U in Taiwanese Southern Min Existential and Predicate Possessive Constructions.

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Abstract

The focus of this paper is u in Taiwanese Southern Min existential and possessive predicate constructions. A central question regarding u(s) in those structures is whether they should be treated as two lexically distinct copular verbs, or rather two realizations of the same morphological element. Tied to this question is the syntactic position and semantic content of u in those constructions. Drawing on previous approaches to possessive predication, particularly the notion of BE- and HAVE- languages, I argue that u in existential and u in possessive predicate should be analysed as the same copular verb. By adopting Freeze's (1992) D- structure of the unified 'Locative Paradigm' I show that u in existential and u in possessive predicate derive from the same underlying structure and, consequently, are fundamentally the same copular verb. I also show that the existential and possessive predicate meaning arises from the configuration of those structures and not u itself.

1 Introduction

This paper is concerned with the nature of u in Taiwanese Southern Min existential and possessive predicate constructions. Previous literature on u in Taiwanese Southern Min focused on the element's polyfunctional use (e.g. Cheng 1981, Tsao 1999, Tsai 2002). The five most common uses include: an emphatic marker, an existential aspect, a presentational auxiliary, a possessive verb 'have, and a verb meaning 'exist' (Tsao & Cheng 1995). The central concern of this paper is the syntactic and semantic relationship between u in existential and u in possessive predicate constructions. The domain of inquiry are positive sentences presented in (1).

(1)   a.   dʑi bʰun tsei   dilei doa   djeŋ.
           one CL   book at   table top
           'A book is on the table.'   **Predicate locative**

    b.   *u* dʑi bʰun tsei   dilei doa   djeŋ.
           U one CL   book at   table top
           'There is a book on the table.'   **Existential**

    c.   wa *u* dʑi bʰun tsei   dilei doa   djeŋ.
           1   U one CL   book at   table top
           'I have a book on the table.'   **Predicate possessive**

Constructions in (1) show remarkable similarities with respect to their constituents and word order. All three of them contain nearly the same constituents, and in each of them the theme argument, i.e. an argument which undergoes motion of some sort, is followed by location. The existential in (1b) and the predicate locative in (1a) are identical except for the presence of the (italicized) u in the latter. Analogically, the existential and the predicate possessive in (1c) are identical except for the presence of grammatical subject in the latter. What is interesting about those constructions is the fact that u appears in both existential and possessive predicate, but not in predicate locative. In fact, predicate locative is the only construction that is not only non-verbal, but lacks a copula altogether. Also, as examples in (1b) and (1c) show, the position of u varies depending on the construction; in existential u is

sentence-initial, whereas in predicate possessive it follows the subject. Different positioning of u results in different configurations with existential sentence being verb-initial and possessive predicate being subject-initial. We can hypothesise that the position of u plays a role in the semantic interpretation of those structures.

The similarity between predicate locative and existential raises a question of whether existential meaning is triggered by u itself, or rather by the syntactic configuration of an existential sentence. The similarity between existential and possessive predicate, on the other hand, raises a question of whether u in those constructions is the same element or not. Therefore, with regards to syntax, I am interested in whether u in existentials and possessive predicates derive from the same D-structure or two separate structures. In terms of semantics, I question whether the differences in configuration of existential and possessive predicate map onto their interpretation. By adopting Freeze's theory of 'Locative Paradigm' I show that u in existential and possessive predicate constructions is not morphologically distinct, but are manifestation of the same functional element, namely a copula. I also show that like English *be*, u is a semantically empty element which only carries a grammatical feature (for English *be* see e.g. Lyons 1968, 1977).

1.1   The Structure of this Paper

This paper is organised as follows: In section 2 I explain all the major theoretical concepts used in this paper. Additionally, I outline the basic subjecthood properites of Taiwanese Southern Min, including word order, tense, case and agreement. Lastly, I briefly discuss the methodology used for gathering the data for this paper. In section 3 I review the major theories on possessive predication, paying particular attention to Freeze (1992). In section 4 I discuss non-verbal predication in Taiwanese, pointing out the environments in which the copula ci can and cannot appear. Section 5 is an introduction to 'locative' constructions in Taiwanese and my own proposal on u. 5.1 discusses the properties of Taiwanese existential sentence, while 5.2 discusses the properties of Taiwanese possessive predication. In section

5.3 I employ Freeze's theory of the unified 'Locative Paradigm' to show that u in existential and u in possessive predication are the same copular verb. Finally, in section 6 I summarise the theories and arguments made in this paper. In 6.1 I discuss some open questions about the proposed analysis and describe potential directions in which this work could be extended.

2   Theoretical background

This section provides an explanation of the key concepts used in this paper. In section 2.1 I provide a definition of an 'existential sentence' and discuss its basic properties. In section 2.2 I introduce the term 'predicate possessive' and discuss different categories that possession can be grouped into. Finally, I provide the taxonomy of possession relations I gathered my data for.

2.1   Existential sentence

The term 'existential sentence' refers to a construction which exhibits the following properties: on a semantic level, it asserts the existence or non-existence of something ((2a) and (2b) respectively); on a syntactic level, it is a structure with a post-verbal subject and a copula as the main verb. Sentences with the verb *exist*, e.g. *Ghosts exist*, only manifest the first property. Consequently, they are excluded from my definition of an 'existential sentence' and will not be taken into account in section 5.1 where I discuss the nature of existential construction in Taiwanese.

(2)   Existential sentence

    a.   There is [$_{NP}$ God].

    b.   There is no [$_{NP}$ God].

The semantic and syntactic status of this (bracketed) post-verbal subject has posed a challenge for linguistic theory (Hazout, 2004). For, despite the fact that it occupies a syntactic

position that is not normally occupied by subjects it manifests semantic properties associated with subjects, such as agreement with the preceding verb.

In English, the existential construction is characterised by the presence of expletive *there* and the copula *be*, as seen in (3):

(3)   There is a glass on the table.

Nonetheless, there are some languages that do not use expletives. For example:

(4)   haya xošex   ba-xeder.
        was   darkness in-the.room
        'There was darkness in the room.'   **Hebrew**

        (Hazout 2004:402(25b))

(5)   na stole   byla kniga.
        on table.LOC was book.NOM.FEM
        'There was a book on the table.'   **Russian**

        (Freeze 1992:554(2b)

In Hebrew, the grammatical subject position of an existential is empty, whereas in Russian it is filled by a locative PP.

A well- known restriction imposed on existential sentences is, a so-called, 'definiteness restriction', the requirement that a post-verbal DP is indefinite (e.g. Milsark, 1974; Safir, 1982). Existential sentences in which DPs are headed by a definite article, such as (6), or by a universal quantifier, such as (7), give rise to 'definiteness effect' and are ungrammatical:

(6)   *There is the mug in the cupboard.

(7)   *There are all apples in the basket.

Clark (1970/1978) accounts for this phenomena by the fact that existential constructions introduce new information into the discourse.

2.2 Predicate possessive

A vast literature has been written on defining and classifying possession (see e.g. Heine 1997, Stassen 2009). Fundamentally, the term 'predicate possessive' refers to sentences which encode a relationship between two entities: the possessor and the possessee (Szabolcsi 1981, Kayne 1993, Partee 1999). The typology of possessive predicates I focus on in this paper is confined to those that can be encoded by the verb *have*, such as the examples in (8a), (8b) and (8c).

(8)   a.   John has a house.   English

       b.   Mannen   ha-r   en hund.
              man.DEF have-PR a   dog
              'The man has a dog.'   Norwegian

              (Stassen 2009:65(87), data from Pål Kristian Eriksen)

       c.   Samochód ma   koła.
              car.NOM   have.3SG wheels.ACC
              'A/the car has wheels.'   Polish

Not all languages, however, form possessive predicates with verbs equivalent to English *have*. In some languages, possessive predicates are encoded by the verb *be* instead. For example:

(9)   a.   Ma-te   pot   tienewa.
              1.SG-DAT books be.INAN.PR
              'I have books.'   Sinhalese

              (Gair 1970:60, cited in Stassen 2009:51 (16))

       b.   ɣur-s   takerrust tamellalt.
              at-him car   white
              'He has a white car.'   Kabyle

              (Nait-Zerrad 2001:130, cited in Stassen 2009:79 (57))

       c.   Ngōn ǐ kɔ́   kíyā
              child   is with knife
              'The child has a knife.'   Mbay

              (Keegan 1997:77, cited in Stassen 2009:57 (52))

I am not interested in BELONG-type verbs, as in 'This cat belongs to Susan', or structures labelled by Tham (2013) as definite possessive predication such as *This bike is mine* or *John's phone*. Although those constructions are similar to 'have' possession from a semantic point of view, for they also encode possession relations, structurally they are different.

