

# Mapping Richard M. Shiffrin's Career

*by Katy Börner, CNS.IU.EDU*

## Time and Space:

1968 Ph.D. in Mathematical Psychology, Stanford University

1968 joins Faculty of the Department of Psychology and Brain Sciences, IUB

1997 Honorary doctorate from the University of Amsterdam

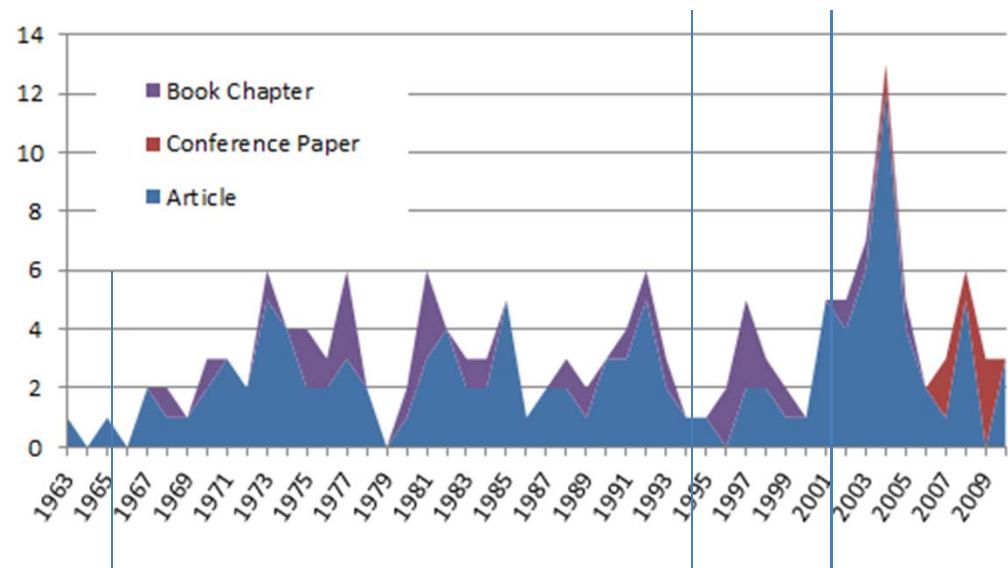
2004 Distinguished Scientific Contribution Award, American Psychological Association

## Topical Focus:

Modeling of human cognition in areas ranging from perception to attention to learning. Best known for explicit models of human memory.

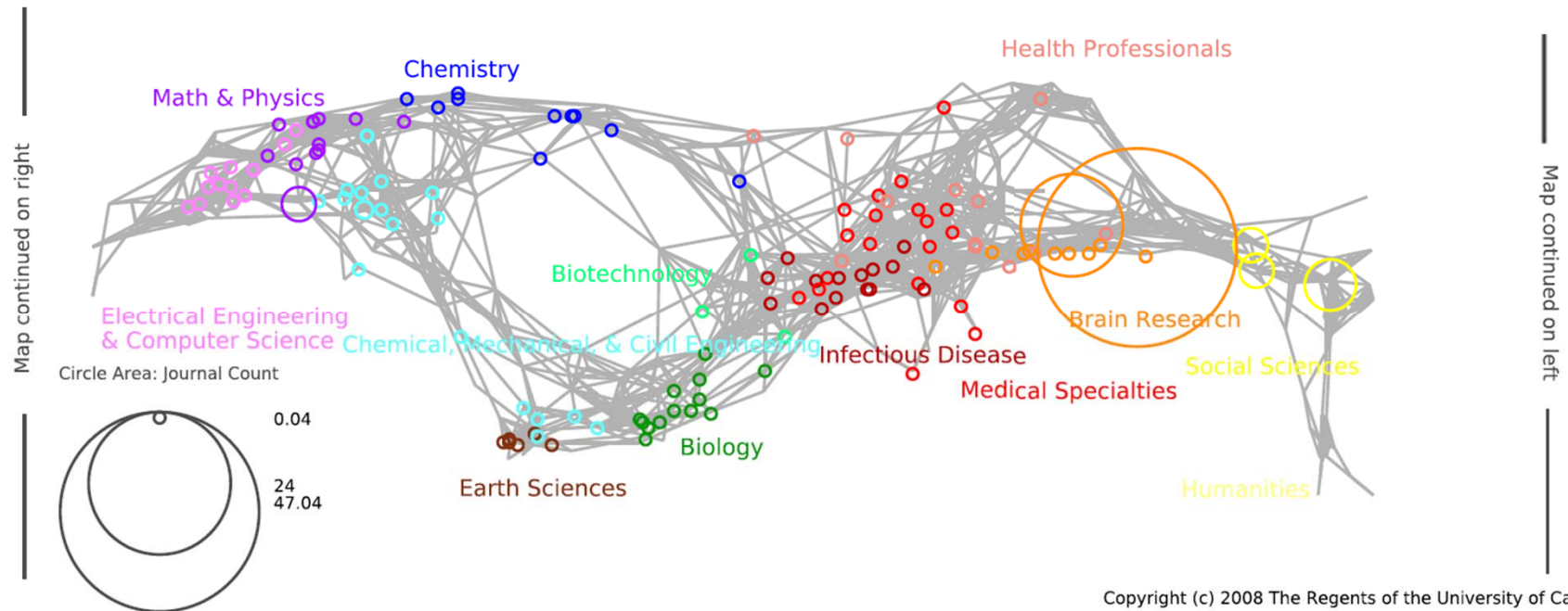
## Dataset:

154 publications downloaded from ISI Web of Science plus Book chapters added by hand from resume (117 journal articles, 30 book chapters and 7 conference papers) for the years 1963-2010.



# Topical Distribution of Papers on UCSD Map of Science

74 of 154 publications can be science located—fractionally assigned to 554 subdisciplines.



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## Brain Research

- 1 American Journal Of Psychology
- 1 Behavior Research Methods
- 2 Behavioral And Brain Sciences
- 1 Cognition
- 3 Cognitive Psychology
- 2 Cognitive Science
- 1 Journal Of Experimental Psychology: General
- 3 Journal Of Experimental Psychology: Human Perception And Performance
- 19 Journal Of Experimental Psychology: Learning Memory And Cognition
- 5 Journal Of Mathematical Psychology
- 3 Journal Of Vision
- 1 Perception
- 1 Psychological Research

## 11 Psychological Review

- 1 Quarterly Journal Of Experimental Psychology Section A: Human Experimental ...
- 1 Spatial Vision
- 1 Vision Research



## Math & Physics

- 1 Scientific American



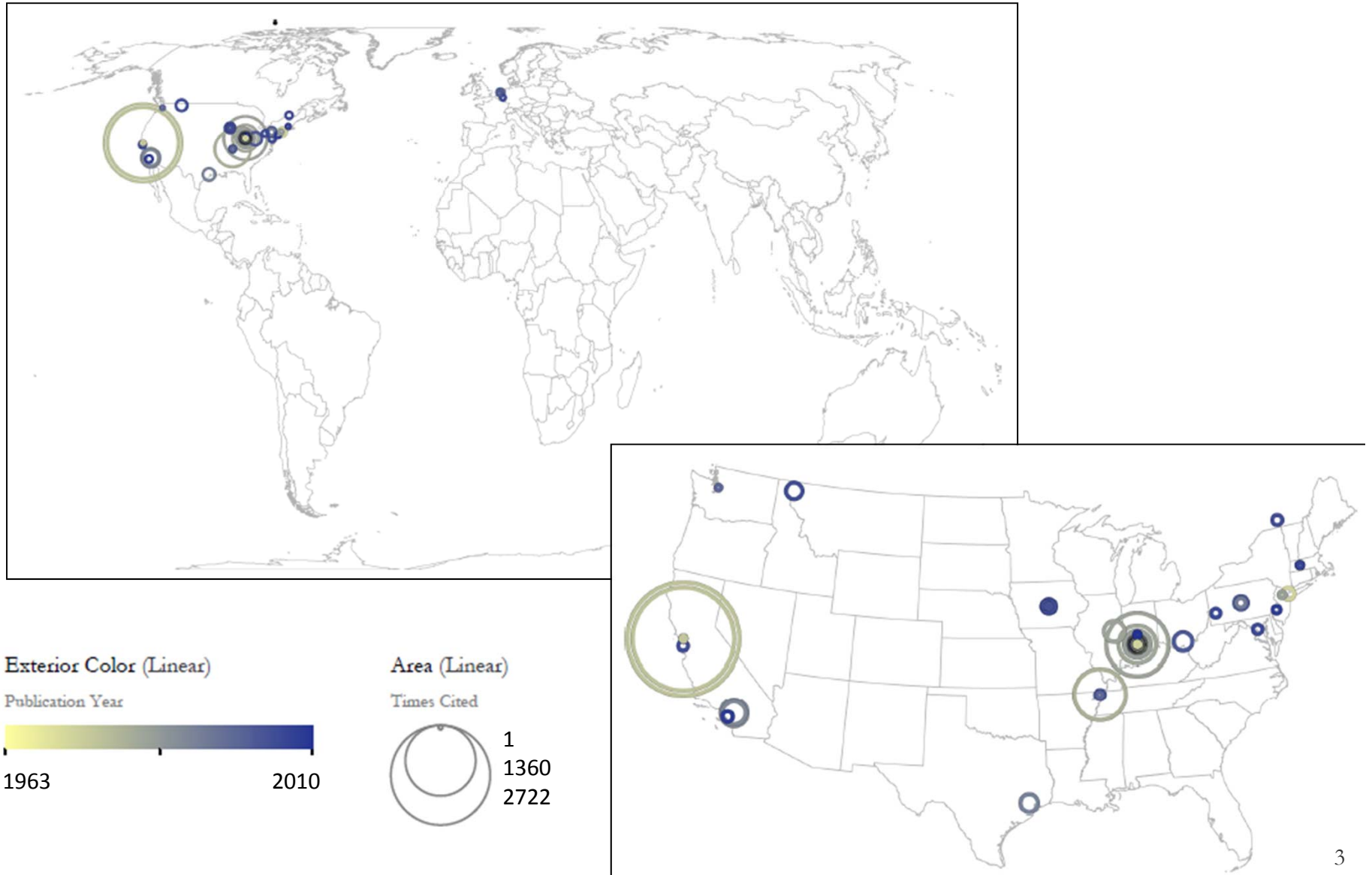
## Social Sciences

- 1 Annual Review Of Psychology
- 3 International Journal Of Psychology
- 1 Journal Of Personality And Social Psychology

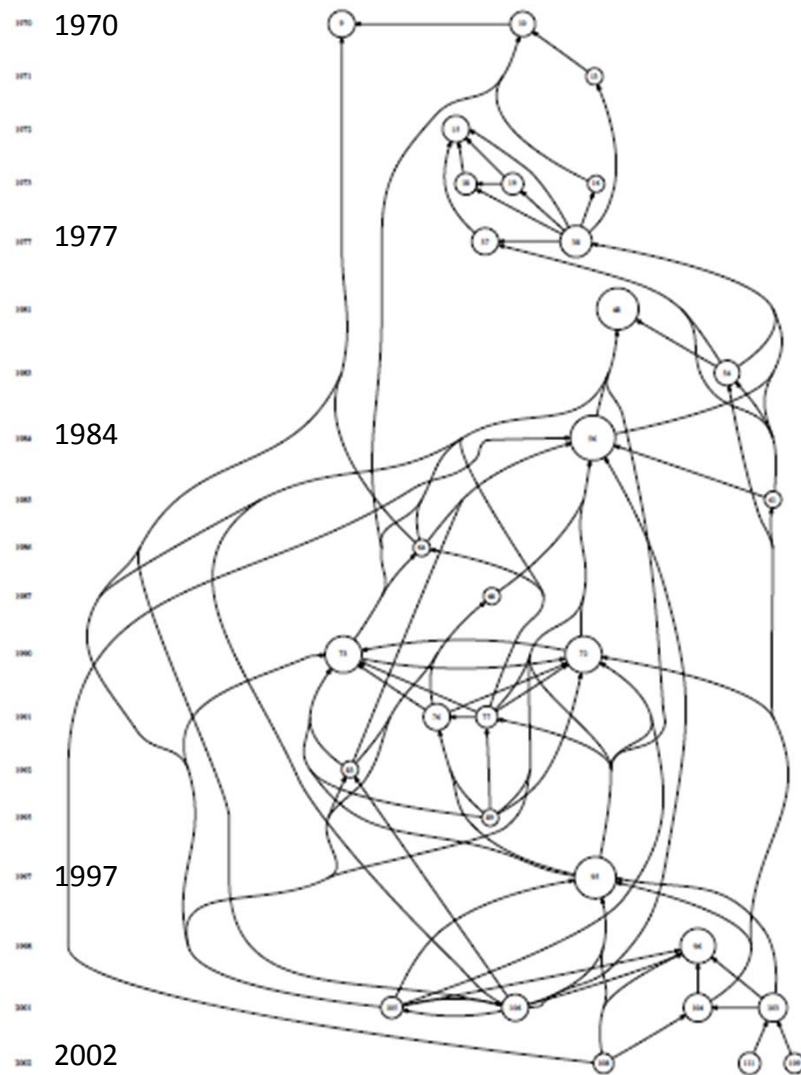
## Multiple Categories

- 3 Journal Of The Acoustical Society Of America
- 2 Proceedings Of The National Academy Of Sciences Of The United States Of Ame...
- 4 Science

# Paper First Author Affiliations (World and zoom into U.S.)



# Paper-Citation Network (Historiograph)



Only 30 papers that are cited more than two times within the set of 154 papers are included.

