yo!
soup the 3SG.STA-drink IMP
‘Drink the soup!’

4. Ordering of operators

Now that every kind of operator in Lakota has been presented, a reasonably detailed description of the mutual order between the elements conveying the ATM information will be given in this section of the paper by analysing the position occupied by these markers in relation to the nucleus.

This study is concerned with the study of the order of enclitics and auxiliary verbs, rather than adverbs. Adverbs expressing these grammatical meanings always occupy a pre-verbal position within the clause although this is not always the same as they can occur in three different positions: clause-initial position (e.g. takómní ‘definitely’), preceding the subject, expressed syntactically through a dependent reference phrase, and verbal complex (e.g. ižéháŋ ‘often’), or before the verbal complex (e.g. lečhála ‘just now’). Further research is needed, however, to establish whether the positioning of these lexical elements in Lakota responds to an established ordering principle or not. Although adverb ordering is indeed deserving of attention, I consider that it should definitely be considered separately.

The order of these functional morphemes within a word has always been considered an important area for typological study. A fairly heated debate has taken place over the past few decades concerning what is actually reflected in morpheme ordering and a number of scholars (e.g. Narrog 2010, for Japanese; Pollock 1989, for French; Rice 2000, for Athabaskan; Yang 1994 for Korean), have provided strong evidence in a variety of grammatical frameworks to confirm that relations between particular morpheme orders and (semantic or syntactic) scope are undoubtedly observable cross-linguistically. The data obtained with regard to Lakota shows that the order of these functional elements is governed by semantic scope and that the relationship between morpheme ordering and scope is captured elegantly by RRG´s proposal
for ordering, which is based on scope in the sense that every operator is attached to a particular layer of the clausal structure.

4.1. Relationship between order and scope

RRG posits the existence of three groups of operator -- nuclear, core and clausal -- selected on the basis of the layer of the clause they modify. These three different groups of operator are represented in the operator projection, becoming a mirror image of the constituent projection, which in turn consists of the following layers: 1) the nucleus, containing the predicate; 2) the core, comprising the nucleus and its arguments; 3) the clause, formed by the core and any peripheral elements of the clause; and 4) the sentence, containing the clause and any element in dislocated position (i.e. pre/post-core slots and left/right-detached positions):

Figure 1: Layered Structure of the Clause with constituent and operator projections (Van Valin 2005: 12)

Regarding the linear ordering of these operators, RRG (Foley and Van Valin 1984; Van Valin 1993, 2005; Van Valin and LaPolla 1997) claims that there is a primary principle governing the relative order of these elements with reference to the nucleus and assumes that this ordering is a function of the semantic scope and works cross-linguistically. Thus, the nuclear operators must occur closest to the nucleus, the core operators farther from the nucleus
than the former, but closer to it than the (sentential) clausal operators, which must be placed
the farthest from the nucleus. This proposal resembles Hengeveld’s (1989, 1990), which also
puts forward the idea that the order of operators within the multi-layered hierarchical model of
the utterance proposed by Functional Grammar\(^{23}\) (hereafter FG) reflects the scope relations
between the grammatical categories conveyed by these operators. Furthermore, this ordering
also seems to accord with Bybee’s (1985) Relevance Principle\(^ {24}\), in which the ordering of
grammatical morphemes is restricted by the relevance of their meaning to the semantics of the
predicate. Thus, for example, the aspectual operator, which is related to the internal temporal
structure of the event, must be placed the closest to the nucleus, whereas the illocutionary force
operator, which identifies the nature of the speech act performed by the sentence, must be the
outmost operator:

\[(35)\] M-ňstńma-he šni yeló
   1SG.STA-sleep-CONT not DECL
   ASP\(^ {25}\) NEG IF
‘I am not sleeping.’

This example, which contains three different operators, namely aspect, negation and IF,
confirms RRG’s primary principle governing the linear ordering of operators, since the nuclear

\(^{23}\) The multi-layered hierarchical model put forward by FG builds upon RRG’s model of the Layered Structure of
the Clause since they both conceive of clause structure as layered. One difference between these two models
could lie in the different nature of the clause structure, which is primarily semantic in FG and both semantic
and syntactic in RRG. Another difference lies in the fact that, unlike FG, RRG does not consider that the
operators are part of the layer. Finally, the order of categories put forward in both approaches is not exactly
the same.

