

# A Multi-Dimensional Exploration of Future Aspect Marker "Dai" in Chinese Dialect from the Perspective of Typology — Take Gansu Tianzhu Dialect as an Example

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**Objectives:** In Tianzhu dialect, the use of the future aspect marker "Dai[ $\text{t}\text{e}\text{i}^{44}$ ]" is frequent. The grammatical meaning of the future aspect marker, "verb phrase (VP) + 'Dai[ $\text{t}\text{e}\text{i}^{44}$ ]+[ $\text{l}\text{i}\text{o}^{21}$ ]", in Tianzhu dialect can be divided into two categories according to the differences of VP: one indicates that the end of the action is about to be reached, that is, "VP + 'Dai<sub>1</sub>[ $\text{t}\text{e}\text{i}^{44}$ ]+[ $\text{l}\text{i}\text{o}^{21}$ ]"; the other indicates that the action is about to begin, that is, "VP + 'Dai<sub>2</sub>[ $\text{t}\text{e}\text{i}^{44}$ ]+[ $\text{l}\text{i}\text{o}^{21}$ ]' ". This article takes the Tianzhu dialect aspect marker "Dai[ $\text{t}\text{e}\text{i}^{44}$ ]" as the main research object, and focuses on the grammatical functions and semantic features of "Dai<sub>1</sub>[ $\text{t}\text{e}\text{i}^{44}$ ]" and "Dai<sub>2</sub>[ $\text{t}\text{e}\text{i}^{44}$ ]" by studying the actionality types of verbs in Tianzhu dialect, and compares the future aspect marker "Dai[ $\text{t}\text{e}\text{i}^{44}$ ]" in Tianzhu dialect with the future aspect markers of other Chinese dialect in Northwest China, and generalizes the geographical distribution and regional characteristics of the future aspect marker "Dai[ $\text{t}\text{e}\text{i}^{44}$ ]".

**Keywords:** Tianzhu dialect; future aspect marker; "Dai[ $\text{t}\text{e}\text{i}^{44}$ ]"; grammatical functions

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## INTRODUCTION

Tianzhu Tibetan Autonomous County (Tianzhu County for short) in Wuwei City, Gansu Province is located at the eastern end of Hexi Corridor, on the northeastern edge of the Qinghai-Tibet Plateau. It borders Jingtai

County to the east, Yongdeng County to the south, Menyuan County, Huzhu County and Ledu County of Qinghai Province to the west, and Wuwei City and Gulang County to the north. Tianzhu is a multi-ethnic area inhabited mainly by Tibetans. It is the main component of the Huarui Tibetan area, with a total of

28 ethnic groups including Han, Tibetan, Tu, Hui, and Mongolia in the territory. The Atlas of Chinese Dialect classifies Tianzhu dialect into the Hexi cluster of Lanyin Mandarin. This article studies the Chinese dialect centered on Tianzhu County and the dialects spoken in the surrounding areas. The corpus of this article is composed of two parts: field research and self-developed corpus. The self-developed corpus is verified by others in the field.

This article takes the Tianzhu dialect aspect marker "Dai[tei<sup>44</sup>]" as the main research object, and tries to link the aspect function of "Dai" with the tense function and modality function, and explores the use conditions and distribution range of "Dai". In Tianzhu dialect, "Dai", used as an aspect particle, is pronounced as [tei<sup>44</sup>], which will not be marked one by one in the article. "Dai" will have a tone sandhi in the speech stream. The tone value in the following example sentences is marked according to the actual tone value of the speech stream. In Tianzhu dialect, "Dai" is used in the middle and at the end of the sentence in two ways that differ from Mandarin:

A. və<sup>44</sup> tei<sup>44</sup> na<sup>53</sup> ʂaŋ<sup>44</sup> liaŋ<sup>53</sup> xɔɔ<sup>213</sup> tʂə<sup>53</sup> i<sup>21</sup> ta<sup>44</sup> li<sup>21</sup> tɛ<sup>213</sup> i<sup>21</sup> li<sup>21</sup>.

‘He and I agreed to go together.’

B. yn<sup>53</sup> kʰæŋ<sup>44</sup> ʂɿ<sup>21</sup> xɿu<sup>44</sup> ti<sup>21</sup> xən<sup>44</sup> y<sup>44</sup> tɛia<sup>53</sup> ɕia<sup>44</sup> tei<sup>44</sup> liɔɔ<sup>21</sup> / tʂə<sup>44</sup> li<sup>21</sup>.

‘The clouds look thick, and it feels like it's about to rain.’

The usage of "Dai" in Tianzhu dialect is special as a conjunction and an aspect particle, respectively. As a conjunction between personal pronouns, the grammatical function is equivalent to "And" as in sentence A "və<sup>44</sup> tɛi<sup>42</sup> na<sup>53</sup> ʂaŋ<sup>44</sup> liaŋ<sup>53</sup> xɔɔ<sup>213</sup> tʂə<sup>53</sup> i<sup>21</sup> ta<sup>44</sup> li<sup>21</sup> tɛ<sup>213</sup> i<sup>21</sup> li<sup>21</sup>". (He and I agreed to go together.) "This usage of "Dai" is not discussed in this article. This article focuses on the study of the

syntactic distribution and semantic features of the "Dai" after the predicate verb in sentence B when it is used as a future aspect marker in Tianzhu dialect.

### SEMANTIC FEATURES OF "DAI"

This article focuses on the tense and aspect interpretation of "VP+[tei<sup>44</sup>. liɔɔ<sup>21</sup>]", Let's first take a look at the following three sets of examples:

(1) a. tɛ<sup>44</sup> in<sup>44</sup> tɛ<sup>21</sup> i<sup>21</sup> mən<sup>42</sup> tɔɔ<sup>42</sup> liɔɔ<sup>21</sup>.

‘The relatives have arrived.’

b. tɛ<sup>44</sup> in<sup>44</sup> tɛ<sup>21</sup> i<sup>21</sup> mən<sup>21</sup> tɔɔ<sup>21</sup> tei<sup>44</sup> liɔɔ<sup>21</sup>.

‘The relatives will soon arrive.’

(2) a. vɛi<sup>42</sup> miæn<sup>44</sup> ɕia<sup>21</sup> y<sup>13</sup> liɔɔ<sup>53</sup>.

‘It's raining outside.’

b. vɛi<sup>42</sup> miæn<sup>44</sup> ɕia<sup>21</sup> tei<sup>44</sup> y<sup>13</sup> liɔɔ<sup>53</sup>.

‘It will soon rain outside.’

(3) a. lɔɔ<sup>44</sup> ɐ<sup>21</sup> nɛi<sup>24</sup> ba<sup>44</sup> ʂɿ<sup>44</sup> liɔɔ<sup>21</sup>.

‘The old lady is 80 years old.’

b. lɔɔ<sup>44</sup> ɐ<sup>21</sup> nɛi<sup>24</sup> ba<sup>44</sup> ʂɿ<sup>44</sup> tei<sup>44</sup> liɔɔ<sup>21</sup>.

‘The old lady will soon be eighty years old.’

In the above three sets of examples, sentences-a respectively describe the facts of "The relatives have arrived.", "It's raining outside.", and "The old lady is 80 years old". In these cases, "[liɔɔ<sup>21</sup>]" is similar to the use of "[liɔɔ<sup>21</sup>]" in Mandarin. Sentences-b respectively indicate that the three events, “The relatives will soon arrive.", "It will soon rain outside.", and "The old lady will soon be eighty years old." will be realized soon. Thus, the category of temporal deixis (in grammars, it is usually referred to simply as "time") may include no more than three grammes: "the situation coincides with the moment of speech", "the situation precedes the moment of speech" and "the situation follows the moment of speech". Their common names are present, past and future.<sup>1</sup> It can be seen that "Dai" in Tianzhu dialect serves as both an aspect marker and an expression of tense. In Tianzhu dialect, the meaning of "future" implied by "Dai" also has the following three situations, for example:

(4) tʂɿ<sup>44</sup> tʰiæn<sup>44</sup> tɛ<sup>42</sup> i<sup>42</sup> pa<sup>13</sup> zən<sup>53</sup> zə<sup>21</sup> sɿ<sup>44</sup> tei<sup>44</sup> liɔɔ<sup>21</sup>.

‘The scorching heat almost kills people.’

(5) t<sup>44</sup>ʁu<sup>44</sup> t<sup>44</sup>ʁo<sup>44</sup> ei<sup>44</sup>a<sup>44</sup> kə<sup>21</sup> ye<sup>24</sup> k<sup>44</sup>ei<sup>44</sup> eye<sup>31</sup> ti<sup>21</sup>  
 ʂ<sup>44</sup> x<sup>31</sup>ʁu<sup>31</sup>, tsuə<sup>13</sup> ie<sup>13</sup> ie<sup>44</sup> tɛi<sup>44</sup>ʁu<sup>42</sup> ei<sup>44</sup>  
 væn<sup>44</sup> tɛi<sup>44</sup>lio<sup>21</sup>.

