

The linguistics of scalar humor

October 8, 2002
Benjamin Bergen
University of Hawai'i
Dept. of Linguistics
bergen@hawaii.edu

Collaborator

- Kim Binsted
UHM Information and Computer Science

Caveat

- Some of the natural language data reported on in this talk may offend the weak-stomached
- “He who dares not offend cannot be honest.”
– Thomas Paine
- “Never offend people with style when you can offend them with substance.”
– Sam Brown, Washington Post
- “Are you just going to stand up there and tell jokes again?”
– Amy Schafer

Outline

- Introduction to scalar humor
- The *X is so Y that Z* construction
- Scales
- Characteristics of scalar humor
- What makes it funny?
- Conclusions

Introduction to scalar humor

- The basic phenomenon – scalar humor
 - I was such an ugly kid that when I worked in a pet store, people kept asking how big I'd get.
 - I was such an ugly kid that my father carried around the picture of the kid who came with his wallet.
 - I was such an ugly kid that when I was born the doctor slapped my face.
- Some topic (like some person) is described in the first clause as having a lot of some property. This is then followed by a punchline.
- This is a very common sort of humor
- It's a staple of stand-up comedy
 - I just got back from New York and boy was it cold!
How cold was it?

- It was so cold that flashers in Central Park were just describing themselves.
- I was so poor growing up ... if I wasn't a boy ...I'd have nothing to play with.
 - Rodney Dangerfield

- It is the main form of “the Dozens”
 - Your breath smells so bad, people on the phone hang up.
 - Your brother is so ugly, when he sits in the sand the cat tries to bury him.
- There are over 100 web sites dedicated to Yo’ mama jokes.
 - Your mother is so old, her Social Security number is in Roman numerals.
 - Your mother is so fat, she broke her arm and gravy poured out.
- There are two fundamental questions here:
 - how are language users able to produce creative language behavior like this
 - why are these utterances funny - what characteristics of this behavior evoke laughter or other humor responses in interlocutors?
- There is nothing special about these utterances
 - they use an existing construction with inferences built-in
 - they rejecting those inferences through the use of imagery, metaphor and other general-purpose cognitive mechanisms.
- These components are also what make the utterances funny.

X is so Y that Z

- Formally, scalar humor makes use of set of related constructions with some variant of the form:

X is so Y that Z

- The same construction is used for non-humorous purposes
- Looking just at the non-humorous utterance, the first clause predicates Y of X and the second, Z, provides evidence or a depiction of X being very Y. For example:
 - It was so cold where I live, we found dogs huddling for warmth.
 - The film had an ending that was so shocking that it physically hurt you.
 - If He is omnipotent, then He can create a rock so big that He can't pick it up.
 - Subject: MAKE MONEY SO FAST THAT IT'S LIKE CHEATING. IT'S EASY, FAST & LEGAL
- This pragmatic relationship can be seen in a closely related construction: *X is such a Y that Z*

John is such a charmer that he convinced everyone that he's related to Charles Bronson.
- And we can see the same relationship with *X is Y. Z*

John is charming. He managed to convince everyone that he's related to Charles Bronson.

- In this last case, the implication is not encoded constructionally – there are a variety of ways to follow *X is Y*:
John is charming. Paul isn't.
John is charming. I know so because I've seen him in action.
- But with *X is so Y that Z*, these are effectively non-sequiturs, unless they can be interpreted as evidence that John is very charming.
John is so charming that Paul isn't.
John is so charming that I know so because I've seen him in action.
- So this pragmatic relationship is encoded in the *X is so Y that Z* construction.
- Notice parenthetically that there can be a structural ambiguity here:
We are so excited that you have found a position in our organization.
It's so pleasant that your howler monkey has decided to join us for lunch.
- We'll ignore this ambiguity in this talk and focus only on the cases that entail this pragmatic relationship

Scales

- The pragmatics of *X is so Y that Z* depends on scales.
- What are scales?
 - There's been lots of work on linguistic scales - a linguistic scale is a set of words, of the same grammatical category, which can be ordered by their semantic strength or degree of informativeness (Horn 1972, Levinson 1983)
 - {lukewarm, warm, hot}
 - {may, should, must}
 - {sometimes, often, always}
 - These linguistic scales have been used as explanations for scalar implicature, a type of quantity implicature
 - *The water was lukewarm* implies that *the water was not warm or hot.*
 - *I often go to the beach* implies that *I do not always go to the beach.*
- But the scales used by the *X is so Y that Z* construction are not like this
 - They are not restricted to particular grammatical categories
 - *It was so cold in the fridge that there was frost on the lettuce.*
 - The scales are dependent on the entity measured
 - *?It was so cold in the arctic circle that we found frost on the lettuce.*
 - They are mostly non-linguistic - they seem to be based on shared subjective interpretation
 - *?It was so cold in the Arctic circle that my dog's tail was cold.*
- The humorous utterances have pragmatic differences
 - In truth, X may not actually be particularly Y
 - Your mother is so fat, when she dances the band skips. [The mother might not be fat at all.]
 - Z may not literally depict X as very Y

