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Revisiting Possession in English

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Abstract

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Languages often distinguish inalienable from alienable possession. Inalienable possessions, such as a hand, are generally considered inherent to the possessor, while alienable possessions, such as a house, are viewed as less central, transient, and replaceable. Though many languages mark this distinction linguistically, the ways of doing so and distinctions made are varied. There is not yet a cohesive and comprehensive account of how and why possession relations are categorized the way that they are cross-linguistically. In this paper, I use syntactic and semantic tests to examine the possibility that possessions as they are coded in English fall into four main concept categories. I further argue that this framework for understanding possession may account for cross-linguistic inconsistencies in the classification of possessions into sub-categories. Implications for the theory and the theory's larger application are discussed.

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Table of Contents

Revisiting Possession in English.....	1
Introduction.....	1
Background.....	2
Accounts to Date.....	5
Proposal.....	7
An Alternative Proposal.....	8
Tests.....	9
Experiment.....	13
Method.....	14
Participants.....	14
Materials.....	14
Sentences.....	14
Nouns.....	14
Procedure.....	15
Ratings Task.....	15
Results.....	15
Averages.....	15
Similarity Ratings.....	17
Analysis.....	19
Discussion.....	20
References.....	23
Appendices.....	26

Illustrations

Figures

1. Possession Category Schema.....8
2. Possession Category derived stimulus configuration.....18
3. Modified Possession Category Schema.....20

Tables

1. Average Ratings for Each Quadrant per Sentence.....16

Revisiting Possession in English¹**Introduction**

Our notions of self and social position depend on our connections to other people and objects. Often, the concept of possession lies at the heart of these relations (Bally 1996). This paper proposes a new perspective from which to look at possession as it is encoded in language. Prior research on possession has revealed that there are different kinds of possession relations and that these can perhaps differ across languages (Chappell & McGregor 1996; Heine 1997). For example, it has been suggested that people, through their language, differentiate physical from non-physical possession, temporary from permanent possession, and alienable from inalienable possession (Heine 1997). A common observation is that the different kinds of possession lack clear tests of membership (Nichols 1988). In particular, the apparent exceptions to any proposed rules have been interpreted as indicating that the notion of possession is not clearly partitioned into categories.

While extremely rich in examples and fine distinctions, the state of the literature is such that there is no overarching framework for thinking about the notion of possession. In this paper, I address this limitation of the literature. Based on examples of inalienability found in the grammars of many languages, as well as evidence of this distinction in English, I propose that the different types of possession are organized with respect to two major distinctions that give rise to four main conceptual categories.

¹ I would like to thank Dr. Phillip Wolff, Kevin Holmes, Jason Shepard, and the undergraduate members of Emory's Cognitive and Linguistic Systems Lab for helpful discussion and suggestions. All errors are my own.

I will describe a number of tests that have been developed for distinguishing different kinds of possession. It is on the basis of these various tests that I will form an overarching theory of possession as it is expressed in English. In defense of this theory, I will report the results of a ratings study. Finally, I will explore the potential implications of this theory for future research on the notion of possession.

Background

The concept of alienability in possession is a familiar one. Many languages exhibit a morphological distinction between possessions that are alienable and inalienable (Chappell & McGregor, 1996). Inalienability is a property generally thought to describe those possessions that inherently belong to the possessor – that is, they do not exist without the possessor or they have an indefinite period of being possessed (Nichols, 1988; Chappell & McGregor, 1996; Heine 1997; Cooper 2002). Body parts and kinship terms are commonly considered inalienable. Alienability, conversely, is a property shared by those possessions that belong to the possessor in a way that is less inherent. Alienable possessions typically consist of things like watches and houses. While marking for alienability varies in structure and frequency, the distinction, when present, is often found to be clear and consistent within a language. Membership in each category – alienable and inalienable – is generally dependent on semantic properties of the possession, though the requirements for membership vary greatly cross-linguistically (Chappell & McGregor, 1996).

