Lecture 12: CGGs and idioms, the copy language, and parsing

(Lecture 11 was replaced by the CIS 20th anniversary)

Reminder: 2nd assignment due Friday noon on CMS.

1. CGGs are used some amount in practice—on additional reason to know about them.

2. Idioms: non-compositional meaning: limited or no modifiability (x)
   
   (a) "he kicked the bucket". (b) "he kicked the proverbial bucket"

   In TAG, can accomplish with one elementary tree with entire lexical "expansion
   
   [or p] associated with [j y. die(y)]

   (c) "can you drown? Use this space:"

3. Some CGG ideas, from Baggioin and Guenin 2018: besides the non-idiomatic reading,

   (a) "kick the bucket" has type S/NP, \( \lambda x. y. \text{die}(y) \)

   (b) "kick" has type (S/NP)/NP
       \( \lambda x. y. \text{die}(y) \)

   (c) "kick" has type (S/NP)/"the bucket"
       \( \lambda x. y. \text{die}(y) \)

   Note: I don't know how influential this proposal is or will be.

   (x) From Baggioin and Guenin 2018:
   
   "The diversity of approaches in [a book on analysis of idioms] is testimony to the practice that the idioms are decisive factors in polishing our theories linguistically, psychologically, and computationally."
4. The copy language (from Eigner)

\[ \begin{align*}
    a & b & b & c & a & b & b & c \\
    A & B & B & G & s & A/s & s & B/s & s & B/s & s & S \\
    s & 1/4 & s
\end{align*} \]

5. Parsing states: \([X,i,j]\) means category \(X\) covers \(w_i \ldots w_j\)

Combination: \([X/Y,i,j] \cap [Y/P,j+1,k]\) means \([X/P,i,k]\)

other stuff

How many possible states?