Acquisition arguments for a General Point of View as an alternative to Relativism and Subjectivity

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1. Introduction¹

When the radio was invented, there were skeptics who said it would be of limited use because "no one has anything to say to everyone", that is, we have no general assertions to make to a non-specified audience. This is obviously untrue, given the success of radio. Even animals communicate to an unspecified audience: a growl, or a howl, or a hiss is intended for both visible and unseen predators (to every living thing) in the environment. If untrue, why did it seem plausible that radios are useless?

Our psychological models are dominated by notions of exchange and self-interest. And those relations are defined in terms of personal goals and independent perspectives. In Western culture Self-interest is presumed for actors, just as ego-centrism is assumed for children. Discourse models presume the existence of a fundamental Speaker-Hearer relation where each person has a perspective and goals with respect to the other. By contrast, we argue that adults and children demonstrably assume a non-egocentric General Point of View immediately, in their earliest declarative utterances.

The personal perspective is enlarged by another large intellectual movement, born of relativistic physics: every action or claim is affected by the actor and no independent reality exists outside of individual perspectives. Therefore, in addition, one can seek only an ideal description and truth is an illusion and *subjectivity* is inevitable.

1.2 Theoretical Background

Philosophy, accordingly, has produced both *externalist* and *internalist* views of the denotational power of grammar. The externalist view claims that statements have a determinable truth-value, while the *internalist* view suggests that a full description must be done entirely in mental terms.

Independent of these standpoints, however, is the undeniable fact that we have assertions and factives in grammar. That is, grammar must refer to notions of *truth* whether or not that *truth* has an external grounding.² Formal semantics representations that begin from an individual perspective which leads quite naturally to the observation that all statements are in some measure altered or affected by speaker limitations and hence must be subjective.

¹ We thank the audience at the DGFS workshop on subjectivity, and Angelika Kratzer for discussion and her broad support for the perspective advocated here which opposes the relativist tradition. We also thank Peggy Speas, Jill deVilliers, Bart Hollebrandse, and all the members of the Evidentiality Project for providing the background for this work. The work was supported by NSF evidentiality grant to M. Speas, T. Roeper, J. deVillierrs, J. Garfield.

² See Hinzen (2007) for background and relevant discussion.

We argue that a much simpler default assumption, with a fairly direct syntactic representation, will capture both intuitional and acquisition facts. There is:

A General (human) Point of View (GPOV)

Under GPOV all assertions presume a general truth and a default Common Ground—true for all people. A subjective perspective is not an inevitable starting point. Why do we add "human" and what is its significance? We argue that expletive sentences like the following, which show no morphology for point of view get a human POV despite its animal reference:

- (1) Is it good to wear a dog collar?
- (1) is automatically evaluated from a general human perspective, not a doglike one, so the natural answer is "no". If such a restriction is present, it suggests a biological bias that is not captureable by any application of a "pure resource logic" defineable independent of human nature. We will focus on how children grasp contrasts like the following:
 - (2) a. John is sure to win the race. [derived from: it is sure for John to win the race] b. John is sure that he will win the race.

In (2a) it is neither the child nor the subject to which the "sureness" refers, but to the nature of the world. While <u>sure</u> is a raising verb and the underlying form: <u>it is sure that John will win</u> makes a claim about probability in the world – not just the speaker's view, these adjectives are often seen as speaker-oriented because the word <u>sure</u> itself can also be an expressive (see below) that clearly carries speaker-certainty (as in "sure, I'll help") or subject-certainty as in the *sure-that* construction. This ambiguity could cloud the child's perception of the GPOV – raising <u>sure</u> particularly when there is a non-expletive subject like <u>John</u>. Ambiguities make determining the acquisition path more interesting and important.

Properties of a GPOV can be captured in many systems, as in current work on "predicates of personal taste" where an "exocentric" (Lasersohn 2006, Stephenson 2007) property can be formally captured as an extension of personal perspectives, or by indexicals or small *pro* representations linked to a speaker that becomes generic (Moltmann to appear). These perspectives lead to the necessity of a "judge parameter" to decrease the subjectivity. Not surprisingly, notations can adapt to most demands. Suggestions at the DFGS workshop on a "normative" basis for statements move in the direction we advocate, but maintain a relativist ingredient we think may be unnecessary. The deeper challenge is to achieve a tight fit between the facts and their notation. We argue that including acquisition facts and assumptions can contribute to that goal.

