# Chapter 1

# Possessive and existential constructions: Introduction and overview

Ulrike Zeshan and Pamela Perniss

#### 1. Introduction

Whether we like to admit it or not, our lives are determined to a large extent by the accrual and management of possessions and belongings, whether they be concrete entities (e.g. a phone, a car) or abstract ones (e.g. knowledge, status). Indeed, all languages have a way of expressing possession, that is, of expressing a relationship between possessed items and their possessors. The typological classification of the domain of possession, including the related domain of existence, has been the object of numerous investigations (cf. Lyons 1977; Clark 1978; Seiler 1983; Nichols 1988; Heine 1997; Lehmann 1998; Croft 2002; Stassen 2005). However, until now, descriptions and analyses of the linguistic strategies used to express possessive and existential notions cross-linguistically have been confined to spoken languages. This volume represents the first step toward a typological classification of possession as a linguistic category in signed languages.

The chapters contained in the volume provide descriptions and categorisations of the linguistic structures used in different sign languages across the world to express notions of possession and existence. As a large-scale typological investigation, the volume's contents represent the second enterprise of its kind. The first volume in the Sign Language Typology Series (Zeshan 2006) provided an investigation of negative and interrogative constructions in sign languages. Together, these two volumes provide important insight into the typological structure of language in the visual-spatial modality in central domains of grammar.

As a research field, linguistic typology aims to uncover the range of structures and constructions that are possible in human languages for expressing core grammatical – and by extension cognitive and cultural – concepts. Moreover, typological classifications reveal areal and genetic influences on language structure and shed light on processes of grammaticalisation (e.g. Croft 2002; Hopper and Traugott 1993; Heine et al. 1991). As mentioned, rigorous typological investigation has hitherto been the province of spoken language investigation, but it is important to extend the scope of research to sign languages. It is only by looking at language in both modalities – that is, both spoken and signed – that we can come to understand the full range of possibilities of the structure of human language. Moreover,

only by extending typological research to signed language can we come to understand the influence of modality on language structure. Typological investigation of sign languages will bring us closer to answering recently debated questions about modality-driven similarities and differences between signed and spoken languages, the influence of the age of sign languages on their structure, and the influence on structure of the heightened potential for iconic and indexic representation in the visual-spatial modality (cf. Meier 2002; Aronoff et al. 2003).

This chapter first provides an overview of the domain of possession as a grammatical category, including existence as a related domain of expression (see section 2 below). The overview and explication draws heavily on Heine (1997), as this work presents a very comprehensive and convincing synthesis of the domain of possession as a whole. The chapter then outlines the design and implementation of the study (see section 3). This includes a description of the questionnaire and stimulus materials used to elicit and document the possessive and existential structures used in individual sign languages, and a list of the sign languages from which data was compiled in the course of the project. Finally, the chapter summarises the data, providing a typological sketch of the constructions used to express possession and existence in the surveyed sign languages (see section 4).

It must be noted that the use of the term "typological classification" above may be an overly optimistic assessment of what this volume can provide to its readers. Any classification must be built on prior inventory and documentation of the available linguistic strategies in a collection of languages. It is this which the present volume strives to achieve for nearly two dozen sign languages, used on five continents (see section 3). For nearly half of these sign languages, the results of the investigations into the domain of possession are reported on in detail in subsequent chapters.

#### 2. The domain of possession

As we will see, the notion of possession resists a straightforward definition both conceptually and linguistically, despite its fundamental nature. On a mundane level, we are likely to have quite clear and robust ideas about possession. In our daily lives, we are perpetually surrounded by the notion of possession. What we possess is that which we have, that which belongs to us. As such, "ownership of" and "control over" are useful concepts for describing the notion of possession (cf. Lehmann 1998). For example, on an economic level, monetary transactions allow us to purchase, and thereby possess by rights of ownership, all of our material belongings. On a more abstract level, we are in possession of our cognitive and physical faculties when we are in control of them.

Yet languages – and, importantly, cultures – differ vastly in how they express and conceptualise possessive relationships. It may therefore be best to start with a broad and general definition of possession: a possessive relationship holds between an item or entity that is possessed (i.e. the possessum) and the person or

entity which possesses the item (i.e. the possessor). Semantically, when a speaker uses a possessive construction, she refers to an entity by designating it as standing in a relationship of ownership, that is, by indicating its status as a possessum through identification of its possessor (cf. Croft 2002). Structurally, the possessor is the dependent, which modifies the possessum, the head of the construction. There are multiple ways, morphosyntactically, in which the possessive relationship can be marked. Some languages mark the possessive relationship on the head, others on the dependent, and still other languages feature explicit morphological marking on both elements. On the other hand, the possessum and possessor may simply be juxtaposed or concatenated, without any additional overt morphological marking. Though the varied and diverse morphosyntactic means of expressing possession complicate attempts at providing overarching linguistic descriptions of the domain of possession, there are main divides within the domain that seem to be reflected in all languages (Heine 1997).

Syntactically, all languages distinguish between so-called *predicative* (or verbal) and *attributive* (or nominal) possession constructions (Heine 1997). As distinct types of possessive constructions, predicative and attributive possession are dealt with in sections 2.1 and 2.2 below, respectively. Heine argues that both predicative and attributive possession are derived from "more concrete domains of basic experience", which he calls "event schemas". The event schemas that form the source domains for grammaticalised possessive constructions are described in section 2.3. In addition to the type of syntactic construction, another important distinction to be made within the domain of possession refers to whether the possessum is conceived of as *inalienable* or *alienable* to the possessor. Alienable and inalienable possession will be discussed in section 2.4. Finally, the expression of existence, which is closely related to the expression of possession and which constitutes the other major construction type dealt with in this volume, is discussed separately in section 2.5.

#### 2.1 Predicative possession

Predicative possession is so-called because it is predicative or verbal in nature. That is, predicative possession constructions have clausal syntax, whereby the possessor and possessum fill argument slots of the predicate. The linguistic expressions of *having* and *belonging* reflect the two main types of so-called predicative possession. English examples of the two types of predicative constructions are given in (1).

- (1) a. I have a house.
  - b. The house belongs to me.

We can see that the two constructions, i.e. the *have*-construction in (1a) and the *belong*-construction in (1b), differ in a number of respects other than the choice of verb. These differences include the argument status of the possessor and possessum, the definiteness of the two nominals, and their information status within the

clause. *Have*-constructions typically emphasise the possessor, as evidenced by the possessor's subject role in the clause and the indefiniteness of the possessum. In contrast, *belong*-constructions are typically characterised by a definite possessee in subject position, which places the emphasis on the possessum.

Of course, not all languages have two independent verbs that correspond to English "have" and "belong". The labels "have-construction" and "belong-construction" identify the translation equivalents of English sentences that use the two verbs, both in terms of semantic and/or syntactic structure, and in terms of discourse-pragmatic reference (Heine 1997). Thus, the construction used in a language to canonically express the equivalent of "I have a house" is considered to exemplify its have-construction, whether the language uses a verb meaning "have", one meaning "take", a copula verb together with locational case marking, or no verb at all.

Indeed, Heine treats the distinction between the two types of construction as being primarily pragmatically motivated. As noted, in *have*-constructions, the possessum is typically indefinite and a clausal complement. Discourse-pragmatically, it is subordinate to the more important and emphasised possessor. It is the other way around in *belong*-constructions, where the possessee is definite and clausally prominent as the subject or topic. Heine moreover notes that *belong*-constructions tend to underscore a relationship of permanent – but alienable – possession between the possessor and the possessum. *Have*-constructions, on the other hand, tend to convey a broader range of possessive notions, including permanent possession as well as temporary possession. Overall, such differences affect the discourse prominence and information status of referents, and reveal themselves in the nuances of pragmatic interpretation.