‘By the time school starts next month, the homework will be almost done.’

(6) tsuə<sup>44</sup>kə<sup>21</sup> kæn<sup>13</sup>t<sup>44</sup>ʁu<sup>44</sup>  
 və<sup>44</sup>t<sup>44</sup>ʁo<sup>213</sup> ʂ<sup>21</sup>t<sup>44</sup>iæn<sup>44</sup>xə<sup>21</sup> tɛi<sup>22</sup>tʂə<sup>44</sup>li<sup>21</sup>.

‘By the time I arrived yesterday, it was almost dark.’

In Tianzhu dialect, most of the reference time implied by "Dai" refers to the time of utterance indicating that it will be realized soon, and is the "near future" as in example (4). Unless there is an explicit time reference, it can mean "far future" and "past future", such as "next month" in example (5) and "yesterday" in example (6).

**GRAMMATICAL FUNCTIONS AND DISTRIBUTION OF "DAI"**

In Tianzhu dialect, the usage frequency of the future aspect marker "Dai" is very high, indicating that a change in action or a situation is about to occur. "Dai" here is an integration of tense meaning and aspect meaning, equivalent to the Mandarin words "immediately", "soon", "will". Here, "Dai" should be pronounced with an accentuation and must be used in conjunction with modal particles which are attached to the sentence layer by layer. The main sentence pattern for "Dai" is: "(S)+VP+Dai+[lio<sup>21</sup>/tʂə<sup>44</sup>·li<sup>21</sup>]".

(7) v<sup>21</sup> ma<sup>24</sup> fæn<sup>24</sup> tsu<sup>21</sup> xɔ<sup>44</sup> tɛi<sup>44</sup>lio<sup>21</sup>, tən<sup>13</sup>  
 k<sup>44</sup>a<sup>42</sup> tʂ<sup>22</sup>ʂɑŋ<sup>24</sup> lio<sup>21</sup> tɛi<sup>24</sup> tɛ<sup>44</sup>i<sup>24</sup>.

‘Mom is getting dinner ready soon, and we will go after dinner.’

(8) v<sup>21</sup> ma<sup>24</sup> fæn<sup>24</sup> tsu<sup>21</sup> xɔ<sup>44</sup> tɛi<sup>44</sup>tʂə<sup>44</sup>li<sup>21</sup>, tən<sup>13</sup>  
 k<sup>44</sup>a<sup>42</sup> tʂ<sup>22</sup>ʂɑŋ<sup>24</sup> lio<sup>21</sup> tɛi<sup>24</sup> tɛ<sup>44</sup>i<sup>24</sup>.

‘Mom is getting dinner ready soon, and we

will go after dinner.’

(9) v<sup>21</sup> ma<sup>24</sup> fæn<sup>24</sup> k<sup>44</sup>u<sup>13</sup>ei<sup>13</sup> tsu<sup>21</sup> xɔ<sup>44</sup> tɛi<sup>44</sup>lio<sup>21</sup>/tʂə<sup>44</sup>  
 li<sup>21</sup>, tən<sup>13</sup> k<sup>44</sup>a<sup>42</sup> tʂ<sup>22</sup>ʂɑŋ<sup>24</sup> lio<sup>21</sup> tɛi<sup>24</sup> tɛ<sup>44</sup>i<sup>24</sup>.

‘Mom is getting dinner ready soon, and we will go after dinner.’

Through comparison, we find that the grammatical functions and meanings expressed by the above three examples are exactly the same. The word "Dai" in example (7) and (8) is at the end of the sentence and is usually appended with the expressions of sentence-formation category, such as "[lio<sup>21</sup>]" and "[tʂə<sup>44</sup>li<sup>21</sup>]" in Tianzhu dialect indicating that the state of affairs that is described in the clause "Mom is getting dinner ready" is about to be realized. Example (9) adds the temporal adverb "(soon)" before the predicate verb, and there is no strict restriction on whether or not to add "(soon)" before the predicate in the future aspect sentence. The addition of "fast" does not affect the grammatical meaning of the expression. In contrast, temporal adverbs and adverbials play a significant role in expressing reference to past and future time.<sup>2</sup> In addition, the predicate is usually not preceded by the future words "will, be going to" and some temporal words. Instead, the future time is reflected by "Dai".

According to the different meanings of expressions, the future aspect of Tianzhu dialect clearly can be divided into two types. One type expresses the meaning that is about to reach the end of the action, and the other expresses the meaning that is about to begin. In the paper, the former future aspect marker is called "Dai<sub>1</sub>"; and the latter one is "Dai<sub>2</sub>". For example:

(10) a. v<sup>21</sup> ma<sup>24</sup> zi<sup>44</sup> ʂɑŋ<sup>53</sup> ei<sup>44</sup> væn<sup>44</sup> tɛi<sup>44</sup><sub>1</sub> lio<sup>21</sup>/tʂə<sup>44</sup>  
 li<sup>21</sup>.

‘Mom is almost done with the laundry.’

b. tʂ<sup>44</sup>u<sup>44</sup> lio<sup>44</sup> mən<sup>53</sup> tʂə<sup>44</sup> ʂ<sup>44</sup>  
 tɛiæn<sup>21</sup> ta<sup>44</sup>lio<sup>13</sup>, tʂ<sup>44</sup>xu<sup>24</sup> tʂ<sup>21</sup> kuə<sup>44</sup> lei<sup>21</sup>tɛi<sup>44</sup><sub>1</sub>  
 lio<sup>21</sup>/tʂə<sup>44</sup>li<sup>21</sup>.

‘...been out for a long time and will be coming back soon.’

c. tʂʰə<sup>44</sup> ʂiɻu<sup>44</sup> xɔɔ<sup>24</sup> tɛi<sup>44</sup><sub>1</sub> liɔɔ<sup>21</sup>, ni<sup>21</sup> kʰei<sup>44</sup> ʂaŋ<sup>42</sup> liɔɔ<sup>21</sup> tɛ<sup>44</sup><sub>1</sub>.

‘The car will be repaired soon and you can drive back.’

(11) a. ti<sup>44</sup> li<sup>24</sup> ti<sup>53</sup> tʂʰu<sup>44</sup> tɛia<sup>42</sup> ʂɻu<sup>22</sup> tɛi<sup>44</sup><sub>2</sub> liɔɔ<sup>21</sup>.

‘The crops in the fields are about to be harvested.’

b. kæn<sup>21</sup> tɛin<sup>44</sup> tʂue<sup>24</sup>, tiæn<sup>44</sup> in<sup>35</sup> kʰei<sup>44</sup> tɛi<sup>44</sup><sub>2</sub> liɔɔ<sup>21</sup>.

‘Sit down and the movie will start soon.’

c. tiæn<sup>44</sup> kʰə<sup>21</sup> tɛia<sup>24</sup> xə<sup>42</sup> liɔɔ<sup>21</sup>, ʂuei<sup>24</sup> tɛiɔɔ<sup>21</sup> tɛi<sup>44</sup><sub>2</sub> liɔɔ<sup>53</sup>.

‘It's already dark, time for bed.’

The syntactic structure of the future aspect, "VP + Dai", in Tianzhu dialect has a regular grammatical meaning, as can be seen from the above examples, which are neatly divided into two examples (10) and (11). For example, example (10a) means "Mom is almost done with the laundry. In terms of the action of washing clothes, she is about to reach the end of that action." The grammatical meaning of example (11a) is "The crops in the field are about to be harvested. So the action of harvesting the crops has not yet begun, but is about to begin." From this to the other, it is not difficult to see that the difference in the internal meaning of the future aspect is brought about by the VP. Now we will focus on discussing which word classes and phrasal verbs can fit the syntactic pattern of "VP+[tɛi<sup>44</sup>·liɔɔ<sup>21</sup>]" in different contexts, so as to summarize the syntactic distribution and semantic features of "Dai<sub>1</sub>" and "Dai<sub>2</sub>".

### Functions and Distribution of "Dai<sub>1</sub>"

In Tianzhu dialect, "Dai<sub>1</sub>" is usually located at the end of a sentence when it is used as a future aspect marker to express the aspect meaning that is about to reach the end of the action. The

following focuses on the combined functions of "Dai<sub>1</sub>" with word classes and phrases.

#### Monosyllabic verb + Dai<sub>1</sub>

(12) tɛ<sup>44</sup> in<sup>44</sup> tɛ<sup>44</sup> i<sup>21</sup> mən<sup>42</sup> kʰuei<sup>24</sup> tɔɔ<sup>21</sup> tɛi<sup>44</sup><sub>1</sub> liɔɔ<sup>21</sup>/tʂə<sup>44</sup> li<sup>21</sup>.

