

Chapter 8: Possession

Let us start our investigation of recursive possessives by asking what “possessive” means in the first place. Countless parents, have reported to me that their child’s first word was “mine,” sure that it signaled their children’s egocentrism and self-interest. Are they right? Does a primitive notion of *possession* reveal their unconscious human nature? Is grammar a slightly abstracted inventory of our emotions, or a metaphor for human nature?

When a child uses an expression like “mine, “*my spoon*,” or “Ezra’s book” (referring to himself), grammatical and emotional possession seem identical. Children start with the possessive meaning. The emotional sense of possession in “my” is very strong and may provide the child entrance into the less well-defined world of the grammatical possessive. In the grammatical sense, the possessive seems to have no sharp semantic core. Real-life possessives seem to have many possible meanings:

John's picture

= picture of John, pictures by John, pictures possessed
by John.

But not all meanings are possible. One child tried: “I need my help” (= I need someone to help me). This goes beyond the meaning encompassed

by this possessive. What grammar constructed it for the child, and why is it not right for an adult?

For “John’s picture,” we have: object, agent, possessor--all covered by the possessive marker in English. How about these obviously productive uses that one can easily invent:

John's disappearance

Bill's conviction (belief or criminal case)

Fred's irresponsibility

the drug's appearance

the city's protection

In none of these cases does the concept of "possession" apply well. (nn1) In *Fred's irresponsibility* we have an attribute, not something owned. The city does not own its destruction. Terms like “possessive” may be more harmful than helpful in making grammar transparent to everyone. After all, calling someone “possessive” is not exactly a compliment. (Of course, the case label “accusative” is not very friendly either).

Maybe any association works (as has been suggested). But that is not true. While we can go from

the photo of John to John's photo

we cannot go from:

“(do you like) the idea of lunch?” to:

“(yes, I like) *lunch's idea.”

Here again we bump up against subtle linguistic knowledge which is never conveyed in school. Do children, who generalize madly, and easily say:

a piece of cake

occasionally say:

*a cake's piece

*a people's group for a group of people

*tea's bowl for a bowl of tea

*brick's house for a house of brick

Not one example like that has ever been reported (to my knowledge), but the child might still comprehend a possessive that way. After all children say funny things like “my did it” and adults do not.

We can see that anything doesn’t go. Some kinds of association are sharply ungrammatical for the adult: genitives cannot carry the notion property or made out of. All the indicators are that this is a restriction that does not have to be learned, but children still might mis-analyze the construction in ways that mislead them. It is time to dive into real transcripts to see what is there.

“That a my did it”

One child from the Galasso corpus (nn2) has been scrupulously followed to determine the emergence of possessives, *Me, my, mine, he, his, your, etc.*

Me: I want me bottle. Where me Q-car? That me car. Have me show. Me turn. Me cat. Me pen. (2;6-2;8)

You: No you train. It's you pen. It's you kite. It you house? (3;2)

Him: I want to go in him house. Him bike is broken. It's him house.

Mine: Mine banana. Mine bottle. Mine car. Mine apple. Mine pasta (2;4)

My: My car. (3x at 2;4) My pasta. I want my key. It is my t.v.

His: What's his name? (3x) (3;6)

your: Where's your friend? It's your car? I got yours. (3;4)

AGENT:

My do it (I) (3;0)

My get it (I) (3;0)

This child obviously utilizes the notion of possession before he masters the morphology to express it. We find *me*, *mine*, *my* (and other children say *mines*) all used to express possessive. It is possible that a child who uses several forms simultaneously has slight semantic variations in mind. It is very hard to determine from the naturalistic data just what the range of possible meanings are.

It is clear that Agent readings arise because many children will actually use them with verbs: “my do it.” A famous case comes from Henry Hamburger, (nn3) “that a my did it” which seems like an adult form of “that was my doing,” but actually refers to an object the child made. Spontaneous quotations tell a lot, but they cannot reveal the boundaries of meaning for the child: can all roles appear as possessives? There are many ways to find out.

EXPLORATION 8.1: IS A PICTURE OF YOU YOUR PICTURE?

With a digital camera, each person in a group could take some pictures, be the object of pictures, and then hold a random assortment.