#### 2.2 Attributive possession

In terms of linguistic structure, predicative possession constructions contrast with *attributive* possession constructions. *Attributive possession* refers to constructions like *my car* or *John's book*, where syntax is nominal or phrasal. As the examples show, the relationship between the possessor and possessum is established within a noun phrase. (For this reason, attributive possession is also called *nominal* or *adnominal possession*.) Moreover, these examples show a pronominal possessive relationship, where the possessor is a pronoun (e.g. *my*), and a noun-noun relationship, where the possessor is a noun (e.g. *John*).

In terms of typological classification (cf. Ultan 1978; Chappell and McGregor 1996; Croft 2002), work on attributive possession focuses on the way in which the link between the two nominals (i.e. the possessor and possessum) is established, on where the link is established, and on the order of the nominals (Heine 1997). For example, the possessor and possessum can be related to each other through simple juxtaposition or concatenation, but also through overt morphological marking on either or both of the elements (cf. Croft 2002). In explicit marking of attributive possession, through e.g. agreement markers or case affixes, languages

can mark the possessor (dependent-marking), the possessum (head-marking), or both possessor and possessum.

Compared to predicative possession, which is more likely to *assert* a possessive relationship, attributive possessive constructions generally convey a *presupposed* possessive relationship. That is, in the case of predicative possession, the proposition as a whole consists of an assertion of the possessive relationship itself, as new information. In contrast, an attributive possession construction is phrasally embedded, as old information, within a proposition declaring something about the possessed item.

In addition, Heine (1997) takes attributive possession constructions to express a semantically broader range of possessive meanings than do predicative possession constructions. Beyond permanent and temporary possession, attributive possessive constructions may extend in meaning to other types of possessive relationships, including abstract possession, as well as to relationships that are not strictly possessive. To illustrate, Heine gives the example of the attributive possessive phrase *Suzanne's car* to refer to the car that Suzanne thought about buying, but never bought (1997: 226).

#### 2.3 Source domains for possessive constructions

According to Heine, possessive constructions, both predicative and attributive, are derived from certain source domains, which he calls "event schemas". Event schemas are like stereotypes of events, or stereotypical construals of situations, akin to "frames" or "scripts" (cf. Fillmore 1982; Shibatani 1996). They are rooted in "concrete experiential domains". The most important of these experiential domains are: what one does (Action), where one is (Location), whom one is with (Accompaniment), and the being of things around us (Existence) (Heine 1997). As we shall see, the oft-noted linguistic and conceptual affinity between the domains of possession, existence, and location (cf. Lyons 1977; Clark 1978) can be traced back to shared source domains from which expressions of possession have grammaticalised. In fact, it is not difficult to construct the link between possession, existence, and location even on a synchronic level. That which one possesses may be construed as – and often is literally – existing together and/or in the same location as oneself.

Heine (1997) distinguishes eight event schemas that account for the majority of possessive constructions in the languages of the world (cf. also Heine and Claudi 1986). The event schemas are: (1) the Action schema; (2) the Location schema; (3) the Accompaniment schema; (4) the Genitive schema; (5) the Goal schema; (6) the Source schema; (7) the Topic schema; and (8) the Equation schema. Though both predicative and attributive possession are conceptually rooted in the same source domains, there are differences in the frequency with which a certain schema, or template, occurs for one or the other type of possessive construction.

The Action schema, for example, is inherently propositional in nature, containing a transitive verb of taking or seizing. The action verb grammaticalises to possessive constructions expressing predicative possession of both the 'have'

and 'belong' types. The Location schema, on the other hand, is a very common source schema for attributive possession constructions, though *have*-constructions are also derived from it. In the Location schema, the possessor is conceptualised as the place where the possessum is located. That is, through the use of a locative complement, usually marked on the possessor, the possessum is expressed as being at the possessor's location. Examples of the Location schema are given in (2) and (3) below.

(2) Written Mongolian

[Poppe 1954, in Stassen 2005]

Na-dur morin bui 1sg-at horse be.3sg.pres 'I have a horse.'

(3) Modern Irish

[Pietsch 2004]

Tálitiragambe.3sg.presletterat.1sg'I have a letter.'

Another important source schema, again for attributive possession and *have*-constructions, is the Topic schema. Here, the possessor functions as a possessive modifier by appearing in topic position. The Topic schema is related to existence in that it often occurs together with a verb of existence. In effect, the possessive relationship is established by asserting the existence of the possessum in relation to the topicalised possessor. An example of the Topic schema to express possession is given in (4).

(4) Tondano [Sneddon 1975, in Stassen 2005] Si tuama si weweanwale rua

ANIM.SG man TOP exist house two

'The man has two houses.' (lit. 'As far as the man is concerned, there are two houses.')

Stassen (2005), in his typological overview of predicative possession, lists five encoding strategies that, like Heine's source schemas, indicate the relevant domains from which the strategies have been derived. Stassen distinguishes the (1) Havepossessive, (2) Locational possessive, (3) Genitive possessive, (4) Topic possessive, and (5) Conjunctional possessive. What Stassen calls the Conjunctional possessive largely coincides with Heine's Accompaniment schema.

(5) Sango [Samarin 1967, in Stassen 2005]

Lo eke na bongon

3sG be and/with garment
'She has a garment.' (lit. 'She is with garment.')

Here, typically, the possessum is a comitative complement to the possessor subject (see example (5) above). The Have-possessive is a transitive construction in which the subject is typically the possessor, the object is the possessum, and the predicate marks the possessive relationship. Stassen notes that this predicate is often derived from a verb for physical handling. The Have-possessive thus overlaps generally with what Heine calls *have*-constructions, particularly those derived from an Action schema, that is, those with verbs denoting actions like taking, grabbing, seizing, holding, or obtaining.

Finally, Heine notes an effect of areal forces on the source domains from which possessive constructions have grammaticalised. The Action and Location schemas are the primary source domains in European languages. On the African continent, languages similarly exhibit possessive structures derived from the Action and Location schemas, and additionally from the Companion schema. Possessive constructions in Asiatic languages have become grammaticalised predominantly from the Goal, Genitive, and Topic source schemas (all of which are variants of a more general Existence schema).

In general, the multitude of event schemas from which constructions expressing possessive relationships have evolved (Heine and Claudi 1986; Heine et al. 1991; Heine 1997; Stassen 2005) is testimony to the complexity of the domain. The complexity is reflected also in the empirically-determined affinity between constructions expressing possession, existence, and location, and in the accompanying difficulties in cross-linguistic analysis (Clark 1978; Nichols 1988). In section 4 we will return again to why the domain of possession evades a straightforward definition.

#### 2.4 Alienable vs. inalienable possession

Possessed items can be conceived of as *inalienable* or *alienable* to the possessor, who is prototypically human (e.g. *the man's house*) (cf. Lehmann 1998), but may also be non-human and animate (e.g. *the dog's ears*) or inanimate (e.g. *the tree's branches*). Alienable possessions are those with whom it is possible to in some way sever or terminate the relationship of possession (e.g. through loss, sale, or theft). In contrast, inalienable possessions are inherently and permanently possessed. In cases of inalienable possession, of which kinship relations and body parts are prototypical examples, the possessed item is physically and/or conceptually inseparable from the possessor.