‘The relatives are coming soon.’

(13) ye<sup>13</sup> tʂʰ<sup>21</sup> kei<sup>44</sup> liɔɔ<sup>21</sup> pæn<sup>22</sup> kə<sup>21</sup> ye<sup>24</sup> liɔɔ<sup>21</sup>, tɛia<sup>42</sup> kæn<sup>44</sup> mɔɔ<sup>24</sup> xɔɔ<sup>44</sup> tɛi<sup>44</sup><sub>1</sub> liɔɔ<sup>21</sup>/tʂə<sup>44</sup> li<sup>21</sup>.

‘After taking medicine for half a month, his cold is almost healed.’

(14) ti<sup>21</sup> li<sup>13</sup> ti<sup>42</sup> mɛi<sup>44</sup> tʂɿ<sup>31</sup> kʰuei<sup>24</sup> ʂu<sup>44</sup> tɛi<sup>44</sup><sub>1</sub> liɔɔ<sup>21</sup>/tʂə<sup>44</sup> li<sup>21</sup>.

‘The wheat in the field is almost ripe.’

(15) tʰei<sup>22</sup> iaŋ<sup>24</sup> tʂʰ<sup>21</sup> lei<sup>42</sup> liɔɔ<sup>21</sup>, kɔɔ<sup>44</sup> su<sup>42</sup> lu<sup>44</sup> ʂaŋ<sup>13</sup> ti<sup>21</sup> pin<sup>44</sup> ɛiɔɔ<sup>44</sup> tɛi<sup>44</sup><sub>1</sub> tʂə<sup>44</sup> li<sup>21</sup>.

‘The sun is out, and the ice on the highway is almost gone.’

(16) mə<sup>44</sup> mə<sup>21</sup> tʂən<sup>44</sup> kei<sup>21</sup> tʂə<sup>44</sup> i<sup>22</sup> xu<sup>24</sup> liɔɔ<sup>21</sup>, tʂɿ<sup>44</sup> xu<sup>24</sup> tʂɿ<sup>21</sup> kʰuei<sup>44</sup> xɔɔ<sup>213</sup> tɛi<sup>44</sup><sub>1</sub> tʂə<sup>44</sup> li<sup>21</sup>.

‘The bun has been steamed for a while, it should be almost cooked by now.’

(17) liɑŋ<sup>44</sup> kɻu<sup>24</sup> tʂɿ<sup>21</sup> nɔɔ<sup>13</sup> ti<sup>21</sup> ʂɿ<sup>44</sup> tɛiæn<sup>42</sup> ta<sup>44</sup> li<sup>21</sup>, tɛia<sup>44</sup> pa<sup>42</sup> tɛi<sup>44</sup><sub>1</sub> tʂə<sup>44</sup> li<sup>21</sup>.

‘The couple has been quarreling for so long that they can hardly live together anymore.’

Zhou&Li (2020) demonstrated the rationality of taking [± stages] and [± telic] as the two basic semantic criteria for classifying actionality and the basis for their operability in Chinese. She divided the actionality of Chinese verbs into aspectless verbs, state verbs, activity verbs, accomplishment verbs and achievement verbs.<sup>3</sup> This classification criterion is adopted in the article. By analyzing the examples (12)-(17), it can be seen that the predicates (such as "[tɔɔ<sup>24</sup>],[xɔɔ<sup>44</sup>],[ʂu<sup>53</sup>],[ɛiɔɔ<sup>44</sup>]", and "[pa<sup>24</sup>]/[væn<sup>53</sup>]", etc.) can be monosyllabic verbs and adjectives in the syntactic construction of "VP+Dai<sub>1</sub>+ [liɔɔ<sup>21</sup>]". In addition to the monosyllabic verbs mentioned above, other monosyllabic verbs that fit the structure include: "[lei<sup>44</sup>],[ɛi<sup>13</sup>],[in<sup>53</sup>],[sɿ<sup>44</sup>],[tɿɻu<sup>44</sup>],[tuæn<sup>13</sup>]" and so on.

All of the above words have a non-dynamic continuous [-stages] and a definite end point [+telic] feature, that is, achievement verbs. In other words, it means that the achievement verbs can fit the "VP+Dai<sub>1</sub>+ [lio<sup>21</sup>]" pattern.

**Verb-resultative construction+ Dai<sub>1</sub>**

When "Dai<sub>1</sub>" in Tianzhu dialect is used as the future aspect marker, the VPs that match "Dai<sub>1</sub>", in addition to a few monosyllabic words, in most cases are the two-syllabic words that fit the structure of "VP+Dai<sub>1</sub>+ [lio<sup>21</sup>]" . The two-syllabic words include the verb-resultative construction (VRC) of two-syllable words, such as:

(18) v<sup>21</sup> ma<sup>24</sup> zi<sup>44</sup> ʂaŋ<sup>53</sup> ei<sup>44</sup> væn<sup>44</sup> tei<sub>1</sub><sup>44</sup> lio<sup>21</sup>/tʂə<sup>44</sup> li<sup>21</sup>.

‘Mom is almost done with the laundry.’

(19) tʂə<sup>22</sup> ʂiɹu<sup>44</sup> xɔ<sup>21</sup> tei<sub>1</sub><sup>44</sup> lio<sup>21</sup>, ni<sup>22</sup> ʂɔ<sup>44</sup> vei<sup>44</sup> tən<sup>13</sup> k<sup>53</sup> a<sup>53</sup>.

‘The car will be repaired soon. Please wait a moment.’

(20) tʂɿ<sup>44</sup> t<sup>44</sup> iæn<sup>44</sup> t<sup>42</sup> i<sup>42</sup> pa<sup>44</sup> zən<sup>42</sup> zə<sup>21</sup> s<sup>1</sup> tei<sub>1</sub><sup>44</sup> lio<sup>21</sup>.

‘The scorching heat almost kills people.’

(21) va<sup>44</sup> va<sup>42</sup> faŋ<sup>44</sup> ɛye<sup>53</sup> xæn<sup>44</sup> mu<sup>21</sup> iɹu<sup>44</sup> xuei<sup>44</sup> lei<sup>2</sup> , pa<sup>13</sup> vu<sup>213</sup> li<sup>44</sup> zən<sup>42</sup> t<sup>42</sup> i<sup>53</sup> fən<sup>44</sup> tei<sub>1</sub><sup>44</sup> lio<sup>21</sup>.

‘The child has not returned from school, driving the family crazy.’

(22) t<sup>44</sup> iæn<sup>44</sup> i<sup>21</sup> lən<sup>24</sup> tʂə<sup>21</sup> , ka<sup>44</sup> kɹu<sup>44</sup> va<sup>42</sup> k<sup>53</sup> u<sup>24</sup> t<sup>44</sup> uə<sup>24</sup> n<sup>44</sup> s<sup>1</sup> tei<sub>1</sub><sup>44</sup> lio<sup>21</sup>.

‘The weather is so cold that the puppy is about to freeze to death.’

The above examples show that “[ei<sup>44</sup>·væn<sup>53</sup>],[çiɹu<sup>44</sup>·xɔ<sup>13</sup>],[zə<sup>44</sup>·s<sup>24</sup>],[tei<sup>44</sup>·fən<sup>53</sup> ]” are all two-syllable VRCs. According to semantic criterion and structures that conform to the non-dynamic continuity [-stages] and the definite end point [+telic] feature, the two-syllable VCRs mentioned above are still achievement verbs. Words such as these are

most commonly used: "[tʂɿ<sup>44</sup>·væn<sup>53</sup>],[P<sup>44</sup>·xɔ<sup>24</sup>·tɿɔ<sup>53</sup>],[ɛie<sup>44</sup>·xɔ<sup>24</sup>],[tʂɔ<sup>44</sup> tɛiæn<sup>53</sup>]" and so on.