\(^{24}\) The basic idea behind morpheme ordering is shared both by RRG and Bybee. However, although the concepts
‘scope’ and ‘relevance to the predicate’ are related to morpheme ordering based on semantic information, they
are not necessarily the same. This discussion is presented best in Cinque (2014) and Manova and Aronoff
(2000).

\(^{25}\) From this point onwards, the glosses have an additional line in order to make the representation of mutual
ordering between operators visually clearer.
operator is the left-most element and the clausal operator the right. Figure 2 below shows a template illustrating the linear ordering exhibited by the Lakota operators:

| PREDICATE-NUCLEAR-Number-Pronominal Arguments-NUCLEAR-CORE-CLASUAL |
|-------------------------------------------------------------------|
| ASP | ASP | MOD | STAT: IRR-MOD-NEG |
| NEG | NEG | EVID | |
| EQ | IF | |

Figure 2: Linear ordering of operators in Lakota

As we can see, operators in Lakota tend to follow the verbal stem. Below are a number of sentences in Lakota including combinations of more than one enclitic, which serve to support the positional order of operators shown in the aforementioned template:

(36) Waŋná ōkápi Ō-skáta-haŋ-pi šni
now baseball 3.ACT-play-CONT-PL not

‘They are not playing basketball.’

(37) Iyéčhiŋkiŋyaŋka waŋ wa-káŋpa-haŋ škê
car a lSG.ACT-drive-CONT it.is.said

‘It is said that he has been driving a car.’

(38) Hél nahńńči n-unká-haŋ he?
there still 2SG.ACT-lie.CONT INT

‘Are you still lying there?’

The example in (36) shows two enclitics, namely those expressing aspect and core negation in this order, supporting the claim that the nuclear operators should be closer to the nucleus than the core operators. The examples in (37) and (38) also support the expected linear

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26 This template does not include some instrumental and directional particles which occur as verbal prefixes, such as na- or pa- and o- or e- respectively (see examples (11), (15) and (18).
ordering, since the enclitic providing aspectual information is followed by a clausal operator indicating evidentiality in (37) and IF in (38):

(39) Thiyáta-kiya  glé  Ø-kiníča  séče
    home-LOC  return  3SG.ACT-need  perhaps

    MOD  STAT

    ‘Perhaps he needs to go home.’

(40) Ó-ma-ya-kiya  o-yá-kíhi  he ?
    STEM-1SG.STA-2SG.ACT-help  STEM-2SG.ACT-be.able.to  INT

    MOD  IF

    ‘Can you help me?’

(41) Wa-l-áwa-pi  s´a  he?
    STEM-2.ACT-go.to.school-PL  usually  INT

    EQ  IF

    ‘Do you (PL) usually go to school?’

In (39) – (41) we can observe that core operators precede clausal operators in Lakota, since the enclitics expressing necessity, classified under modality, and event quantification occur closer to the nucleus than the enclitics marking epistemic modality, belonging to status, and IF.

Regarding the relative order of operators within each layer, the following examples include more than one operator belonging to the same layer. Thus, the sentence in (41) shows that the aspectual operator hÁŋ precedes nuclear negation:

(42) Wa-čhéya-haŋ  šní
    1SG.ACT-cry-CONT  not

    ASP  NEG

    ‘I am not crying.’

The enclitics la and kÁ, which express the speaker’s affection and an attenuation of the verbal meaning and could consequently also be considered to convey aspectual information (intensive aspect) and nuclear negation respectively, occur outside of hÁŋ (Taylor and Rood 1996: 473-474).
Unlike the ordering within nuclear operators, the positioning of core operators is not so evident. As we will see, although some core operators do not seem to have a fixed position, a tendency may exist whereby modality occurs closer to the nucleus than core negation, with the latter tending to precede event quantification (see example (56) for a possible exception):

(43) O-čhi-čaňniga  o-wa-kihi  šni  
STEM-1SG.ACT+2SG.STA-understand  STEM-1SG.ACT-be.able.to  not  
MOD  NEG

‘I cannot understand you.’

(44) Wa-O-čhi  šni  s’a  
STEM-3SG.ACT-dance  not  usually  
NEG  EQ

‘Usually he doesn’t dance.’