For inalienable relations, in particular for the prototypically inalienable possessions (body parts and kin), possession of, or control over, the possessum by the possessor is inherent to the concept. This is reflected in the morphological distinctions made in many languages between alienables and inalienables. As a grammatical category, inalienable possession tends to exhibit a closer structural relationship to the possessor. This may be reflected in inalienable possessed nouns being unmarked (in contrast to the overt marking of alienables) or in a category of obligatorily pos-

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sessed nouns for inalienable possessed items. In the latter case, the noun always has to appear together with a possessor, typically in the form of a pronominal ('my brother'), and it would be impossible to simply refer to a 'brother' in general. Moreover, the set of inalienable nouns in a language tends to be a closed class, while the set of alienable nouns is open (cf. Nichols 1988). However, the distinction between alienability and inalienability is largely a cultural matter, and languages draw the boundary between the two along very different lines. Besides the prototypical body parts and kin terms, obvious candidates for inclusion in the grammatical category of inalienables in a given language may include physical and mental states (e.g. strength and fear), and qualities that are used culturally in uniquely identifying a person (e.g. their name, voice, or even smell). Other less obvious inalienables, but which are just as commonly encountered cross-linguistically, may include entities like a person's bed, their house, their neighbours, or their clan.

The asymmetry between the alienable and inalienable categories is also evident with respect to the difference between predicative and attributive possession. In particular, inalienables are generally confined to attributive possession. Compare the following attributive and predicative constructions from English in examples (6) and (7) below.

(6) Attributive possession

a. My house (alienable possessum)b. My head (inalienable possessum)

(7) Predicative possession

a. I have a house (alienable possessum)b. ? I have a head (inalienable possessum)

As the examples show, alienables and inalienables work equally well in the attributive possessive constructions in (6). In the predicative constructions in (7), however, only (7a) is felicitous, with an alienable possessum, while (7b), with an inalienable possessum, sounds odd. This has to do with the aforementioned difference in discourse-pragmatic reference between the two types of possessive constructions. Predicative possession tends to assert (new) information, while attributive possession tends to state presupposed (old) information. Assuming a normal, unmarked state of affairs, body parts (like the head, in the example) are inherently possessed. Asserting the possession of an inherently possessed entity thus sounds odd because it is prototypically presupposed information.

#### 2.5 Existence

Cross-linguistically, there is substantial empirical overlap between structures used to express existence and those used to express possession. In fact, the affinity between possessive, existential, and locative constructions has been mentioned often in the literature (e.g. in Lyons 1977; Clark 1978). As noted above, it is easy to see how the

possessum may be described as being or existing at the location of the possessor. By the same token, it is easy to make a connection between something existing within a person's "sphere of influence" (Langacker 1995; but see also section 4) and something belonging to that person.

As we have seen above, Heine (1997) identifies Existence as one of numerous event schemas or source domains from which possessive constructions are derived. Specifically, the Goal, Genitive, and Topic schemas are three types of constructions which depend on the notion of existence to express possession. This is evident in the templates for possessive constructions derived from each schema. These templates are given in (8a-c) below, where X refers to the possessor and Y refers to the possessum.

(8) a. Goal schema: Y exists for/to X
b. Genitive schema: X's Y exists
c. Topic schema: As for X, Y exists

The empirical and conceptual affinity between existential and possessive constructions can thus be partly explained by the fact that existence is one of the source domains for possession. The three-stage grammaticalisation process – from source meaning to target meaning – proposed by Heine (1997) (cf. also Heine and Claudi 1986; Heine et al. 1991), sheds additional light on the synchronically tight relationship between the domains of existence and possession. In Stage I of the grammaticalisation process, there is only the source meaning. In Stage II, there is ambiguity between the source and the target meanings. That is, a single construction can be interpreted with either the source meaning or the target meaning. Finally, in Stage III, only the target meaning is available.

#### 3. Design of the study and data

The data presented in this volume represent the result of a large-scale investigation into possessive and existential constructions in almost two dozen sign languages used around the world. Sign language researchers on five continents – Europe, North America, South America, Africa, and various parts of Asia – were approached and asked to compile their knowledge about possessives and existentials in their respective sign languages by filling out a questionnaire and by carrying out primary data collection using specially-designed stimulus materials.

Both the questionnaire and the stimulus materials targeted the grammatical categories of attributive, predicative, alienable and inalienable possession. In addition, the materials targeted existential constructions. The sign languages represented in the study, the scope of the questionnaire, and the stimulus materials used to collect data are discussed and outlined in the sections below.

## 3.1 Sign languages represented in the study

Table 1 below provides a list of the sign languages from which data on possessives and existentials was provided by individuals or groups of researchers. Because it is not always immediately obvious from the name of the sign language itself, the table also lists the country and continent on which each respective sign language is used. Individual circumstances of the researchers varied, specifically the amount of time they had available to participate in the project, the amount of primary data collected and analysed, and the extent to which they were able to fill out the questionnaire. In several cases, data were collected using the game materials, but the questionnaire was not used. Possessive constructions in several additional sign languages were investigated by members of the Sign Language Typology Research Group in elicitation sessions with a single informant, and no game materials were used in these cases. Instead, researchers were guided by the questionnaire in elicitation sessions, and they elicited and discussed utterances in the target sign language with each informant. The data on possessives and existentials from roughly half of the sign languages on which data were collected are presented in the form of papers in this volume, with a chapter dedicated to each sign language.

The sign languages in Table 1 are listed in alphabetical order. The sign languages whose possessive and existential structures are elaborated on in the form of a chapter in this volume are marked with a star following their name in the table.

Sign language	Region	
1. Adamorobe Sign Language (AdaSL) *	Ghana (Africa)	
2. American Sign Language (ASL) *	USA / Canada (North America)	
3. Austrian Sign Language (ÖGS) *	Austria (Europe)	
4. Brazilian Sign Language (LSB)	Brazil (South America)	
5. British Sign Language (BSL)	UK (Europe)	
6. Catalan Sign Language (LSC) *	Catalonia (Europe)	
7. Chinese Sign Language (CSL)	China (Asia), northern variety	
8. Croatian Sign Language (HZJ)	Croatia (Europe)	
9. Flemish Sign Language (VGT) *	Belgium (Europe)	
10. German Sign Language (DGS)	Germany (Europe)	
11. Ghanaian Sign Language (GSL)	Ghana (Africa)	
12. Hong Kong Sign Language (HKSL)	Hong Kong (Asia)	
13. Indo-Pakistani Sign Language (IPSL)	India and Pakistan (South Asia)	
14. Jamaican Sign Language (JSL)	Jamaica (Caribbean)	
15. Japanese Sign Language (NS) *	Japan (Asia)	
16. Jordanian Sign Language (LIU) *	Jordan (Middle East)	
17. Kata Kolok (KK) *	Bali (Southeast Asia)	
18. Persian Sign Language (PSL)	Iran (Central Asia)	
19. Russian Sign Language (RSL)	Russia (Eurasia)	
20. Sign Language of the Netherlands (NGT)	Netherlands (Europe)	
21. South Korean Sign Language (SKSL)	Korea (Asia)	

22. Spanish Sign Language (LSE)	Spain (Europe)
23. Tanzanian Sign Language	Tanzania (Africa)
24. Trinidad Sign Language (TSL)	Trinidad (Caribbean)
25. Turkish Sign Language (TID)	Turkey (Eurasia)
26. Ugandan Sign Language (USL) *	Uganda (Africa)
27. Venezuelan Sign Language (LSV) *	Venezuela (South America)

Table 1: Sign languages from which data was collected for the study of possessive and existential constructions, and the country and continent on which each sign language is used

#### 3.2 Use of the questionnaire

The purpose of the questionnaire was to register the inventory of possessive and existential constructions in each particular sign language. The structure of the questionnaire reflects the major dimensions within the conceptual domain of possession. It is divided into three main sections: attributive possession, predicative possession and existence.