**Verb-direction construction +Dai<sub>1</sub>**

When VP is a verb-direction construction (VDC), that is, the main verb plus a verb indicating a direction can also fit the "VP+Dai<sub>1</sub>+ [lio<sup>21</sup>]" pattern. According to previous research, there are 12 compound directional words used for verb complement position in modern Mandarin Chinese. They

are : "[tɛ<sup>44</sup>·i<sup>214</sup>·lai<sup>24</sup>],[tʂ<sup>44</sup>·u<sup>44</sup>·lai<sup>24</sup>],[tʂ<sup>44</sup>·u<sup>44</sup>·tɛ<sup>44</sup>·y<sup>53</sup>],[ʂaŋ<sup>53</sup>·lai<sup>24</sup>],[ʂaŋ<sup>53</sup>·tɛ<sup>44</sup>·y<sup>42</sup>],[xia<sup>53</sup>·lai<sup>24</sup>],[xia<sup>53</sup>·tɛ<sup>44</sup>·y<sup>42</sup>],[kuo<sup>53</sup>·lai<sup>24</sup>],[kuo<sup>53</sup>·tɛ<sup>44</sup>·y<sup>42</sup>],[k<sup>44</sup>·ai<sup>44</sup>·lai<sup>24</sup>],[xuei<sup>24</sup>·lai<sup>53</sup>],[xuei<sup>24</sup>·tɛ<sup>44</sup>·y<sup>53</sup> ]". The research from the author shows that in Tianzhu dialect, only 6 of these 12 compound directional words can be set before the aspect marker "Dai<sub>1</sub>".

They

are "[tɛ<sup>44</sup>·i<sup>24</sup>·lei<sup>53</sup>],[tʂ<sup>44</sup>·u<sup>44</sup>·lei<sup>53</sup>],[ʂaŋ<sup>44</sup>·lei<sup>53</sup>],[xa<sup>44</sup>·lei<sup>53</sup>],[kuə<sup>44</sup>·lei<sup>53</sup>]" and "[xuei<sup>44</sup>·lei<sup>21</sup>]" .

(23) a. ʂuei<sup>21</sup> lio<sup>44</sup> zi<sup>13</sup> tʂɔ<sup>21</sup> ʂaŋ<sup>44</sup> lio<sup>21</sup>, tʂɿ<sup>44</sup> xu<sup>24</sup> tʂ<sup>21</sup> tei<sub>1</sub><sup>44</sup> lei<sup>42</sup> t<sup>44</sup> lio<sup>21</sup>.

‘After sleeping all morning, it's time to get up.’

b. kɔ<sup>44</sup> k<sup>24</sup> xɔ<sup>24</sup> tʂ<sup>44</sup> ən<sup>44</sup> t<sup>42</sup> tʂ<sup>44</sup> u<sup>13</sup> lei<sub>1</sub><sup>42</sup> t<sup>44</sup> lio<sup>21</sup>.

‘The college entrance examination results are coming out.’

\* t<sup>44</sup> iæn<sup>42</sup> ta<sup>44</sup> lio<sup>13</sup> , tʂɿ<sup>44</sup> xu<sup>24</sup> tʂ<sup>44</sup> u<sup>21</sup> t<sup>44</sup> i<sup>44</sup> t<sup>44</sup> lio<sup>21</sup>.

c. tʂ<sup>44</sup> ə<sup>44</sup> ʂaŋ<sup>22</sup> lei<sub>1</sub><sup>44</sup> t<sup>44</sup> tʂə<sup>44</sup> li<sup>21</sup>.

‘The car is coming soon.’

\* ni<sup>22</sup> ʂɔ<sup>44</sup> vei<sup>44</sup> tən<sup>13</sup> k<sup>53</sup> a<sup>53</sup> , tɛia<sup>42</sup> ʂaŋ<sub>1</sub><sup>24</sup> t<sup>44</sup> t<sup>44</sup> lio<sup>21</sup>.

d. tɛia<sup>44</sup> mən<sup>42</sup> k<sup>44</sup> ɛi<sup>44</sup> t<sup>21</sup> tʂ<sup>44</sup> , tʂɿ<sup>44</sup> xu<sup>24</sup> tʂ<sup>21</sup> xa<sub>1</sub><sup>44</sup> lei<sub>1</sub><sup>42</sup> t<sup>44</sup> tʂə<sup>44</sup> li<sup>21</sup>.

‘They drove the car and will be coming soon.’

\* tʂɿ<sup>44</sup> xu<sup>24</sup> tʂ<sup>21</sup> tɛia<sup>44</sup> xa<sub>1</sub><sup>44</sup> t<sup>21</sup> t<sup>44</sup> lio<sup>21</sup>.

e. tʂ<sup>44</sup> u<sup>22</sup> lio<sup>44</sup> mən<sup>53</sup> ʂɿ<sup>44</sup> tɛiæn<sup>42</sup> ta<sup>44</sup> lio<sup>21</sup> , tʂɿ<sup>44</sup> xu<sup>24</sup> tʂ<sup>21</sup> kuə<sub>1</sub><sup>44</sup> lei<sub>1</sub><sup>42</sup> t<sup>44</sup> tʂə<sup>44</sup> li<sup>21</sup>.

‘...has been out for a while and will come back soon.’

\* teia<sup>44</sup> mən<sup>42</sup> tʂɿ<sup>44</sup> xu<sup>24</sup> tʂɿ<sup>21</sup> kuə<sup>44</sup> tɛ<sup>42</sup> i<sup>44</sup> tʂə<sup>44</sup> li<sup>21</sup>.

f.va<sup>44</sup> va<sup>42</sup> mən<sup>42</sup> fəŋ<sup>44</sup> tiɔo<sup>24</sup> tʂə<sup>21</sup> zi<sup>13</sup> kə<sup>22</sup> siɔo<sup>13</sup> ʂɿ<sup>42</sup> liɔo<sup>21</sup>, teia<sup>44</sup> xuei<sup>44</sup> lei<sup>44</sup> tɛ<sup>44</sup> liɔo<sup>21</sup>.

‘The children have been out of school for an hour and he will be back soon.’

\*lei<sup>42</sup> ti<sup>21</sup> ʂɿ<sup>44</sup> tɛiæn<sup>42</sup> ta<sup>44</sup> liɔo<sup>21</sup>, teia<sup>44</sup> xuei<sup>44</sup> tɛ<sup>42</sup> i<sup>44</sup> liɔo<sup>21</sup>.

Therefore, in Tianzhu dialect, the six Chinese verb phrases such as “[tɛ<sup>42</sup> i<sup>24</sup> · lei<sup>53</sup>], [tʂɿ<sup>44</sup> u<sup>44</sup> · lei<sup>53</sup>], [ʂəŋ<sup>44</sup> · lei<sup>53</sup>], [xa<sup>44</sup> · lei<sup>53</sup>], [kuə<sup>44</sup> · lei<sup>53</sup>]” and “[xuei<sup>44</sup> · lei<sup>21</sup>]” in the examples (a-f) can naturally co-occur with the aspect marker “Dai<sub>1</sub>”. The five examples with “\*” do not conform to the expression habits of Tianzhu dialect. Therefore, it can be inferred that when the VDC of the future aspect construction, “VP+Dai<sub>1</sub>+ [liɔo<sup>21</sup>]” pattern, in Tianzhu dialect is used as the VP, only the VDC of “main verb + directional verb [lei<sup>53</sup>]” can appear in the grammar structure. Among the six groups of directional words that can be freely combined, the six groups of example sentences (23) (a-f) all indicate that the action is about to be carried out, expressing the aspect meaning of reaching the end of the action. According to the semantic criteria and structures that conform to non-dynamic continuity [-stages], and a definite end point [+telic] feature, the VDCs mentioned above are still achievement verbs. Therefore, in the structure form of “compound directional word+Dai+ [liɔo<sup>21</sup>/tʂə<sup>44</sup> · li<sup>21</sup>]”, in most cases, “Dai<sub>1</sub>” is used as the future aspect marker.

However, there are exceptions. For example, in the example (23c), “tʂə<sup>44</sup> ʂəŋ<sup>22</sup> lei<sup>44</sup> tɛ<sup>42</sup> tʂə<sup>44</sup> li<sup>21</sup>.” means “The car is coming up soon.” This can be understood as the movement of the car coming up is about to reach the end, and it can also be understood as the movement of the car

is about to begin. In this case, it can mean that the future aspect marker “VP+Dai<sub>1</sub>+ [liɔo<sup>21</sup>]”, such as: “teia<sup>44</sup> tʂɿ<sup>24</sup> k<sup>42</sup> ei<sup>21</sup> ʂɿ<sup>44</sup> tɛiæn<sup>42</sup> ta<sup>44</sup> liɔo<sup>13</sup>, tʂɿ<sup>44</sup> xu<sup>24</sup> ʂəŋ<sup>44</sup> lei<sup>42</sup> tɛ<sup>42</sup> tʂə<sup>44</sup> li<sup>21</sup>.” which means that the movement of coming up will be completed, and it can also mean the future aspect marker “VP+Dai<sub>2</sub>+ [liɔo<sup>21</sup>]”. The meaning of which the future aspect marker is to express depends on the specific context. Since the context is different, the VDC “[ʂəŋ<sup>44</sup> · lei<sup>53</sup>]” can express different aspect meanings. It can be inferred that in Tianzhu dialect, in the structure of “VDC+Dai+ [liɔo<sup>21</sup>]”, there are six compound directional verbs that can be freely combined with “Dai”. In most cases in this structure, the VDC is followed by “Dai<sub>1</sub>”. The grammatical meaning of occasional “Dai<sub>2</sub>” should be analyzed in relation to the specific context.