Cross-linguistically, inalienability is marked in a variety of ways. Most commonly, specific morphemes in the forms of affixes or free morphemes are used to modify the possessed item. Suau, a Melanesian language, affixes the possessive marker to the possessed noun (1) to indicate an inalienable relationship between the possessor and possessed item. The possessive morpheme is attached to the determiner modifying the possessed item (2) to indicate alienability.

- (1) sina-di
 mother-their
 'their mother'
- (2) e-na numa
 poss-his house
 'his house'
 (Lynch 1974:71-72)

In some languages, including French and German, the determiner used to modify the possessed noun marks its alienability. Consider the French sentences *Il ouvrit ses lettres* 'He opened his letters' and *Il ouvrit les yeux* 'He opened his eyes'. The use of the third person possessive determiner *ses* in (3) indicates alienability, while the obligatory use of the definite determiner *les* in (4), (5) indicates inalienability.

- (3) Il ouvrit ses lettres
 he open.PST his letters
 'he opened his letters'
- (4) Il ouvrit les yeux
 he open.PST the eyes
 'he opened his eyes'
- (5) *Il ouvrit ses yeux.
 he open.PST his eyes
 'he opened his eyes'

(Cooper 2002:1)

While many languages' categorization of the kinds of possessions that are considered alienable and inalienable follow certain patterns, some have unexpected or unusual patterns of classification. Aroma, a Melanesian language, uses the bound morpheme *ku* to indicate inalienability when adjoined to the possessed noun (6), while the same morpheme is attached to the determiner to indicate alienability (7):

(6) valavu-ku
 idea -my
 'my opinions'

(7) ge-ku valavu
 poss-my idea
 'my thoughts'
 (Lynch 1984:77)

Interestingly, these examples reveal that speakers of Aroma understand thoughts to be alienable possessions, while opinions are considered inalienable. A similar subtle distinction can be found in the two definitions of the Fijian word for heart. When used in an inalienable construction (8), the meaning reads something like 'my repository of feelings and emotions'. When used in an alienable construction (9), however, the meaning is 'my heart (organ)':

(8) na uto-qu
 art heart-my
 'my heart' (repository of feelings/emotions)

(9) na no-qu uto
 art poss-my heart
 'my heart' (organ)
 (Lynch 1974:79)

Though alienability is typically categorized based on shared semantic traits, examples such as these beg the question of whether the categorization of possessions in this way may go beyond semantic properties to reveal insight to cultural beliefs about ownership and belonging. For this reason, it is important to inquire beyond a binary distinction in possession to begin to understand the true nature of classification of possession.

Accounts to Date

A variety of scholarly work has been done to account for perceived inconsistencies of inalienability cross-linguistically. Nichols notes: “the notion ‘inalienable’ is not a semantically uniform one” (1988:572). Several authors share this sentiment, see Appendix A. She posits that languages exhibit degrees of inalienability following a general hierarchy, consisting of (1) kin terms and or body parts, (2) part-whole and or spatial relations, and (3) culturally basic possessed items (e.g. arrows, domestic animals). The validity of this ‘possession cline’ is acknowledged by Tsunoda (1996) in his account of possession patterns in Japanese. Nichols also makes reference to the relationship between form and meaning in representations of possession. In general, inalienable affixes are “shorter” and “involve fewer morphemes”, (1988:579) suggesting an iconic relationship between form and meaning. Haiman explores the idea of iconicity further, saying that most of the time, the “expression of alienable possession is more complex, with greater linguistic distance between possessor and possessum, and this seems to reflect conceptualization iconically” (2008:37), again reinforcing the relationship between form,

concept, and meaning. Inalienable possessions are conceptually – and often linguistically – closer to their possessors than are alienable possessions.

These categories may be universally conceptual. Though they are not overtly marked in every language, they may still be present in the conceptual structures of speakers. Based on testaments of Brugman (1996), Heine (1997), Cooper (2002), and Haiman (2008), I have evidence to support the idea that this distinction, while not overtly marked morphologically, may exist in English. Brugman (1996) demonstrates that this notion can be applied to possession in English. She applies a series of several syntactic tests that reveal a possible distinction between possessions that are conceptually alienable from those that are conceptually inalienable.