With the questionnaire it was possible for sign language researchers to inventory the different types of signs used in their sign languages for the expression of possessive and existential meanings. This includes, for example, the paradigms of personal and possessive pronouns, word order, and the inventory of simple and/or complex strategies of relating the possessor and possessum in attributive possession. Furthermore, it includes identifying the different types of strategies used in predicative possession (e.g. an action-based or location-based schema), revealing possible differences in the use of *have-* vs. *belong-*constructions, and identifying particles, modifiers, and/or predicates specifically used in possessive and existential constructions. The questionnaire contained starred and non-starred items. The starred items covered the primary, or most apparent, distinctions made within the domain of possession. The non-starred items were extended questions that were intended to reveal more fine-grained distinctions, or to note additional structures, in the possessive patterns of the individual sign languages.<sup>1</sup>

Sign language researchers were told that they could use the questionnaire alone, relying on their and their research collaborators' knowledge of the sign language. This worked well especially when deaf researchers, whose native (or non-native) user intuitions could be tapped, were part of the research team. The participating researchers could also use the questionnaire in conjunction with elicitation sessions using the stimulus materials in order to corroborate, substantiate, and supplement their knowledge.

#### 3.3 Data elicitation with stimulus materials

In addition to the questionnaire, researchers collected data on their sign languages using stimulus materials prepared specially to elicit structures involving possessive and existential constructions. The stimulus materials consisted of four tasks or games, which were performed or played by pairs of signers. The four games – the *family* <sup>1</sup> The questionnaire is given in full in appendix 1.

*tree* game, the *picture comparison* game, the *doctor-patient* game, and the *picture matching* game – targeted attributive and predicative possessive constructions and were matched with the constructions covered in the questionnaire. Each game and the constructions it was designed to elicit are described briefly below.<sup>2</sup>

The *family tree* game targets inalienable possession in the domain of kinship. One signer asks another signer about his/her family (e.g. about his/her siblings or parents) and fills out a family tree chart across multiple generations based on the signer's descriptions. The task elicits both attributive (e.g. *my sister*) and predicative (e.g. *I have a sister*) possessive constructions. Because the family descriptions cover multiple generations, the game elicits not only simple nominal possessives, but also possible complex ones (e.g. *my sister's husband's mother*). The game elicits possessive pronouns (first, second, and third person), predicative and attributive possessive structures, including quantified possessive nominals, and the kinship terms themselves.

In the *doctor-patient* game, one signer (in the role of the doctor) "diagnoses" the illness of the other signer (in the role of the patient) by inquiring about the patient's symptoms. The game targets the second prototypical domain of inalienable possession: body parts. It is designed to elicit attributive (e.g. *my head*) and predicative (e.g. *I have a headache*) possessive constructions involving abstract possessive notions to do with illness, pain, and symptoms. Thus, it targets first- and second-person personal and possessive pronouns.

The *picture comparison* game elicits possessive and existential expressions. Each participant is given a picture which the other cannot see. The game requires signers to find the differences between the two pictures through statements and questions such as "On my picture, there is a man carrying a bucket. Does the man in your picture have a bucket?" The game targets various types of possessed items, both inalienables and alienables (e.g. body parts, clothes, tools). In addition, the game elicits modified and quantified possessives (e.g. a girl holding a *long stick* in one picture vs. a *short stick* in the other picture, or a table with *two vases* vs. a table with only *one vase*). Finally, both positive and negative existential statements are elicited (e.g. "There are *some* fish" vs. "There are *no* fish").

In the last of the four data elicitation games, the *picture matching* game, signers are asked to assign belongings to people by matching pictures of objects to pictures of people. For each match, signers are asked to describe the choice they have made, giving an explanation for why they have assigned a particular object to a particular person. The game targets mainly alienable possession and third person reference. It is furthermore designed to elicit *belong*-constructions (e.g. "The bicycle belongs to the girl"), which may contrast with the *have*-constructions elicited in other games, for example by encoding the possessed item rather than the possessor as the clausal subject.

<sup>&</sup>lt;sup>2</sup> The complete set of instructions for performing the game activities, as well as the full set of stimulus materials, are included in appendix 2.

#### 4. Possession and existence in sign languages

This section gives a typological overview of the data collected throughout the course of this study on possessive and existential constructions in a variety of sign languages around the world. The section strives to present some generalisations about the structures available in these domains in the visual-spatial modality, and tackles the question of a typologically-based comparison between the spoken and signed modalities in these domains. The remaining chapters of the volume also address this question in their own way, based on the individual sign language being investigated. It is hoped that the generalisations that follow here, together with the more detailed observations and analyses in the respective chapters, will provide the reader with a valuable and comprehensive overview of the domain of possession and existence within a broader typological scope. Such a typological scope will help answer questions about whether sign languages use similar or different strategies from spoken languages in these domains. For example, can the same event schemas proposed by Heine (1997) describe the range of possessive constructions found in sign languages? Can we trace the constructions observed in sign languages back to these same event schemas, or will we identify new schemas? Or may we, for example, find an even tighter relationship between location and possession in sign languages than in spoken languages, given the prevalent use of pointing in the visual-spatial modality to indicate referent locations (specifically, for indicating the possessor and/or possessum)? This section explores such questions, giving examples from a wide range of sign languages represented in our data.

#### 4.1 Possession and existence as a case study in Sign Language Typology

Conceptually, this cross-linguistic study on possession in sign languages has aimed at operating in a cyclical way, which is represented in Figure 1 (from Zeshan 2007). Starting out with the notion of possession as a cognitive and linguistic domain as set out above, and on the basis of previous research on possessive and existential constructions in spoken languages, data are collected using the stimulus materials and the typological questionnaire. Compilation of these data lead to inductive generalisations, and these results can then secondarily be compared with spoken language data and can ultimately feed back into the theoretical considerations we started out with at the beginning of this chapter.

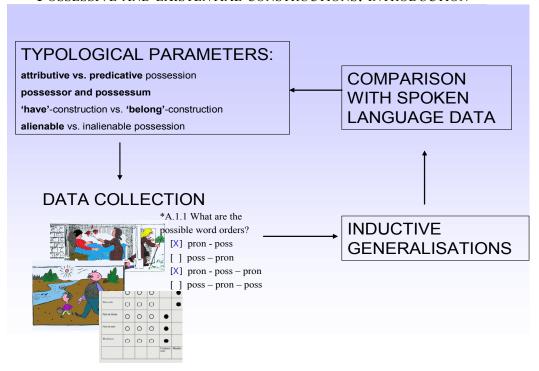


Figure 1: Research design for the cross-linguistic project on possession and existence (Zeshan 2006)

Research in sign language typology has several inter-related aims which are instantiated in this project on possessive and existential constructions. First of all, since large-scale cross-linguistic studies of sign languages are only just beginning, the immediate aim of a comparative study is to discover the range of structural variation to be found across diverse sign languages from different geographical areas and genetic groupings, and this is a strictly inductive exercise. Secondly, as Zeshan (2006: 26) points out, "it is a natural and almost automatic by-product of such studies that we will also notice this variation to fall into a limited number of patterns". As this volume demonstrates, some of these patterns have parallels in spoken language typology and some do not, and it is at this stage that comparisons with spoken language data become meaningful. Finally, after a larger number of typological studies on sign languages have been completed, and the unfurling mosaic of sign language data becomes ever more defined and detailed, we can expect to synthesise results into a theory of variation across sign languages. Within such a theory, it should be possible to approach the question of why the patterns we can observe across sign languages are the way they are. Such a theory will allow us to address questions about language modality (signed or spoken) in a new way, in the light of a broader range of sign languages.

#### 4.2 Methodological issues

In comparison with the first Sign Language Typology study on interrogative and negative constructions (see Zeshan 2006), the project on possession and existence has evolved to a more sophisticated methodological level, including the use of extensive stimulus materials as described in section 3.3. However, at the current stage of knowledge, a number of methodological issues continue to be of concern. These include, most importantly, the absence of sampling and consequently the uneven distribution of sign languages in the study. Sampling of sign languages in a typological study is currently undesirable because a) there is so little available data in the first place, and each new sign language could be of great typological significance, and b) there is no workable methodology for establishing sign language families and therefore, our knowledge base of how sign languages are related to one another is too thin to allow for any genetic sampling. Therefore, this project can only aim at a reasonable geographical spread, covering individual languages from a variety of regions and continents, though the sign languages in Table 1 are still geographically biased, in favour of European sign languages particularly. We can thus say with reasonable certainty that there is a variety of different genetic groupings represented in our convenience sample, although we are unable to determine the actual genetic groups in most cases.

