SUPPLEMENTARY MATERIALS

Fluency Heuristic: A Model Of How The Mind Exploits A By-Product of Information Retrieval

Ralph Hertwig and Stefan M. Herzog

University of Basel, Switzerland

Lael J. Schooler

Max Planck Institute for Human Development, Berlin

Torsten Reimer

University of Maryland, College Park

Table A

US cities and their population size (Butler, 2003)

Name of city	Population
New York	8103700
Los Angeles	3805400
Chicago	2934900
Houston	2028500
Philadelphia	1522900
Phoenix	1395800
San Diego	1260000
Dallas	1234200
San Antonio	1188500
Detroit	960300
San Jose	921700
Indianapolis	804000
San Francisco	800000
Jacksonville	761900
Columbus	714900
Austin	681700
Memphis	665800
Baltimore	663700
Milwaukee	605300
Boston	597700
El Paso	585300
Nashville	583700
Denver	583000
Seattle	578300
Washington	577800
Charlotte	559900
Fort Worth	555200
Portland	542300
Las Vegas	518000
Tucson	514200
Oklahoma City	513900
New Orleans	488600
Cleveland	480700
Long Beach	475300
Albuquerque	455500
Kansas City	448000
Fresno	440400
Virginia Beach	437200
Atlanta	435500
Sacramento	419200
Mesa	418800
Oakland	411400
Tulsa	399100
Omaha	394300
Minneapolis	392100
Colorado Springs	379400
Miami	375400
Honolulu	370600
Saint Louis	353300
Wichita	348800
Santa Ana	348100
Arlington	345700
Anaheim	337800
Pittsburgh	335700
Cincinnati	332900
Toledo	315100
Tampa	314300
Buffalo	296100
Saint Paul	294200
Aurora	290500
Corpus Christi	288100
Raleigh	285800
Newark	278200
Lexington-Fayette	264700
Anchorage	264200
Riverside	262800
Louisville	260400
Saint Petersburg	257100
Bakersfield	254500
Stockton	251100
Birmingham	245600
Jersey City	244200
Norfolk	241000
Hialeah	234500
Greensboro	231800
Glendale	231200
Plano	230500
Baton Rouge	229700
Lincoln	228100
Garland	224000
Rochester	222400
Akron	218100
Scottsdale	214200
Madison	211000
Fremont	209500
Augusta-Richmond	208900
Fort Wayne	208900
Lubbock	207200
Chesapeake	204800
Montgomery	203800
Richmond	203400
Shreveport	201800
Paradise	201500
Mobile	201200
Spokane	200800
Des Moines	200500
Grand Rapids	199700
Irving	199000
Tacoma	198700
South Bend	109400
Provo	108800
Waterbury	108600
West Covina	108200
Wichita Falls	108200
Joliet	107600
Arvada	107400
Pueblo	107300
Allentown	107000
Daly City	106700
Lowell	106700
Clarksville	106000
Cape Coral	105900
Santa Clara	105400
Gary	104300
Erie	104100
San Buenaventura	103900
Macon	101700
Livonia	101500

Table B

German companies and their sales volume (in Mio. €) in 2003

("Die 100 grössten Unternehmen Deutschlands", n.d.)