The semantic taxonomy of possession relations I elicited my data for is based on a list provided by Myler (2016, 180-181):

(10)   John has a cup (with him).   **(Physical Possession)**

(11)   John has my keys.   **(Temporary Possession)**

(12)   John has a car.   **(Ownership)**

(13)   John has black hair.   **(Body Parts)**

(14)   John has a sister.   **(Kinship)**

(15)   A weaver has a spindle.   **(Canonical Tool)**

(16)   This house has a window.   **(Part-Whole)**

(17)   Juan tiene frío.
        Juan has   cold
        'John is cold.' (he's feeling the cold.)   **(Physical sensation)**

(18)   Juan tiene miedo.
        Juan has   fear
        'John is afraid.'   **(Psychological State)**

(19)   John has (a great deal of) kindness.   **(Abstract Property)**

(20)   John has the flu.   **(Disease)**

(21)   That tree has many nests in it.   **(Locative HAVE)**

A large number of relations listed above falls under the class of 'alienable' and 'inalienable' possession. Alienable possession is a type of possession in which the possessee is not an

inherent part of the possessor. It includes such relations as *physical possession* and *ownership*, and it is mainly used for tangible things. *Locative* HAVE in which the possessee is located relative to the possessor is also included in 'alienable' category. Inalienable possession, on the other hand, is a type of possession in which the thing possessed cannot be separated from its possessor, this includes *body parts* and *kinship*. In inanimate inalienable possession, such as *canonical tool* and *part-whole* the possessee is the subpart of the inanimate possessor. *Physical sensation*, *psychological state*, *abstract property* and *disease* can all be classified as 'abstract' possession since in all of them the possessee is a concept that is not visible or tangible. Finally, temporary possession defines a relation in which the possessor can get hold of the possessee for a limited time, but cannot claim ownership to it (Heine, 1997: 34-35).

This categorization falls into the domain of Stassen's (2009) four possession subtypes (presented in (22)) which are based on semantic features called *permanent contact* and *control*.

(22)   Four subdomains of possession (Stassen 2009: 17):

Possessive subtype	Permanent contact	Control
Alienable	+	+
Inalienable	+	-
Temporary	-	+
Abstract	-	-

In Stassen's terms, alienable possession involves a long-term relation in which the possessor exerts control over the possesse and is, consequently, typically human. Inalienable possession also involves a permanent contact between the possessor and the possessee, but without the asymmetric relationship of control between the two of them. Similarly to alienable possession, temporary possession involves control, but without permanent contact. Finally, abstract possession involves neither permanent contact nor control.

2.3 Background on Taiwanese Southern Min and a Word on the Data

The aim of this section is to outline the basic subjecthood properties of Taiwanese Southern Min. Sections 2.3.1-2.3.3 briefly discuss word order, tense, agreement and case. Section 2.3.4 provides a sketch of the methodology used for this paper.

2.3.1 Word order

The basic word order in Taiwanese is SVO. The remaining word orders in active voice are ungrammatical.

(23)　**Declarative sentences in Taiwanese**

    a. ŋaua lim guni.
        cat   drink milk
        'Cats drink milk.'   **SVO**

    b. *ŋaua guni lim.
        cat   milk drink
        'Cats drink milk.'   **SOV**

    c. *lim   ŋaua guni.
        drink cat   milk
        'Cats drink milk.'   **VSO**

    d. *lim   guni ŋaua.
        drink milk cat
        'Cats drink milk.'   **VOS**

    e. *guni lim   ŋaua.
        milk drink cat
        'Cats drink milk.'   **OSV**

    f. *guni ŋaua lim.
        milk cat   drink
        'Cats drink milk.'   **OVS**

Furthermore, as shown in (24) and (25), the word order in Taiwanese is not affected by the change of mood of the sentence.

(24)   **Imperative sentences in Taiwanese**

    a. ŋaua lim   guni.
       cat   drink milk
       'Drink milk cats!'

    b. *lim   guni ŋaua.
       drink milk cat
       'Drink milk cats!'

(25)   Interrogative mood

    a. ŋaua gam lim   guni.
       cat   Q   drink milk
       'Do cats drink milk?'

2.3.2   Tense

Taiwanese is classified as a 'tenseless' language, i.e. a language without a grammatical category of tense (Comrie, 1985). This means that Taiwanese has no grammatical means of marking events as past event, as seen in (26). Locating events in time in this language occurs by the means of temporal adverbs, aspects or contextual information.

(26)   a. wa dzau.
         1   run
         'I run.'

        b. wa dzau.
           1   run
           'I ran.'

Nonetheless, the language does make a distinction between present and future time reference, as seen in (27):

(27)   a. wa dzau.
         1   run
         'I run.'

        b. wa e   dzau.
           1   will run

'I will run.'

Similarly to English *will*, however, the status of *e* as a future tense marker is debatable (Sarkar, 1998). There has been an ongoing debate on whether tenseless languages have a syntactic representation of tense nonetheless (for the arguments in favour of T-node see e.g. Li 1990, Huang 1989, Sybesma 2007, Lin 2015; for the arguments against it see e.g. Bohnemeyer 2002, Lin 2003, 2006, 2010, Bittner 2005).

For the purposes of this paper I will follow Lin (2015) and assume that Taiwanese still exhibits a syntactic though phonologically null Tense projection. I will also adopt the VP-internal Subject Hypothesis which argues that subjects originate as specifiers of VP and move to the specifier of TP.

2.3.3 Case & Agreement

Taiwanese does not have Agreement. It has a neutral case system which means that it has no morphological case marking. This means that it relies heavily on the word order.

(28)   John likui a.

        John leave COMPL

        'John left.'   **Intransitive**

(29)   a.   John kua dje   Jane.
           John see PTCL Jane
           'John saw Jane.'   **Transitive**

       b.   Jane kua dje   John.
           Jane see PTCL Jane
           'Jane saw John.'   **Transitive**

Dje element present in examples (29a) and (29b) is a particle that attaches to sense verbs.

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2.3.4 The Taiwanese Data

The Taiwanese Southern Min data presented in this paper were mainly gathered from a consultant living in London, United Kingdom. The consultant is a native speaker of Taiwanese Southern Min and Mandarin Chinese fluent in English. She is originally from Tainan, Taiwan, but has been living in London for the last three years. The data from other languages, on the other hand, come from literature and are adequately referenced. The data from Polish are based on my own native speaker intuition.

In addition to eliciting data, I also gathered semantic judgments. The main goal of the semantic part of the fieldwork was to establish which type of possession relation could be expressed by *u*. In order to do that I provided my consultant with the context scenario that would limit her interpretation options to only one. An example of such context scenario is presented below:

Context: *You and your friend are about to enter your flat. You are wondering where the key to the flat has gone. She says:*

(30) soɕi di wa dʑa
key at 1   here
'I have the key.'

3 Previous approaches to possessive predication

The aim of this section is to review the complex literature on predicative possession, starting with the early work by Clark (1970/1978) and ending with a more recent work by Myler (2016). First, I discuss the 'unified' approaches to possession in terms of their D-structure. Then, I review the criticism directed towards those 'unified' analyses, together with alternative approaches to predicative possession.

A significant amount of research on possessive predication has been centered around resolving, what Myler (2016) coins as, 'the too-many-(surface)-structures' puzzle and 'the

too-many-meanings' puzzle. The first puzzle is associated with the question why the same set of possessive meaning is expressed by multiple syntactic structures, as seen in (31):

(31)   Data taken from Myler (2016: 5)

    a.   I have a book.   (English)

    b.   é er   með bók.
           I am with book.ACC
           'I have a book.'   (Icelandic)

    c.   Noqa libru-yoq   ka-ni.
           I   book-YOQ be-1SUBJ
           'I have a book.'   (Cochabamba Quechua)

    d.   U menja   est'   kniga.
           at me.GEN be$_{exist}$.3SUBJ book
           'I have a book.'   (Russian)

    e.   Nekem van   könyvem.
           I.DAT be$_{exist}$.3SUBJ book.3POSS.NOM
           'I have a book.'   (Hungarian)

The second puzzle is concerned with the question why the same 'possession' construction can convey various possession relations, such as examples in (32):

(32)   a.   John has a house.   (Ownership)

       b.   John has a brother.   (Kinship)

       c.   John has dark hair.   (Body Part)

       d.   This door has two handles.   (Part-Whole)

       e.   John has a diabetes.   (Disease)

       f.   John has a lot of confidence.   (Attribute)

What structures in (31) reveal is that, while English uses the possessive verb *have* to express possessive meaning, other languages, e.g. Russian, use the copula *be* instead. Based on this observation, languages which follow the pattern of English are classified as HAVE- languages,

whereas the ones which follow the pattern of Russian are classified as BE-languages. On the 'unified' analysis of possessive predication, the difference between HAVE and BE languages is that of p-incorporation; HAVE-languages express possession by means of one verb, whereas BE-languages do it by means of a copula and a preposition. The goal of the 'unified' approaches, therefore, is to reduce surface variation of possessive predication seen in (31) to a single underlying structure. Because of the robustness of the literature on this subject (see Myler 2016) I only focus on the theories which are most relevant to my own research.