Other methodological issues associated with research in sign language typology are discussed in Zeshan (2006: 14ff and 34ff) and include possible interference from spoken language structures on sign language output by bilingual informants, the reliability of data provided by co-researchers and in existing publications, and the challenge of generating most of the actual data during the comparative study itself. Rather than reiterating the methodological discussion summarised in Zeshan (2006) at this point, particular concerns about methodology are covered in individual chapters in the volume wherever they are especially relevant.

## 4.3 Possessive and existential constructions in sign languages: An overview

In this section, an overview of possessive and existential constructions found across sign languages is presented, drawing on the available data. The summary covers the following subtopics: possessive pronouns (section 4.3.1), predicative possession and existence (4.3.2), spatial marking in possessive and existential constructions (4.3.3), and semantic distinctions in the domain of possession (4.3.4). Attributive possession within noun phrases does not show a large array of structures in sign languages, and therefore this information is given in the other subsections.

#### 4.3.1 Possessive pronouns

Possessive pronouns (equivalent to English *my, your,* etc) are common across sign languages, and where they occur, they have some shared characteristics. Virtually all possessive pronouns bear a family resemblance to personal pronouns. In sign

languages, most personal pronouns are based on index pointing, with the index finger pointing to the signer for first person singular, to the addressee for second person singular, and so on; plural forms are more variable across sign languages in terms of the possible number categories (cf. Sandler and Lillo-Martin 2006: 28, McBurney 2002).

Across sign languages, the first basic distinction is between sign languages that have separate, dedicated forms for possessive pronouns and those that do not. The large majority of sign languages in our data set (including 26 sign languages) do have dedicated possessive pronominals, and there are only five known sign languages lacking them. Interestingly, these five belong to two classes of sign languages: sign languages in East Asia (China, Japan, Korea), and sign languages in village communities (Kata Kolok, Adamorobe). Japanese and Korean Sign Language, though lacking possessive pronouns, have honorific pronouns for respectful reference, and these can be used in a possessive sense, as in the following examples from Japanese Sign Language (INDEX<sub>2</sub>-polite is a pointing sign with all fingers extended and the palm facing upwards; see also Morgan, this volume):

(9.1) INDEX<sub>2</sub> NAME WHAT 'What is your name?'

(9.2) Cont-q\_ INDEX<sub>2</sub>-polite NAME WHAT 'What is your name?'

Among the sign languages with dedicated possessive pronouns, virtually all bear a family resemblance to the personal pronouns, that is, both sets of pronouns point to referents in space, but have different handshapes. There are three commonly occurring handshapes in possessive pronouns, which are shown in Figure 2.



Figure 2: Handshapes used in possessive pronouns in sign languages<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The last handshape with two extended fingers also occurs in another variant with the thumb positioned in between the index and middle fingers.

The open and fist handshapes are by far the most common and occur in all regions in our data. The more interesting sub-group is the one using the third handshape. This handshape occurs in possessive pronouns in the sign languages of France, Turkey, Greece, Brazil, and Mexico.<sup>4</sup>

Many sign languages have just one paradigm of possessive pronouns. If we compare the paradigms of possessive and personal pronouns, a recurring pattern is that the personal pronoun paradigm is larger, while fewer choices are available in the possessive paradigm. For example, dual or plural forms are often unavailable in possessive pronouns. Instead, the singular pronoun may have to be repeated in several different locations, as in this example from VGT (*Vlaamse Gebarentaal*, or Belgian Sign Language):

#### (10) POSS:loc a POSS:loc b CAR TOW

'Their cars are being towed.' (i.e. 'Two different cars belonging to two different persons are being towed.')

The opposite pattern, with a larger possessive than personal pronoun paradigm, is not attested in the data. However, there are several interesting cases of sign languages with more than one possessive pronoun form. For instance, there may be a difference between a basic possessive pronoun ('my') and an emphatic possessive pronoun ('my own'), as occurs, for example, in LSC (*Llengua de Signes Catalana*, or Catalan Sign Language; see Quer, this volume). The largest number of pronominal paradigms in our data is found in Russian Sign Language, which has the following pronoun types:

(11)	- personal	'you'
	- honorific	'you (respectful)'
	- possessive	'your'
	<ul> <li>possessive/existential</li> </ul>	'your (existing)'
	- emphatic impersonal possessive	'(someone's) own'

#### 4.3.2 Predicative possession and existence

The typological project so far has identified various ways of expressing utterances such as 'I have a car' and 'How many children do you have?' in sign languages. As explained in section 2.3, a limited number of patterns for predicative possession have been identified in the research literature on spoken languages, and this typology may be applied to sign languages as well, with some modifications due to the nature of the sign language data. The main types found in sign languages include a

<sup>&</sup>lt;sup>4</sup> At first glance, these sign languages do not seem to be related to one another. However, historically there are some interesting links between LSF (*Langue des Signes Française*, or French Sign Language) and the sign languages of some of the other countries. We cannot explore this issue in detail here.

possessive construction based on the expression of existence (see section 4.3.2.1), another one based on the action of "taking, grabbing, holding" (4.3.2.2), and an expanded construction with a quantifier or modifier in the predicate slot (4.3.2.3). Many sign languages have more than one type, each with its own, more or less complex, restrictions. We also look briefly at 'belong'-constructions in subsection 4.3.2.4.

Before going into details of the main types of 'have'-constructions, a few rarer cases should be mentioned. First of all, one sign language in the sample, Adamorobe Sign Language, which is used in a village community in Ghana, has no dedicated constructions for possession. Instead, possessor and possessum are simply juxtaposed (cf. Nyst, this volume) as in the following utterances:

- (12a) money index in money? (12a) money?
- (12b) INDEX<sub>1</sub> MONEY NEG 'I don't have any money.'

Interestingly, Kata Kolok, another village sign language used in Bali, also uses simple juxtaposition as its main possessive strategy in both NPs and clauses (see Perniss and Zeshan, this volume). However, Kata Kolok does have the option of using a grammaticalised construction based on the sign GOOD (example 13), and this is a type that has not been found in any other sign language in the data:

(13) INDEX<sub>1</sub> MOTORCYCLE GOOD 'I have a motorcycle.'5



Figure 3: EXIST/HAVE and NOT-EXIST/NOT-HAVE in Türk İşaret Dili (Turkey)

<sup>&</sup>lt;sup>5</sup> This utterance can also mean 'My motorcycle is good', depending on the context.

In the remainder of this section, only affirmative clauses are discussed. However, negative possessive utterances are also interesting because in many cases, negating a possessive clause is not merely a matter of adding a negative. Instead, negation is only suppletive, such that two entirely different signs may be used to express, for instance, positive and negative existence/possession. In fact, existentials and possessives are mentioned in Zeshan (2005) as one of the semantic domains where negative suppletion is very common across sign languages. Figure 3 shows suppletive positive and the negative particles in Türk İşaret Dili (Turkey). Interesting instances of negative possession are included in the individual chapters of this volume, including languages with more than one negative but only one positive sign expressing possession and/or existence, such as Ugandan Sign Language (Lutalo-Kiingi, this volume).

#### 4.3.2.1 From existence to possession

Possessive constructions in most sign languages in the data include the use of a sign that expresses both existence and possession (often an existential particle). However, it is not possible to distinguish sub-patterns such as the Goal schema or Genitive schema because sign languages do not have case marking and do not use prepositions in the way spoken languages do. Therefore, we only speak of a general existence schema here.