Compare, for instance, (10) and (11):

(10) I have a missing tooth.

(11) *I have a missing five-dollar bill.
(Brugman 1996:1)

Brugman notes that constructions like (10) seem to be available for only certain – presumably inalienably possessed – nouns. Heine (1997) expands upon this notion by identifying several potential categories of possession, including physical, temporary, permanent, inalienable, abstract, inanimate inalienable, and inanimate alienable in an attempt to capture the various conceptual and syntactic categories that each type of possession seems to belong to. Cooper (2002) notices another instance of evidence for inalienability in English. Take for example what I will call subject-modifier phrases (12), (13) or phrases that describe a possessor in terms of one of its possessions. English seems to restrict the availability of these constructions to only include inalienable traits or possessions.

(12) a white-bearded man

(13) *a two-carred man
(Cooper 2002:2)

Additionally, Cooper notes that the option for a possession to stand for its possessor in constructions Cooper calls *bahuvrihi* compounds, in which possessors are described in terms of their possessions, seems to be an option only for possessions that are inalienable. Compare (14), (15):

(14) a pretty face, a loud mouth

(15) *a small house, * a red car
(Cooper 2002:2)

Because the inalienable possessions *face* and *mouth* are conceptually closer to their possessors, they can be used in these constructions to stand for their possessors. Conversely, the alienable possessions *house* and *car*, which do not share such a close relationship with their possessors, do not have this ability.

Proposal

The conceptual categories of inalienable and alienable possession, though unmarked, are present in English (and possibly other languages) and become evident when a series of syntactic tests are applied to different possessed nouns. Cross-linguistic inconsistencies in alienable and inalienable distinctions may be accounted for by adopting the notion that there are more than two conceptual categories of possession. These categories are captured by the results of several syntactic tests I have drawn from the literature as well as several I have devised.

An Alternative Proposal

I propose that in addition to the distinction between alienable and inalienable possession, English also makes a distinction between things that are owned and things that are not owned. I propose that possession groups in English can be divided along two perpendicular axes, the horizontal divide having to do with how inherent the relationship between the possessor and the item, and the vertical divide having to do with the degree of ownership – and subsequent control – the possessor has over the item. See figure (1).

(1)

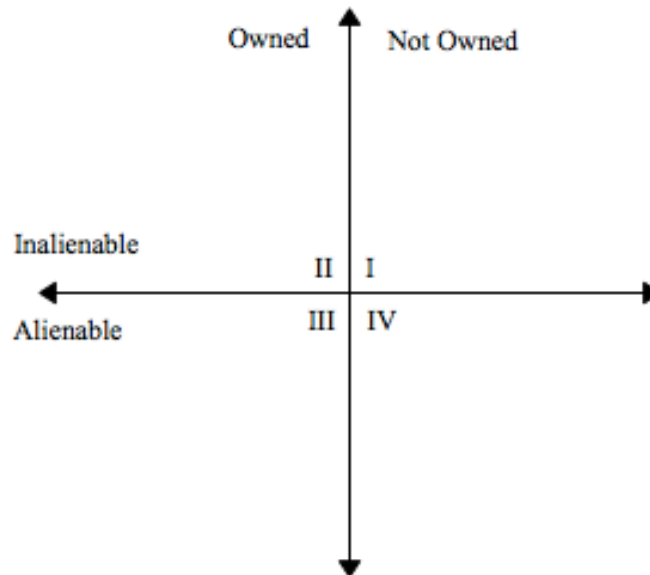


Figure 1. Possession Category Schema. This figure represents the proposed schema for organizing conceptions of possession.