In general, we argue that the best representation should capture the GPOV as a Default and not a derivative notion within the notation. We will not advance a more precise semantic notion or notation, which we hope will emerge, but we assume an extension of a syntactic notion of POV to GPOV, which corresponds to Speas (2004)

³ These are furthermore all pertinent to the evidential dimension of modality (see Kratzer (1991)).

notion of the "seat of knowledge".⁴ Hollebrandse (2000) assumes a syntactic POV Operator on a root CP position which controls the co-variation of pronouns, deictics, and Tense (it captures the simultaneous shifts from: "can you send <u>me this here now</u>" to "yesterday he asked <u>could</u> I send <u>him that there then</u>" with embedded semi-quotation).

1.3 Predicates of Personal Taste and Subjectivity

Much attention has been given recently to the study of "predicates of personal taste", originating in the work of Lasersohn (2004), as a central paradigm for communication and which are oriented toward verbs linked to personal experience:

(3) Rollercoasters are fun.

If we bring in other predicates that look similar, other possibilities emerge. Thus signs proclaim:

- (4) God is good/Allah is great.
- (5) Jesus died for your sins.

Religious remarks, dominated by evaluative terms, are obviously intended to be "general truths", not for the speaker alone, and worth a war to defend. The religious fanatic holds that such statements are true for you, even if you do not agree. While it is obvious to those in Western cultures that such assertions are---at a scientific level---quite cultural and relative, it is equally obvious that any presumption of relativity is anathema to the speaker, and notably unmarked in the language: God is great =/= God is great for me. The linguistic challenge is to capture that linguistic notion of "truth" within a semantic model.

We believe that children who have vociferous arguments over topics like (6) are presuming a notion of truth that is closer to "God is great" than "rollercoasters are fun", and that even the latter case, unmodified by "fun for me" has the force of a claim about a universal GPOV, contra to the literature.

(6) Tomatoes are yukky. That's easy.

1.4 Acquisition and Implicit Arguments

Is acquisition relevant? Acquisition facts have been regarded as clouded by problems of performance and the challenge of language-particular acquisition, but a tradition has developed whereby acquisition is seen as directly relevant to default aspects of UG⁵ and

⁴ Hollebrandse's (2000) proposal of a POV position in the CP which allows pronouns, deictics and temporal phrases to covary is supported by Anand and Nevins (2001) who provide independent morphological evidence from Chinese for this perspective, and see also Speas (2004), for extensions to Navajo. See also Harris (2009) and Potts (to appear) and references therein for relevant discussion of how expressives engage POV.

⁵ See deVilliers and Roeper (to appear) Handbook of Generative Approaches to Language Acqusition for an overview.

therefore potentially a source of more direct insight than intuitions of grammaticality or meaning which are (ironically) notoriously uncertain and obscured by subjective biases.

The case at hand is a case in point: is there a hidden implicit argument <u>for me</u> attached to <u>rollercoasters are fun</u> or is there a default GPOV that is part of the human comprehension of what a tensed clause, an Assertion (Klein 2006), means?

Implicit arguments and implicatures have been studied in acquisition and in both instances there is evidence that children show limited ability before the age of 5 to reliably grasp them (though current experimentation may challenge parts of this broad claim). Thus implicit agents are not initially recognized as what separates (7a) from (7b):

- (7) a. The apple dropped on the ground.
 - b. The apple was dropped on the ground.

If <u>for me</u> is a comparable implicit argument, then we would predict that children would avoid sentences like "that is yukky" until they were able to project both invisible implicit agents and invisible benefactives, but as we shall see, truth assertions over apparently taste predicates occur much earlier than implicit arguments.⁶

We argue therefore that it is incorrect to place these predicates in a separate class. The implicit benefactive "for me" is not expressed in putative predicates of personal taste, because it is not there. We argue that most declarative sentences not only express a General Point of View, but the assertive power of grammar specifically allows them to be <u>externalized</u> from the individual:

(8) Assertions are transferable externalized propositions about general truth.