### Functions and Distribution of "Dai<sub>2</sub>"

When “Dai<sub>2</sub>” in Tianzhu dialect is used as a future tense marker, it expresses the meaning of the upcoming start. At this time, “Dai<sub>2</sub>” can be located after the predicate component, but also after the substantive component, usually at the end of the sentence. “Dai” is accentuated and must be used in conjunction with the modal particles “[liɔo<sup>21</sup>]” or “[tʂə<sup>44</sup> · li<sup>21</sup>]”. “VP +Dai<sub>2</sub>+ [liɔo<sup>21</sup>]” has a high degree of integration, and there is no single-use of “VP+Dai”. Now we will focus on the combined functions of “Dai<sub>2</sub>” with word classes and phrases.

#### Monosyllabic verb + Dai<sub>2</sub>

(24) tʂɿ<sup>44</sup> uəŋ<sup>44</sup> tɛia<sup>42</sup> k<sup>42</sup> uei<sup>24</sup> ʂɿ<sup>44</sup> tɛi<sup>44</sup> liɔo<sup>21</sup>.

‘The crops are about to be harvested.’

(25) yn<sup>53</sup> k<sup>42</sup> æn<sup>44</sup> ʂɿ<sup>21</sup> xɿ<sup>44</sup> ti<sup>21</sup> xən<sup>44</sup>, y<sup>44</sup> tɛia<sup>53</sup> ei<sup>44</sup> tɛi<sup>44</sup> liɔo<sup>21</sup>/tʂə<sup>44</sup> li<sup>21</sup>.

‘The clouds look thick, and it feels like it’s about to rain.’

(26) tʂə<sup>44</sup> tɛia<sup>21</sup> k<sup>42</sup> ei<sup>44</sup> tɛi<sup>44</sup> tʂə<sup>44</sup> li<sup>21</sup>.

‘The car is about to leave.’

(27) tʂə<sup>44</sup> ən<sup>44</sup> tɛi<sup>42</sup> mu<sup>213</sup> iɿ<sup>24</sup> k<sup>42</sup> ɔo<sup>44</sup> xɔo<sup>24</sup>, na<sup>53</sup> zi<sup>13</sup> ʂuə<sup>24</sup> ʂɿ<sup>44</sup> k<sup>42</sup> u<sup>24</sup> tɛi<sup>44</sup> tʂə<sup>44</sup> li<sup>21</sup>.

‘He didn’t do well on the test, and when he said that he was on the verge of tears.’

(28) ni<sup>22</sup>tʂʉ<sup>21</sup>kə<sup>24</sup>zi<sup>44</sup>ʂaŋ<sup>42</sup> tɛia<sup>21</sup>ɛi<sup>31</sup>tɛi<sup>44</sup>tʂə<sup>44</sup>li<sup>21</sup>.

‘Your clothes need to be washed.’

In the future aspect construction of "VP+[tɛi<sup>42</sup>·liɔ<sup>21</sup>]", some monosyllabic verbs fit this pattern. From the examples (24)-(28), it can be seen that the actionality types of the predicates such as "[ʂʉ<sup>44</sup>],[xə<sup>24</sup>],[k<sup>44</sup>·ɛi<sup>44</sup>],[k<sup>44</sup>·u<sup>24</sup>]" and "[ɛi<sup>24</sup>]" etc., can naturally co-occur with "[tɛi<sup>24</sup>]" and "[tʂə<sup>44</sup>]" at the verbal level, so they are considered "to have the feature of dynamic and continuous [+stages] without a clear end [- (+) telic]" ("there can be an end" is not the same as "there is a clear end"), which are called activity verbs. In other words, it means that the activity verbs fit the "VP+Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" pattern, expressing the aspect meaning of the action being about to begin.

**Verb-object construction + Dai<sub>2</sub>**

(29) t'ian<sup>44</sup>k'ə<sup>21</sup>tɛia<sup>13</sup> xə<sup>21</sup>liɔ<sup>24</sup> ,ʂuei<sup>13</sup>tɛio<sup>24</sup> tɛi<sup>24</sup> liɔ<sup>21</sup>.

‘It’s already dark, time for bed.’

(30) ni<sup>22</sup>tsuə<sup>13</sup> ie<sup>24</sup> xɔ<sup>44</sup> xɔ<sup>44</sup> pu<sup>24</sup>tsuə<sup>24</sup> ʂʉ<sup>44</sup> ,ɛi<sup>44</sup> ta<sup>42</sup>tɛi<sup>44</sup> liɔ<sup>21</sup>.

‘If you don’t do your homework properly, you’re going to get a beating.’

(31) ni<sup>44</sup>k'æn<sup>24</sup>tɛi<sup>21</sup>tʂaŋ<sup>22</sup>va<sup>44</sup> va<sup>44</sup> ti<sup>21</sup> ,tɛia<sup>21</sup> ni<sup>44</sup>ɛi<sup>22</sup>tsɔ<sup>24</sup> tɛi<sup>44</sup>liɔ<sup>21</sup>.

‘You look dirty; you should take a shower.’

Through the analysis of the actionality types of "[ʂuei<sup>13</sup>·tɛio<sup>24</sup>],[ɛi<sup>44</sup>·ta<sup>42</sup>],[ɛi<sup>22</sup> tsɔ<sup>24</sup>]" they all belong to the words with the features of dynamic and continuous [+stages] and no clear end [- (+) telic]. They are also activity verbs that fit " VP +Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" pattern, indicating the action is about to begin.

It is worth noting that in the construction that

expresses the meaning of the future aspect, in addition to the monosyllabic words before the aspect marker particle "Dai<sub>2</sub>", there is also a special category such as examples (29)-(31) where the verb-object construction " VP+Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" has two variants, "VO+Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" and "V+Dai<sub>2</sub>+O+ [liɔ<sup>21</sup>]". Similarly, "VO+Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" has a high degree of integration and there is no single-use of "VO+Dai<sub>2</sub>". For instance, in examples (29)-(31), the uses of "Dai" follow the verb-object construction to indicate that the action is about to take place. There is another expression for this type of structure in Tianzhu dialect.

(32) a. t'ian<sup>44</sup> k'ə<sup>21</sup>tɛia<sup>13</sup> xə<sup>21</sup>liɔ<sup>24</sup> ,ʂuei<sup>13</sup> tɛio<sup>24</sup> tɛi<sup>24</sup>liɔ<sup>53</sup> .→ t'ian<sup>44</sup> k'ə<sup>21</sup>tɛia<sup>13</sup> xə<sup>21</sup>liɔ<sup>24</sup> ,ʂuei<sup>13</sup> tɛi<sup>44</sup> tɛio<sup>24</sup>liɔ<sup>13</sup>.

‘It’s already dark, time for bed.’

b. ni<sup>22</sup>tsuə<sup>13</sup> ie<sup>24</sup> xɔ<sup>44</sup> xɔ<sup>44</sup> pu<sup>24</sup>tsuə<sup>24</sup> ʂʉ<sup>44</sup> ,ɛi<sup>44</sup> ta<sup>42</sup>tɛi<sup>44</sup>liɔ<sup>21</sup> .→ni<sup>22</sup>tsuə<sup>13</sup> ie<sup>24</sup> xɔ<sup>44</sup> xɔ<sup>44</sup> pu<sup>24</sup>tsuə<sup>24</sup> ʂʉ<sup>44</sup> ,ɛi<sup>44</sup> tɛi<sup>44</sup> ta<sup>42</sup>liɔ<sup>21</sup>.

‘If you don’t do your homework properly, you’re going to get a beating.’

c. ni<sup>44</sup> k'æn<sup>24</sup> tɛi<sup>21</sup>tʂaŋ<sup>22</sup>va<sup>44</sup> va<sup>44</sup> ti<sup>21</sup> ,tɛia<sup>21</sup> ni<sup>44</sup>ɛi<sup>22</sup>tsɔ<sup>24</sup> tɛi<sup>44</sup>liɔ<sup>53</sup> .→ni<sup>44</sup> k'æn<sup>24</sup> tɛi<sup>21</sup> tʂaŋ<sup>22</sup>va<sup>44</sup> va<sup>44</sup> ti<sup>21</sup> ,tɛia<sup>21</sup> ni<sup>44</sup>ɛi<sup>22</sup>tɛi<sup>42</sup>tsɔ<sup>24</sup>liɔ<sup>53</sup>.

‘You look dirty; you should take a shower.’

