Other succinct data structures

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- "cardinal" k-ary tries ($k = |\Sigma|$)
  - lower bound: $(\lg e + \lg k)n$ bits
  - upper bounds: $(2 + \lceil \lg k \rceil)n$ bits (& maybe without ceilings)
  - Benoit, Demaine, Munro, Raman [WADS 1999]: find child labeled i in $O(\lg \lg k)$ time
  - Raman & Rao [ISAAC 1999]: $O(\lg \lg \lg k)$

- suffix tree equivalents
  - many papers by Grossi, Vitter, Ferragina, Sadakane, [e.g.: SODA 2003] etc.

  OPEN: can you use $O(n)$ bits of space and get $O(|P|)$ query time?

  query: find ≥ 1 match of P in T.

- dynamic versions [Munro, Raman, Storm – SODA 2001]
  [Raman, Raman, Rao – WADS 2001]