Thus the value of these largely personal observations is that they hold under transfer as externalized assertions, as in these dinner arrangements:

(9) "I will be 20 minutes late for dinner."

"Bill is hungry."

"Fred hates buffets."

"Mary's children have to leave early."

All express points of view, in a sense, but they are expressed as available truths, hence true from a General Point of View. If these views are told to Mike who tells them to John, then John can weigh them collectively and choose the right restaurant to meet at.

It is clear that a "presumption of truth" is necessary to their value as <u>transportable assertions</u> where we can adjust all indexical references (I = John) without disturbing the underlying proposition such that it is useable by a 3^{rd} person. Many discussions overlook this dimension and thus may mischaracterize so-called Speaker-adverbs:

(10) Unfortunately John won the race.

⁶ The workshop on subjectivity in fact had several advocates of the view that these statements should be seen as "normative". This view takes a step toward the notion of asserting truth, but with the scalar notion still in force. It is not evident that there is any normative factor involved.

While it is not unfortunate for John, it might be for the Speaker, yet the sentence actually says that it is unfortunate in some absolute sense beyond both speaker and John. One might in fact challenge it by saying "it is just unfortunate for you" and get a reply "no, it is unfortunate because he always wins and others are discouraged from competing", indicating the GPOV force of the sentence.

A comparison to animals may be instructive. Animals also often communicate to an invisible and unknown audience when they give warning cries or growls or other indications of attitude which are intended (by the biology not by some conscious intentional system) to communicate something to other organisms that they may not see. Interestingly, the animal system, a howl, does not externalize a proposition that allows it to be transferable among members of the species.⁷

Acquisition evidence pertinent to this point begins with the experimentation of Carol Chomsky, who presupposed without comment that children understood a GPOV for expletives when she asked 5-8 year olds "is it easy or hard to see the doll?", where the GPOV is entailed for adults although the child might assume it is a Hearer-POV alone.

2 Children's knowledge of POV in longitudinal data

To get a glimpse of children's usage of POV constructions, we ran a search on children's naturalistic production of expletive constructions for raising adjectives, focusing on sure, using the CHILDES database (MacWhinney, 2000). Adam in the Brown corpus, Ross in the MacWhinney corpus and Shem in the Clark corpus were studied. In the search, we went through all utterances of Adam, Ross and Shem to look for constructions that could be categorized as a potential expletive or contained 'sure'.8 The results were then hand checked for expletive or *sure*-constructions.

The longitudinal data showed that expletive constructions emerged fairly early in these children (ranging from 2;5 to 4;1). Some were clear GPOV uses, as the interaction between the child and the investigator/caregiver revealed that the child was expressing opinions about a general fact, e.g. (11). These children also knew how to use for-PPs to express point of views of a specific person. Shem produces 6 expletives with for me, e.g. (12), and Ross produced 4 such utterances with for you and for me, e.g. (13).

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(11) *URS: no # he couldn't take it apart.
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*CHI: why?

*CHI: it's hard to take apart?

*URS: yes # it's quite hard.

(Adam 3;4.01)

(12) *SHE: is [/] i(t)'s hard **for me**?

(Shem 2;7.10)

(13) *CHI: milk is is good for you # but gum is bad for you . (Ross 3;7.03)

⁷ That is our impression, not being educated on modern ethology. Perhaps a sequence of howls among wolves has this function.

⁸ A potential expletive construction would contain a BE verb followed by an adjective, and the search command looked for this be+adj combination in the morphological tier of the transcriptions.

Not many children used the more ambiguous 'sure' construction during their recording sessions before age 5;5, Early "sure" uses usually marked subject's certainty (14), as the word 'sure' appeared at the beginning of an utterance and did not form a grammatically correct sentence:

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(14) *CHI: ... sure you don't want some ? (Adam 2;7.14)
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Another early use of 'sure' was in exclamatives (15), where the word 'sure' appeared in second-position and expressed the speaker's attitude towards the utterances:

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(15) *CHI: oh # you sure believe . (Adam 3;2.21) 
*CHI: it sure is big . (Ross 3;8.18)
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Others do not primarily express subject-certainty but rather emphatic real-world-certainty:

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(16) *CHI: yeah (.) sure that could go like that . (Ross 3;0.17)
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We found a few *sure-that* and *sure-to* constructions in Adam's and Ross's transcriptions. Adam produced 2 such utterances at 4;4 and 5;2, and Ross produced 4 such utterances between 3;8 and 5;5. The constructions were all grammatical, but it appeared that the grammatical subjects of the utterances were often the speaker ('I') or the hearer ('you'). In other words, the utterances expressed a point of view from a local person.