Name of company	Sales volume
DaimlerChrysler	136437
Volkswagen	87153
Siemens	74233
■ Deutsche Telekom	55838
Metro	53595
Eon	46364
RWE	43875
BMW	41525
Deutsche Post	40017
■ Rewe-Gruppe	39180
Robert Bosch	36357
ThyssenKrupp	36137
BASF	33361
♦ Schwarz-Gruppe (Lidl/Kaufland)	32459
Edeka/AVA-Gruppe	31160
Bayer	28567
Deutsche Bahn	28228
Tengelmann-Gruppe	26630
■ Aldi-Gruppe	25700
Franz Haniel + Cie	23038
■ Deutsche BP	19392
TUI	19215
Celesio	18540
Bertelsmann	16801
■ Phoenix-Gruppe	16165
♦ Shell Deutschland Oil GmbH	16108
■ Deutsche Lufthansa	15957
KarstadtQuelle	15270
MAN	15021
■ Otto-Konzern	14315
■ Ford-Werke	14000
■ Adam Opel	13941
RAG	12864
Continental	11534
Hochtief	11503
Degussa	11427
♦ Energie Baden-Württemberg	10609
Henkel	9436
Linde	8992
ZF Friedrichshafen	8928
■ Vattenfall Europe	8456
Boehringer Ingelheim	7839
Total Deutschland	7600
Heraeus	7412
Lekkerland/Tobaccoland	7374
Thomas Cook	7242
Merck	7202
■ Vodafone Deutschland	7200
Fresenius	7064
SAP	7025
■ Esso Deutschland	7000
♦ INA-Holding / Schaeffler-Gruppe	7000
Spar	6828
Schlecker	6550
MG Technologies	6403
Heidelberger Zement	6372
♦ Bosch Siemens Hausgeräte	6296
■ Adidas-Salomon	6267
Infineon	6152
Baywa	5891
■ Röchling-Gruppe	5771
Bilfinger Berger	5586
Porsche	5582
Würth	5453
♦ Hewlett-Packard Deutschland	5300
■ Oetker-Gruppe	5099
Salzgitter	4842
Schering	4828
Beiersdorf	4673
Südzucker	4575
Rheinmetall	4248
♦ Heidelberger Druckmaschinen	4130
■ Philips Deutschland	4113
Celanese	4075
■ Freudenberg Gruppe	3867
Benteler	3683
■ SCA Hygiene Products	3428
■ VGN Verbundnetz Gas	3329
Tchibo	3313
Wella	3312
Mahle	3246
♦ Anzag (Andreae-Noris Zahn)	3156
Voith	3109
Strabag	3091
Walter Bau	3053
Hella	3028
■ Behr-Gruppe	3005
Debitel	2988
■ ABB Deutschland	2980
Medion	2924
Deutsche Unilever	2900
EWE	2887
Altana	2735
B. Braun	2647
Dynamit Nobel	2512
Wacker	2468
Axel Springer	2435
■ K+S Gruppe	2288
■ IWKA Gruppe	2287
Dürr	2265

Note. Entries marked with ♦ were excluded from the analysis because of the names' length. Entries marked with ■ were searched in the COSMAS corpus by using the more established name (see Footnote 5 in main document).

Table C

Music artists and their cumulative album sales (in Mio.) in the US (1958 -2003)

("Top artists", 2003)

Music artist	Sales
The Beatles	166.5
Elvis Presley	117.5
Led Zeppelin	106
Garth Brooks	105
Eagles	88
Billy Joel	78.5
Pink Floyd	73.5
Barbra Streisand	71.5
Elton John	67.5
Aerosmith	64
The Rolling Stones	63.5
AC/DC	63
Bruce Springsteen	61.5
Madonna	60
Michael Jackson	58.5
Mariah Carey	57
Metallica	57
George Strait	54.5
Whitney Houston	54
Kenny Rogers	50.5
Van Halen	50.5
Neil Diamond	50
Fleetwood Mac	48.5
U2	48
Kenny G	47.5
Alabama	46
Céline Dion	45.5
Santana	43.5
Shania Twain	42
Journey	40
Willie Nelson	39
Eric Clapton	38.5
Simon & Garfunkel	37.5
Chicago	37
♦Bob Seger & The Silver Bullet Band	37
2 Pac	36.5
Reba McEntire	36.5
Prince	36.5
Backstreet Boys	36
Foreigner	36
Guns 'n Roses	35.5
Alan Jackson	35.5
Bob Dylan	34.5
Bon Jovi	33.5
John Denver	33.5
Rod Stewart	33
Phil Collins	32
Def Leppard	32
Linda Ronstadt	31.5
Boston	31
Queen	30.5
James Taylor	30.5
The Doors	29.5
Dave Matthews Band	29
Dixie Chicks	28.5
Pearl Jam	28.5
Michael Bolton	28
R. Kelly	28
N Sync	28
Tom Petty & The Heartbreakers	28
Britney Spears	28
Ozzy Osbourne	27.5
Boyz II Men	27
John Mellencamp	26.5
Bee Gees	25.5
Frank Sinatra	25.5
Lynyrd Skynyrd	25
Paul McCartney	25
ZZ Top	25
Rush	24.5
The Carpenters	24
Janet Jackson	24
Barry Manilow	24
Steve Miller Band	24
Nirvana	24
The Cars	23.5
Brooks & Dunn	23
Creed	23
Earth, Wind & Fire	23
Faith Hill	23
Vince Gill	22.5
Mannheim Steamroller	22.5
Mötley Crue	22.5
Sade	22.5
Luther Vandross	22.5
♦Creedence Clearwater Revival	22
Doobie Brothers	22
Enya	22
Gloria Estefan	22
Tim McGraw	22
The Police	22
TLC	22
Genesis	21.5
R.E.O. Speedwagon	21.5
Beastie Boys	21
Eminem	21
Lionel Richie	21
Jimmy Buffet	20.5
Heart	20.5
Meat Loaf	20.5
Alanis Morissette	20.5
The Beach Boys	20
Jimi Hendrix	20
Hootie & The Blowfish	20
Jay-Z	20
The Who	20

