## Einführung in die Computerlinguistik Word Shapes

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## How big is the term vocabulary?

- That is, how many types (distinct words) are there?
- Can we assume there is an upper bound?
- Not really: At least $70^{20} \approx 10^{37}$ different words of length 20 .
- The vocabulary will keep growing with collection size.


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- "Yahoo!" -> "Xxxxx!" -> "Xx!"


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- Xx - $-\mathrm{Xx}-\mathrm{x}-\mathrm{Xx} \mathrm{x}-\mathrm{x}-\mathrm{Xx}$ / Sainte-Euphemie-sur-Riviere-du-Sud


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- $X x-X x-x-X x-x-X x /$ Sainte-Euphemie-sur-Riviere-du-Sud
- x'Xx / o'Hara


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POW/MIA $\rightarrow \quad$ Composer-in-residence $\rightarrow$
d'Abruzzo $\rightarrow \quad$ Aminoacylase-3 $\rightarrow$
http://www.icssrnerc.org $\rightarrow$

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## Exercise

- Provide a (theoretically possible) word shape that does not occur in Wikipedia
- The shortest such word shape wins.
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