Possession can be categorized with this two-dimensional plane. Items in Quadrants I and II have a more intrinsic relationship with their possessors than do items in Quadrants III and IV. Additionally, possessors have a greater amount of control over items in Quadrants II and III than

over items in Quadrants I and IV. Generally speaking, each quadrant can be described as follows:

1. Quadrant I: Inalienable possessions that are not owned by their possessor. (Includes items such as *mother* and *nephew*)
2. Quadrant II: Inalienable possessions that are owned by the possessor. (Includes items such as *hand* and *leg*)
3. Quadrant III: Alienable possessions that are owned by the possessor. (Includes items such as *car* and *house*)
4. Quadrant IV: Alienable possessions that are not owned by the possessor. (Includes items like *education* and *skill*)

I will test this hypothesis by collecting grammaticality judgments from native English speakers for the tests I have devised with a series of possessed nouns from each quadrant. Drawing ten nouns from each of my proposed quadrants, I hope to see whether judgments reveal clusters similar to the ones predicted.

Tests

I have compiled the following series of tests to test the membership of a variety of possessions in each quadrant of the schema.

(1) Determiner Frequency Test (*the* vs. *my*). As noted by Haspelmath (2008), inalienable possessions are generally assumed to have a possessor. Because inalienable

possessions exhibit a closer relationship to their possessors, I postulate that they are modified more frequently with the determiner *my* than with the determiner *the*. Subsequently, when a possessor refers to his or her own possession with the determiner *the* instead of *my*, the resulting phrase will sound more marked. Compare (16), (17). Alienable possessions, on the other hand, will probably occur with both determiners at relatively similar frequencies.

(16) Peter looked at his hand. (His own hand)

(17) Peter looked at the hand. (His own hand)

I propose that this test will serve as a horizontal axis test, separating alienable possessions from inalienable possessions. Items that are considered inalienable will receive lower rankings when modified with the definite determiner *the*.

(2) Subject Modifier Phrase Test. Cooper (2002) observes that only conceptually inalienable possessions are available for the formation of subject modifier phrases (12), (13). I believe that this test will isolate items belonging to Quadrant II. Items that are not members of this quadrant will receive low acceptability ratings when used in subject-modifier constructions.

(3) Bahuvrihi Compound Test. Cooper (2002) also observes that only inalienable nouns are available for creating Bahuvrihi compounds (14), (15). I posit that only items in Quadrant II will receive high acceptability ratings when used in these constructions.

(4) Definite Article Usage Test. Cooper (2002) notes that reflexive constructions like those found in French (18), (19) as well as Spanish and German, require the use of a definite article rather than a possessive article to modify the possessed noun. I presume this reduces redundancy, as inalienable possessions already entail the existence of a possessor.

(18) Il se lave les mains
 he 3PS washes the hands
 'he washes his hands'

(19) *Il se lave ses mains
 he 3PS wash his hands
 'he washes his hands'

Cooper observes this phenomenon, at least to an extent, in English. Compare (20), (21):

(20) She patted him on the head.

(21) *She patted him on his head.
 (Cooper 2002:2)

I posit that only items in Quadrant II will receive high acceptability ratings when used in constructions like (20).

(5) Possessor Ascension Test. Various observations have been made regarding restrictions on possessor ascension in English (Chappell & McGregor 1996; Cooper 2002; Haiman 2008; Heine 1997). It is generally believed that only inalienable possessions are available for use in constructions with possessor ascension. Compare (22), (23):

(22) The dog bit Jerry on the ankle.

(23) *The dog bit Jerry on the five-dollar bill.

Again, this test will identify items belonging to Quadrant II.

(6) ‘Missing’ Test. As noted by Brugman (1996), only inalienable possessions seem to be available in ‘missing’ constructions (10), (11). Inalienable possessions in Quadrants I and II will likely receive the highest acceptability ratings when used in this construction.

(7) Attributive Possession Test. Heine (1997) notes that the usage of possessions in attributive constructions (24b), (25b) is restricted based on the relationship between the possessor and possessed item. Specifically, only owned items can be used in these constructions. This test will isolate owned possessions from those that are not owned. Owned possessions, members of Quadrants II and III, will be allowed in constructions like (24b), but items that are not owned, members of Quadrants I and IV, will be prohibited (25b).

(24) a. John has a car.
b. The car is John’s.

(25) a. John has a wife.
b. *The wife is John’s.