(17) *CHI: I'm sure they're there.	(Ross 3;8.18)
*CHI: be sure to bring some water too.	(Adam 4;4.01)
*CHI: are you sure it doesn't write?	(Adam 5;2.12)

The corpus data suggested that children started to express the general POV from early on (about 3;3), and they were able to state a point of view from a specific person, even though those POVs were generally from a local person. There were few cases which involved a clear subject POV, but third person subject POV uses were very rare. This may be due to the nature of longitudinal data, which involved interaction between the child and the caregiver. The setting may prefer local person's POV in conversation. Experimental methods are more versatile in exploring children's knowledge of POV, and we developed two lines of experiments to study children's understanding of general, speaker, and subject POVs.

3. Experiment design and methods

Of the two types of experiments, the first evaluated whether children understood general POV in expletive constructions, and the second focused on teasing apart subject/speaker/and GPOV uses in 'sure' constructions. The test items were all presented in a story format. One example of the expletive stories can be found in (18). The story first stated that Johnny had problems jumping over the fence, because he was too little. It

was also told to the child that other people who were taller did not have difficulty doing it. The contrast between one person (Johnny) and others would show that jumping over the fence was generally easy, though it might be difficult for some people under specific conditions.

(18) Look, there is a tall fence in the backyard. Johnny wants to jump over the fence, but it is so tall that he fails every time. But look, his sisters are tall and strong, they have no problems jumping over the fence.

So: Is it easy to jump over the fence?

At the end of this story, there was a question formulated in an expletive construction, which assumed a general point of view interpretation. The child was expected to answer 'yes' for (18), but if he or she pointed out that it was not easy for Johnny, it would also be accepted as correct, because the child did perceive the contrast between a general POV and Johnny's POV.

Stories of *sure*-constructions were different from stories of expletive constructions. One example of such stories can be found in (19). The story illustrated that one person had some false belief due to some accidents. Although the character in the story did not know the truth, the child as a listener knew exactly what had happened. In such a case, we had a contrast of different point of views, and would be able to test whether the child fully understood the 'sure' question at the end of the story.

(19) This is Jacob. Jacob loves to eat peanut butter and jelly sandwiches. His favorite kind of jelly is strawberry. His mom always makes him a peanut butter and strawberry jelly sandwich for lunch, like this one here (bottom left). But last night Jacob's mom ran out of strawberry jelly and so she had to make his sandwich with grape jelly instead. The next morning Jacob's Mom gives him his lunch bag and Jacob goes off to school, but Jeremy's Mom forgot to tell him about the jelly!

Four types of *sure*-questions can be asked after such a story. A *sure-to* question as in (20a) addresses speaker's knowledge of the general truth, but it also entails a child's ability to carry out syntactic raising: it is sure for John to => John is sure to. This construction forces the speaker to use a GPOV to answer the question. (20b) is a *sure-that* construction that elicits the (grammatical) subject's POV. The answer would be 'yes' for (20b), because Jacob thought that his mother put strawberry jelly in his sandwich.

(20) a. Is Jacob sure to have strawberry jelly in his peanut-butter sandwich? Answer: No.

b. Is Jacob sure that strawberry jelly is in his peanut-butter sandwich? Answer: Yes.

The third and fourth types of *sure*-questions were used in part of the experiment to study children's understanding of general POV in *sure*-constructions (without syntactic raising). Both (21a) and (21b) relate to the general truth of the utterance, and the target answers are both 'no'.

- (21) a. Is it sure for Jacob to have strawberry jelly is in his peanut-butter sandwich? Answer: No.
 - b. Is it sure that Jacob will have strawberry jelly is in his peanut-butter sandwich? Answer: No.