Regarding the linear ordering existing among the clausal operators, status seems to be the clausal operator appearing closest to the predicate, followed by evidentiality, with the IF operator occurring on the sentence periphery, as illustrated by the following example:

(45) Ečháŋni  wakȟáŋ-Ø-kičhi-yuzapi  kta  škȟé  (ye)ló  
soon  sacred-3.ACT-REC-marry-PL  POT  it.is.said  DECL  
STAT  EVID  IF

‘It is said that they are going to get married soon.’

As for the linear ordering among the different operators included under Status, the distinction between realis and irrealis seems to be the first clausal operator and external negation seems to precede epistemic modality:

(46) Híŋhaŋni  kiŋ  ungáš  Ø-mágažu  kte  šni  séčé  
morning  the  maybe  3SG.ACT-rain  POT  not  perhaps  
IRR  NEG  E.MOD

‘I gather it will not rain tomorrow.’

In summary, the evidence shown by the examples given above seems to confirm the assumption held by RRG that languages have a closed system of operators in which—depending
on the grammatical information it provides--each group of operators appears to apply to a different level of the Layered Structure of the Clause and, furthermore, that a direct relation exists between these levels and the position of each group of operators within a sentence:

```
V
|   |
NUCLEUS ← Aspect
|   |
NUCLEUS ← Negation
|   |
CORE ← Modality
|   |
CORE ← Core Negation
|   |
CORE ← Event Quantification
|   |
CLAUSE ← Status (Realis vs irrealis-Modality-Negation)
|   |
CLAUSE ← Evidentiality
|   |
CLAUSE ← Illocutionary Force
|   |
SENTENCE
```

Figure 3: The operator projection in Lakota

Although the analysis of all these combinations of operators in Lakota shows that the order of these elements adheres faithfully to the semantic scope, the description given in this paper does not attempt to be exhaustive, since it is impossible to include all the operators of the verbal complex in all their possible combinations. Nevertheless, with respect to the relationship between the order of meaningful elements and semantic scope, at least the most representative cases are included and discussed.
4.2. Apparent conflicts

It is possible to find some constructions apparently in conflict with the principle governing the ordering of operators within a sentence. Firstly, we have constructions that include the enclitics kta/e héčha, kta iyéčheča, kta iyéčhetu or kta (iyéčheča/iyéčhetu) tkňá, manifesting deontic modality. A few sentences in which some postverbal elements deviate from the expected order are given below:

(47) Héhaŋ  ma-yuha  kte  šni  iyéčheča
then  1SG.STA-3SG.ACT.have  POT  not  should
STAT  STAT  MOD

‘She should not have given birth to me then.’ (Buechel 1978: 393)

(48) Eháñni  h(e)-čě-am-uŋ  kta  iyéčhetu  tkňá
long.time.ago  DEIC-STEM-1SG.ACT-do  POT  should  CF27
STAT  MOD  STAT

‘I should have done that long ago.’ (LLC 2011: 345)

(49) Aḡúyapi  na  čaŋháŋpi  opȟé-uŋ-thuŋ-pi  kta  héčha
bread  and  sugar  STEM-1.ACT-buy-PL  POT  must
STA  MOD

‘We have to buy bread and sugar.’ (Rood and Taylor 1976: 198)

(50) Sakhib  uŋ-yiŋ  kte  iyéčhetu  welo
together  1.ACT-go.there  POT  must  DECL
STAT  MOD  IF

‘We must go together.’ (Deloria 1932: 101)

In (47) – (50) enclitics expressing obligation, namely héčha, iyéčheča and iyéčhetu, occur farther from the nucleus than the enclitic kta, which has always been considered to mark the distinction realis vs irrealis. These combinations, in which a status operator precedes a core

27 Contrary-to-fact or counterfactual epistemic modality.
operator, are problematic, since this positioning appears to contradict the principle governing the linear ordering of operators, with a status operator (realis vs irrealis) being closer to the nucleus than a modality operator (obligation). Examples (47) and (48) could be explained, however, by analysing the different enclitics in isolation. It is, therefore, worth mentioning that none of the enclitics expressive of obligation—hēčha, iyēčheča, or iyēčhetu for example—can express deontic modality by themselves. Thus, in order to express obligation, these enclitics must occur in combination with the potential enclitic ktA. They could then be considered elements designating some type of epistemic modality, which would classify them under the status operator:

(47´) Héhaŋ ma-yuha kte šni iyēčheča
then 1SG.STA-3SG.ACT.have POT not CF
STAT STAT STAT