(8) ‘Belong’ Test. As noted by Heine (1997), Similar to (7), this test separates items that more inherently ‘belong’ to their possessors, i.e. are owned, from those that possessors can merely ‘have’, i.e. are not owned. All possessions are available in ‘have’ constructions (26a), (27a), but only items that are more closely ‘owned’ by the possessor can be used in ‘belong’ constructions (26b), (27b).

- (26) a. John has a shirt.
b. The shirt belongs to John.

- (27) a. John has a skill.
b. *The skill belongs to John.

(9) 'Donate' Test. This test separates items that can be donated by the possessor from items that cannot be donated. Items that can be donated are presumably owned by their possessors, and this ownership relationship permits possessors to relinquish control of the items by donating them. This test will isolate items in Quadrants II and III (items that can be owned) from items in Quadrants I and IV (items that cannot be owned). Items from II and III will likely be given higher acceptability ratings than items from I and IV.

Experiment

In this experiment, I tested whether there is an overall structure to the way people conceptualize possession. My strategy was to present participants with sentences describing possession relations and to then have them give each sentence a rating with respect to key possession tests. Given my hypothesis regarding the schema of possession categorization, two main predictions will be tested. (1) Considering all tests in their combination, there should be a distinction between inalienable and alienable possession relations, and this sensitivity will likely show up in several tests. (2) A distinction between items that are owned by their possessors from items that are not owned should emerge with respect to several tests. Additionally, it is likely that social factors involved in possession relations will play a part in the way people categorize possession relations.

Method

Participants. Seventeen Emory undergraduate students were given one of four versions of the ratings task and asked to rate the acceptability of each sentence on a scale from zero to 7.

Materials.

Sentences. I selected six membership tests based on their compatibility with the largest possible set of possessed nouns and their collective representation of each categorical distinction. The Determiner Frequency Test, Possessor Ascension Test, ‘Missing’ Test, Attributive Possession Test, ‘Belong’ Test, and ‘Donate’ Test were all used. Because subject modifier phrases and bahuvrihi compounds are difficult to construct with a large sample of nouns, they were not included. Similarly, the Definite Article Usage test, because of its relatively infrequent occurrence in English, was excluded. I created eight framework sentences to use in a ratings task (Appendix B) in order to test the effectiveness of these tests in categorizing a set of possessed nouns. I included one control condition test sentence, *John has a(n) (x)*, to verify that each noun was available in this basic possessive relation construction. Each sentence used a proper name to represent the possessor and included one of forty test nouns.

Nouns. Forty nouns were selected for a rating task. Ten potential members of each of the four proposed quadrants were chosen. Several examples were taken from the literature, and the rest were chosen based on their semantic properties. The following summarizes the set of chosen possessed nouns:

1. To represent Quadrant I: *mother, daughter, cousin, grandfather, aunt, brother, sister, nephew, wife, son*

2. To represent Quadrant II: *hand, kidney, nose, elbow, eye, tooth, heart, arm, finger, toe*
3. To represent Quadrant III: *shirt, boat, house, nickel, car, watch, land, estate, television, computer*
4. To represent Quadrant IV: *pebble, goals, cup, sponge, pencil, eraser, screw, candle, box, paperclip*

Procedure

Ratings Task. Each set of ten nouns was randomly divided in half to create two sets of twenty total nouns (five from each quadrant). Each noun from both sets was entered into the set of framework sentences. An acceptability scale ranging from zero to seven (with zero representing a completely unacceptable sentence and seven representing a completely acceptable sentence) accompanied each sentence. The order of each set was randomized.

Results

A total of 1120 sentence ratings were collected. Ratings were compiled and organized by quadrant.

Averages. Average ratings were calculated for members of each quadrant per test.

Overall, results followed expected trends (Table 1).