The first 'unified' analysis of predicate possession was proposed by Clark (1970/1978) whose work on the sample of over thirty languages pointed out the morphosyntactic commonalities between locative predicates, existentials and possessive predicates. It was the work by Freeze (1992), however, that provided the first standard solution to the 'too-many-surface-structures' puzzle. Drawing on similarities between the structures presented in (33), Freeze (1992) proposes a unified analysis of predicate locative, existential and possessive predicate, labelled collectively as 'The Locative Paradigm'.
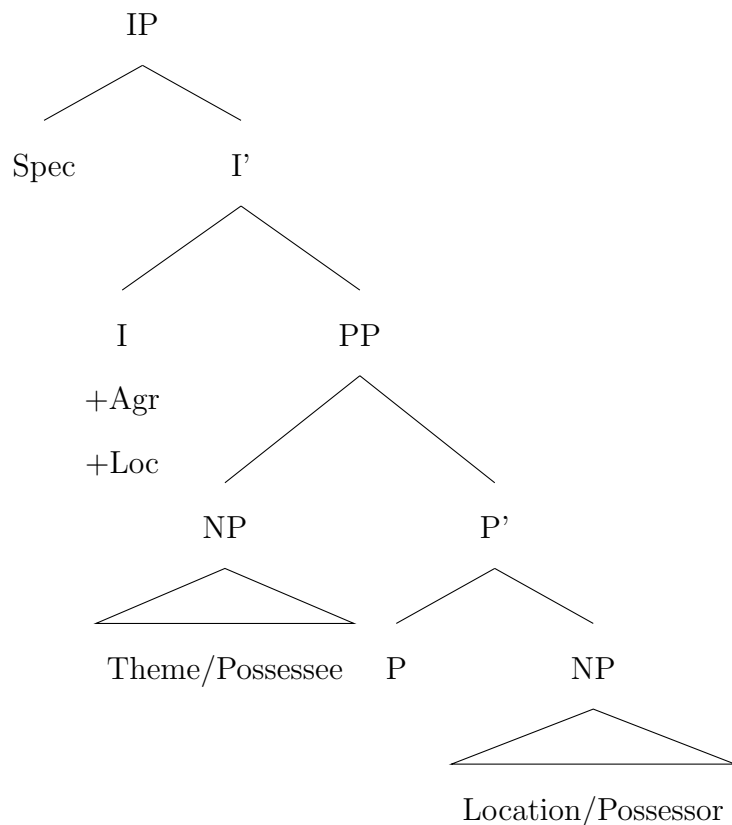
(33) Russian

    a.   kniga   byla na stole.
          book.NOM.FEM was on table.LOC
          'The book was on the table.'   **Predicate Locative**

    b.   na stole   byla kniga.
          on table.LOC was book.NOM.FEM
          'There was a book on the table.'   **Existential**

    c.   u menja   byla sestra.
          at 1SG.GEN was sister.NOM
          'I had a sister.' (lit. 'at me was a sister')   **'Have' predication**

    (Freeze 1992:553-554 (2))

Freeze (1992) notes that all three of these structures share the same constituents, with only minor word order alternations. Based on this observation, he argues that all of them derive "from a single and maximally simple abstract syntactic structure" (1992, 553) (this notion is

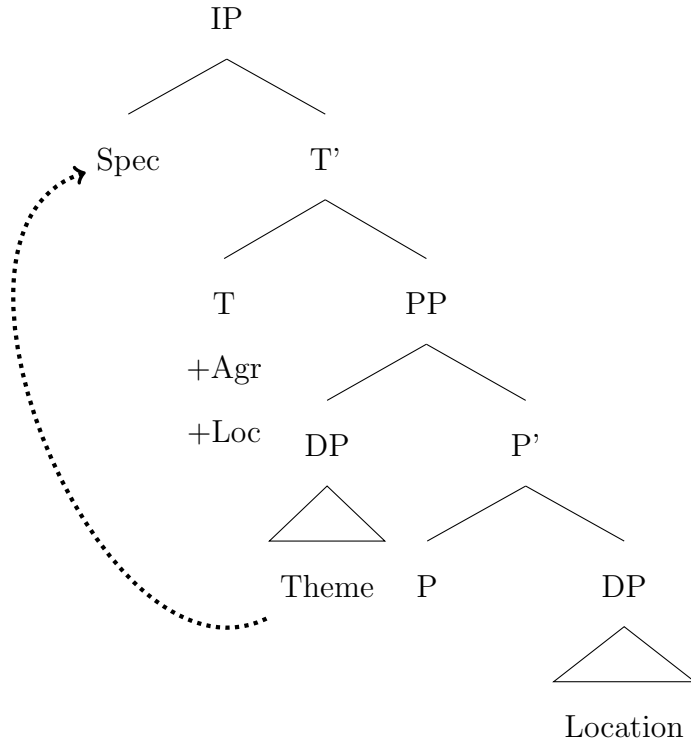further supported by Den Dikken (1995)). The D-structure proposed for those constructions is represented in (34):

(34)   *The D-structure of The Locative Paradigm (Freeze 1992:558 (7))*

```
                         IP
                       /    \
                    Spec     I'
                            /   \
                          I       PP
                        +Agr     /   \
                        +Loc   NP      P'
                              /△\     /   \
                    Theme/Possessee  P     NP
                                          /△\
                                    Location/Possessor
```

This structure adopts the predicate-internal subject hypothesis which argues that the subject of a clause originates from the specifier of its predicate and not, as it has been previously claimed, from Spec TP (Belletti and Rizzi, 1988). That is why the subject position in the tree is empty. Furthermore, in Freeze's analysis all three constructions of the 'Locative Paradigm' have a preposition as the head of the predicate phrase. The Theme/ Possessee is the specifier of the adposition, whereas the Location/ Possessor is its complement. The copula is realised in the I (inflection) node which carries [+Agr] and [+Loc] features. Since Taiwanese is a case-neutral language I will leave aside the discussion of Case-assignment in this structure (for that see Freeze (1992)).

On Freeze's approach, the surface differences between predicate locatives, existentials and 'have' predication are a result of movement. In predicate locative, the theme argument raises to spec-IP, as in (35):

(35)   Predicate locative

```
                        IP
                      /    \
                  Spec      T'
                          /    \
                        T       PP
                      +Agr     /  \
                      +Loc   DP    P'
                            /\    /  \
                           /__\  P    DP
                        Theme        /\
                                    /__\
                                 Location
```

As a result, we get the structure of a sentence such as *A key is in the box*. In contrast, an existential sentence, is derived by the movement of P' containing Location [1] into spec-IP, as seen in (36):

(36)   Existential

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[1]In 'proform' languages, e.g. English, spec-IP is filled by a locative proform instead of Location.

TP
Spec   T'
        T   PP
        +Agr
        +Loc   DP   P'
                Theme   P   DP
                                Location
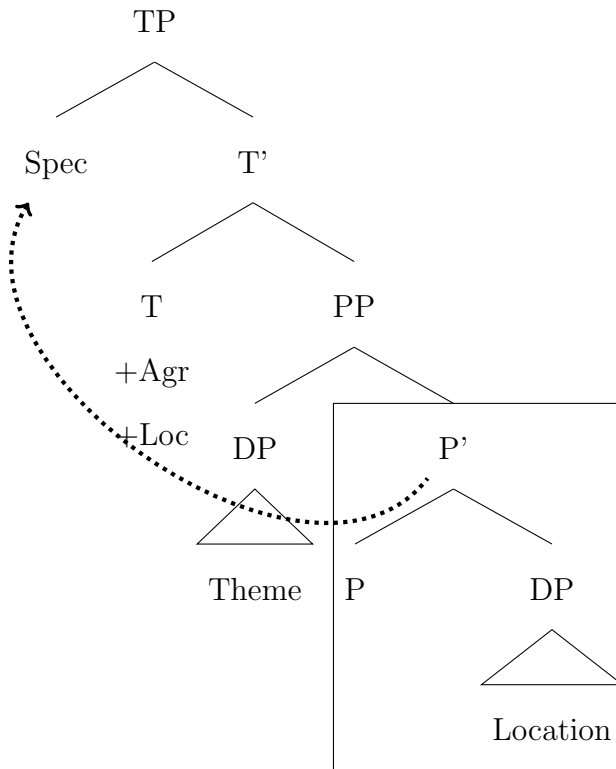
The choice between deriving these two movements is based on the definiteness of the theme; If the theme is definite, it moves to subject position. If the theme is indefinite, the P' moves to subject position instead.

In terms of possession sentences, Freeze (1992) observes that in many languages the order Location-Theme in existential is paralleled by the order Possessor-Possessee in possessive predicate. This can be seen in examples (37)- (38).