Note. Entries marked with ♦ were excluded from the analysis because of the names' length (see Footnote 5 in main document).

Table D

Athletes and their income in 2003 in million $ (“The Best-Paid Athletes, 2004)

Athletes	Income
Tiger Woods	80.3
Michael Schumacher	80
Peyton Manning	42
Michael Jordan	35
Shaquille O'Neal	31.9
Kevin Garnett	29.7
Andre Agassi	28.2
David Beckham	28
Alex Rodriguez	26.2
Kobe Bryant	26.1
Grant Hill	25.9
Derek Jeter	23.2
Barry Bonds	22.7
Manny Ramirez	22.1
Oscar De La Hoya	22
LeBron James	21.1
Vince Carter	20.2
Dale Earnhardt Jr	20.1
Arnold Palmer	20
Phil Mickelson	19.8
Allen Iverson	19.7
Champ Bailey	19.6
Jeff Gordon	19.3
Lance Armstrong	19.2
Tracy McGrady	19
Ronaldo	18.5
Carlos Delgado	18
Ichiro Suzuki	17.8
Randy Johnson	17.5
Mike Piazza	17.3
Jevon Kearse	17.2
Sammy Sosa	17
Pedro Martinez	16.8
Jason Giambi	16.6
LaVar Arrington	16.5
Brian Urlacher	16.4
Carson Palmer	16.3
Greg Norman	16.2
Ernie Els	16.1
Ralf Schumacher	16
Jason Kidd	15.9
Zinedine Zidane	15.8
Yao Ming	15.7
Grant Wistrom	15.6
Shawn Green	15.5
Charles Rogers	15.4
Rasheed Wallace	15.3
Kevin Brown	15.2
Anfernee Hardaway	15.1
Andre Miller	15
Ernie Els	16.1
Ralf Schumacher	16
Jason Kidd	15.9
Zinedine Zidane	15.8
Yao Ming	15.7
Grant Wistrom	15.6
Shawn Green	15.5
Charles Rogers	15.4
Rasheed Wallace	15.3
Kevin Brown	15.2
Anfernee Hardaway	15.1
Andre Miller	15

Table E

The world's richest people and their fortune in billion $ ("The World's Richest People, 2004)