Table 1

Average Ratings for Each Quadrant per Sentence

	Quad I	Quad II	Quad III	Quad IV
Sentence 1	7	6.88	6.9	7
Sentence 2	5.49	5.14	7	6
Sentence 3	6.86	6.6	6.69	5.8
Sentence 4	0.37	5.6	1.1	0.63
Sentence 5	5.37	4.94	4.6	3.6
Sentence 6	3.6	4.7	6.6	5.46
Sentence 7	2.17	4.68	6.9	5.74
Sentence 8	0.94	4.5	6.68	4.9

As expected, ratings for sentence 1 (the control condition) were consistently high for members of all quadrants. Ratings for sentence 2 (constructions with the determiner *the*) were expected to be relatively low for items in Quadrant I and II, and high for sentence 3 as inalienable items are likely more frequently modified with the determiner *my*. Alienable items, on the other hand, are likely modified with the determiners *the* and *my* at comparable rates. Modifying these items with *the* sounds less marked than does modifying items from Quadrants I and II. This trend holds when comparing the average ratings of sentences 2 and 3 for Quadrants I and II. Averages are higher in both quadrants for sentence 3. This trend also holds when comparing the averages of sentences 2 and 3 for Quadrants I and II to the average rating of Quadrants III and IV.

Ratings for sentence 4, as predicted, were highest for items in Quadrant II. This sentence employed the Possessor Ascension Test, which was predicted to be most acceptable with body part terms. Ratings for sentence 5 also showed expected trends. When used in ‘Missing’ constructions, inalienable items (Quadrants I and II) exhibited higher average ratings. Interestingly, items in Quadrant III also showed high acceptability ratings. The ‘Missing’ Test may then be better suited for identifying members of Quadrant IV (based on their unacceptability), which received much lower ratings for this sentence. Sentence 6 ratings were also consistent with predictions. Attributive constructions were rated most acceptable for items in Quadrants II and III, which are owned by their possessors.

Similar trends hold with sentences 7 and 8. Ratings were highest in Quadrants II and III for both the ‘Belong’ and ‘Donate’ tests, as predicted. Because these items are owned by their possessors, they have the property of ‘belonging to’ their possessors. Their possessors thereby have the ability to donate them.

Similarity Ratings. A Multidimensional Scaling (MDS) analysis was conducted using the ratings data. See Figure (2).

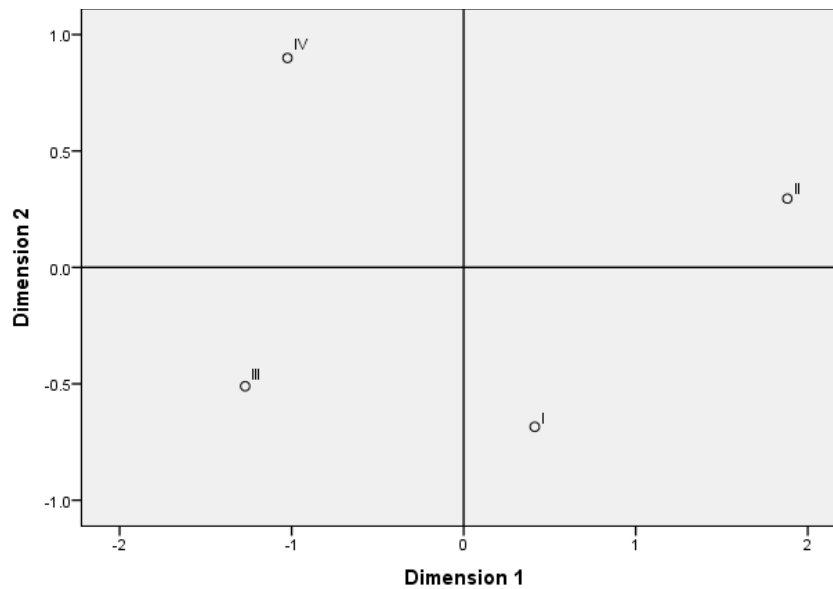


Figure 2. Possession Category derived stimulus configuration. This figure represents the derived stimulus configuration for sentence ratings. Each point represents a proposed quadrant.