Set up:

- 1) Put a picture that a child made on the floor
- 2) Give the child a photo of someone else to hold
- 3) Hold a picture of the child yourself

Now ask: “show me your picture.”

Then continue to ask about each picture:

“Is that your picture?”

[pointing at one a friend holds that “you” took]

“Is that your picture?”

[pointing at one of “you”]

“Is that your picture?”

[pointing at one “your” friend took of someone else]

Which pictures will the child take? Agent = child made, Object = child himself, possessive = child owned. Our prediction is that most child will accept them all, but we do not really know. Since we have an obligation to answer “yes” whenever we can, we should be able to see if the child accepts all three meanings.

Caption: Possessive meanings

Why “Of Mice and Men” and not “Mice’s and Men’s”?

Is the *of*-phrase just “a genitive on the right side?” In one of my first experiments, (nn4) I got a clue that children’s *of*-phrases are not perfectly in line with adults’. We had some barnyard animals that carried out various *-ing* actions, like “show the kicking of the horse by the dog.” Then we asked the children to

“show me: the jumping of the fence.”

Seventy-seven percent of the children three to five years made the fence itself jump instead of having an animal jump it. This result is somewhat flabbergasting if one assumes that English has subject-verb-object as a fundamental structure. It should make a subject coming after the verb the most difficult thing to acquire. But it is not. There is no simple subject-verb-object template, like a stencil, that a child locks every new sentence into. (And compounds like “[No more] kitty-chasing” give input to the child that puts the object before the verb, instead of the subject. In fact, many languages, like Italian, express possession after the noun: *the hat of John* instead of *John’s hat*, as in Old English *the book of Job*. Will children allow the subject reading for *the picture of John* where adults take an object?

Here's how we explored it. (nn5) We took photographs of a person, identified in a story as "me." And then showed two pictures, one of someone putting a crown on me (it was in fact me) and one where I put a crown on someone else. Then we asked the children to point to:

- a. the crowning of me
- b. the patting of me
- c. the pushing of me

To our surprise, the Romance option was clearly available. Children between four and five years preferred to have "me" be the agent two-thirds of the time. Is the opposite possible too: object before the verb? The following example suggests that it could.

“I need my help” (nn6)

(The "my" is the object of help and not an agent of help: he needs help.) The free interpretation of possessive is at work. For adults *my help* gets only an agent reading. It is not really clear why. The set of bare nouns derived from verbs seems to share this characteristic: *my push, my kick, my love, my thanks, my dissent*, while those with affixes that can be considered nominal

passives easily receive an object reading: *my destruction/my resurrection/my designation as president*. It seems as if a child may have an instant grasp on the more abstract, relational notion behind possessive. The child's grammar then points to part of the solution: the freer possessive is the core version. Restrictions on it must be learned for special lexical items or certain grammars. Let us now see if we can explore these options.

Now let us go after meanings that might be excluded for adults.

EXPLORATION 8.2: PICTURE OF YOU AND PICTURE OF YOURS

Setup: 1. Child has a picture of herself, by herself, and another picture.

2. Dad has pictures of the child and by the child

Say: “Give Mom the pictures of you.”

=> just of you (child's and Dad's)

“Give Mom the pictures of yours.”

=> of you (child's and Dad's)

=> by you (child's and Dad's)

=> owned by you (child's set)

Will the child allow all of these readings?

Caption: Excluded possessive readings

While children do not spontaneously overextend possessives and say: **the rice's bowl*, it might be that they allow that interpretation. We did a little experiment with four to six-year-olds which one can easily reproduce.

EXPLORATION 8.3: CAN AN OBJECT POSSESS ITSELF? (NN7)

Setup:

A girl named Candy.

She holds a bowl full of popcorn.

Also present: a bowl of candy.

Now if we ask to see:

the candy bowl

the bowl of candy

we should get the bowl full of candy. But if we asked to see:

Candy's bowl

then we should get the bowl of popcorn.

Caption: Containers are not possible possessives

What something consists of cannot possess it. We did the same thing with a girl named Ivy and a wall of ivy, a girl named Crystal and a crystal bowl, etc. One might add girls named Rosemary, who has a bottle of ginger, and Ginger who has a bottle of rosemary.