There were two rounds of experiments. The first round consisted of both kinds of stories. The participants in the firsts round were 10 children aged from 3;8 to 5;2.9 For these 10 children, each experiment session contained five expletive stories, three 'sure' stories and two control items. The participants were randomly assigned to two groups, and the only difference between the groups was the kind of *sure*-questions that were asked after each 'sure' story. Each child would receive three *sure* stories with two *sure-that* questions and one *sure-to* questions, or with one *sure-that* question and two *sure-to* questions. Since there were 10 children who participated in the experiment, we would be able to gather an equal amount of *sure-to* answers and *sure-that* answers.

For the second round, only "sure" stories were involved. A total 32 children ranging from 3;7 to 7;9 participated in this round. ^{10, 11} There were 12 such stories, and the stories were presented to children in the same order. Each story was accompanied with one of the four kinds of *sure*-questions. Altogether, each child would receive 3 *sure-to* questions like (20a), 3 *sure-that* questions like (20b), 3 general POV *sure* questions like (21a), and another 3 general POV *sure* questions like (21b).

4. Results

Children in our study did very well on expletive stories. Their answers, on average, were target-like for 80.4% of the time for all expletive stories. In four of the five stories, the target answers accounted for more than 80% of children's replies. There was one story in which two children failed to offer relevant answers to the question, but only two out of ten children gave non-target answers for that story. Overall, the error rate of children's answer was only 19.4%.

The participants not only produced target answers, but also did it consistently for most stories. Two children gave adult-like answers for all five questions. One of them was 4;4, and the other was 4;6. The other eight children missed only one question, and their age ranged from 3;8 to 5;2 (average age was 4;1). Some of the target answers were impressive, as a 4;6 girl added (22) after a target-like 'yes' answer for some stories.

(22) "(but) not for Johnny"

⁹ They were recruited from local daycare centers, and they were tested in their classrooms. At the time of testing, four children were younger than 4;0, five children were between 4;0 and 5;0, and one child was older than 5;0.

¹⁰ After the first round, we learned that the 'sure' experiment needed a larger sample size, as we would like to target a wider age range. Also, since the 'sure' stories in the second round had four different types of questions, we had to recruit more children to get more answers.

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11 15 of these children were between 3;2 and 4;11, 11 children were between 5;1 and 6;9, and 6 children were older than 7;0. Like in the first round, these children were recruited from local daycare centers/primary schools, and they were tested in their classrooms.

¹² Not offering relevant answers counts as missing a question in this case.

To make such a comment, the girl needed to fully understand the contrast between a general POV and one specific person's POV, and her own Speaker-POV. Note that for the few non-target answers, children typically replied:

(23) "no, I can do it."

applying their own view Speaker-POV to a GPOV construction, showing a subset of the kind of response which is often cited as evidence for egocentricity.

One of the stories was designed to test children's preference for a human bias in expletive constructions, and the result showed that children did apply the same bias as adults did. The story is illustrated in (24):

(24) Look. There is a tall tree. Johnny's sisters want to reach the top of the tree, but they are so little. But a giraffe is tall. So: Is it easy to reach the top of the tree?

The story is slightly anti-pragmatic, pushing the child toward a giraffe POV, but we got strong human GPOV responses. 80% of the children replied "no" (target-like) and 20% of the children stated "yes" (non-target). The two *yes*-children were 3;8 and 3;9, while children who gave target answers to this question ranged from 3;8 to 5;2 (with an average age of 4;3).

Children's responses to "sure" stories, on the other hand, were more diverse. In the first round of experiment, there were only three 'sure' stories, but we found that answers to *sure-to* questions (20a), which adopted a General POV, were target-like 63.6% of the time for the ten children between 3;8 to 5;2. Answers to *sure-that* questions (20b), on the other hand, were target-like 21.4% of the time. These results were preliminary as only a small number of *sure*-questions were asked, but it revealed some differences in children's responses to *sure-to* and *sure-that* constructions.