(37)   Hindi (**SOV**)

    a.   mai hindustaan-mee thaa.
        1   India-in   COP.SG.MASC.PAST
        'I was in India.'   **(Theme Locative COP)**

    b.   kamree-mee aadmii hai.
        room-in   man COP.3SG.MASC.PRES
        'There is a man in the room.'   **(Locative Theme COP)**

    c.   larkee-kee   paas   kuttaa hai.
        boy.OBL-GEN proximity dog   COP.3SG.MASC.PRES
        'The boy has a dog.' (lit. 'By the boy is a dog.')   **(Locative Theme COP)**

(38)   Tagalog (**VSO**)

    a.   na   sa baaba?i aŋ saŋgol.
          COP at woman NP baby
          'The baby is with the woman.'   **(COP Locative Theme)**

    b.   may gera sa ewropa.
          COP war in Europe
          [+LOC]

          'There is a war in Europe.'   **(COP Theme Locative)**

    c.   may relos   aŋ naanai.
          COP watch art mom
          [+LOC]

          'Mom has a watch.'   **(COP Theme Locative)**

More importantly, however, Freeze notes that in many languages (e.g. languages in (37)-(38)) existential and possessive predicate share the same copula. Following Lyons (1968) and Clark (1970/ 1978), Freeze uses this observation to argue that possessive predicates are, on a derivational level, existential. In BE languages, possession sentences are only differentiated from existential sentences by the [+Human] feature of the Location and, in some cases, the presence of a special preposition. In HAVE languages, the Possessor/ Location moves to the subject position. The preposition, which is locative in nature, moves to I-node and incorporates into the existential verb that is already there. Within Freeze's framework, therefore, English *have* is the spellout of the verb *be* and a locative preposition incorporated into it. The derivation of 'have' possession is illustrated in (39)

(39)   'Have'- predication
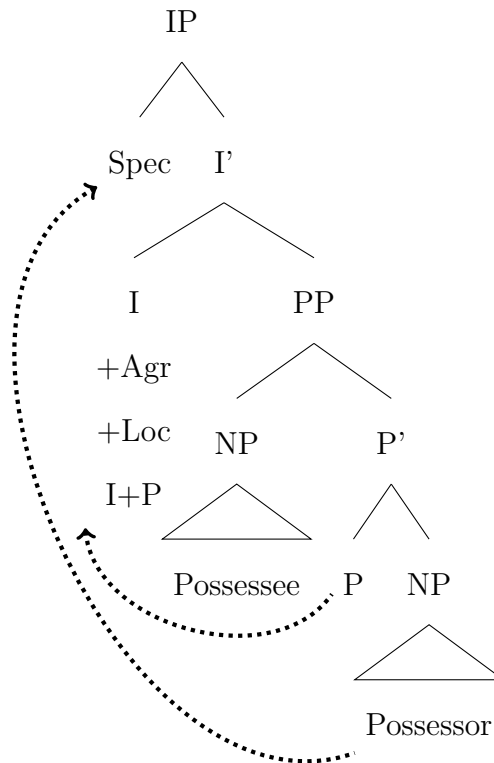
The I node can be realised as either BE or HAVE depending on the processes that take place during derivation.

In line with Freeze, Kayne (1993) also takes a decompositional view on HAVE. In Kayne's (1993) analysis HAVE is the spellout of a prepositional determiner (notated in (40) as D/P) incorporated into BE. But, unlike in Freeze (1992), the nature of this prepositional determiner is non-locative. Yet, the main difference between the two analyses lies in the element embedded under BE. For Kayne (1993), in line with Szabolsci (1982), this embedded element is a possessed DP, and not a PP as proposed by Freeze (1992). This can be seen in the D-structure presented below:

(40)   Kayne's D-structure for Possessive Predicates (1993/2000;110 (7))
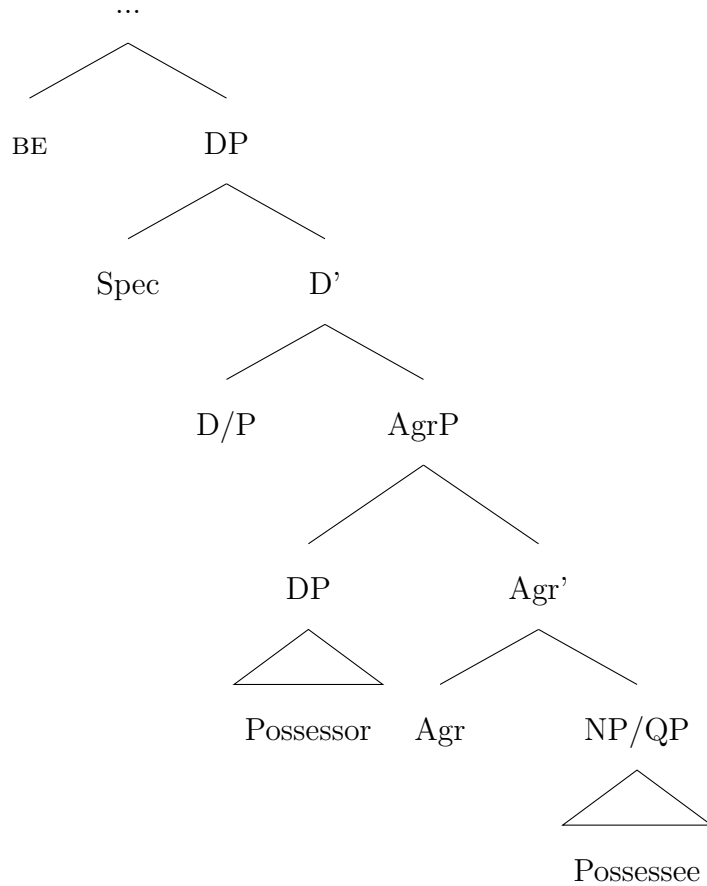
We also note that, contrary to Freeze (1992), on Kayne's approach the Possessor is structurally higher than the Possessee. Nonetheless, both Freeze (1992) and Kayne (1993) claim that all possession types can be derived from a single underlying structure. This view, however, is challenged by Levinson (2011) who, drawing on the Icelandic *vera með* construction, argues that WITH-Possessives, in the sense of Stassen (2009), cannot be assimilated into Freeze's Locative Paradigm. She argues instead that "there must be at least two different sources of predicative possession structures cross-linguistically" (2011, 383).

vera með can encode a range of possession relations including inalienable possession (examples in (41b) and (41c)) and alienable temporary possession ((41a)).

(41) *vera með*

    a. hún   er med bækurnar   fimm.
   she.NOM is with books-the.ACC five

'She has five books (with her).'

b. Jón   er með kvef.
   John.NOM is with cold.ACC
   'John has a cold.'

c. Jón   er með blá augu.
   John.NOM is with blue eyes.ACC
   'John has blue eyes.

On Freeze's (1992) analysis of WITH-Possessives BE and WITH are adjacent to each other and should not be separated by other constituents. This claim, however, is proved false both by the case of Icelandic in Levinson (2011) and Portuguese in Myler (2016).

Nonetheless, in line with Freeze (1992), Levinson claims that HAVE and BE are related to each other via P incorporation. But like Kayne (1993) she argues that this p is of nonlocative nature.

Along the lines of Levinson (2011), Myler (2016) argues that the argument structure of HAVE constructions differs from that of BE constructions. Following Hoekstra (1994) and Jung (2011), Myler (2016) claims that HAVE is the transitive form of BE. This means that various possession constructions cannot be derived from a single underlying structure.

(42)   HAVE- Languages on Myler's approach
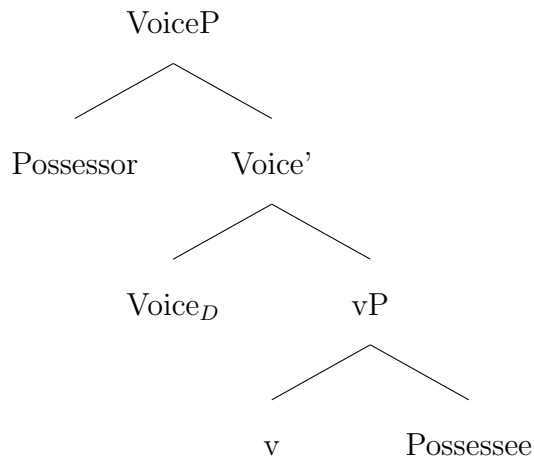
To conclude, this section has discussed the major theories regarding the relation of BE

and HAVE in possessive predication. All of the presented theories agree on the view that BE and HAVE are not completely distinct lexical verbs, but are related to each other to some extent.

Freeze (1992) and Kayne (1993) have argued that the difference between HAVE constructions and BE constructions lies in the movement; the movement of a preposition into BE and the movement of the Possessor into Spec TP. Freeze (1992), Kayne (1993) and Levinson (2011) all agree on the claim that HAVE is derived as a result of p-incorporation into BE. For Freeze (1992) this preposition is locative, whereas for Kayne (1993) and Levinson (2011) it is not. In contrary to the p-incorporation theory, Hoekstra (1994), Jung (2011) and Myler (2016) argue that BE and HAVE are related via transitivity.

4 Non-verbal predication in Taiwanese

This section outlines the types and properties of non-verbal predicates in Taiwanese. The goal of the section is to identify the pattern of copula use in Taiwanese and provide a background to 'locative' constructions discussed in section 5.

Non-verbal predication is a construction in which the semantic relation is expressed without a verb (Dik 1980, Hangeveld 1992). Based on the categorisation proposed by Tham (2013), non-verbal predicates can be nominal (43a), adjectival (43b), or an oblique phrase (43c).

(43)   a.   John is a teacher.   (**Nominal**)

        b.   Mary is beautiful.   (**Adjectival**)

        c.   John is in the house.   (**Oblique phrase**)

(44)   a.   John ҫi dʑi wi lansu.
           John be one CL teacher
           'John is a teacher.'   (**Nominal**)

        b.   dʑi bui huei   dʑin sui.
           this CL flower very beautiful

'This flower is beautiful.'   (**Adjectival**)

   c.   John dilei tsu   laidei.
       John at   house inside
       'John is in the house.'   (**Oblique phrase**)

An oblique phrase is defined as a noun phrase or an adpositional phrase which acts as an adverbial modifier of the verb. This phrase can express various relations, such as locative (44c), possessive (45a), accompaniment (45b), etc.