To our surprise many of the children would point to the bowl made of crystal when we asked for Crystal's bowl, etc. This suggests that the child either does not have the restriction or perhaps does not grasp the possessive – 's itself. Maybe they hear "candy bowl" when we say "candy's bowl"?

One might want to show in advance that the child applies that morpheme (not just lexical cases like *my*, *her*, *your*) by asking the question:

Whose bowl is that?

And see if we get:

"Candy's" or "crystal's" or just

"Candy" or "Crystal"

At the point where children use - 's productively, one would expect them to block the made of reading.

So far we do know that the possessive is not completely free in its interpretation and we know that children do not exhibit that restriction immediately.

Recursive Possessives are Not Agents

How about all those complicated recursive possessives that we marched through in an earlier chapter? Do they all freely allow all these meanings? Let us investigate:

John's rejection of a friend

John's friend's rejection

Now John is not clearly the agent of the rejection anymore—it seems that someone else is rejecting John's friend. All we know about John is that it is his friend, not John's role in the rejection, which probably does not exist, all that John's indicates is that he is linked to friend, but he has no necessary link to the action of rejection.

In fact we could continue

John's friend's rejection of Bill

and now the friend becomes the Agent, but not John. It is clear that under recursion, recursive possessives (John's friend's rejection) do not allow expression of just any meaning (any thematic role of reject).

This limitation on how recursive possessives refer must follow from something, but what? This question gets right to the root of linguistic theory. Our previous analysis of verb projection supplies the answer here as well:

verbs project their roles nearby

It is the phrase next to the verb on either side which is the Agent or Theme-object. The linguistic term for this is local projection.

Nothing is learned here. The limits on universal grammar allow the child to ignore other cognitively conceivable hypotheses. We are really seeing how the invisible assumptions of mind work. Recursion of possessives is infinite, but the meanings it can carry are not.

The possessive is just the tip of the iceberg in terms of limits on interpretation. If we allow both:

John's creation of Mary

Mary's creation by John

and then form:

John's and Mary's creation

now we cannot have *John's* be the Agent, and *Mary's* the object. The *and* must link not only two genitives, but genitives with the same role in the event (in this case either agent or object). Again, we just “know” this to be true for children as well, from our intuitive sense of what universal grammar allows. We will not develop an exploration to show it, but it would be easy to do.

Movement and Backwards Reference

One of our commitments is to make the endpoint of acquisition ever-present. It defines what it means to be a speaker of English, but it is easily forgotten (even among acquisition researchers). What kinds of complicated knowledge does the child eventually control. Consider this sentence:

Mom has the picture of herself of her friend's.

Most people, with a little thought decide that this sentence is ambiguous. The picture is either of Mom or the friend. There is something strange here, though. Since the reflexive comes first, how can it refer to the friend? We do not allow sentences like this:

*herself helped Mary.

A basic principle of grammar is that reflexives refer back to an earlier noun phrase. To get the facts right we have to invoke one of the deepest powers of grammar: to move something from back to front. We can take a sentence like:

the friend's picture of herself =>

and move the reflexive forward to have

the picture of herself of the friend's

Then we can see that before movement, in what has classically been called “Deep Structure” the reflexive really did follow the noun phrase. The simple principle is upheld if we allow the power of movement into the grammar.

Now suppose we fixed the connection before we moved the phrase, then *herself* goes to *friend*, but if we fix the relation after we move it, then *herself* goes to *mother*. So the child has two possibilities if she puts the reflexive back in its original position:

Mom has the friend's picture of herself

then it refers to her friend. Only if she fixes reference in the front position will it refer to Mom:

Mom has the picture of herself of her friend's

Now let us try to set it up overtly, which should be much simpler for the child.

EXPLORATION 8.4: POSSESSING BACKWARDS

Set-up:

two children involved, one subject girl,
and another girlfriend (or dolls)

Equip the child's friend with one picture of Mom and one
picture of the friend herself

Friend holds: Mom-picture
self-picture

Then we can tell the child to take from the friend and give to the mother:

“Give Mom the picture of herself of the friend's.”

Will the child take the picture of Mom or of the friend?

Caption: Backwards reflexives and possessives

Extension:

Mom has a picture of herself and another of her daughter. Call her
<child's name, here let's say “Susan”>.