‘She should not have given birth to me then.’ (Buechel 1978: 393)

(48´) Eháŋni h(e)-čēh-am-uŋ kta iyēčhetu tkhá
long.time.ago DEIC-STEM-1SG.ACT-do POT CF CF
STAT STAT STAT

‘I should have done that long ago.’ (LLC 2011: 345)

As regards examples (49) and (50), in accordance with the LLC (2011: 344), it could, in fact, be argued that the enclitic ktA functions as an element expressing volition. Consequently, the solution I suggest here is that, if the enclitic ktA is regarded as a core operator expressing volitive modality—also known as ‘boulomaic’ (Kiefer 1994: 2517) or ‘bouletic’ (Palmer 1986: 12)—, which is, in turn, considered a subcategory of deontic modality, and the enclitics hēčha and iyēčhetu are classified as evidentiality operators (indicating information inferred by direct physical evidence, by general knowledge, or because the speaker has experienced a similar situation), the position of the operators in these constructions would match the expected linear ordering:

(49´) Ağuyapi na čhaŋháŋpi opē-uŋ-thuŋ-pi kta hēčha
bread and sugar STEM-1.ACT-buy-PL VOL have.to
MOD EVID

‘We have to buy bread and sugar.’ (Rood and Taylor 1976: 198)
Sakhíb uŋ-yíŋ kte iyéchetu welo together 1.ACT-go.there VOL must DECL MOD EVID IF

‘We must go together.’ (Deloria 1932: 101)

Secondly, we have constructions where the enclitic kTA and the auxiliary verb okíhi appear to alternate (LLC (2011: 427). Although it is possible to find constructions where the modality operator okíhi precedes the status operator kTA (51), sentences including kTA preceding okíhi (52) would seem to be more common, contradicting the principle governing the linear ordering of operators, since a clausal operator would therefore be closer to the nucleus than a core operator:

(51) Wakȟáŋ Tháŋka\textsuperscript{28} thókičhuŋze\textsuperscript{29} kín̥ waŋ-O-yáŋka sacred big his.kingdom the STEM-3SG.STA-3SG.ACT.see
  o-Ō-kíhi kte šni STEM-3SG.ACT-be.able.to POT not MOD STAT

‘He cannot see the Kingdom of God.’ (lit. ‘He cannot see the Kingdom of the universal spiritual power / the Great Spirit.’)

(52) Wíŋyaŋ iyútaŋ-wičha-Ō-ye uŋ hé woman STEM-3PL.STA-3SG.ACT.tempt CLM DEIC
  nathá-Ō-Ō-ka-pi kta o-Ō-kíhi-pi šni STEM-3SG.STA-3SG.ACT-pause POT STEM-3.ACT-be.able.to-PL not STAT MOD

‘They could not stop him tempting women.’ (Deloria 1932: 162)

\textsuperscript{28} The concept 
Wakȟáŋ Tháŋka is very difficult to translate. Although it should be rendered as ‘the universal spiritual power’, it is normally translated as ‘the Great Spirit’ or ‘God’.

\textsuperscript{29} This term is formed by the third person possessive prefix ţha plus the noun wókičhuŋze ‘government, kingdom’.
It is widely assumed that deontic modals modify the relation between the participant and the action and that epistemic modals are concerned with the speaker’s judgment. According to the rules governing linear precedence, the modals should be ordered with respect to each other in terms of their semantic scope, with the deontic modals occurring closer to the verb than the epistemic modals. That is to say, the operator with a narrow semantic scope (deontic modality) precedes the operator with a wider semantic scope (epistemic modal). An attempt to account for the irregular ordering shown by the sequence kta okihi in (52) could stem from the assumption that, as in many languages—like English for example—where modal verbs like ‘can’ can express both root and epistemic modality, the operator okihi used here could convey the idea of likelihood with two consecutive status operators. However, this possibility is probably untenable since there seems to be a clear-cut distinction in Lakota between root and epistemic modality so that none of the elements expressing modality is able to express both types of modal meaning.