(45)   a.   hi   b^{h}un tsei   ȼi John e.
            that CL   book be John POSS
            'That book is John's.'

       b.   wa ham John dzouhuei.
           1   with John together
           'I am with John.'

As examples in (44) and (45) show, the presence or absence of a copula is dependent on the category of the non-verbal predicate. For adjectival, locative and accompaniment predicates, the use of copula $ȼi$ is disallowed, whereas for nominal and possessive predicates it is required. This pattern is summarised in table below.

(46)

Predicate category	Copula $ȼi$
Nominal	Present
Adjectival	Absent
Oblique Phrase (Locative)	Absent
Oblique Phrase (Possessive)	Present
Oblique Phrase (Accompaniment)	Absent

In some languages the presence or absence of a copula also depends on sentence tense category. In Russian, for example, a copula in the present tense non-verbal predicates is not

allowed, whereas in other tenses it is required. This alternation can be seen in (47).

(47)   Russian

    a.   Ta   stena vysokaja.
         that.FEM.SG wall   high.FEM.SG.NOM
         'That wall is high.'   (Present Tense)

         (Raptschinsky 1946:15, cited in Stassen 1997:64(6a))

    b.   Pogoda **byla**   xorošaja.
         weather be.3SG.FEM.PA fine.FEMSG.NOM
         'The weather was fine.'   (Past Tense)

         (Fennell 1961:53, cited in Stassen 1997:64(6d))

Since Taiwanese is a tenseless language, this tense dependency does not apply to it. The use of *çi* is only based on the category of non-verbal predicate. Lastly, non-verbal predicates can also vary depending on their predication type. Tham (2013) groups predication types into ascriptive, equative and presentative, presented as (48a), (48b) and (48c) respectively.

(48)   a.   Emma çi dʑi dʑa ŋau.
         Emma be one CL cat
         'Emma is a cat.'   **Ascriptive**

    b.   dzendʑan dio çi dzendʑan.
         war   DIO be war
         'War is war.'   **Equative**

    c.   u dʑi dʑa ŋau dilei tsu   laidei.
         U one CL cat at   house inside
         'There is a cat in the house.'   **Presentative**

Ascriptive type of predication is the type of predication in which a predicate meaning is applied to a subject. Equative type indicates that two entities of the same semantic type have the same denotation. In both ascriptive and equative types the copula çi is present. Presentative type introduces or re-introduces new information, e.g. an individual, into the discourse. The presentative type is particularly relevant here since it is the type of predication

that existential sentences belong to. It is also the only predication type which contains u instead of the copula ɕi (the use of copula based on the predication type is summarised in the table below).

(49)

Predication type	Copula ɕi
Ascriptive	Present
Equative	Present
Presentative	Absent

I will return to the discussion of existential sentences in more detail in section 5.1. With this background in mind, I now turn to section 5 where I discuss 'locative' constructions in Taiwanese.

5 'Locative' constructions in Taiwanese

The goal of this section is to discuss the properties of 'locative' constructions in Taiwanese Southern Min (illustrated in (85)), with particular emphasis on the role of u.

(50)   a.   hi   bʰun tsei   dilei doa   djeŋ.
         that CL   book at   table top
         'The book is on the table.'   **Predicate locative**

     b.   u dʑi bʰun tsei   dilei doa   djeŋ.
         U one CL   book at   table top
         'There is a book on the table.'   **Existential**

     c.   wa u dʑi bʰun tsei.
         1   U one CL   book
         'I have a book.'   **Predicate possessive**

As noted in the introduction, those structures contain essentially the same constituents but display them in different order. I have also observed that existential and possessive predicate

in Taiwanese share the same *u* element. Furthermore, in both structures *u* appears in the position of the verb. It seems, therefore, that Taiwanese patterns with many languages such as Russian in which existential and possessive predicate share the same copula. Based on this observation, I propose that *u* in existential and *u* in possessive predicate is the same copular verb. The following sections, therefore, focus on the syntactic and semantic function of *u* in both constructions. In section 5.1 I outline the basic syntactic properties of existentials in Taiwanese; that includes the word order, the lack of grammatical subject and the status of postcopular DP. In section 5.2 I examine a range of possession relations that can be encoded by *u* based on the list provided by Myler (2016). Finally, in section 5.3, I employ Freeze's (1992) proposed D-structure for 'Locative Paradigm' in order to show that *u* in existentail and *u* in predicate possessive are derivationally related. I also show that the word order differences at S-structure are the result of movement.

5.1 Existential construction in Taiwanese

Existential sentences in Taiwanese such as the example in (52) are characterised by two properties:

(51)   a.   *u*-insertion

       b.   V-S-(XP) word order

(52)   u [$_{DP}$ dʑi lei tsatau] [$_{PP}$ dilei tsu   laidei].
       U   one CL thief   at   house inside
       'There is a thief in the house.'

In this structure, the sentence- initial *u* and postcopular DP are obligatory, whereas an expression of predication, the so called 'coda' (often a PP), is option and, therefore, can be omitted, as shown in (53):

(53)   u ɕim.
       U god

'There is god.'

There are two puzzles associated with existential sentence in Taiwanese. First is the apparent lack of grammatical subject; second, which is of primary concern here, is the property of u in terms of its syntactic position and semantic content. What differentiates an existential sentence from other structures in Taiwanese is its verb-initial word order. As I pointed out in section 2.3.1, the standard Taiwanese word order is SVO. The existential V-S-(XP) order, therefore, deviates from Taiwanese norm. This, consequently, suggests that there is some kind of subject- verb inversion involved.

The lack of grammatical subject in the existential indicates that Taiwanese, unlike English, is not conditioned to the Extended Projection Principle (EPP) requirement that every clause have a subject. As illustrated by the example in (54a) violating the EPP in English results in ungrammatical sentence.

(54)　　a.　*Is a problem.　　　　　　　　English existential without expletive *there*

　　　　　b.　There is a problem.　　　　　　English existential with expletive *there*

Motivated by satisfying the EPP, English existential triggers the operation of *there*-insertion (Chomsky, 1986b). This operation inserts expletive *there* into the subject position. Example in (54b) represents a grammatical existential sentence in English. It is the same structure as (54a) with the only difference being the inserted *there*.

As mentioned earlier, the expletive *there* appears in the position where argumental DPs generally appear, i.e. in the subject position, but it has no semantic content. Since *there* is semantically null, it is necessarily incompatible with theta-roles; it cannot, for example, perform the function of an *experiencer*, as in (55a), or an *object*, as in (55b).

27

(55)   a. *There hates John.

        b. *John hates there.

Unlike English, Taiwanese existential lacks an expletive subject. If we insert *hia* 'there' into the subject position, as illustrated in (56), the sentence remains grammatical but its meaning changes dramatically.

(56)   hia u dʑi bʰun tsei.

        there U one CL book at box inside

        '*There is a book.'

        'There is a book there.'

This suggests that *hia* is only used as a semantically nonempty deictic locative and cannot be used as an expletive. The position of *hia* in the structure in (56) also indicates that the subject position of Taiwanese existential does not always have to be empty. Naturally, that does not change the fact that existential in Taiwanese is generally associated with V-S-(XP) order.

    I must note that the V-S-(XP) structure of existential is not unique to Taiwanese. Identical syntactic structure can be found in Modern Hebrew:

(57)   haya [$_{NP}$ xošex]   [$_{PP}$ ba-xeder.]
        was   darkness   in-the.room
        'There was darkness in the room.'

    (Hazout 2004:402(25b))

Like in Taiwanese, Modern Hebrew existential lacks a grammatical subject. It has been claimed, however, that in M. Hebrew and languages that follow its pattern the subject position is occupied by a covert expletive element (a sort of expletive pro) (Hazout 2003). Along the same lines, Borer (2010) argues that V-S-(XP) configuration in languages that normally do not allow it is licensed by a special covert locative, which she coins *locale*. The

term *locale* refers to a locatives which "function[s] as an existential binder for the event argument" (Borer, 2010: 4). Drawing on the work by Freeze (1992), Borer (2010) argues that locatives, along expletives and referential DPs in the relevant syntactic position, have existential force over events. In the absence of a DP which could existentially close an event argument, an existential closure is achieved through a *locale*. *Locales*, both overt and covert, occupy the same structural position. Since Taiwanese existential patterns with M. Hebrew, I will follow Borer (2010) to assume that the subject position in Taiwanese existential is occupied by a covert *locale*.

Moving on to the postcopular DP, it has been thoroughly discussed in the literature on existential sentences (e.g. Moro 2006, Hazout) that its syntactic status poses a problem for linguistic theory; it occupies a syntactic position that is not normally occupied by subjects in Taiwanese, and yet it manifests subjectlike properties. Discussing the properties of the postcopular DP in Taiwanese existential is beyond the scope of this paper. And since the nature of this DP is not the main focus of my research I will simply assume that it reflects general properties of postcopular DPs found in existentials cross-linguistically.

I will note, however, that, as observed by Borer (1980), the post-verbal DP in V-S-(XP) structures must be weak, i.e. it must be headed by an indefinite article (58a) or existential quantifier (58b).