Mom gives both pictures to Susan.

Now the adult says:

“Look Susan is holding the picture of herself of Mom’s.

Which one is it?”

Or suppose the child does not see it,

Say: “Mom gave one picture to Susan.

Susan has a picture of herself of her friend’s

Who do you think is on the picture?”

The answer should reveal whether the child takes the surface order of the sentence or restores the deeper order.

When do children grasp all of this? Evidence for clause movement was found in the work of Larry Solan. (nn8) Solan gave children sentences roughly like:

- a. Before he jumped, the horse hit the pig.
- b. He jumped, before the horse hit the pig.

If we restore *before* in the first sentence to the end, then it is no surprise if *he*=horse (the horse hit the pig, before he jumped). The second sentence (b) forces *he* to be someone outside the sentence. Children four to six can get

the coreference reading for sentences like (a), which suggests that they can understand movement. Will they understand backwards reference for these reflexives? We do not really know.

Conclusion: An Engine at Work

Could a five-year-old say or hear something like this? A teacher might easily say:

I really like that drawing of yours of your mom's car

or:

your friend's picture of one ear of his dog's ...is very funny.

Such a sentence has six possessives to unpack in eleven words. A child might guess what is meant, but to control English, they have to be unpacked in a very particular way. The complex structures are not found only in the *New York Times*, they are often present in our language to children (as we saw in the chapter on recursion).

We flew into the web of possessives with a goal: where can agents appear? We find them in both pre-nominal and post-nominal possessives, but not inside the recursive possessive machine. We had to hang onto all kinds of different machinery just to lay out all the variation to be captured: recursion, movement, affixation, verb projection, prepositional phrases,

reflexives, in short the whole of engine of grammar. Every part of a mechanism engages every other part.

Once again more is going on than we can readily explain.

Nevertheless what those who work with children can see is that systems come into play that are far beyond any form of overt instruction. Being beyond instruction does not mean being beyond assistance. Exposure to sharp contrasts like those in our explorations is a natural way for children to progress in understanding a system we do not fully grasp ourselves. Still it is important to remember that exposure to what can occur does not prove to the child what cannot occur. For that we must rely on innate knowledge.

Larger Picture

Our larger scheme has three vital ingredients: structure (recursion), meaning (action and event), and operations (movement). The structure is the chassis--like a skeleton, on which is laid meaning, and to which operations apply.

Into this structure are put words—but the words have their own structure (endings) and they have links across the syntax (reflexives and co-reference). The link between words and structure happens when the child lays the word-structure on top of the verb-structure: he sees a relation

between a verb meaning and ending, allowing some forms (*runner*) and stopping others (**seemer*).

All of this represents knowledge that the child need not acquire. He already has it. If he does not show the knowledge at first, it does not mean he does not have it. If *-er* seems free at first, the child will eventually lay it on the chassis of verb structure, and interpretive limits will pop out immediately. The child lays out little pieces of an engine and then sees where they fit. It is that moment of fitting when the abstract properties of grammar really take effect. Often child meanings or phrases (“storier”) are cut out in this process.

But we are still coping with just a tiny piece of the pie. We have not discussed: how we weave in the force of sentences (question or imperative), how we add other systems that ride on the structure, like intonation and case marking (e.g. accusative, nominative, possessive, instrumental, dative). As different parts of grammar are woven in, meaning is added, but also subtracted. For example, “dog see” means either “dog sees” or “someone sees dog.” If we say “see him,” adding accusative case, we eliminate the agent possibility. Building the grammar causes the child to both expand and restrict his expressive power.

And yet we have already derived dozens of points where this knowledge touches the reality of a child's life and where we can, as we have done, ask questions about what the child knows.

Our discussion has not yet seized upon how languages and dialects can vary---how the child is confronted with choices that force him to acquire one grammar or another. In a sense, we have hardly engaged the acquisition process. Rather we have dwelt upon what lexical items carry and how universals are manifest in what the child hears every day. Much of this must be left for another day.

One place the power and precision of grammar becomes stark lies in how it can be duplicated. We actually have rules that govern the silent parts of language, places where grammar is so exact that we know from one sentence what is missing from the next. We turn next to the question of how a child must learn to structure silence itself.