### Novel Word Sense Detection

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Week 8, Lecture 5

# Tracking Sense Changes

### Classical sense

### sick | adjective \'sik\

: affected with a disease or illness

: of or relating to people who are ill

: very annoyed or bored by something because you have had too much of it

<sup>1</sup> http://www.merriam-webster.com/

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#### Novel sense



Niall Horan @NiallOfficial · Apr 24

Listening to Paulo nutini 's new record! It's sick!

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11:50 PM - 24 Apr 2014 · Details

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### Comparing sense clusters

 If a word undergoes sense change, this can be detected by comparing the sense clusters obtained from two different time periods

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reporter/NN, auditor/NN, listener/NN, scribe/NN, translator/NN, writer/NN, reader/NN, editor/NN, author/NN, orator/NN, commentator/NN, composer/NN, biographer/NN, novelist/NN, ...

#### compiler/NN

scientist/NN, compositor/NN, philosopher/NN, publisher/NN, preacher/NN, transcriber/NN, thinker/NN, teller/NN, statesman/NN, musician/NN, jurist/NN, essayist/NN, interpreter/NN, observer/NN, auditor/NN, experimenter/NN, artist/NN, dramatist/NN, ...

1909-1953

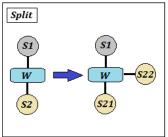
translator/NN, editor/NN, listener/NN, reader/NN, commentator/NN, author/NN, observer/NN, interpreter/NN, writer/NN, scribe/NN, redactor/NN, viewer/NN, ...

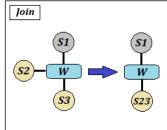


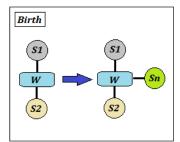
preprocessor/NN, driver/NN, handler/NN, hardware/NN, software/NN, loader/NN, kernel/NN, dbms/NN, linker/NN, assembler/NN, scheduler/NN, debugger/NN, browsers/NNS, processors/NNS, parser/NN, subsystem/NN

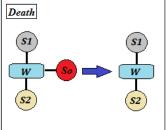
2002-2005

# Split, join, birth and death









## A real example of birth