Tang (2018) discussed the future aspect of "VP+Dai+[lie]" in Guanzhong dialect in his article, in which the verb-object construction “VP+Dai+[lie]" has two variants, "V +Dai+O+[lie]" and "VP+Dai+[lie]". These two variants have their own felicity conditions.<sup>4</sup> Coincidentally, the two variants of the verb-object construction of "“VP+Dai+[lie]" in Tianzhu dialect are highly consistent with the structure discussed by Tang (2018). Analyzing the felicity conditions of the two variants "VO+Dai+[lie]" and "V+Dai+O+[lie]" of the verb-object construction of "VP+Dai+[lie]" in Tianzhu dialect, the verbs in the "VP" construction can only be monosyllable verbs, and the object in this structure can only be bare nouns, as in the above example sentence, " t'ian<sup>44</sup> k'ə<sup>21</sup> tɛia<sup>13</sup>

xə<sup>21</sup> lio<sup>24</sup>, ʃuei<sup>13</sup> tɛio<sup>24</sup> tɛi<sup>44</sup> lio<sup>53</sup>". We can't say "\* t'ian<sup>44</sup> k'ə<sup>21</sup> tɛia<sup>13</sup> xə<sup>21</sup> lio<sup>24</sup>, ʃuei<sup>13</sup> zɪ<sup>21</sup> tɛio<sup>24</sup> tɛi<sup>44</sup> lio<sup>53</sup>." nor "\*ni<sup>22</sup> tsuə<sup>13</sup> ie<sup>24</sup> xɔ<sup>44</sup> xɔ<sup>44</sup> pu<sup>24</sup> tsuə<sup>24</sup> ʃɿ<sup>44</sup>, ɛi<sup>44</sup> zɪ<sup>21</sup> tuən<sup>24</sup> ta<sup>42</sup> tɛi<sup>44</sup> lio<sup>21</sup>". It can be seen that the object in this structure can only be bare nouns, and no quantifiers can be inserted between the verb and the object, and no "numeral-classifier-noun" construction is allowed to appear.

Such structural forms are not uncommon in Northwestern dialects. Scholars believe that "verb-object phrase +[kɛi]/[tɛ'i]" is used in Tianshui, Longnan, Huining, Jingtai and other places in Gansu. Mo (2005) argues that "verb-object phrase+[kɛi]" is the earlier word order of Northwest dialects, while the word order of "verb+[kɛi]+object" is a later order and is probably formed by the influence of other northern dialects. In the future, "verb+[kɛi]+object" may have a tendency to replace "verb-object phrase +[kɛi]".<sup>5</sup> From the above three sentences, it can be seen that the construction of "verb phrase + Dai" in Tianzhu dialect coexists with the construction of "Verb+ Dai + object". The change of the syntactic position of "Dai" does not affect the expression of the overall meaning. In Tianzhu dialect, the grammatical meaning of these two forms is identical in order to express the action to be performed, which is a special type of grammatical phenomenon in Tianzhu dialect. Through a survey of people of different age groups, we found that in Tianzhu dialect, more and more people use the "verb+Dai+object" construction to express the grammatical meaning of the future aspect. Other forms that appear frequently in this type of construction are "[tʃɿ<sup>24</sup>·fæn<sup>24</sup>],[ɛie<sup>44</sup>·tʃɿ<sup>24</sup>],[xe<sup>21</sup>·ʃue<sup>i24</sup>],[tʃɿu<sup>24</sup>·lu<sup>24</sup>],[p'ɔ<sup>44</sup>·pu<sup>24</sup>]" and so on.

However, if the position of the clause is

adjusted, and the three clauses "ʃuei<sup>13</sup> tɛio<sup>24</sup> tɛi<sup>44</sup> lio<sup>53</sup>" "ɛi<sup>44</sup> ta<sup>42</sup> tɛi<sup>44</sup> lio<sup>21</sup>" "ɛi<sup>22</sup> tɔ<sup>24</sup> tɛi<sup>44</sup> lio<sup>21</sup>" are brought to the beginning of the sentence, the grammatical function of "Dai" will be completely different, as it no longer expresses the tense and aspect meaning, but a different modal meaning, which is also very special in Tianzhu dialect. For example:

(33) a. ʃuei<sup>13</sup> tɛio<sup>24</sup> tɛi<sup>24</sup> lio<sup>21</sup> mən<sup>53</sup> suə<sup>13</sup> xɔ<sup>44</sup>. → ʃuei<sup>13</sup> tɛi<sup>44</sup> tɛio<sup>24</sup> lio<sup>21</sup> mən<sup>53</sup> suə<sup>13</sup> xɔ<sup>44</sup>.

‘Lock the door when you sleep.’

b. ɛi<sup>44</sup> ta<sup>42</sup> tɛi<sup>44</sup> lio<sup>21</sup> t'ɿ<sup>42</sup> pɔ<sup>213</sup> tʃu<sup>44</sup>. → ɛi<sup>44</sup> tɛi<sup>42</sup> ta<sup>42</sup> lio<sup>21</sup> t'ɿ<sup>42</sup> pɔ<sup>213</sup> tʃu<sup>44</sup>.

‘Protect your head when you are hit.’

c. ni<sup>44</sup> ɛi<sup>22</sup> tɔ<sup>24</sup> tɛi<sup>44</sup> lio<sup>21</sup> tuə<sup>44</sup> tʃuə<sup>44</sup> k'a<sup>21</sup>. → ni<sup>44</sup> ɛi<sup>22</sup> tɛi<sup>42</sup> tɔ<sup>24</sup> lio<sup>21</sup> tuə<sup>44</sup> tʃuə<sup>44</sup> k'a<sup>21</sup>.

‘You scrub more when you take a bath.’

Sentences of this type of structure often have predictive and imperative meanings. "Dai" is not used as an aspect marker in the sentence, and it means "when...". It can be seen that "Dai" is widely accepted and used frequently in Tianzhu dialect. Linguistic typology studies show that the development of future tense into epistemic modality is a common feature of human languages.<sup>6</sup> Different syntactic positions of "Dai" express different grammatical meanings.

### Substantive components +Dai<sub>2</sub>

When "Dai<sub>2</sub>" in Tianzhu dialect is used as an aspect marker it can also be placed after the substantive component to form the "NP+Dai<sub>2</sub>+ [lio<sup>21</sup>]" syntactic construction.

(34) lo<sup>44</sup> e<sup>21</sup> nɛi<sup>24</sup> pa<sup>44</sup> ʃɿ<sup>44</sup> tɛi<sup>44</sup> lio<sup>21</sup> iæn<sup>24</sup> tɛin<sup>42</sup> xæn<sup>21</sup> xɔ<sup>44</sup> xɔ<sup>44</sup> tʃə<sup>44</sup> li<sup>21</sup>.

‘The old lady is almost 80 years old and her eyes are still fine.’

(35) ʃaŋ<sup>44</sup> vu<sup>21</sup> tɛi<sup>44</sup> lio<sup>21</sup> fæn<sup>24</sup> tsu<sup>24</sup> tʃɿ<sup>44</sup>.

‘It's almost noon, go cook.’

(36) və<sup>44</sup> tɛin<sup>44</sup> niæn<sup>21</sup> sæn<sup>44</sup> ʃɿ<sup>42</sup> tɛi<sup>42</sup> lio<sup>21</sup>.

‘I'm turning 30 this year.’

In Tianzhu dialect, only temporal nouns and quantitative phrases can be used as substantive

components, entering the "NP+Dai<sub>2</sub>+ [lioo<sup>21</sup>]" syntax construction. This type of construction can only express the aspect meaning that the state will appear.

### Sentence Types in Which the Future Aspect Marker "Dai" Appears

In Tianzhu dialect, the future aspect marker "Dai" can only appear in three basic sentence types: declarative sentences, interrogative sentences, and exclamation sentences. For example:

(37) ti<sup>44</sup> li<sup>24</sup> ti<sup>53</sup> tʂ'uoŋ<sup>44</sup> tɕia<sup>42</sup> ʂxu<sup>44</sup> tɕi<sup>44</sup> lioo<sup>21</sup>.

‘The crops in the field are about to be harvested.’

(38) ka<sup>44</sup> ti<sup>21</sup> kə<sup>21</sup> ʂaŋ<sup>22</sup> kei<sup>13</sup> lioo<sup>44</sup> tɕi<sup>44</sup> niæn<sup>44</sup> lioo<sup>21</sup>, tɕ'uo<sup>22</sup> lei<sup>13</sup> tɕi<sup>44</sup> lioo<sup>21</sup> pa<sup>21</sup>?

‘The youngest child has been in school for several years, and is about to graduate, right?’

(39) fæn<sup>13</sup> ʂu<sup>44</sup> tɕi<sup>44</sup> lioo<sup>21</sup> ma<sup>44</sup> mei<sup>44</sup> ixu<sup>13</sup>? və<sup>21</sup> lei<sup>44</sup> pu<sup>31</sup> tɕi<sup>44</sup> lioo<sup>21</sup>.