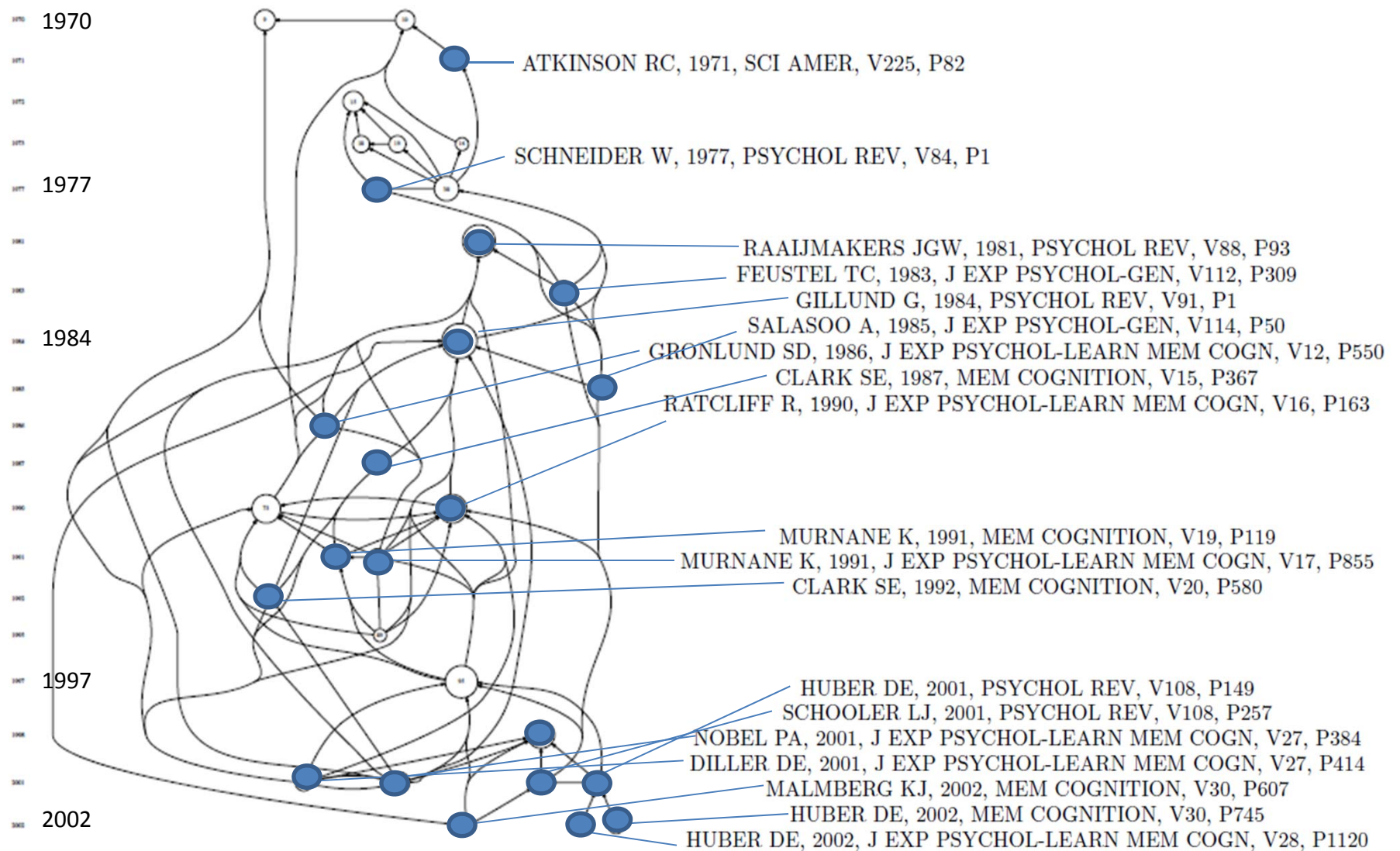
Early and recent papers have a hard time to acquire 3+ citations within the set.