- The reception to my talk was so cold that I saw students huddling together for warmth.
 - Z may depict X as more Y than possible
 - Your mother is so old, she was a waitress at the Last Supper.
 - Z may describe a scenario that is not literally possible
 - Your mother is so fat, she broke her arm and gravy poured out.
 - The result is not a new appreciation for how Y X is, but rather can be a (sometimes shared) humor experience
- In all cases, the implication is flouted for humor.
- Humorous utterances that use the form XYZ differ along the following dimensions:
 - the variant of the form that is selected (e.g. is it only two clauses or three?)
 - what the target of the joke is (i.e. who is being targeted as an object of commentary)
 - the way in which the presupposed relationship between the two clauses is rejected (e.g. exaggeration, understatement, etc.)

Characteristics of scalar humor

- Each variant of *X is so Y that Z* is also possible in non-humorous utterances. The variants include the following:
 - X is so Y that Z
 - *It was so cold, that the chickens were mugging the sheep to get wool for sweaters!*
 - -X is very Y
 - -How X is Y?
 - -X is so Y that Z
 - *It was really cold last winter ... (How cold was it?)...it was so cold, I saw a lawyer with his hands in his own pockets.*
 - X is very Y. Z.
 - *It rained heavy last night. Today I saw a man picking up a hooker in a kayak on Hollywood Blvd!*
- The target – the butt of the joke - can vary
 - X as target
 - *Yo' mama's so fat, her blood type is Ragu.*
 - Part of Z as target
 - *It was so cold, I saw a bunch of Eskimos using Hillary Clinton for heat.*
 - The entire scene as target
 - *It rained heavy last night. Today I saw a man picking up a hooker in a kayak on Hollywood Blvd!*
 - The speaker as target
 - *[Says the hick] Whoo-whee! They got some tall buildings in Atlanta, though. Some of them you could hardly count to one before your spit hit the ground!*
- In the humorous utterances, the presupposition from the first clause is rejected in the

second clause in one of the following ways:

- Hyperbole
 - Understatement
 - Indirect relation
- *Hyperbole*: the scene described by Z falls well beyond the normal scale of Y for X. The hearer expects Z to describe a scene falling within the normal range of Y values for X, and yet it does not.
 - *Yo mama's so fat, when she was diagnosed with a flesh eating disease, the doctor gave her 5 years to live.*
 - *Yo mama's so fat, she gets runs in her jeans.*
 - *Mendacious hyperbole*: the scene described by Z would fall well beyond the normal scale of Y for X even if some false supposition were true.
 - *Yo mama's so fat, a picture of her fell off the wall!*
 - *Yo mama's so fat, at the zoo, the elephants started throwing her peanuts.*
 - *Transferring hyperbole*: the scene described by Z would fall within the normal scale of Y for some other X that tends to be much more Y.
 - *Yo mama's so fat, her ass has its own congressman.*
 - *Yo mama's so fat, she's got smaller fat women orbiting around her.*
 - *Punning hyperbole*: the scene described by Z falls well beyond the normal scale of Y for X and also incorporates a play on words, which may be based on homonymy, polysemy, or some idiom.
 - *Yo mama's so fat, she went on a light diet... As soon as it's light she starts eating.*
 - *Yo momma's so fat she eats Wheat Thicks.*
 - *Yo mama's so fat, she ain't on a diet, she's on a triet... She be like "What ya'll eating? I'll try it!"*
 - *Yo mama's so fat, on Halloween she says "Trick or meatloaf!"*
 - *Understatement* (much less common): the scene described by Z falls far from the extreme end implied by the construction. Rather, Z describes a scene that demonstrates very little Y of X.
 - *It was so cold last week in Hawaii that I had to put on shoes.*
 - [Says the hick] *Whoo-whee! They got some tall buildings in Atlanta, though. Some of them you could hardly count to one before your spit hit the ground!*
 - *Indirect relation*: The scalar assumption is not directly flouted, but rather Z is indirectly related to Y. The indirect relation can be mediated by one or some set of: polysemy, idiomaticity, conceptual metaphor, or imagery.
 - *Polysemy*: some word or words of Y may have multiple related meanings, one of which is not intended by XY and which is part of the scene described in Z.
 - *It was so cold out that rap stars were actually chilling out.*
 - *Yo momma's so dumb, they had to burn down the school to get her out of*

second grade.