Existentials are used in possessive constructions in a large number of sign languages all around the world including India/Pakistan, Turkey, Russia, the US, the UK, Catalonia, Germany, Jordan, Iran, and China. The construction called the "double subject strategy" in Seiler (1983) is probably the one most commonly found across the data, and is exemplified in the Indo-Pakistani Sign Language utterance in (14). This is similar to example (4) above (Topic schema) except that the first person topic is not formally, marked. Thus an approximate paraphrase of (14) would be 'I, children exist'.

# (14) INDEX<sub>1</sub> CHILD-pl EXIST 'I have children.'

In some cases, the existential/possessive sign can be inflected in space, that is, the sign changes its form according to who possesses something or according to what the possessed item is. Examples of this come, for instance, from sign languages in South Korea, China, Brazil and Germany. These are discussed in section 4.3.3.2.

# 4.3.2.2 From "taking, grabbing, holding" to possession

In this type, which corresponds to the Action Pattern in Heine (1997), a sign whose original meaning has something to do with "taking" or "grabbing" is used for possession. In sign languages, it is often easy to see how such a sign has developed, since the iconic form of the sign clearly points to its origin. For example, the South Korean Sign Language sign glossed HAVE-IN-HAND (see Figure 4) is clearly

based on the physical action of grabbing, but has grammaticalised and can now be used in a wide variety of possessive contexts, including with possessums that are very large (e.g. HOUSE), or even with kinship terms (e.g. OLDER-SISTER). The existential pattern is also used in this language in addition to the Action Schema (see section 4.3.4 about the difference in usage).



Figure 4: HAVE-IN-HAND in South Korean Sign Language

The "taking, grabbing, holding" type of possessive construction is a well-attested strategy in the data; however, it is not nearly as common as the existential pattern.

#### 4.3.2.3 From predicative quantifier/modifier to possession

Another very common pattern found across multiple sign languages is the "predicative quantifier/modifier" construction (Hengeveld 1992). In this pattern, as soon as some further information is given about the possessed item, such as its quantity, or some adjectival information, there is no overt sign expressing the possessive relationship. Rather, one says something like 'I, the children are three', 'My children are three.' Compare the following Indo-Pakistani Sign Language utterances with the unmodified possessum in (14):

(15a) INDEX<sub>1</sub> CHILD-pl THREE
'I have three children.' (lit. 'My children are three.')

(15b) \_\_\_\_\_\_cont-q INDEX<sub>2</sub> CHILD-pl NUMBER+WH 'How many children do you have?' (lit. 'How many are your children?')

This pattern is also used in the two village sign languages discussed at the beginning of this section.

#### 4.3.2.4 'Belong'-constructions

In the typology project, data on 'belong'-constructions are much less extensive, and the available information is often unclear. As mentioned in section 2.1, the difference between a 'have'-construction and a 'belong'-construction has to do with the information status of possessor and possessum, and this distinction is a subtle one. The difficulty in distinguishing between the two is reflected in the ambiguous data on 'belong'-constructions. Therefore, only one frequent type is discussed here.

There is good evidence from the data that the use of pronouns in the predicate slot plays an important role in 'belong'-constructions in a number of sign languages. This is not unlike the use of *mine*, *yours*, etc in English in utterances such as *It is mine*. However, instead of separate pronominal forms (cf. *my* vs. *mine*), the same pronoun is normally used in sign language equivalents, appearing in the predicate slot instead of inside the NP, as can be seen in these two examples from Turkish Sign Language:

- (16a) POSS<sub>1</sub> CAR GOOD 'My car is good.'
- (16b) CAR POSS<sub>1</sub> 'The car is mine.'



Figure 4: POSS, in Turkish Sign Language

The form of POSS1 (see Figure 4) is identical in the two utterances. On the other hand, some sign languages do employ variant pronominal forms in 'belong'-constructions. In Chinese Sign Language, personal pronouns consist of index pointing, and as mentioned above, they are also used as possessives, since no separate possessive pronouns exist. However, the 'belong'-construction is characterised by repetition of the pronominal form (indicated by ++ in the transcription) in the Chinese Sign Language examples (17) and (18b).

(17) CLOTHES MOTHER INDEX: fr++ INDEX<sub>1</sub> PUT-ON, LIKE 'The clothes belong to my mother / are my mother's, (but) I put them on; I like them.'

- (18a) PICTURE INDEX:picture INDEX<sub>1</sub> 'The picture there, that is me.'
- (18b) PICTURE INDEX:picture INDEX<sub>1</sub>++
  'The picture there, that is mine / belongs to me.'

The examples discussed in this section are comparable to corresponding examples in spoken languages, such as those given in section 2.3. However, sign languages also have unique grammatical mechanisms that rely on the use of the signing space and that obviously have no parallel in spoken languages. Spatial grammar interfaces with the domain of possession and existence, and the ways in which this happens is discussed in the next section.

#### 4.3.3 Spatial marking in possessive and existential constructions

As spatial languages, sign languages exhibit a relationship between location, existence and possession that is of particular interest (mentioned in section 2.5). Nyst (this volume) and Perniss and Zeshan (this volume) point out the close relationship between locative expressions, in particular those involving pointing, and the expression of possession and existence in Adamorobe Sign Language and Kata Kolok, respectively. In these sign languages, the three domains overlap to the extent that it is often impossible to say which construction we are dealing with, except by reference to the context of the utterance. Pointing in particular is ubiquitous in all sign languages and plays a major role in the organisation of pronominal paradigms, as discussed in section 4.3.1.

This section focuses on how locative marking in sign languages interfaces with other constituents in the clause. This interface can be seen in the cross-linguistic sign language data at the level of the possessive NP (4.3.3.1), and with predicative signs inflecting for person, number and/or location (4.3.3.2).

#### 4.3.3.1 Spatial marking in possessive NPs

In possessive NPs that include a pronoun (section 4.3.1), spatial marking is present by virtue of pointing in sign space. However, it is also possible in many sign languages to move a nominal or adjectival sign to a different area of the signing space, resulting in a possessive interpretation. For instance, the sign for 'house' (made in several sign languages made with two open hands touching at the fingertips in a roof-like shape), is made in front of the signer's torso in citation form, but can be displaced, for instance to the right side of the signing space, in order to indicate the location of the house. The following examples from American Sign Language (ASL) show displacement of the colour signs GREEN and BLUE:

(19a) GREEN(displaced towards Julie) POSS<sub>3</sub>, BLUE(displaced towards signer) POSS<sub>1</sub>

'The green one is Julie's, and the blue one is mine.'

(19b) GREEN(displaced towards Julie), BLUE(displaced towards signer) 'The green one is Julie's, and the blue one is mine.'

In (19a), the displaced signs occur together with possessive pronouns, but it is possible to leave out the pronouns, as in (19b), in which case the colour terms are predicative. Reference in terms of which colour item belongs to which person is clear in both cases due to the displaced location of the signs GREEN and BLUE. This construction is semi-productive in ASL, though it is restricted to non-body-anchored signs.

Figure 5 shows an interesting combination of spatial marking with a nominal sign from a Tanzanian Sign Language dictionary. The basic sign NAME is made near the palm of the signer's opposite hand, and this second hand is dropped when the sign is spatialised to mean 'my name'. Signed away from the body, the resulting meaning is either 'your name' (if signed with neutral facial expression) or 'who' (if signed with a question facial expression).



NAME NAME<sub>1</sub> NAME<sub>2</sub>
Figure 5: Tanzanian Sign Language signs based on NAME (Tanzania Association of the Deaf (1993:106)

In general, the pattern of adding a location specification to nominal or adjectival signs in sign languages seems to be limited and is not fully productive. However, the extent of its productivity has not been investigated in detail across sign languages for the purpose of the typology project, and this area requires further study. Moreover, it is very difficult to say whether the spatialisation of signs in the way described in this section genuinely marks possession proper or whether a possessive interpretation is merely an inference from a basic locational meaning (e.g. 'the green is associated with a particular spatial location, which is by inference connected to a possessor also associated with this same location'). Again, this problem only serves to underscore the close association between possession and location in sign languages.