In the second round of experiments, more "sure" stories were presented, and we found that answers to *sure-to* questions (20a), on average, were target-like 69.8% of the time for all 32 children. Children between 3;7 and 4;4 gave 63.6% target answers to all *sure-to* questions, and children between 4;4 and 6;0 gave 61.9% target answers. However, children older than 6;0 reached 91.7% accuracy rate in giving target answers to *sure-to* questions. Children older than 6;0 performed a lot better than younger children in understanding the general POV in *sure-to* constructions.¹³

Answers to *sure-that* constructions (20b), which probed for the subject POV, were target-like 35% of the time for children under 6;0. 33.3% answers from children between 3;7 and 4;4 were target-like, and 36.7% answers from children between 4;4 and 6;0 were target-like. Three children answered all three *sure-that* questions correctly (aged 4;2, 4;4).

¹³ On the other hand, there does not seem to be a big difference between children aged 3;7-4;4 and children aged 4;4-6;0 in their reposes to the *sure-to* questions. But we think it may be due to the fact that we have a number of unclear answers in the later group. If we study the percentage of clear incorrect answers, it looks like younger children tend to make more mistakes. There were four children who made one mistake in all three questions, and they were aged 3;7, 3;11, 5;5 and 5;5. Three children made two mistakes in the three stories, and they were 4;2, 4;3 and 4;11. One child missed all three questions, and he was 4;4. In general, children made progress on the speaker POV in *sure-to* constructions as they grew older, but they might not fully acquire this construction until sometime after 6;0.

and 5;5, respectively). Two children made one mistake (aged 4;0 and 4;2), and six children made two mistakes for all three *sure-that* questions (aged 3;7, 3;11, 4;0, 4;3, 4;11, and 5;7, respectively). It looks like that children may have made some progress from 3;7 to 6;0, but overall, they did not provide as many accurate answers as they did for *sure-to* constructions.

An unexpected finding in the answers to *sure-that* constructions was that children older than 6;0 gave target-like answers only 13.3% of the time. It was not clear why older children did not perform well on this task, as they outperformed younger children in other questions we asked. One factor could be that all other *sure*-stories in the experiment were probing for a "no" answer, common in current literature which assumes a *yes*-bias, but a large number of no's might establish a *no*-bias. This might have biased the older children – they were generally adult-like for all other questions and replied 'no' almost all the time. ¹⁴

There is another possibility as well. This age is beyond the point where children make errors on "False Belief". Nonetheless they gave a "reality" answer which is consistent with GPOV. It may be that they misunderstand <u>sure</u> as factive (sure of the fact that) as in the factive <u>aware that there was a sandwich in his bag</u> which calls for a false presupposition accommodation.

For *sure*-stories that target for a GPOV, children on average gave target-like answers 74% of the time for (21a)-type questions, and 86% of the time for (21b)-type questions. Answers from children between 3;7 and 4;4 were target-like 63.8% of the time for (21a). GPOV in *sure*-constructions were consistent with the findings from expletive stories. Children developed a good understanding of the general POV at an earlier stage, and the use of GPOV was not only associated with the expletive construction.

5. Discussion

Children's responses in the two experiments showed that they did not blindly apply subjective meaning to every case, and they were able to interpret expletives with a GPOV from early on. They knew that expletives, without *for*-PPs, assumed truth in a Common Ground, and they further noticed that the Common Ground usually only consisted of humans. One strength of our approach is that it allows us to distinguish our GPOV from the customary reference to Speaker-POV or Speaker-factivity (see Guerzoni (2003), de Cuba (2006), Roeper (2011)). The 'why' questions we asked distinguished the two, as in (25):

(25) A house with a small window that is just large enough for a small boy, John, to crawl through, but no one else can.

Is it hard to crawl through the window?

For instance in (25), the "yes"-children almost never answered "yes, because I find it hard". Instead, they would say "yes, (but) not for Johnny". 15

¹⁵ Notice this is only true for the "yes"-children, which are children who answered the question like adults.

¹⁴ The older children were only exposed to the *sure*-stories.

On the whole, when we looked at the answers to the "sure"-stories, we found that a number of answers stated some facts they learned from the story, reverting to a GPOV or more narrow Speaker-POV:

(26) Is Johnny sure that he will win the race? Target answer: Yes.

