Combinatorial Capacity of English Negation in Child Language

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Abstract

Negation is very important for langauge and thought. How does it develop in the language of children? There has been many guessses like rejection, non-existence, denail, etc. but it has been hard to assess because these concepts are vagule. Here we assess the combinatorial capacity of early negation in children's productions, and use words negation combines with as a proxy for early concepts expressed by it. We show some important stuff.

Keywords: Add your choice of indexing terms or keywords; kindly use a semi-colon; between each term.

Introduction

Negation is an abstract concept found in all human languages and crucial to everyday communication. It can help a coffee shop divide its menu into "coffee" and "not coffee" sections, with the "not coffee" section bringing together diverse items that otherwise cannot be labeled. It can help us regulate others' actions in a sign like "no mask, no entry". It also helps us communicate our feelings and desires; what we do not want or dislike. But how does this crucial abstract concept emerge in humans? Does language play a role in its emergence or does language simply adopt it for communication?

There has been several influential hypotheses on the conceptual origin of negation.

Emotional: rejection (I not like it, not want it)

Perceptual: non-existence (no juice, no more milk, no fish in the bathroom, I do not have underpants), failure, Locatives (no in there, daddy was not on the phone), non-events (the dog not barking)

Motor control: prohibition (do not spill milk), inability (I cannot zip it) 4. Linguistic: labeling and word learning (this is not a bunny, not red, this isn't a reptile)

Epistemic: know, think, etc. (I not know)

Things that stay outside: why not, not now/today/again (temporal), the dog not barking (verbs and actions)

In this paper, we address the same topic in a slightly different way. We start with the widely accepted assumption that negation is a higher order operator, affecting the meaning of lower level concepts. The question we ask is: what type of concepts does linguistic negation operate on in early child language? Do we find negation starting in a limited conceptual domain and then expanding to others? Or do we find it operating across different conceptual domains as early as we can attest it?

Caveat on production vs comprehension.

Study

First level headings should be in 12 point , initial caps, bold and centered. Leave one line space above the heading and 1/4˜line space below the heading.

Method

Second level headings should be 11 point , initial caps, bold, and flush left. Leave one line space above the heading and 1/4˜ line space below the heading.

Third-Level Headings   Third-level headings should be 10 point , initial caps, bold, and flush left. Leave one line space above the heading, but no space after the heading.

Discussion

Use standard APA citation format. Citations within the text should include the author's last name and year. If the authors' names are included in the sentence, place only the year in parentheses, as in (1972), but otherwise place the entire reference in parentheses with the authors and year separated by a comma (Newell & Simon, 1972). List multiple references alphabetically and separate them by semicolons (Chalnick & Billman, 1988; Newell & Simon, 1972). Use the et. al. construction only after listing all the authors to a publication in an earlier reference and for citations with four or more authors.

For more information on citations in RMarkdown, see **here.**

Footnotes

Indicate footnotes with a number[1] in the text. Place the footnotes in 9 point type at the bottom of the page on which they appear. Precede the footnote with a horizontal rule.[2] You can also use markdown formatting to include footnotes using this syntax.[3]

Figures

All artwork must be very dark for purposes of reproduction and should not be hand drawn. Number figures sequentially, placing the figure number and caption, in 10 point, after the figure with one line space above the caption and one line space below it. If necessary, leave extra white space at the

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[1]Sample of the first footnote.
[2]Sample of the second footnote.
[3]Sample of a markdown footnote.

bottom of the page to avoid splitting the figure and figure caption. You may float figures to the top or bottom of a column, or set wide figures across both columns.

Two-column images

You can read local images using png package for example and plot it like a regular plot using grid.raster from the grid package. With this method you have full control of the size of your image. **Note: Image must be in .png file format for the readPNG function to work.**

You might want to display a wide figure across both columns. To do this, you change the `fig.env` chunk option to `figure*`. To align the image in the center of the page, set `fig.align` option to `center`. To format the width of your caption text, you set the `num.cols.cap` option to `2`.

One-column images

Single column is the default option, but if you want set it explicitly, set `fig.env` to `figure`. Notice that the `num.cols` option for the caption width is set to `1`.
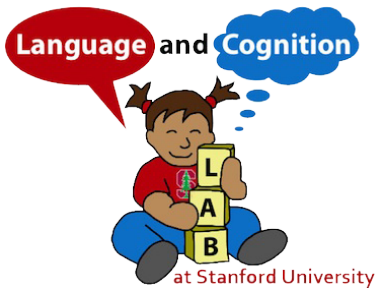

Figure 2: One column image.

R Plots

You can use R chunks directly to plot graphs. And you can use latex floats in the fig.pos chunk option to have more control over the location of your plot on the page. For more information on latex placement specifiers see **here**
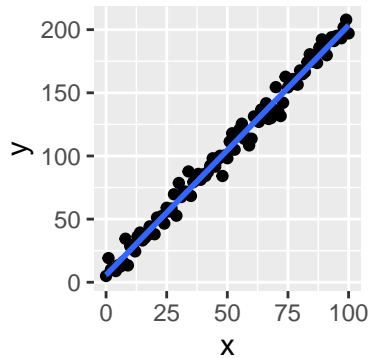

Figure 3: R plot

Tables

Number tables consecutively; place the table number and title (in 10 point) above the table with one line space above the caption and one line space below it, as in Table 1. You may float tables to the top or bottom of a column, set wide tables across both columns.

You can use the xtable function in the xtable package.

	Estimate	Std. Error	t value	Pr($>$|t|)
(Intercept)	0.01	0.12	0.0	0.97
x	1.94	0.12	16.8	0.00

Table 1: This table prints across one column.

Acknowledgements

References

Chalnick, A., & Billman, D. (1988). Unsupervised learning of correlational structure. In *Proceedings of the tenth annual conference of the cognitive science society* (pp. 510–516). Hillsdale, NJ: Lawrence Erlbaum Associates.

Newell, A., & Simon, H. A. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice-Hall.

Figure 1: This image spans both columns. And the caption text is limited to 0.8 of the width of the document.