Prime Time for Minimal–Interval Semantics

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A Crash Course in Minimal–Interval Semantics

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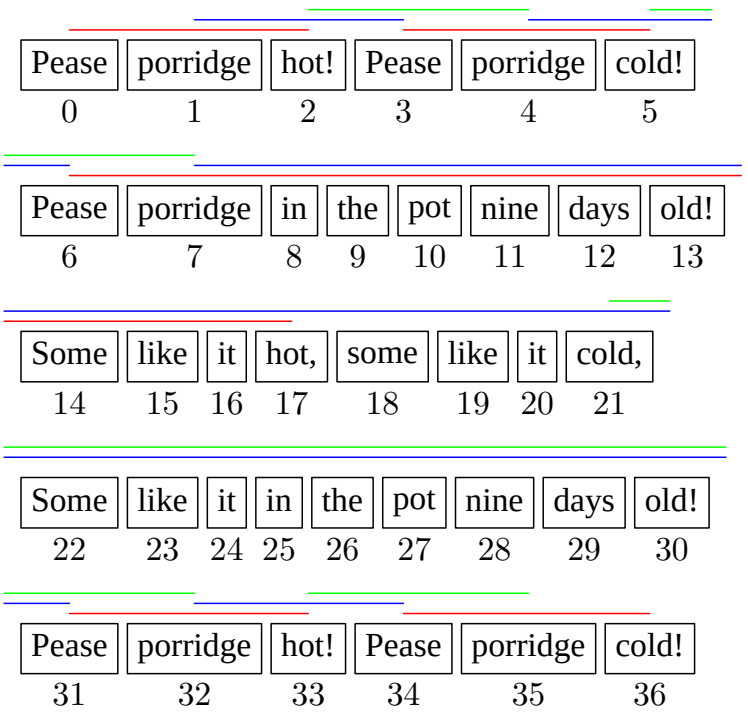
- Very natural: AND of terms has as semantics the smallest regions of text containing the terms
- Introduced by Clarke, Cormack and Burkowski in '95.

Why Minimal–Interval Semantics?



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- Looks complicated? It's actually very natural!

How to compute it?

Pease	porridge	hot!	Pease	porridge	cold!	Pease	porridge	in	the	pot	nine	days	old!	Some	like	it	hot,	some	like	it	cold,
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

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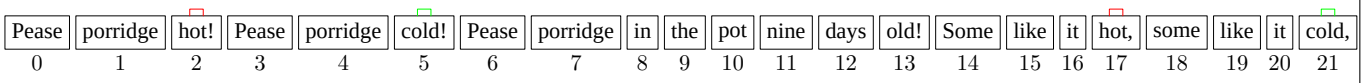

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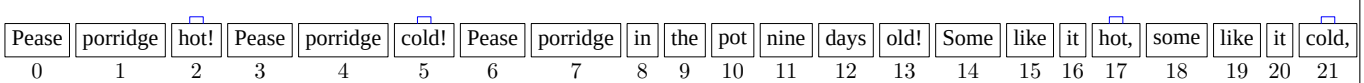

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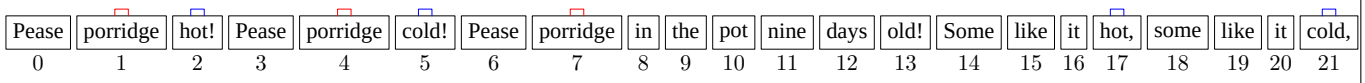

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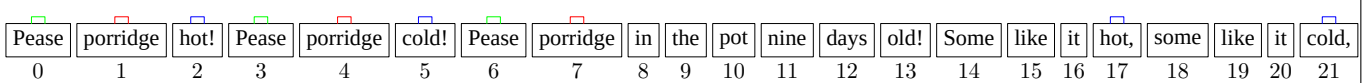