All papers that have a first author other than Shiffrin are labeled.

Circle size represents #citations.

Early papers highlight the “base knowledge” Shiffrin is drawing from. Later papers show Shiffrin’s impact on the next generation.

# Paper-Citation Network (Historiograph)





# Paper-Citation Network (Historiograph)

ID	Citation	LCS	GCS
9	SHIFFRIN RM, 1970, MODELS OF MEMORY, P375	7	
10	SHIFFRIN RM, 1970, SCIENCE, V168, P1601	6	45
13	ATKINSON RC, 1971, SCI AMER, V225, P82	3	336
15	SHIFFRIN RM, 1972, J EXP PSYCHOL, V93, P72	7	166
16	SHIFFRIN RM, 1973, J EXP PSYCHOL, V100, P39	3	46
18	SHIFFRIN RM, 1973, PERCEPT PSYCHOPHYS, V13, P328	5	35
19	SHIFFRIN RM, 1973, PERCEPT PSYCHOPHYS, V14, P231	5	24
37	SCHNEIDER W, 1977, PSYCHOL REV, V84, P1	7	2232
38	SHIFFRIN RM, 1977, PSYCHOL REV, V84, P127	10	2722
48	RAAIJMAKERS JGW, 1981, PSYCHOL REV, V88, P93	18	566
54	FEUSTEL TC, 1983, J EXP PSYCHOL-GEN, V112, P309	6	294
56	GILLUND G, 1984, PSYCHOL REV, V91, P1	20	834
61	SALASOO A, 1985, J EXP PSYCHOL-GEN, V114, P50	3	147
64	GRONLUND SD, 1986, J EXP PSYCHOL-LEARN MEM COGN, V12, P550	3	40
66	CLARK SE, 1987, MEM COGNITION, V15, P367	3	23
72	RATCLIFF R, 1990, J EXP PSYCHOL-LEARN MEM COGN, V16, P163	14	150
73	SHIFFRIN RM, 1990, J EXP PSYCHOL-LEARN MEM COGN, V16, P179	14	106
76	MURNANE K, 1991, MEM COGNITION, V19, P119	7	35
77	MURNANE K, 1991, J EXP PSYCHOL-LEARN MEM COGN, V17, P855	5	52
83	CLARK SE, 1992, MEM COGNITION, V20, P580	3	39
89	SHIFFRIN RM, 1995, J EXP PSYCHOL-LEARN MEM COGN, V21, P267	3	88
95	Shiffrin RM, 1997, PSYCHONOMIC BULL REV, V4, P145	17	284
96	SHIFFRIN RM, 1998, RATIONAL MODELS OF COGNITION, P73	12	
103	HUBER DE, 2001, PSYCHOL REV, V108, P149	8	39
104	SCHOOLER LJ, 2001, PSYCHOL REV, V108, P257	8	32
105	NOBEL PA, 2001, J EXP PSYCHOL-LEARN MEM COGN, V27, P384	5	39
106	DILLER DE, 2001, J EXP PSYCHOL-LEARN MEM COGN, V27, P414	7	29
108	MALMBERG KJ, 2002, MEM COGNITION, V30, P607	4	32
109	HUBER DE, 2002, MEM COGNITION, V30, P745	4	18
111	HUBER DE, 2002, J EXP PSYCHOL-LEARN MEM COGN, V28, P1120	5	17

**LCS**

Local Citation  
Score – cites  
within  
dataset

**GCS**

Global  
Citation  
Score – all  
cites in Web  
of Science

Records with  
missing GCS  
are not in  
WoS.

# Evolving Collaboration Network

Shown here are two bimodal networks:  
(1) all 89 unique authors on his papers  
(in orange) connected to each of the  
publication years (in blue) and (2) the  
same authors (in orange) interlinked with  
66 publication venues (in green).

Data was downloaded from the ISI Web  
of Science and book chapters were  
added by hand. Basic author unification  
was performed to ensure there is exactly  
one author node for Shiffrin R M,  
Shiffrin, R, Shiffrin, Richard, Shiffrin,  
Richard M. Shiffrin, RM and each of his  
co-authors. No unification was  
performed for venues, e.g., "Attention &  
Performance V," "Attention And  
Performance IX," and "Attention And  
Performance VI" are represented by  
three venue nodes.