Children's answers:

"he's too small, he's too small to win the race" (4;3)

"because I think he's too small and I think he doesn't have much energy" (4;6)

Still the high error rate in *sure-that* responses suggested that children might adopt a GPOV to interpret *sure-that* questions. It was likely that the syntax of these constructions stood as obstacles, and children assigned a non-target underlying structure to *sure-that* construction. The real question in (27a) might be transformed to (27b), which opened room for subjective interpretation or, as suggested above, that children mistook the meaning of <u>sure</u> in the raising construction as an indication that it was a factive adjective like <u>aware</u> which, challengingly, introduces an incorrect presupposition:

(27) a. Is John sure that he will win?

b. Is it sure that he_(John) will win?

Studies on false belief show that children often fail to link the complement clause to the subordinating matrix clause verb (de Villiers 1995, 2000, etc. at an early stage which serves as another kind of default (see Roeper and de Villiers (to appear)). On the other hand, *sure-to* constructions do not allow for such a structural reanalysis, but rather a raising-operation. Nevertheless, the experiment showed that children did perform better for *sure-to* questions.

(28) Johnny is sure to win.

One reason why children produced some non-target answers, particularly children under 6.0, for *sure-to* questions could be that they had overgeneralized the use of "sure" based on what they knew of "happy" where no raising is required:

(29) a. Johnny is sure to win.

b. Johnny is happy to win.

Studies on raising predicates report that children take time in learning different kinds of raising predicates (C.Chomsky 1969, Solan 1979, Becker 2005). 16

(ii) *It is pretty to look at the tiger.

¹⁶ Solan (1979) studied as well an interesting case of object-control for which there is no expletive that could be replaced. In (i) it is noteworthy that another kind of non-raising object control structure is needed because (i) does not correspond to (ii):

⁽i) The tiger is pretty to look at.

In sum, there is ample evidence from both naturalistic and experimental evidence that GPOV is available to children and a plausible default assumption.

6. Conclusion

The range of explanatory responses across all of these experiments reveals quite clearly every possibility: avoidance, egocentricity, subject reference, generic GPOV reference, and human or animal reference. A large majority of them from the earliest naturalistic data entail that a GPOV is present and moreover, easily attached to what is otherwise an inherently opaque syntax: expletive constructions with the ambiguous pronoun it.

The larger conclusions from this study are that the approaches which proceed from a view of "predicates of personal taste" as relative and subjective overlook what seems like a straightforward view given not only the behavior of children but the fact that there is no morphology or other indication that a complex variable involving a hidden "pro", a judge parameter, or that the complexities of context change the fact that children like others, render judgments of situations which they believe reflect a Common Ground and a General Point of View that they automatically share with other human beings. A personal perspective calls for explicit modification, as in a for-phrase, not the other way around, as if we had to be explicit in saying "God is great for everyone" and "God is great" has a default meaning of "just for me".

Children do, of course, face great challenges in assessing the numerous scalar references and their normative character in their environment. When a towering adult looks down to a small child and says "My you are a big boy", the 3yr old has to appreciate that he means "big for a little boy of 3yrs" as a GPOV statement that he and the adult can jointly grasp which supersedes the scalar nature of "big boy". That this is possible is shown by data gathered by Gu for a 3yr old who refers to his "big little truck". We should not confuse this challenge of grasping scalar implicatures with the numerous Assertions, automatically marked by expletives and Tense, which state what seem to be Common truths despite the fact that they are inherently relative to both humans and individuals.

Our account relies upon the syntax of GPOV structures as related to the Operator that controls all of deixis. The syntactic account linking GPOV to the CP and its c-command domain leaves much unexplained and unrepresented. The GPOV and the deictic reference require a more complex semantic statement of interaction such that a statement like <u>I am here</u> can be an Assertion which both reflects the Speaker by use of first person pronoun and the fact that the statement may be a transportable factual assertion in the Common Ground. And a philosophical dimension, perhaps to be captured in a pragmatic representation of reference is needed to account for the fact that the POV for each first

Children may go through a stage where they prefer an object-control analysis before raising is recognized, since it is common to hear (iii), although it is ungrammatical to say (iv):

- iii) Ice cream is delicious to eat.
- iv) *It is delicious to eat ice cream.