‘Is the meal ready? I cannot wait anymore.’

(40) nuæn<sup>44</sup> tɕ'i<sup>24</sup> xæn<sup>53</sup> pu<sup>21</sup> lei<sup>42</sup>, pa<sup>13</sup> zən<sup>42</sup> tuən<sup>21</sup> ʂi<sup>44</sup> tɕi<sup>44</sup> lioo<sup>21</sup> v!

‘The heating hasn't come yet; it's freezing to death!’

In Tianzhu dialect, "Dai" mostly appears in affirmative sentences of declarative sentences, as in example (37), and is sometimes used in negative sentences. It's worth noting that when "Dai" is used as a future aspect marker, its negative form cannot be directly negated on the original sentence structure "(S)+VP+Dai+[lioo<sup>21</sup>/tʂə<sup>44</sup>·li<sup>21</sup>]". Instead the aspect marker "Dai" and the modal particles "[lioo<sup>21</sup>]" "[tʂə<sup>44</sup>·li<sup>21</sup>]" at the end of the sentence are removed. Meanwhile, the subjective marker "[xæn<sup>53</sup>]" is added to form the

"(S)+[xæn<sup>53</sup>]+VP+[pu<sup>21</sup>·xa<sup>24</sup>]" construction, indicating the negation of the action or event that is about to occur, such as "tʂ'uoŋ<sup>44</sup> tɕia<sup>42</sup> xæn<sup>53</sup> ʂxu<sup>44</sup> pu<sup>21</sup> xa<sup>24</sup>" "tʂ'ə<sup>44</sup> xæn<sup>53</sup> k'ei<sup>44</sup> pu<sup>21</sup> xa<sup>24</sup>" and so on. The types of interrogative sentences in which "Dai" appears are usually the right and wrong questions of example (38) and the positive and negative questions of example (39). The frequency of positive and negative questions is significantly higher than that of right and wrong questions, such as "fæn<sup>13</sup> ʂu<sup>44</sup> tɕi<sup>44</sup> lioo<sup>21</sup> ma<sup>44</sup> mei<sup>44</sup> ixu<sup>13</sup>?" The future aspect marker "Dai" in Tianzhu dialect does not appear in imperative sentences, but only in the above three types of sentences in general. This is related to the fact that "Dai" expresses a prediction of an event that will happen, which is not compatible with the imperative sentences.

In summary, the Tianzhu dialect uses "Dai" as the future aspect marker to indicate that the action is about to occur or the state is about to be realized. In this case, the tense meaning and the aspect meaning are integrated. According to the different meanings of expressions, the Tianzhu dialect can be clearly divided into two categories, one expressing that the action is about to reach the end point, and the other expressing that it is about to start or happen. In this article, the future aspect marker in the former category is called "Dai<sub>1</sub>", and the future aspect marker in the latter category is called "Dai<sub>2</sub>". By examining the ability to combine "Dai" with word classes and phrases, the grammatical functions and distribution of "Dai<sub>1</sub>" and "Dai<sub>2</sub>" are clearly delineated. In Tianzhu dialect, when "Dai<sub>1</sub>" is used as the future aspect marker, the VP of the syntactic structure of "VP+Dai<sub>1</sub>+ [lioo<sup>21</sup>]" must be the verb-resultative construction and verb direction construction of monosyllabic verbs and double-syllabic words, and the "VP" in "VP+Dai<sub>1</sub>+ [lioo<sup>21</sup>]" is consistent with the non-dynamic continuous [-stages] feature and the definite end point [+telic] feature based on the semantic criteria and structures. Monosyllable verbs, verb-resultative constructions and verb-direction

constructions must be the achievement verbs with a definite end point; in other words, only achievement verbs can apply to the "VP+Dai<sub>1</sub>+ [liɔ<sup>21</sup>]" construction.

When "Dai<sub>2</sub>" in Tianzhu dialect is used as a future tense marker, it expresses the meaning of the upcoming start. In this case, "Dai<sub>2</sub>" can be located either after the predicate component or the substantive component. When "Dai<sub>2</sub>" is located after the predicative component, the VP in the future aspect of "VP+Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" structure could be either bare verbs or verb-object constructions. Analyzing the actionality types of these words, we believe that they have a dynamic and continuous [+stages] feature and no clear end point [- (+) telic] feature, i.e., monosyllabic verbs and verb-object constructions must be activity verbs with no definite end point. In other words, only activity verbs can apply to the construction of "VP+Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" . When "Dai<sub>2</sub>" is after the substantive component, only temporal nouns and quantitative phrases can serve as the substantive component, and could apply to the syntactic construction of "NP+Dai<sub>2</sub>+ [liɔ<sup>21</sup>]" .

In Tianzhu dialect, there are two forms of future time reference: one is "[k'uei<sup>24</sup>]+VP+[liɔ<sup>21</sup>]" ; the other is the future aspect "VP+Dai+[liɔ<sup>21</sup>]" or "[k'uei<sup>24</sup>]/[teixu<sup>24</sup>]+VP+Dai+[liɔ<sup>21</sup>]" . The first form is marked by adverbs of time such as "quick" and "just", which is used in the same way as in Mandarin and will not be repeated here. This article focuses on the usage of "Dai" as the future aspect marker. We conducted a sample survey of three different age groups of the old, middle-aged and young, and found that today the elderly and middle-aged people express the same form of future time reference, and the highest frequency of uses is the future aspect of "VP+Dai+[liɔ<sup>21</sup>]" , followed by "[k'uei<sup>24</sup>]/[teixu<sup>24</sup>]+VP+Dai+[liɔ<sup>21</sup>]" and with

the lowest frequency of "[k'uei<sup>24</sup>]+VP+[liɔ<sup>21</sup>]" ,i.e., "VP+Dai+[liɔ<sup>21</sup>]" > "[k'uei<sup>24</sup>]/[teixu<sup>24</sup>]+VP+Dai+[liɔ<sup>21</sup>]" > "[k'uei<sup>24</sup>]+VP+[liɔ<sup>21</sup>]" . But among young people, the highest frequency of uses is "[kuei<sup>24</sup>]+VP+[liɔ<sup>21</sup>]" ,then followed by "VP+Dai+[liɔ<sup>21</sup>]" and "[k'uei<sup>24</sup>]/[teixu<sup>24</sup>]+VP+Dai+[liɔ<sup>21</sup>]" ,i.e., "[k'uei<sup>24</sup>]+VP+[liɔ<sup>21</sup>]" > "VP+Dai+[liɔ<sup>21</sup>]" > "[k'uei<sup>24</sup>]/[teixu<sup>24</sup>]+VP+Dai+[liɔ<sup>21</sup>]" . The reason for this phenomenon is that the future time reference form in Tianzhu dialect is influenced by Mandarin. At present, the syntactic structure of "VP+Dai+[liɔ<sup>21</sup>]" or "[k'uei<sup>24</sup>]/[teixu<sup>24</sup>]+VP+Dai+[liɔ<sup>21</sup>]" is gradually disappearing in people's daily expressions. Therefore, it is particularly important to record and study this special language phenomenon.

#### DISTRIBUTION OF THE FUTURE ASPECT MARKER“DAI”IN NORTHWESTERN DIALECT

Regarding the distribution of the types of the future aspect markers in Gansu dialect, the author has made a rough statistics which can be divided into two types: with “Dai” and without “Dai”. Wuwei is represented by the type with“Dai”. For example,the dialects in Tianzhu and Liangzhou District uses two types: "VP+Dai+[liɔ<sup>21</sup>]" or "[k'uei<sup>53</sup>]+VP+[liɔ<sup>21</sup>]" , such as "ma ma pa fæn tsu şu tei liɔ(Tianzhu District)/ma ma pa faŋ k'uei tsu şu tei liɔ(Liangzhou District)""ti li ti mei tsɿ k'uei şu liɔ(Tianzhu District)/ti li ti mo tsɿ k'uei şu liɔ(Liangzhou District)"; in Jingtai County in Baiyin city, the types of "VP+Dai+[lɔ<sup>24</sup>]" or "[k'uei<sup>24</sup>]+VP+[lɔ<sup>24</sup>]" are used, such as"ma ma pa fæn tsu şu tei lɔ""ti li ti mo tsɿ k'uei şu lɔ". The distribution of the future aspect type without "Dai" is in Qin'an County, Tianshui City in the form of "VP+[li<sup>21</sup>]" , such as"ma ma pa zi fu fa ei væn li""ti li ti mai tsɿ fa şu li". It can be seen that the types of markers used in different regions of Gansu are different. They can be roughly divided into two types: one type taking “Dai” as the future aspect marker; the other type, without "Dai", taking the modal particles

"[lɔo<sup>24</sup>]" and "[li<sup>21</sup>]" as the particle words of the aspect marker.