- *It was so cold, I saw a lawyer with his hands in his own pockets.*
- *Indirect relation*
 - *Idiom*: Some particular idiom may be suggested by Y, and in Z is interpreted non-idiomatically (literally) or according to polysemy of some linguistic elements of the idiom.
 - *Yo momma's so fat, she can't even jump to a conclusion.*
 - *Yo momma so fat she's on both sides of the family!*
 - *Yo mama's so fat, when she hauls ass, she has to make two trips.*
 - *Conceptual metaphor*: Z depicts a scene that is metaphorically very Y.
 - *It was so cold, I saw a bunch of Eskimos using Hillary Clinton for heat.*
 - *Imagery*: Here, the relation between Y and Z is purely imagistic – the image described in Z is compatible with Y, but in Z it is cast as playing part in a different type of scene.
 - *It was cold last night! I was so cold I was rubbing my hands faster than Dick Cheney on an Enron payday.*
- To summarize so far
 - These humorous utterances are all based on a non-humorous construction, *X is so Y that Z*
 - In the humorous utterances, the scalar inference set up by the first clause of the construction is rejected
 - By describing X as falling well beyond the appropriate scale of Y
 - Using specious reasoning
 - By using a scale of Y appropriate to an X that is more Y
 - Applying knowledge of homophony or polysemy
 - By describing X as falling well below the high end of the scale of Y
 - Through a Z that describes X as very Y, but only through some indirect conceptual relation
 - Polysemy
 - Idiom
 - Conceptual metaphor
 - Imagery
 - All of these components pre-exist in the individual's cognitive system – scalar humor can be constructed from used parts.

What makes it funny?

- There is a consensus among humor researchers that humor evokes an incongruity of the components of the humorous utterance (and its context) that is then resolved
 - Relief theories (e.g. Kant 1790, Spencer 1860) – there is some threatened harm that is then revealed to be inconsequential
 - Conflict theories (e.g. Menon 1931) – two conflicting impulses are evoked
 - the impulse to proceed and the impulse to draw back
 - friendliness and hostility
 - play and seriousness

- Incongruity theories (e.g. Schopenhauer 1819) – “two or more inconsistent, unsuitable, or incongruous parts or circumstances [are] united in one complex object.”
 - the ideas are related through common elements
 - one thing is perceived in two different ways using different frames of reference
 - the incongruity is made congruous
- Scalar humor using *X is so Y that Z* is a clear example of this
 - There is an incongruity between the expected character of Z and its actual character
 - Eskimos wouldn’t really use Hillary Clinton for heat.
 - No-one actually gets runs in their jeans.
 - What does Dick Cheney have to do with how cold it was?
 - This incongruity is resolved through the various mechanisms described above.

Conclusions

- Why on earth would linguists want to study humor?
- Tells us about pragmatics
 - Scales
 - Constructional pragmatics
- Tells us about cognitive mechanisms
 - Metaphor
 - Polysemy
 - Imagery
- A type of “external” evidence on structural properties
 - Punning behavior can provide evidence for phonological representations
 - Existence of ambiguity can illuminate syntactic representations
- Tells us about processing
 - Sentence processing – what is activated when?
 - Ambiguity resolution
- Allows us to consider these issues in the context of truly creative language use.
- Linguistic creativity has been central to linguistics since Chomsky (e.g. 1965), who identified creativity as a central component of linguistic competence
 - *Grammatical creativity*: the ability to put together existing structures in new ways, such that the product is grammatical utterances (i.e. grammatical competence).
 - Magnanimous purple theories gallop tepidly.
 - *Selectional creativity*: the selection of an existing structure to be used in a new context (Di Pietro 1976)
 - Who left the refrigerator open?
 - I am not a crook.
 - *Full creativity*: a combination of the two - the ability to produce and interpret an entirely novel utterance such that it is appropriate (Cairns and Cairns 1976), like scalar humor.
- The full creativity of scalar humor makes use of constructional pragmatics, along with

other domain-general mechanisms

- These same mechanisms are responsible for creating the humorous effect of scalar humor utterances, by evoking an incoherence and allowing it to be resolved.
- Moreover, it unites structural, cognitive, and social aspects of language.

- So why wouldn't linguists study humor?
 - Come on, we're scientists (a.k.a. *physics envy*)
 - Come on, it's too hard

- Morals
 - Generative creativity is only part of the human capacity for creative language use.
 - Interestingly, selective creativity seems to be the product of constrained and structured principles that make use of general purpose cognitive mechanisms.
 - This illustrates the importance of the *embodiment* of the human language system – only when embedded in a larger cognitive and physical context are predominantly linguistic capacities able to function.