The MDS analysis reveals an organization similar to the one I predicted. The first major conceptual distinction between possession types, alienable and inalienable, is represented. There is a clear distinction between inalienable possessions (Quadrants I and II) and alienable possessions (Quadrants III and IV). Interestingly, the second major distinction deviates somewhat from the one predicted. Instead of grouping Quadrants II and III into an ‘owned’ category and Quadrants I and IV into a separate ‘not owned’ category, a distinction is made between Quadrants II and IV and Quadrants I and III. This distinction may be explained based on the social aspects of these possessions. Items belonging to Quadrants I and III include things

like kinship terms and owned alienable possessions. The kinds of relationships between these possessions and their possessors is largely based on social constructs and norms. These relationships are, in fact, defined in social terms. Kinship terms define social relations, while ownership must be accepted socially in order to have meaning. Quadrants II and IV, including things like body parts and alienable possessions that are not owned do not depend on a social definition or understanding in order to be possessed. For this reason, they are grouped more closely together and differentiated from Quadrants I and III.

Analysis. It seems, then, that our tests are sensitive not necessarily to ownership relations, but to social aspects of possessive relationships. The ‘Donate’ test, for example, involves more than a just physical transfer of an item from one possessor to another – it includes a social contract that includes a transfer of rights and ownership as well. Implicit social contracts are necessary for ownership to be agreed upon and for kinship terms to be defined. Conversely, no underlying social contracts or agreements are necessary for defining the possessive relationships between possessors and body parts or possessors and alienable possessions that are not owned.

In accordance with the schema identified with the MDS analysis, I will offer a modified version of my proposed possession categorization schema. See Figure (3).

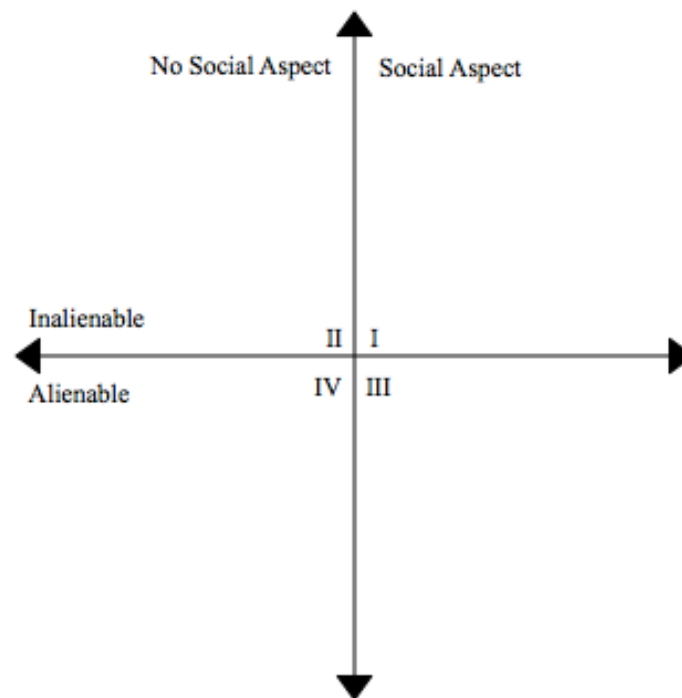


Figure 3. Modified Possession Category Schema. This figure represents the proposed schema for organizing conceptions of possession based on the results of an MDS analysis.

This schema provides a well-supported schema for organizing conceptual categories of possession.

Discussion

The results of the ratings study provide a baseline of evidence to support a slightly modified version of my proposed schema. The average ratings for each Quadrant proved to be in line with my expectations. As predicted, several tests divided the nouns into two major

categories, creating four subsequent quadrants. The Determiner Frequency Test divided the data according to their membership in each of the major categories ‘alienable’ and ‘inalienable’ possessions. Similarly, the Possessor Ascension Test correctly isolated items belonging to Quadrant II, predominantly body part terms. Only these items received the highest acceptability ratings when used in constructions where the possessed item served as an extension of the possessor, i.e. *The dog bit John on the (x)*.

Interestingly, the ‘Missing Test’ seemed to isolate items in Quadrant IV through exclusion. While members of Quadrants I, II, and III were all given comparably high acceptability ratings in ‘Missing’ sentences, only items from Quadrant IV received consistently low ratings. Perhaps the combination of the properties ‘alienable’ and ‘not owned’ prohibits the use of these possessions in ‘Missing’ constructions.