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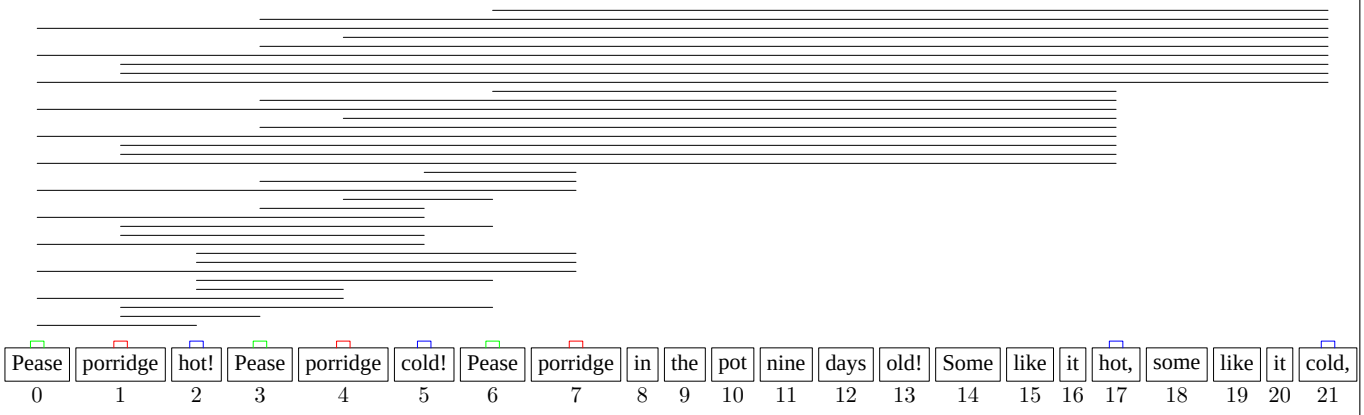

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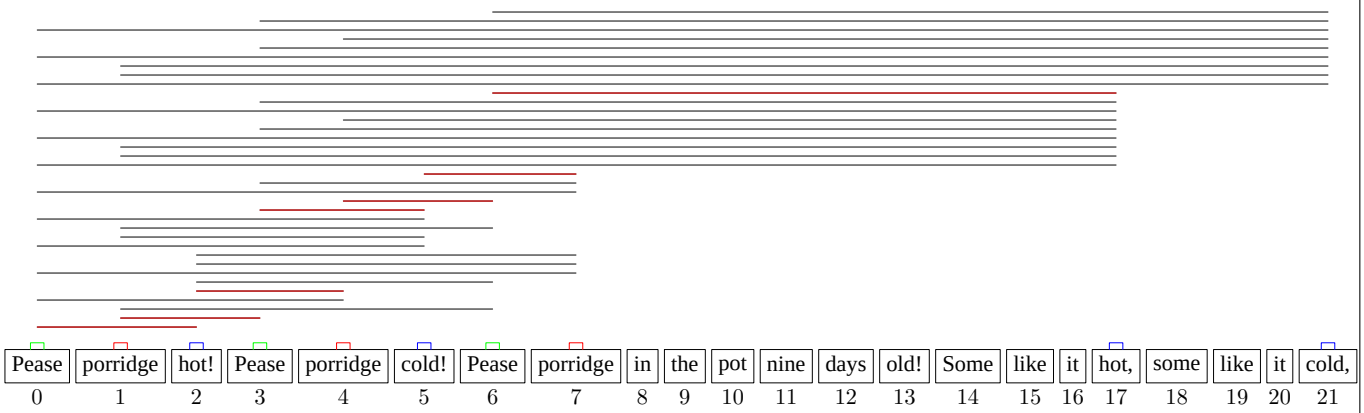

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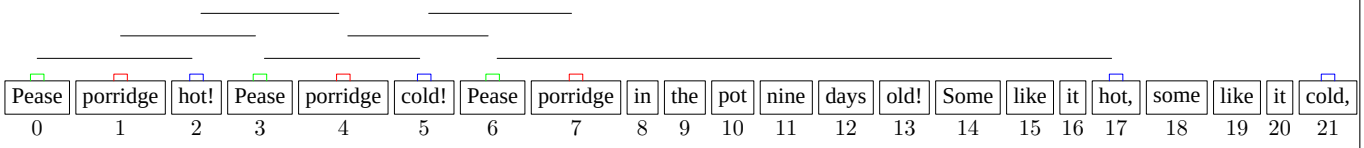

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- We believe it scales linearly to the web

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- Ordered conjunction can be used when you don't know all the words of a verse of a song
- Ordered conjunction can be also used to implement phrasal searches with wildcards (also very natural)

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- Albeit unremarkable in precision/recall, MG4J was by far the largest contributor of unique relevant documents to TREC 2005: searching with powerful operators pays