<sup>&</sup>lt;sup>6</sup> Although the fact that the possessum is associated with the location of the possessor is more than inference, given the productivity of location marking for reference/co-reference in sign languages.

#### 4.3.3.2 Spatial inflections for person, number and location

Most sign languages studied to date use spatial inflections to mark person and number distinctions, and these are ultimately based on the marking of location. The possessive pronouns discussed in 4.3.1 point to different locations in the sign space to indicate first, second and third person locations, and the same mechanism is used for plurals. For instance, plural pronouns can be made by repeating the singular form at several locations in space, or by combining the pointing with an arc movement.<sup>7</sup>

In the sign language data on possession, spatial modification of signs in possessive constructions is most conspicuous in existentials. It also occurs in constructions of the Action Schema type, but since existentials show a richer array of forms, the examples given in this section only include instances from the data of positive and negative existentials. Again, it is often difficult to say whether these modifications simply indicate location (i.e., something existing at particular locations in space) or are grammaticalised instances of person and/or number marking. The following examples are presented simply to illustrate the available mechanisms across sign languages.

As discussed in section 4.3.2.1, many sign languages use existential signs in possessive constructions. There is a basic typological distinction between sign languages that do and do not allow a high degree of spatial modification in these constructions. Sign languages with spatial modifications in existentials are found all over the world and include those in Britain, Germany, Austria, Venezuela, Uganda, Ghana, China, and South Korea. In German Sign Language (DGS), the existential sign simply changes hand orientation to mark the difference between first and nonfirst person. However, the hand can also be displaced in space to mark locations/ referents distinct from the signer (see Figure 6).



Figure 6: DGS HAVE/EXIST in neutral space ('there is, someone has'; left hand picture) and with first person reference ('I have'; right hand picture)

<sup>&</sup>lt;sup>7</sup> Spatial marking is also essential in verbs, in particular the subjects and objects of transitive verbs. However, this goes beyond the topic of this chapter and is not discussed further here.

In several African sign languages, a sign with an open handshape and the palm facing upwards can be spatially modified to indicate both existence and possession. Examples (21a) and (21b) are from Ghanaian Sign Language (see also Lutalo-Kiingi, this volume, for details on the same kind of pattern in Ugandan Sign Language, and for a picture of the palm-up sign):

- (21a) CAR PALM- UP:ufl 'There is a car way over there.'
- (21b) MONEY PALM-UP:fr PALM-UP:fl 'These two (people) both have money.'

Across the data, the largest array of spatial modification is typically found with negative existentials. Signs meaning 'there is none', of which many sign languages have more than one, can, for example, be made at the body to express 'having no money', or can be articulated, for example, in several rows from right to left to show that there 'is nothing on any of the shelves'. The many possible modifications allow signers to make many fine distinctions with respect to spatial arrays which, in spoken languages, are not usually expressed or would require longer spoken paraphrases.

#### 4.3.4 Semantic distinctions in the domain of possession

In the domain of possession, the various constraints on the expression of different semantic categories have been a matter of interest in spoken language typology (e.g. Chappell and McGregor 1996, Baron et al. 2001, Seiler 1983). For example, kinship relations ('my parents', 'my siblings', etc) are often expressed differently from the possession of objects. Also, different patterns are often used for body parts ('my head'), ailments/illnesses ('have a headache'), and part-whole relationships ('roof of the house').

One of the main semantic variables in possessive constructions is the notion of alienability, as discussed in section 2.4. However, the sign languages in our data show little evidence of using different constructions for alienable and inalienable possession. Regarding possessive pronouns, we occasionally find a different preference for kinship terms than for other types of possessum. That is, kinship terms can appear in a bare form without possessive pronouns, in line with what has been discussed in section 2.4. However, ellipsis is widespread in many sign languages, and therefore we can find similar instances with other possessum types as well.

Another tendency can be seen in some sign languages that have several sets of pronouns, where one paradigm is used for emphatic possession (e.g. 'one's very own'). Example (22), from Indo-Pakistani Sign Language, shows kinship possession to be incompatible with the emphatic possessive pronoun:

# Possessive and existential constructions: introduction

(22) INDEX<sub>1</sub> ROOM 'my room'
POSS<sub>1</sub> ROOM 'my (own) room'
INDEX<sub>1</sub> FEMALE MARRY 'my wife'
??POSS<sub>1</sub> FEMALE MARRY 'my (own) wife'

In predicative possession, there are very few instances of structures differing according to the semantic type of possessor and/or possessum. The only notable pattern is in the case of body parts and ailments/illnesses, where possessive forms are virtually absent across the sign languages studied. The following examples, from Jordanian Sign Language and Hong Kong Sign Language respectively, are typical (see also Hendriks, this volume):

- (23) INDEX<sub>1</sub> PAIN:head 'I have a headache.'
- (24) INDEX<sub>1</sub> FEVER 'I have a fever.'

It is quite rare for sign languages to use an overtly possessive construction, for example with an existential sign, in these contexts. Rather, one simply says something like 'I am feverish', or 'I am hurting (at the head)' like in (23), where the sign PAIN is displaced in space to a location next to the signer's head.

Finally, a close investigation of the data also reveals subtle semantic distinctions beyond the notion of alienability. This has not been fully explored yet, but several interesting examples can be discussed here. In South Korean Sign Language, two signs are used in 'have'-constructions, one following the existential schema (HAVE/EXIST) and the other one following the action schema (HAVE-IN-HAND, cf. section 4.3.2.2 above). As may be expected, given its conceptual source, HAVE-IN-HAND is incompatible with some (though not all) abstract possessed items. For these items, the existential pattern with the sign HAVE/EXIST must be used, which has a wider, more general distribution than HAVE-IN-HAND, as demonstrated in examples (25a) and (25b):

- (25a) WORK HAVE-IN-HAND HAVE/EXIST 'have work'
- (25b) \*TIME HAVE-IN-HAND HAVE/EXIST 'have time'

In Turkish Sign Language, a different distinction is made between use of the sign shown in Figure 3 and the sign in Figure 7 below.



Figure 7: OWN in Turkish Sign Language

The sign glossed as OWN in Figure 7 is much more restricted in use than the general possessive/existential EXIST/HAVE. OWN is only used when the possessed item is something large or important, such as a house, a car, and the like. In cannot be used in conjunction with items such as a pen, a coin, or a pet (except if, for instance, one has a pet breeding business where the pets constitute something of substantial importance). Moreover, the use of OWN is mostly restricted to inanimates (and sometimes animals) and cannot be used with kinship terms (such as one's children), with abstract concepts (such as time), or with terms for illnesses and body parts.

#### 5. Conclusion

This introduction has looked at possessive and existential constructions in both spoken and signed languages while placing the domain of possession within a linguistic and conceptual framework. Specifically, this means addressing the difficulty of delimiting the domain of possession on the levels of linguistic expression and of cognitive conceptualisation. Though all languages have ways of expressing possessive relationships – making possession a fundamental domain of language – the domain itself is linguistically very disparate, as the examples in this chapter have shown. This may be explained in part by the various event schemas in the possession domain (Heine 1997), and specifically the fact that the linguistic structures for expressing possessive relationships have been derived from non-possessive expressions rooted in concrete domains of experience.