(58)　　a.　u ʣi bʰun tsei di do diŋ.
　　　　　　U one CL　book at table top
　　　　　　'There is a book on the table.'

　　　　b.　u ʣigwa djongok hakɕen dilei ganɕen.
　　　　　　U some　Chinese student at　classroom
　　　　　　'There are some Chinese students in the classroom.'

Consequently, existential sentences with 'strong' post-verbal subjects, i.e. those headed by a definite article (59a) or a universal quantifier (59b), are ungrammatical.

(59) a. *u hi   bʰun tsei   di do   diŋ.
         U the/that CL   book at table top
         '*There is the book on the table.'

    b. *u sou djongok hakçen dilei gançen.
         U all Chinese student at   classroom
         'There are all Chinese students in the classroom.'

This means that Taiwanese existential is subject to the 'definiteness effect' (Milsark, 1974).

5.2   Predicative possession in Taiwanese

Predicative possession in Taiwanese is a structure such as the example in (60).

(60)   wa u dʑi bʰun tsei.

         1 U one CL book

         'I have a book.'

This construction shares commonalities with possessive predication in English; both have the SVO order, and in both the surface structure is encoded by one verb and not by a verb + preposition, as it is the case for languages such as Russian and Icelandic.

In Taiwanese, the equivalent of the Icelandic *vera með* 'be with' construction, for example, does not give rise to predicate possessive interpretation, as can be seen in the examples in (61).

(61)   a.   wa ham John dzouhuei.
             1   with John together
             'I am with John.' (John is accompanying me by free will)

             '#I have John.'

    b. *wa ham dʑi gi doa.
             1   with one CL knife
             '#I have a knife.'

    c.   *John ham gabi   çek   e ᵐbadʑu.
             John   with brown colour E eye

'#John has brown eyes.'

Instead, the structure is a non-verbal predicate which can only be used to express a "symmetric" relationship between two arguments, as seen in (61a). If the relationship is "asymmetric", as seen in examples (61b)- (61c), then the sentence is ungrammatical. This means that in Taiwanese it is impossible to obtain a predicate possessive interpretation on Levinson's (2011) approach. Recall from section 3 that in Levinson's analysis, HAVE is the spellout of BE and a nonlocative preposition 'with' incorporated into it.

It seems, therefore, that Taiwanese belongs to the group of HAVE- languages. Nonetheless, the verb u in predicate possessive appears to be the same verb as the one in existential. This, in turn, brings Taiwanese closer to BE-languages. The question then arises of whether u in those two constructions is fundamentally the same copular verb. Linked to it is the question of where the meaning of existential and possessive predicate come from; whether it comes from u itself or maybe the configuration of those structures.

As I will show in section 5.3, u in possessive predicate is the spellout of the existential u and a locative preposition. I will also argue that u is semantically empty element and that the existential and possessive meanings are the result of those structures' configuration. But first, I examine the range of possession relations which are compatible with u. The taxonomy of possession relations I present here is based on Myler (2016).

(62)   wa ʥa u ʥi gi ɕugia.
       1 here U one CL key
       'I have a phone (with me).'   **Physical Possession**

(63)   soɕi di John hia.
       key at John there
       'John has your keys.'   **Temporary Possession**

(64)   John u ʥi don ɕa.
       John U one CL   car
       'John has a car.'   **Ownership**

(65)   John u gabi ɕek e baʥu.
John ᴜ brown colour ᴇ eyes
'John has brown eyes.'   **Body Parts**

(66)   John u ʥi lei ʥimuei.
John ᴜ one ᴄʟ sister
'John has a sister.'   **Kinship**

(67)   seiwagi u ʥo dzuei dzam.
dishwasher ᴜ very many layer
'Dishwashers have racks.'   **Canonical Tool**

(68)   ʥi gjen tsu u ʥi lei ᵐboŋ
this ᴄʟ house ᴜ one ᴄʟ door
'This house has one door.'   **Part- Whole**

(69)   John ei gua.
John feel cold
'John is cold.'   **Physical Sensation**

(70)   John e giang.
John ᴇ afraid
'John is afraid.'   **Psychological State**

(71)   John ʥin u-ɕinɕim
John very ᴜ-confidence
'John has a lot of confidence.'   **Abstract Property**

(72)   John gaumo.
John cold
'John has the flu.'   **Disease**

(73)   genʥo laidei u sa ei lang.
building inside ᴜ three ᴄʟ people
'The building has three people in it.'   **Locative**

As examples in (62)- (73) illustrate, Taiwanese *u* can express eight different possession relations, all of which can be classified as either alienable or inalienable. This means that Taiwanese does not morphologically distinguish between alienable and inalianable possession. The possessive *U*-construction cannot be used to express *temporary possession* or

abstract notions related to the possessor's health and mental state, such as *physical sensation*, *psychological state*, *abstract property* and *disease*. In this respect, Taiwanese follows the pattern of existentially-based possessive predication in Cochabamba Quechua (Myler, 2016).

The table below presents a summary of the use of *u* with various possession relations.

(74)   *U* in different possession relations:

Possession relation	Possessive *u*- construction
Physical	OK
Temporary	*
Ownership	OK
Body Parts	OK
Kinship	OK
Canonical Tool	OK
Part- Whole	OK
Physical Sensation	*
Psychological State	*
Abstract Property	*
Disease	*
Locative	OK

Temporary possession in Taiwanese is structurally similar to locative oblique phrase (discussed in section 4; both structures lack the copula *çi* and both contain the locative preposition *dilei* 'at'. The absence of a copula in temporary possession, therefore, can be explained by the fact that the structure is locative in nature. Furthermore, like in Russian possessive predication, the possessor in Taiwanese temporary possession is the complement of a locative preposition. Taiwanese, however, contains one extra element that is not found in Russian, namely the obligatory sentence- final *hia* 'there'.

There are some restrictions imposed on the possessee DP Like in English, the possessee

DP in temporary possession must be headed by a definite article. Otherwise the sentence is ungrammatical, as illustrated by (75a):

(75)   a.   *dʑi don ɕa u dilei John hia.
              one CL car U at John there
              'John has the car.'

Furthermore, only temporary possession is compatible with this structure.

(76)   *dʑi gi ɕugia dilei wa dʑa.

        one CL key at 1 here

        'I have a phone (with me).'   **Physical Possession**

(77)   *dʑi don ɕa dilei John.

        one CL car at John

        'John has a car.'   **Ownership**

(78)   *gabi ɕek e badʑu dilei John.

        brown colour E eyes at John

        'John has brown eyes.'   **Body Parts**

(79)   *dʑi lei dʑimuei dilei John.

        one CL sister at John

        'John has a sister.'   **Kinship**

(80)   *dʑo dzuei dzam dilei seiwagi.

        very many layer at dishwasher

        'Dishwashers have racks.'   **Canonical Tool**

(81)   *dʑi lei ᵐboŋ dilei dʑi gjen tsu.

        one CL door at one CL house

        'This house has one door.'   **Part- Whole**

(82) *ʥin u-ɕinɕim dilei John.

very U-confidence at John

'John has a lot of confidence.'   **Abstract Property**

(83) *sa lei lang dilei genʥo laidei.

three CL people at building inside

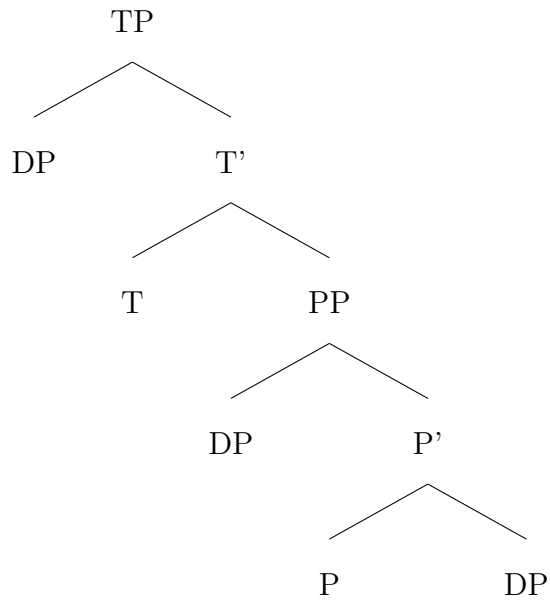'The building has three people in it.'   **Locative**

To sum up, the data show that Taiwanese has two syntactic ways of expressing possession: one which contains u; the other which contains the locative preposition *dilei* 'at'. The choice between those two structures is linked to a possession relation they aim to express.

5.3   *U* on Freeze's approach

In this section I employ Freeze's theory of the unified Locative Paradigm (1992) to argue that u in existential and u in predicate possessive derive from the same underlying structure. My proposed structure, illustrated in (84), is a revised version of the D-structure provided by Freeze (1992).