A better way of analysing this anomalous ordering might involve the consideration of okihi as an auxiliary verb, which can be inflected and also requires the preceding verb to be inflected, so that it seems plausible that the enclitic kta could have scope over the first verb rather the second and that, consequently, the preceding verb, together with its arguments and operator, would constitute an embedded clause linked to the following verb okihi. Thus, the sequence kta okihi would entail a present capacity for a future potentially realisable action and okihi kta a future capacity for an action obviously likely to take place in the future:

(53) Iyéčhinjiŋyante kiŋ aphí-Ø-wa-ya kta
    car the STEM-3SG.STA-1SG.ACT-fix-CAUS POT
    o-wa-khi
    STEM-1SG.ACT-be.able.to
    ‘I can fix the car.’ (lit. ‘I am able I will fix the car.’)

(54) Iyéčhinjiŋyante kiŋ aphí-Ø-wa-ya

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30 A similar case could be illustrated by the verb čhin ‘want’:

E.g. O-Ø-y-úspa-pi kta 0-čhin-pi
    STEM-3SG.STA-3.ACT-catch-PL POT 3.ACT-want-PL
    ‘They want to catch him.’ (lit. ‘They want that they will catch him.’) (LLC 2011: 96)
The sentence in (53) would imply ‘I think that now I am able to repair the car’, whereas the example in (54) could be paraphrased by ‘I think that in the future, maybe not now, I will be able to repair the car’.

Finally, as was mentioned above (pages 23-24) regarding the relative order between core negation and event quantification, although the enclitic šni normally precedes the enclitic s’a (55), despite regarding it as exceptional, my native consultants feel confident that it is grammatically correct to use them in a reversed order, namely s’a šni (56), and they argue that this change of order entails a slightly different interpretation:

\[(55) \text{Ø-kaḥápa} \text{ šni} \text{ s’a} \]
\[3SG.ACT-drive not usually\]
\[\text{NEG EQ}\]
\[‘Usually I don’t drive.’\]

\[(56) \text{Ø-kaḥápa} \text{ s’a} \text{ šni} \]
\[3SG.ACT-drive usually not\]
\[\text{EQ STAT}\]
\[‘I don’t usually drive.’\]

According to my native consultants, the difference between these two examples might conceivably lie in the scope of the negative enclitic šni. Thus, on the one hand, in (55) šni would only have scope over the predicate, but not over the enclitic s’a, leading to an interpretation of the sentence as ‘Usually I don’t drive’, which could be continued by ‘…, I ride a horse’. On the other hand, the example in (56) would imply that the element being negated is s’a, rather than the predicate, so that this sentence could be interpreted as ‘I don’t usually drive’, which could be followed by ‘…, I hardly ever drive’ (see Cumberland 2005: 320 for an analogous example in Assiniboine).

5. Conclusion
In this paper the ATM functional domain in Lakota was examined using RRG´s theory of operator system. After describing each grammatical category, a comprehensive analysis of the linear order of the different operators in this language was then carried out. The findings obtained in the analysis of the linear ordering exhibited by the Lakota operators appear to validate RRG´s principle of linearity, since it conforms to the sequence nucleus > nuclear operators > core operators > clausal operators, in which operator ordering correlates with scope. There are, however, some constructions that seem to call this claim into question, especially those including the enclitics ktA and šni, which sometimes appear to be placed in an unexpected order when they are combined with other operators. It is particularly striking that the enclitic ktA, which is regarded as an irrealis marker (a clausal operator), normally precedes elements like héčha, iyéčheča, iyéčhetu, tkhá, which serve to convey obligation, or okíhi, an auxiliary verb expressing deontic modality (both of them classified under modality). It is also worthy of note that the enclitics šni and s’a are able to change position with respect to each other, thus affecting the scope of the negative operator and consequently its classification as either core or clausal negation. Nevertheless, after close examination, it seems plausible that the enclitic ktA might be used to designate volition as well as the realis vs irrealis distinction, allowing for its classification under modality or status. It is also worth mentioning that this analysis appears to confirm the fact that deontic and epistemic modality never converge in Lakota. Regarding the enclitic šni, it is also clear that, in Lakota, negation may have scope over different layers and, therefore, that šni is able to occupy different slots within the template. These findings emphasise the fact that some enclitics are more versatile than others, but also that maybe the ordering of operators could not be so strict as would be desirable. Accordingly, these results also reveal the fact that the ordering of operators agrees with that put forward by Rood and Taylor (1996: 473), although the order of the enclitics ktA and šni is in fact freer than their template would suggest, since it is possible for them to express different grammatical meanings and, consequently, to have scope over different layers of the clause.

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