

Content Coverage of PNAS in 1995 and 2001

Ketan Mane & Katy Börner
SLIS, Indiana University

Content Coverage of PNAS in 1995 and 2001

➤ Statistics for the two time slices *

Features	1995	2001
Number of documents	2505	2708
Number of unique keywords	14408	15269
Max. number of times cited	1447	155

* Used author and publisher assigned keywords and controlled vocabulary Mesh terms from Medline

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➤ Data set used:

I) To determine semantically similar documents:

➤ Document keywords for corresponding year were selected:

Criteria for selection:

➤ 500 most cited documents were selected

➤ 1995: documents cited ≥ 90

➤ 2001: documents cited ≥ 10

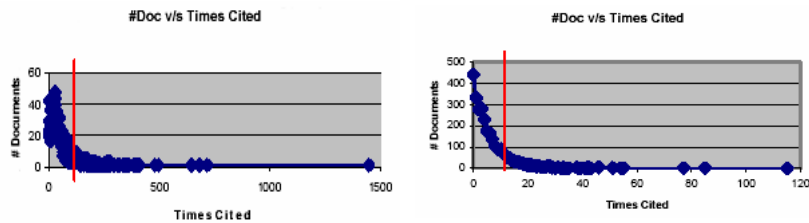


Figure: Number of citations received in 1995 (left) and 2001 (right)

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➤ Data set used:

II) For Co-word analysis:

➤ Keywords list = Unique keyword [Keywords + Publication title words – Stop words]

Year	#Unique Keywords
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1995	4194
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2001	5462
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➤ Keywords with frequency ≤ 10 are eliminated

➤ Final year wise keyword count for analysis:

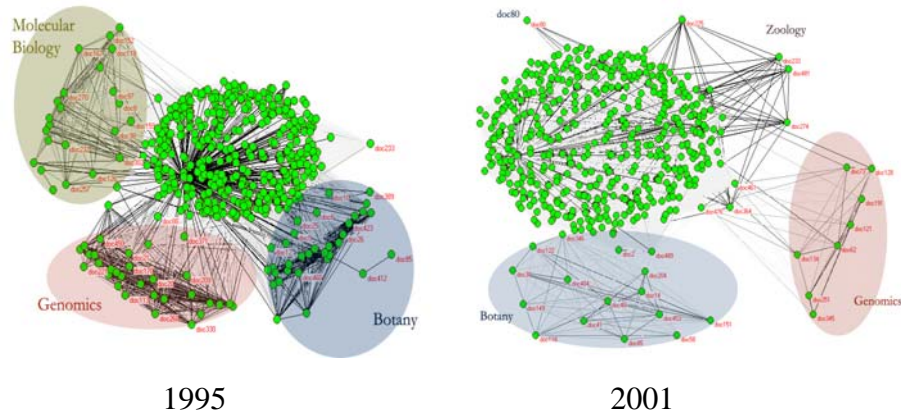
Year	#Unique Keywords
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1995	110
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2001	113
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Content Coverage of PNAS in 1995 and 2001

- Data Visualization: Implemented in “Pajek”
 - Semantic Document Space: show “Research domains”
 - Used Kamada Kawai algorithm to layout documents in a 2D space



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- Data Visualization:
 - Co-(Key)Word Space: show “Hot-topics” in the years
 - Visualized using Fruchterman-Reingold 2D algorithm