At present, there are many linguistic typology research results on tense. It employs a quantitative approach and considers linguistic typology as a frame of reference to study the range of variation in tense.<sup>7</sup> Fortuin, E. (2019) presents a cross-linguistic typology of performatives, especially with respect to their relationship with tense and aspect, in the languages of the world.<sup>8</sup> Mudhsh BADM compare and analyze the similarities and differences between Arabic and English tense and aspect categories in terms of

their forms, functions and usage.<sup>9</sup> Let's take a look at the use and distribution of "Dai" as aspect markers in other dialects across the country. Rong Jing makes statistics on the distribution of various complete aspect markers in Chinese dialect: among the perfect aspect markers after the subject-predicate verbs with object, except for "[liɔo<sup>21</sup>]" and "[kuə<sup>53</sup>]", "Dai" as a perfect aspect marker is in the third place nationwide, with 36 points, mainly in southern dialects. Based on the research of previous scholars and the author's study, "Dai" as a future aspect marker mainly exists in northwestern dialect. Table 1 is presented in order to have a clearer picture of the distribution of "Dai" in northwestern dialect.

Dialect Point	Sentence type	Future Aspect Marker	Examples
<b>Tianzhu Dialect</b>	VP+Dai+[liɔo <sup>21</sup> ]	Dai[tei]	tɛ' in <sup>44</sup> tɛ' i <sup>21</sup> mən <sup>42</sup> k' uɛi <sup>24</sup> tɔo <sup>21</sup> tɛi <sup>44</sup> liɔo <sup>35</sup> . 'The relatives are coming soon.'
	VP+Dai+[tʂə <sup>44</sup> .li <sup>21</sup> ]		tʂə <sup>44</sup> mən <sup>42</sup> k' uɛi <sup>24</sup> k' ei <sup>44</sup> tɛi <sup>44</sup> tʂə <sup>44</sup> li <sup>21</sup> . 'The car is about to drive.'
<b>Tongxin Dialect</b>	VP+Dai+[liɔo <sup>21</sup> ]	Dai[tæ]	t' iæn k' uɛi xət æ liɔo, pu li xue liɔo. 'It's getting dark, don't go back.'
	VP+Dai+[tʂə]		xua pook' ei t æ liɔo. 'The buds are about to open.'
<b>Xining Dialect</b>	VP+Dai+[tʂə]+[fo]	Dai[ti]	tɛia pa nɔo niæn ʂaŋ ti liɔ <sup>10</sup> (Wang, 2009) 'He is about to catch up with me.'
	VP+Dai+[tʂə]+[a]		ka li ei tɛia fətʂei tɛia mən tʂ' ɔtʂu tʂ' ɔ fo. <sup>10</sup> 'Xiao Li said they were about to leave.'
<b>Guanzhong (Yongshou) Dialect</b>	VP+Dai+[liɛ]	Dai[tei]	tʂə' ɔ fəŋ tʂi t' æ i liɛ. <sup>4</sup> (Tang, 2018) 'The house is about to collapse.'
			ŋə kæn mɔt ɔ t ei liɛ. <sup>4</sup> 'I am about to catch a cold.'
<b>Xi'an Dialect</b>	[k' uɛi]/[tɛi vɪ]+VP+Dai+[liɛ]	lie[liɛ]	tʂə' ɔ <sup>21</sup> tʂu <sup>44</sup> iɔo <sup>44</sup> k' ei <sup>31</sup> liɛ <sup>21</sup> . 'The car is about to leave right away.'
			k' uɛi <sup>44</sup> tʂə <sup>44</sup> xɔo <sup>31</sup> , tiæn <sup>44</sup> sɿ <sup>44</sup> ma <sup>42</sup> ʂaŋ <sup>44</sup> k' ei <sup>31</sup> liɛ <sup>21</sup> . 'Hurry up and sit down, the TV will be on right away.'
			ma <sup>44</sup> pa <sup>44</sup> zi <sup>42</sup> ʂaŋ <sup>42</sup> k' uɛi <sup>44</sup> ei <sup>42</sup> væn <sup>24</sup> liɛ <sup>21</sup> . 'Mom will be done with the laundry soon.'

By comparison, the usage of "Dai" as a future aspect marker in Tianzhu dialect is not unique. This usage is prevalent in many places in Gan, Qing, and Ning in Northwest China. The use of

"Dai" was not gradually disappeared until the development of Xi'an dialect. Tianzhu dialect belongs to the Hexi cluster of Lanyin Mandarin, and Xining dialect belongs to the Qinlong cluster of Central Plains Mandarin, while Yongshou dialect belongs to

the Guanzhong cluster of Central Plains Mandarin and Tongxin dialect is located in the transition zone between Lanyin and Central Plains Mandarin. Therefore, the characteristics of the usage of "Dai" as an aspect marker are: the phonetic form in Tianzhu dialect, [tɛi<sup>44</sup>] is the colloquial readings while [tə<sup>44</sup>] is the literary readings. "Dai" gradually gets virtualized in Tianzhu dialect and eventually becomes an aspect marker retaining the colloquial readings of [tɛi<sup>44</sup>]. The grammatical form and meaning of "Dai" in Tianzhu, Xining, and Tongxin are basically the same, which can indicate that the action is about to occur or the state is about to appear. And in the negative sentence, "Dai" cannot be inserted into the construction of "(S)+VP+Dai+[lio<sup>21</sup>]", but can only be used in the construction of "(S)+[xæn<sup>53</sup>]+VP+[pu<sup>21</sup>·xa<sup>24</sup>]+(v)". In Tianzhu dialect, when "Dai" is used as a future aspect marker, its negative form removes the aspect marker "Dai" and the modal particles of "[lio<sup>21</sup>]" or "[tʂə<sup>44</sup>·li<sup>21</sup>]" at the end of the sentence and adds the subjective marker "[xæn<sup>53</sup>]", such as "tɛ'ɪn<sup>44</sup> tɛ'i<sup>21</sup> mən<sup>42</sup> xæn<sup>53</sup> too<sup>13</sup> pu<sup>21</sup> xa<sup>24</sup> tʂ'ə<sup>44</sup> xæn<sup>53</sup> k'ei<sup>44</sup> pu<sup>21</sup> xa<sup>24</sup> v!". The negative forms of Xining dialect and Tongxin dialect are roughly the same as those of Tianzhu dialect. In Central Plains Mandarin, "de" gradually lost the grammatical function of the future aspect, and was only reserved as a future aspect marker in some dialects. According to Tang (2013) research on Yongshou dialect,<sup>11</sup> in the negative form, "Dai" can be inserted in the construction of "VP+Dai+[lie<sup>21</sup>]", which constitutes the syntactic structure of "(S)+[xæn]+[pu tei]+VP+([nə])", such as "tʂ'ə fən tʂ xæn pu tei t'a nə". It can be seen from the table that Xi'an dialect uses "[lie<sup>21</sup>]" instead of "Dai" as the future aspect marker. Therefore, the author also investigated the dialects of Xi'an, Xianyang,

Weinan and other places. It is not difficult to find that in today's Guanzhong cluster of Central Plains Mandarin, the frequency of using "Dai" has dropped significantly, and "Dai" is basically not used as a future aspect marker, and is replaced by the aspect marker "[lie<sup>21</sup>]". In his article, Tang (2018) pointed out that future time references favor the perfect aspect, which is a "rare" phenomenon in typology.<sup>4</sup>

## CONCLUSION

In northwestern dialects, "Dai" as a marker of the future aspect shows a certain regularity in the geographical distribution, i.e. the grammatical structure and meaning of "Dai" in Tianzhu, Xining, and Tongxin dialects are basically the same, and they can all indicate that the action is about to occur or the state is about to appear. And in the negative sentence, "Dai" is not used in the construction of "(S)+VP+Dai+[lio<sup>21</sup>]", and can only adopt the construction of "(S)+[xæn]+VP+[pu<sup>21</sup> xa<sup>24</sup>]+([v])". But in Yongshou dialect, "Dai" can be used in the construction of "VP+[tei·lie]" in the negative form, constituting the construction of "(S)+[xæn]+[pu·tei]+VP+([nə])", such as "tʂ'ə fən tʂ xæn pu tei t'a nə". (Tang 2013) "The future aspect marker of "Dai" is replaced by "[lie<sup>21</sup>]" in developing Xi'an dialect. It can be seen that "Dai" as a future aspect marker has been preserved most completely in Lanyin Mandarin and is still used in the transition zone between Lanyin Mandarin and Central Plains Mandarin, while gradually disappeared when it developed to Central Plains Mandarin.

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