Richest People	Fortune
Bill Gates	46.6
Warren Buffett	42.9
Karl Albrecht	23
Prince Alwaleed Bin Talal Alsaud	21.5
Paul Allen	21
Alice Walton	20
Helen Walton	20
Jim Walton	20
John Walton	20
S. Robson Walton	20
Liliane Bettencourt	18.8
Lawrence Ellison	18.7
Ingvar Kamprad	18.5
Theo Albrecht	18.1
Mikhail Khodorkovsky	15
Carlos Slim Helu	13.9
Michael Dell	13
Steven Ballmer	12.4
Li Ka-shing	12.4
Bernard Arnault	12.2
Walter, Thomas & Raymond Kwok	11.4
Barbara Cox Anthony	11.2
Anne Cox Chambers	11.2
Roman Abramovich	10.6
John Kluge	10.5
Forrest Mars Jr	10.4
Jacqueline Mars	10.4
John Mars	10.4
Silvio Berlusconi	10
Abigail Johnson	9.8
Amancio Ortega	9.2
Charles Ergen	9.1
Sumner Redstone	8.9
Gerald Cavendish Grosvenor	8.7
Stefan Persson	8.6
Pierre Omidyar	8.5
Susanne Klatten	8.1
Hans Rausing	8
Keith Murdoch	7.8
Donald Newhouse	7.7
Samuel Newhouse Jr	7.7
Carl Icahn	7.6
Robert Pritzker	7.6
Thomas Pritzker	7.6
Ernesto Bertarelli	7.4
Samuel Johnson	7.4
Philip Knight	7.1
George Soros	7
Leonardo Del Vecchio	6.9
August von Finck	6.8
Azim Premji	6.7
Stefan Quandt	6.5
Lee Shau Kee	6.3
Lakshmi Mittal	6.2
Kirk Kerkorian	6
H Ty Warner	6
Micky Arison	5.9
Curt Engelhorn	5.9
Eli Broad	5.8
Friedrich Flick Jr	5.8
Fukuzo Iwasaki	5.7
Mikhail Fridman	5.6
Gordon Moore	5.5
John Abele	5.4
Hasso Plattner	5.4
Adolf Merckle	5.3
Johanna Quandt	5.3
Philip Anschutz	5.2
Antonia Johnson	5.2
Jeffrey Bezos	5.1
Maersk Mc-Kinney Moller	5.1
Philip Green	5
Michael Bloomberg	4.9
Marvin Davis	4.9
Eitaro Itoyama	4.9
Edward Johnson III	4.9
Vladimir Potanin	4.9
Mikhail Prokhorov	4.8
Peter Nicholas	4.7
Francois Pinault	4.7
Shari Arison	4.6
Charlene de Carvalho-Heineken	4.6
Karl-Heinz Kipp	4.6
Jim Pattison	4.6
Walter Haefner	4.5
Jeffrey Skoll	4.4
Reinhold Würth	4.4
Khoo Teck Puat	4.3
Robert Kuok	4.2
Kerry Packer	4.2
Jeronimo Arango	4
Donald Bren	4
David Geffen	4
Charles Koch	4
David Koch	4
James Sorenson	3.9
Vladimir Lisin	3.8
Ronald Perelman	3.8
Henry Perot	3.8
Michele Ferrero	3.7

Table F

Response Times and Recognition Rates for Recognized and Unrecognized Objects in the Cities Across the Three Environments Investigated in Study 2. The Statistics Report the Following Measures: Mean (CI 95%)

	Recognition precedes discrimination			Discrimination precedes recognition		
	Median speed recognition		Recognition rate	Median speed recognition		Recognition rate
Environment	Recognized	Unrecognized		Recognized	Unrecognized	
Cities	845 (795 – 895)	1111 (1022 – 1199)	.52 (.49 – .55)	558 (508 – 609)	704 (633 – 775)	.54 (.51 – .57)
Companies	955 (891 – 1019)	1295 (1180 – 1409)	.53 (.49 – .57)	557 (511 – 602)	710 (638 – 782)	.54 (.49 – .58)
Music artists	769 (725 – 812)	1214 (1093 – 1335)	.67 (.64 – .70)	504 (455 – 554)	797 (706 – 888)	.69 (.66 – .72)

Table G

Response Times and Recognition Rates Across the Three Environments Investigated in Study 3, and as a Function of Task Order. The Descriptive Statistics Report Mean (CI 95%)

	Recognition precedes inference				Inference precedes recognition			
	Median speed recognition		Recognition rate	Median inference speed (ms)	Median speed recognition		Recognition rate	Median inference speed (ms)
Environment	Recognized	Unrecognized			Recognized	Unrecognized		
Cities	830 (775 – 886)	1097 (929 – 1265)	.55 (.51 – .59)	1576 (1446 – 1707)	780 (727 – 832)	966 (867 – 1065)	.55 (.51 – .59)	2030 (1758 – 2303)
Companies	774 (724 – 824)	1181 (1023 – 1340)	.63 (.60 – .66)	1915 (1749 – 2080)	708 (678 – 739)	1048 (966 – 1130)	.66 (.64 – .69)	2440 (2150 – 2731)
Music artists	723 (683 – 763)	1173 (1000 – 1347)	.71 (.68 – .75)	1889 (1755 – 2023)	671 (624 – 719)	1062 (964 – 1160)	.72 (.69 – .76)	2303 (2054 – 2551)