The Attributive Possession Test also divided the data into the two major categories of based on social definitions. Items that are typically thought of as being owned by their possessors, found in Quadrants II and III, were given consistently higher acceptability ratings when used in attributive possession constructions. As reinforcement for the existence of categorical division along this social aspect distinction were the results of both the ‘Belong’ and ‘Donate’ Tests. Possessors presumably exert a greater degree of control over items that they own, which explains why items from Quadrants II and III both received the highest acceptability ratings when used in ‘Belong’ constructions as well as ‘Donate’ constructions.

The data support the semantic and syntactic division of possession into four categories. However, the schema would be more robustly supported with a greater amount and variety of data. Further research should explore slightly different types of possession relations to determine

whether this proposal holds for a large variety of possessive relationships. A particularly interesting case is the one of inanimate alienable and inalienable possession. Inanimate objects are thought to have the ability to have both types of possession (Heine 1997). Compare, for example, (28) and (29).

(28) a. That tree has few branches.

b. My study has three windows.

(29) a. That tree has crows on it.

b. My study has a lot of useless books in it.

(Heine 1997:35)

It seems that like animate possessors, inalienable ‘possessors’ have both inalienable (28) and alienable (29) relationships with their possessions. It remains to be seen whether or not they have a similar ‘ownership’ relationship with these possessions as well.

Interesting cases should also be given further attention. Items that are more difficult to categorize based on semantics like *shadow*, *dog*, *life*, *dream*, *scar*, and *courage* could be given these tests to determine which categories they belong to based on syntactic properties.

Additionally, cross-linguistic variation in inalienable and alienable possession categorization should be compared to this schema to see whether perceived discrepancies can potentially be accounted for. It has been noted, for example, that speakers of Mandarin can omit the possessive head *de*, which acts as a link between the possessor and the item possessed, only with alienable nouns like kinship terms (Lin 2011). It would be interesting to see whether the items created by this distinction can be accounted for with my schema.

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Appendix A

Claims attesting to the difficulty of differentiating possession categories

Author	Claim
Heine (1997:11)	“The way inalienability is defined in a given case or in a given language is largely dependent on culture-specific conventions... Languages do in fact differ considerably with regard to where the boundary between inalienably and alienably possessed items is located.”
Seiler (1983:2)	“The distinction [between alienable and inalienable possession] cannot be reduced to a categorical one: Within one and the same language, a possessive relation to one and the same object (e.g. a kinsman) can be represented as either ‘inalienable’ or ‘alienable’; and different languages are not likely to make the distinction between ‘inalienable’ and ‘alienable’ in the same way.”
Chappell & McGregor (1996:8)	“It appears that differences between languages as to which categories they treat as inalienable may not be reconciled in terms of a universal hierarchy.”
Tsunoda (1996:565)	“The distinction between inalienable and alienable possession is not clear-cut but is a matter of degree.”

Appendix B

Framework sentences used in ratings task

1. John has a(n) (x).
2. John pointed to the (x).
3. John pointed to his (x).
4. The dog bit John on the (x).
5. John has a missing (x).
6. The (x) is John's.
7. The (x) belongs to John.
8. John donated his (x).

Appendix C

Words used in ratings task

	Set 1		Set 2
	<u>Quadrant I</u>		<u>Quadrant I</u>
mother		brother	
daughter		sister	
cousin		nephew	
grandfather		wife	
aunt		son	
	<u>Quadrant II</u>		<u>Quadrant II</u>
hand		tooth	
kidney		heart	
nose		arm	
elbow		finger	
eye		toe	
	<u>Quadrant III</u>		<u>Quadrant III</u>
shirt		watch	
boat		land	
house		estate	
nickel		television	
car		computer	
	<u>Quadrant IV</u>		<u>Quadrant IV</u>
pebble		eraser	
goal		screw	
cup		candle	
sponge		box	
pencil		paperclip	