Thus the acquisition path that covers all the forms (eager/easy/pretty) should be carefully established. Even in the <u>pretty/delicious</u> cases the adult interpretation is that <u>delicious</u> is not confined to the speaker.

person pronoun cannot be completely identical in a statement like <u>I think I forgot how much money I have</u> because each <u>I entails</u> different perspectives.

Our goal has not only been to cast a different light upon the presuppositions behind Point of View, but to argue that acquisition data can provide insightful and strong arguments for a particular linguistic account.

Reference

- Anand, Pranav and Andrew Nevins. (2001). Shifty Operators in Changing Contexts. ms. MIT.
- Becker, Misha. (2005). Learning Verbs Without Arguments: The Case of Raising Verbs. *Journal of Psycholinguistic Research*, vol. 34:2 165-191.
- Chomsky, Carol. (1969). *The Acquisition of Syntax in Children from 5 to 10*. Cambridge, Mass.: M.I.T. Press.
- de Cuba, Carlos. (2006). The Adjunction Prohibition and Extraction from Non-Factive CPs. Proceedings of the 25th West Coast Conference on Formal Linguistics. Cascadilla Press.
- de Villiers, Jill. (1995). Steps in the mastery of sentence complements. Paper presented at the Biennial Meeting of the Society for Research in Child Development. Indianapolis, IN.
- de Villiers. Jill. (2000). Language and Theory of mind: what are the developmental relationships?. In S. Baron-Cohen, H. Tager-Flusberg and D. Cohen (eds.) *Understanding other Minds: Perspectives from Autism and Developmental Cognitive Neuroscience*. Cambridge: Cambridge University Press, 83-123.
- de Villiers, Jill and Peter de Villiers. (2000). Linguistic determinism and the understanding of false beliefs'. In P. Mitchell and K. Riggs (eds.) *Children's Reasoning and the Mind*. Hove, UK: Psychology Press, 189-226.
- Guerzoni, Elena. (2003). Why Even Ask? Unpublished doctoral dissertation, MIT.
- Harris, Jesse. (2009). Epithets and perspective shift: experimental evidence. In Biezma, María & Jesse A. Harris (eds.) *University of Massachusetts Occasional Papers in Linguistics: Papers in Pragmatics*. Volume 39. GLSA Publications, Amherst, MA.
- Hinzen, Wolfram. (2007). An essay on names and truth (Oxford Linguistics). Oxford: Oxford University Press, 2007.
- Klein, Wolfgang. (2006). On finiteness. In Veerle Van Geenhoeven (ed.) *Semantics meets acquisition*. Dordrecht: Kluwer Academic Publisher.
- Kratzer, Angelika. (1991). Modality. In A. von Stechow & D. Wunderlich (eds.), Semantik. Ein internationales Handbuch der zeitgenössischen Forschung (pp. 639–650). Berlin: de Gruyter.
- Lasersohn, Peter. (2005). Context dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy*, 28, 643–686.
- MacWhinney, Brian. (2000). *The CHILDES project: Tools for analyzing talk*. Third Edition. Mahwah, NJ: Lawrence Erlbaum Associates.
- Moltmann, Friederike. (To appear). Relative Truth and the First Person. *Philosophical Studies*.
- Potts, Christopher. (To appear). Conventional implicature and expressive content. In Claudia Maienborn, Klaus von Heusinger & Paul Portner (eds.) Semantics: *An International Handbook of Natural Language Meaning*. Berlin: Mouton de Gruyter
- Solan, Lawrence. (1979). The Acquisition of Tough Movement. In F. Eckman & A. Hastings (eds.) *Studies in First and Second Language Acquisition*. 83-97.
- Stephenson, Tamina. (2007). Judge Dependence, Epistemic Modals, and Predicates of Personal Taste. *Linguistics and Philosophy* 30:487-525.

- Roeper, Tom. (2011). How the Emergence of Propositions Separates Strict Interfaces from General Inference. In Reich, Ingo et al. (eds.) *Proceedings of Sinn & Bedeutung 15*, pp. 1–21. Universaar Saarland University Press: Saarbrücken, Germany.
- Speas, Peggy. 2004. Person (and mood and tense) and indexicality. Paper Presented at the Harvard Workshop on Indexicals, Speech Acts, and Logophors, Harvard University, Cambridge, Massachusetts.