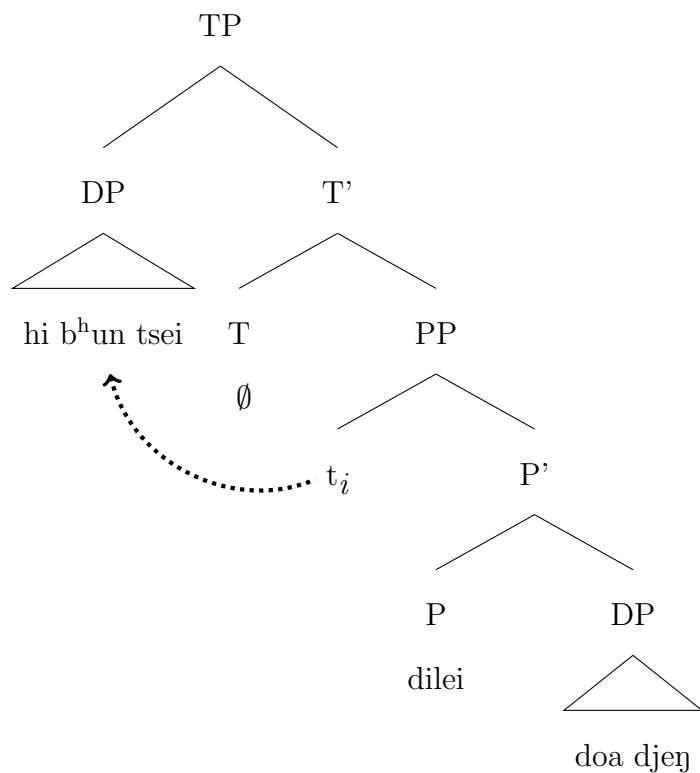(84)   *The proposed D-structure of the predicate locative, the existential, and the possessive predicate*

```
                        TP
                      /    \
                   DP        T'
                           /    \
                         T        PP
                               /      \
                            DP          P'
                                      /    \
                                    P        DP
```

I am now going to show that all three constructions presented in (85) can be derived from the structure in (84) via movement.

(85) a. hi   bʰun tsei   dilei doa   djeŋ.
          that CL   book at   table top
          'The book is on the table.'   **Predicate locative**

      b. u dʑi bʰun tsei   dilei doa   djeŋ.
          U one CL   book at   table top
          'There is a book on the table.'   **Existential**

      c. wa u dʑi bʰun tsei.
          1   U one CL   book
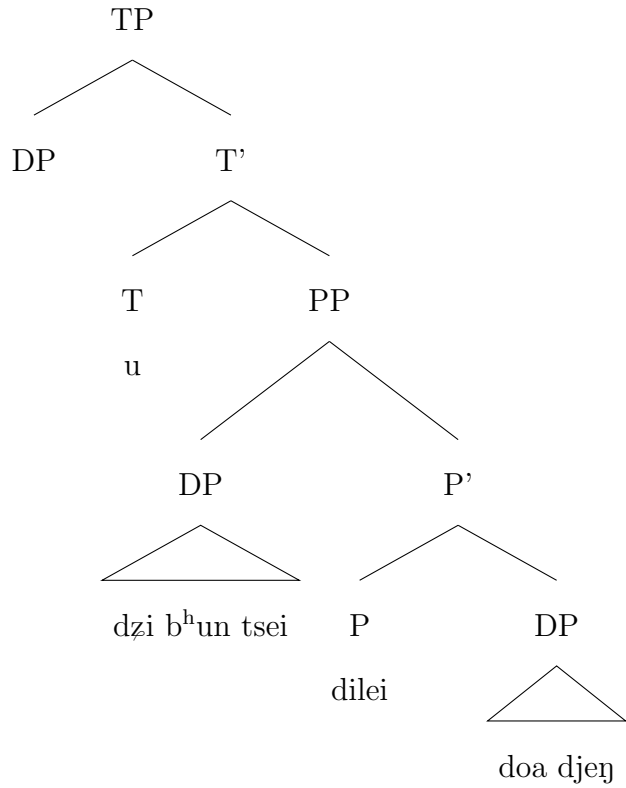   'I have a book.'   **Predicate possessive**

In predicate locative, the subject originates from Spec PP and moves to Spec TP. Since predicate locatives in Taiwanese do not contain a copula, the position of T is filled with a null morpheme, as shown in (86):

(86)   Predicate locative

```
                          TP
                      ╱        ╲
                   DP            T'
                 ╱────╲        ╱    ╲
          hi bʰun tsei     T        PP
                           ∅      ╱    ╲
                                tᵢ      P'
                                      ╱    ╲
                                    P        DP
                                  dilei     ╱──╲
                                          doa djeŋ
```

In existential sentence, which is distinguished from predicative locative only by the presence of u, the subject remains in situ. As a result, we get the distinct existential V-S-(XP) order, illustrated in (87).

(87)   Existential

```
                        TP
                   ┌─────┴─────┐
                  DP           T'
                          ┌─────┴─────┐
                          T          PP
                          u     ┌─────┴─────┐
                               DP          P'
                          ┌────┴────┐  ┌────┴────┐
                        dʑi bʰun tsei  P        DP
                                      dilei    ┌───┴───┐
                                             doa djeŋ
```

Unlike in predicate locative, in existential the movement of the theme argument to the subject position is impossible which is evidenced by the ungrammaticality of (88):

(88)   *dʑi bʰun tsei   u dilei doa   djeŋ.
        one CL   book U at   table top
        'There is a book on the table.'

This in turn means that Taiwanese existential does not allow a (DP)-u-(PP) configuration. The tree structure in (87), however, does not explain why this is the case. To account for this blocked movement I will follow Borer (2010) and claim that existential in Taiwanese is licensed by a covert locale (I first introduced this notion in section 5.1). This covert locale occupies the subject position and, consequently, rules out the movement of the DP embedded under PP to Spec TP, as illustrated in (89):

(89)   Syntactic representation of Taiwanese existential with a covert locale.
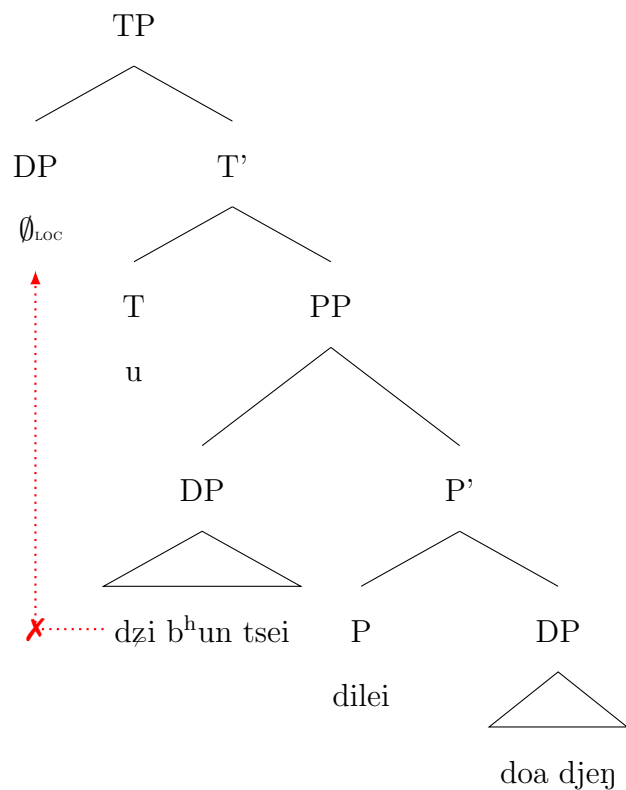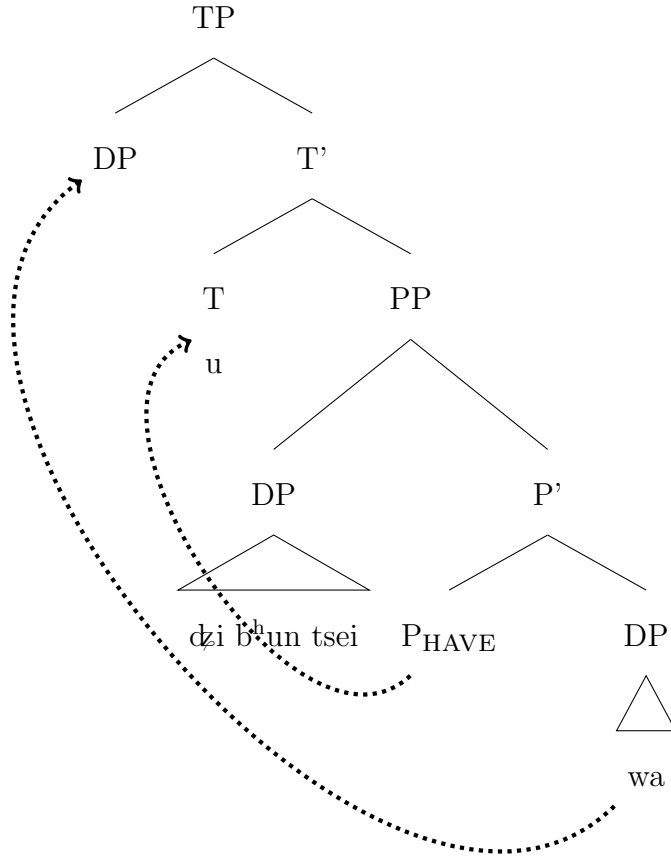
The S-structure of predicate possessive, on the other hand, is derived by two movements: first, the movement of the Possessor to Spec TP; second, the movement of P to T. This derivation process is illustrated in the tree below:

(90)   Predicate possessive
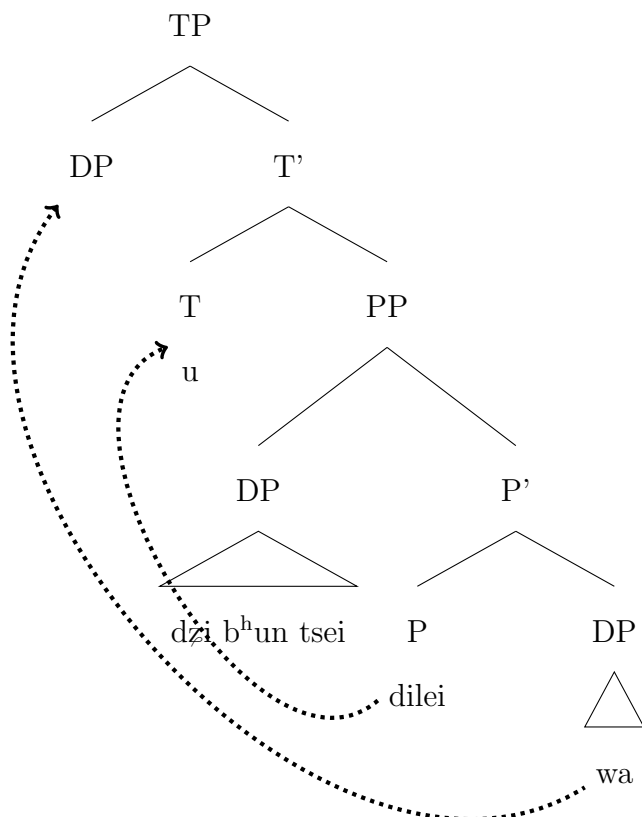
Before the movements, the sentence *wa u dʑi bʰun tsei* is structurally represented as *u dʑi bʰun tsei dilei wa* 'A book is at me'. The D-structure of possessive predicate in Taiwanese, therefore, corresponds to the structure of predicate possessive in Russian. The preposition *dilei*, however, is not a lexical item, but a phonologically-null functional element that gets incorporated into *u* during derivation. To represent this in our structure, I will introduce the functional head P$_{\text{HAVE}}$ (based on Harley 1995, 2002) which, once incorporated into T, will turn an existential copular verb into a possessive one.

(91)   Possessive predicate

Following this analysis, u in the possessive predicate is the spellout of existential u and incorporated P_{HAVE} node.

Interestingly, the D-structure of possessive predicate is very similar to the surface structure of temporary possession, with the only difference being the presence of locative *hia* in the latter. I will leave aside further discussion of temporary possession in Taiwanese for now and I will get back to it in section 6.1.

There is one important piece of evidence that u in existential and u in possessive predicate are the same copula. It turns out that locative inversion in predicate possessives yields ungrammaticality, as shown in (92a).

(92)   Predicate possessives without (92a) and with (92b) locative inversion

41

a. wa u dʑo   dzuei tsei   dilei doa   djen.
    1   U very many book at   table top
    'I have many books on the table.'

b. (*dilei doa   djen) wa u dʑo   dzuei tsei.
    at   table top   1   U very many book
    'On the table I have many books.'

The ungrammaticality of (92b) is anticipated if we adopt Freeze's unified D-structure, illustrated in (34). In (93) below, I present a syntactic structure for example (92b).

(93)
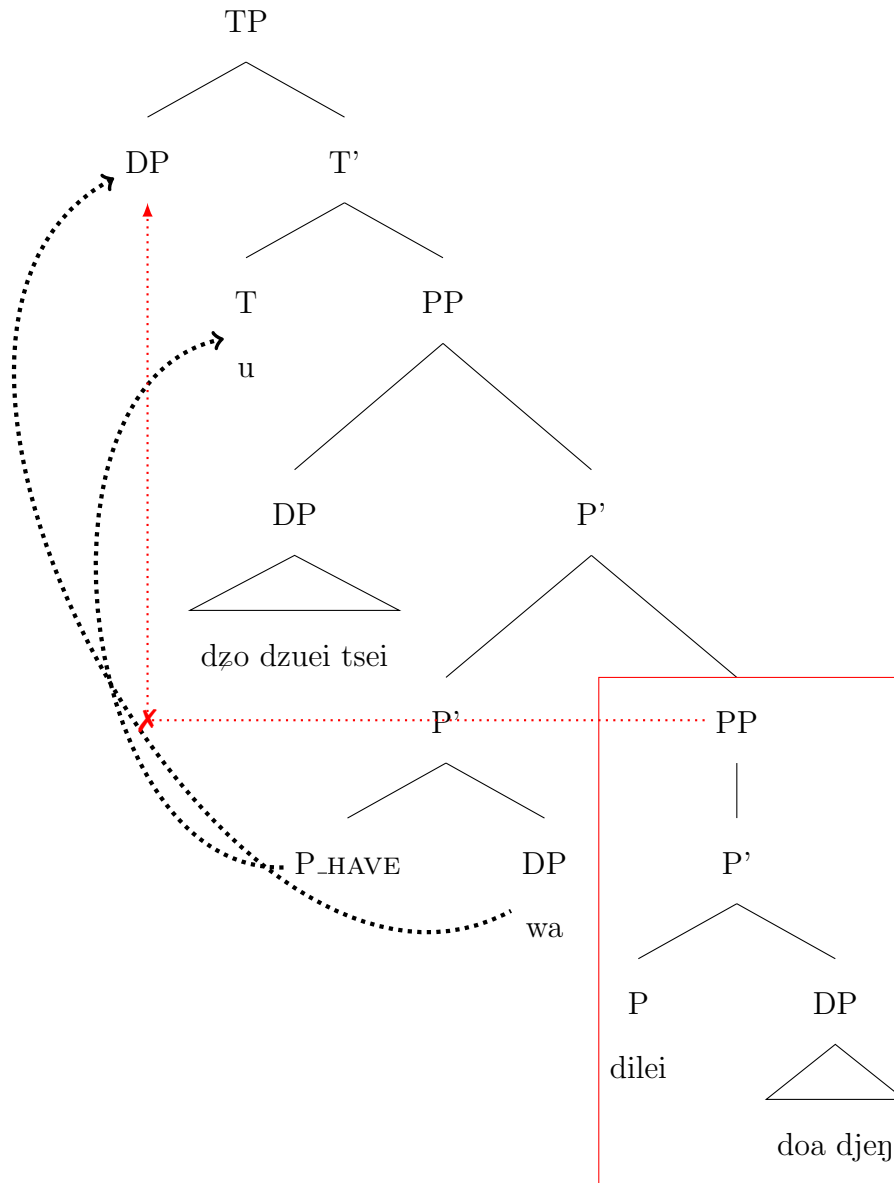
According to the structure above, the movement of PP to Spec TP is impossible because this position is already occupied by the possessor DP which moved there from P'.

To sum up, in this section I have shown that predicate locative, existential and possessive predicate can be derived from the same underlying structure. This in turn supports my claim that u in existential and u in possessive predicate are fundamentally the same copular verb.

6 Conclusion

In this paper, I have attempted to unify u in existential and u in predicate possessive constructions, under the premise that they derive from the same underlying structure. I also showed that u is a semantically empty element and that the existential and possessive predicate meaning comes directly from the syntactic configuration of those structures. In section 2 I explored the defining properties of existential sentences and possessive predicates. I also outlined the subjecthood properties of Taiwanese Southern Min and briefly discussed the methodology I used for my data elicitation. In section 3 I summarised the major theoretical works on possessive predication. In section 4 I identified the pattern of copula use in Taiwanese non-verbal predicates. In sections 5.1 and 5.2 I discussed the features of existential and possessive predication in Taiwanese. Section 5.3 sketched an analysis of u building on Freeze's theory of the unified locative paradigm.

6.1 Some Open Questions

Up to now, I have only briefly discussed the temporary possession in Taiwanese. Nonetheless, I have pointed out that its syntactic structure poses a challenge for my adapted underlying structure for existentials and possessive predicates based on Freeze (1992). The source of the challenge is the locative *hia* which, as a non-adjunct, cannot be placed in the proposed structure. Answering the question why *hia* in temporary possession is obligatory requires further investigation and is beyond the scope of this paper. For now, I will propose that temporary possession derives from a different structure than the rest of possession types in Taiwanese.

Furthermore, based on the data presented in section (90), I have concluded that u-possessive predication requires the possessor to have a [+human] feature. However, it has come to my attention that sometimes the possessive predicate structure can be used with subjects which are analysed in Stassen's (2009) terms as abstract. But, because of the

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[+human] requirement they receive existential interpretation instead, as illustrated in (94).

(94)   a.   konki (*laidei) u ai.
                air   inside   U love
                'There is love in the air.'

                '#Air has love in it.'

    b.   i   e   ɕim (*laidei) u ɕuhun.
                he POSS hart inside   U hate.
                'There is hate in his heart.'

                '#His heart has hate in it.'

This possessive- existential alternation brings up a new puzzle. Currently, I am not able to provide any insights on the matter, but I will use it as a starting point for my future research on possessive predication in Taiwanese.

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