There may be an equal, or at least comparable, amount of disparity in circumscribing the domain of possession on a conceptual level. The variety and diversity of notions (e.g. control, ownership, sphere of influence) proposed by authors seeking to characterise the domain is testimony to the difficulty of the task. Acknowledging the broad range of concepts that can be subsumed under possession, we may follow Seiler (1983) in referring to possession as "the relationship between a human being and his kinsmen, his body parts, his material belongings, his cultural and intellectual products". With this, we can treat possessive notions as anything that falls into our "bio-cultural sphere" (ibid). Given that the nature of this sphere varies from culture to culture, and is also subject to change across generations, it should come as no surprise that the cultural variability in the notions conceptualised as "possessive"

should be reflected in linguistic variability. By looking at sign language data, we expand our notion of linguistic variability yet further to include the visual-spatial language modality.

This chapter has demonstrated that the linguistic categories used to describe possession and existence in spoken languages can be fruitfully applied to research on sign languages. For example, the well-known close link between the notions of location, possession and existence is evident in sign languages as well, and is in fact particularly conspicuous because of the visual-spatial nature of sign languages (cf. references to pointing in section 4 above). Source domains such as the Action Pattern and Existence Pattern are found in sign languages, though the repertoire seems somewhat narrower because sequential morphology is of less consequence in sign languages, and therefore strategies involving case marking have been only marginally documented in our data. On the other hand, sign languages use a large variety of spatial inflection (as detailed in section 4.3.3 above) which, of course, has no counterpart in spoken languages.

For future studies in this domain, one of the main topics of interest will be to draw systematic comparisons between signed and spoken languages. In this volume, we have taken the first step by compiling data and analyses from a significant variety of sign languages. However, in a second step it should be possible, on the basis of the "theory of variation across sign languages" mentioned in section 4.1 above, to take another look at how sign language and spoken language data really relate to one another in the domain of possession and existence. For instance, the data from Adamorobe Sign Language, where no dedicated possessive constructions are found (Nyst, this volume), are utterly unlike the large array of possessive structures in South Korean Sign Language (sections 4.3.2.2 and 4.3.4). If this is taken into account, do these two sign languages still have more in common with one another than with any spoken language?

In sign language linguistics, a basic modality difference between signed and spoken languages has often been assumed, and this notion certainly should not be discarded. However, we may well want to refine our understanding of the "modality question" and recognise that for some typological comparisons, certain sign languages may have more in common with certain spoken languages than with other sign languages. That is, we may find categorisations where languages fall into patterns cross-modally, so that pattern A includes some signed and some spoken languages while pattern B is instantiated in a different set of both signed and spoken languages. The possibility of this kind of patterning has not been previously explored in typological research, but this particular point of view would certainly contribute to the intended "theory of variation" across sign languages and eventually to a re-appraisal of cross-modal typology in general.

#### References

- Aronoff, M., Meir, I., Padden, C., and Sandler, W. (2003) Classifier constructions and morphology in two sign languages. In Emmorey, K. (ed.) *Perspectives on Classifier Constructions in Sign Languages*. Mahwah, NJ: Lawrence Erlbaum Associates, 53-84.
- Baron, I., Herslund, M. and Sorensen, F., eds. (2001) *Dimensions of Possession* (Typological Studies in Language Series). Amsterdam: John Benjamins.
- Chappell, H. and McGregor, W., eds. (1996) *The Grammar of Inalienability: A Typological Perspective on Body Part Terms and Part Whole Relation* (Empirical Approaches to Language Typology 14). Berlin: Walter de Gruyter.
- Clark, E. (1978) Locationals: existential, locative, and possessive constructions. In Greenberg, J. (ed.) *Universals of Human Language*, Vol. 4. Stanford: Stanford University Press.
- Croft, W. (2002) *Typology and Universals*, 2<sup>nd</sup> edition. Cambridge: Cambridge University Press.
- Fillmore, C. J. (1982) Frame semantics. In The Linguistic Society of Korea (ed.) *Linguistics in the Morning Calm*. Seoul: Hanshin Publishing Company, 111-37.
- Heine, B. (1997) *Possession: Cognitive Forces, Sources, and Grammaticalization.* Cambridge: Cambridge University Press.
- Heine, B. and Claudi, U. (1986) *On the Rise of Grammatical Categories: Some Examples from Maa* (Kölner Beiträge zur Afrikanistik 13). Berlin: Reimer.
- Heine, B., Claudi, U., and Hünnemeyer, F. (1991) *Grammaticalization: a conceptual framework*. Chicago: University of Chicago Press.
- Hopper, P. J. and Traugott, E. C. (1993) *Grammaticalization*. Cambridge: Cambridge University Press.
- Langacker, R. W. (1995) Possession and possessive constructions. In Taylor, J.
   R. and MacLaury, R. E. (eds.) Language and Cognitive Construal of the World. Oxford: Clarendon Press, 51-79.

- Lehmann, C. (1998) *Possession in Yucatec Maya: Structures Functions Typology.* Munich: Lincom Europa.
- Lyons, J. (1977) Semantics. Cambridge: Cambridge University Press.
- McBurney, S. (2002) Pronominal reference in signed and spoken language: are grammatical categories modality-dependent? In Meier, R., Cormier, K. and Quinto-Pozos, D. (eds.): *Modality and Structure in Signed and Spoken Languages*. Cambridge: Cambridge University Press, 329-69.
- Meier, R. P. (2002) Why different, why the same? Explaining effects and non-effects of modality upon linguistic structure in sign and speech. In Meier, R. P., Cormier, K. and Quinto-Pozos, D. (eds.) *Modality and Structure in Signed and Spoken Languages*. Cambridge: Cambridge University Press, 1-26.
- Meier, R. P., Cormier, K. and Quinto-Pozos, D., eds. (2002) *Modality and Structure in Signed and Spoken Languages*. Cambridge University Press.
- Nichols, J. (1988) On alienable and inalienable possession. In Shipley, W. (ed.) *In Honor of Mary Haas*. Berlin: Mouton de Gruyter, 475-521.
- Payne, D. and Barshi, I. (1999) External Possession: What, Where, How, and Why. In Payne, D. and Barshi, I. (eds.) *External Possession*. Amsterdam: John Benjamins, 3-29.
- Samarin, W. J. (1967) *Field Linguistics*. New York: Holt, Rinehart and Winston.
- Sandler, W. and Lillo-Martin, D. (2006) Sign Language and Linguistic Universals. Cambridge, UK: Cambridge University Press.
- Seiler, H.-J. (1983) *Possession as an Operational Dimension of Language*. Tübingen: Gunter Narr Verlag.
- Shibatani, M. (1996) Applicatives and benefactives. In Shibatani, M. and Thompson, S. (eds.) *Grammatical Constructions: Their Form and Meaning*. Oxford: Oxford University Press, 157-94.
- Sneddon, J. N. (1975) *Tondano Phonology and Grammar*. Canberra: Pacific Linguistics.

- Stassen, L. M. H. (2005) Predicative possession. In Haspelmath, M., Dryer, M., Gil, D. and Comrie, B. (eds.) *The World Atlas of Language Structures*. Oxford: Oxford University Press, 474-7.
- Tanzania Association of the Deaf/Chama cha Viziwi Tanzania (1993): *Kamusi ya Lugha ya Alama Tanzania. The Tanzania Sign Language Dictionary.*Dar-es-Salaam: Tanzania Association of the Deaf (Chavita).
- Ultan, R. (1978) Toward a typology of substantival possession. In Greenberg, J. (ed.) *Universals of Human Language*, Vol. 4, Syntax. Stanford: Stanford University Press, 11-49.
- Zeshan, U. (2005) Sign Languages. In Haspelmath, M., Dryer, M., Gil, D. and Comrie, B. (eds.) *The World Atlas of Language Structures*. Oxford: Oxford University Press, 558-67.
- Zeshan, U., ed. (2006) *Interrogative and Negative Constructions in Sign Languages* (Sign Language Typology Series, Vol. 1). Nijmegen: Ishara Press.