

Cognitive Science: Memory Lab

(I) Memory, the Tip of the Tongue Phenomenon (TOTP), and incubation.

Below please find a list of the countries of the world. (Ten pages – sorry – you might not want to print this out ...).

Scan through the list. You will certainly know the capital city of some of the countries (Paris, France, for instance). Others you certainly won't know. But for some of them, you will have the feeling that you *do* know the capital, that it's on the tip of your tongue, but you just can't get it. Make a note of these on a separate sheet of paper (you won't need a lot of these to understand what's going on).

The phenomenon of *incubation* refers to a situation in which you seem to succeed in a problem (a memory problem such as remembering a capital city, or an insight problem such as a programming problem) by being distracted from it, perhaps by thinking about something else, perhaps by sleeping.

Put your list in your bag and bring it to the lab. Perhaps you looked at it the night before? Perhaps you looked at it only just before the lab? Can you now remember any more than originally?

Compare notes with your partner(s). If someone wants a clue, try giving them the first letter/ sound of the answer, try giving them the number of syllables, try giving them the stress pattern (ask a linguist what the stress pattern is). These are all ways in which targets and errors resemble each other in malapropisms (e.g. You gotta have a few laughs to break the monogamy.)

TOTP and incubation is an area of research with mixed results. See the attached paper by Choi and Smith (2005) for a flavour of the research. Learn to read papers fast; what do they say in the abstract, in the first paragraph or two of the Discussion, in the Conclusion? Give yourself two minutes to absorb this paper. Then put it in a folder of .pdfs for any later reference.

Discuss with your partner(s) how you could have made this informal test on capital cities into a reportable experiment, perhaps including other variables.

Afghanistan	
Aland Islands	
Albania	
Algeria	
American Samoa	
Andorra	
Angola	
Anguilla	

Antarctica	
Antigua And Barbuda	
Argentina	
Armenia	
Aruba	
Australia	
Austria	
Azerbaijan	
Bahamas	
Bahrain	
Bangladesh	
Barbados	
Belarus	
Belgium	
Belize	
Benin	
Bermuda	
Bhutan	
Bolivia	
Bosnia And Herzegovina	
Botswana	
Bouvet Island	
Brazil	
British Indian Ocean Territory	

Brunei Darussalam	
Bulgaria	
Burkina Faso	
Burundi	
Cambodia	
Cameroon	
Canada	
Cape Verde	
Cayman Islands	
Central African Republic	
Chad	
Chile	
China	
Christmas Island	
Cocos (Keeling) Islands	
Colombia	
Comoros	
Congo	
Congo, The Democratic Republic Of The	
Cook Islands	
Costa Rica	

Cote D'Ivoire	
Croatia	
Cuba	
Cyprus	
Czech Republic	
Denmark	
Djibouti	
Dominica	
Dominican Republic	
Ecuador	
Egypt	
El Salvador	
Equatorial Guinea	
Eritrea	
Estonia	
Ethiopia	
Falkland Islands (Malvinas)	
Faroe Islands	
Fiji	
Finland	
France	
French Guiana	
French Polynesia	

French Southern Territories	
Gabon	
Gambia	
Georgia	
Germany	
Ghana	
Gibraltar	
Greece	
Greenland	
Grenada	
Guadeloupe	
Guam	
Guatemala	
Guernsey	
Guinea	
Guinea-Bissau	
Guyana	
Haiti	
Heard Island And Mcdonald Islands	
Holy See (Vatican City State)	
Honduras	
Hong Kong	
Hungary	
Iceland	

India	
Indonesia	
Iran, Islamic Republic Of	
Iraq	
Ireland	
Isle Of Man	
Israel	
Italy	
Jamaica	
Japan	
Jersey	
Jordan	
Kazakhstan	
Kenya	
Kiribati	
Korea, Democratic People'S Republic Of	
Korea, Republic Of	
Kuwait	
Kyrgyzstan	
Lao People'S Democratic Republic	
Latvia	
Lebanon	
Lesotho	
Liberia	

Libyan Arab Jamahiriya	
Liechtenstei n	
Lithuania	
Luxembour g	
Macao	
Macedonia, The Former Yugoslav Republic Of	
Madagascar	
Malawi	
Malaysia	
Maldives	
Mali	
Malta	
Marshall Islands	
Martinique	
Mauritania	
Mauritius	
Mayotte	
Mexico	
Micronesia, Federated States Of	
Moldova, Republic Of	
Monaco	
Mongolia	
Montserrat	

Morocco	
Mozambique	
Myanmar	
Namibia	
Nauru	
Nepal	
Netherlands	
Netherlands Antilles	
New Caledonia	
New Zealand	
Nicaragua	
Niger	
Nigeria	
Niue	
Norfolk Island	
Northern Mariana Islands	
Norway	
Oman	
Pakistan	
Palau	
Palestinian Territory, Occupied	
Panama	
Papua New Guinea	

Paraguay	
Peru	
Philippines	
Pitcairn	
Poland	
Portugal	
Puerto Rico	
Qatar	
Reunion	
Romania	
Russian Federation	
Rwanda	
Saint Helena	
Saint Kitts And Nevis	
Saint Lucia	
Saint Pierre And Miquelon	
Saint Vincent And The Grenadines	
Samoa	
San Marino	
Sao Tome And Principe	
Saudi Arabia	
Senegal	

Serbia And Montenegro	
Seychelles	
Sierra Leone	
Singapore	
Slovakia	
Slovenia	
Solomon Islands	
Somalia	
South Africa	
South Georgia And The South Sandwich Islands	
Spain	
Sri Lanka	
Sudan	
Suriname	
Svalbard And Jan Mayen	
Swaziland	
Sweden	
Switzerland	
Syrian Arab Republic	
Taiwan, Province Of China	
Tajikistan	

Tanzania, United Republic Of	
Thailand	
Timor-Leste	
Togo	
Tokelau	
Tonga	
Trinidad And Tobago	
Tunisia	
Turkey	
Turkmenista n	
Turks And Caicos Islands	
Tuvalu	
Uganda	
Ukraine	
United Arab Emirates	
United Kingdom	
United States	
United States Minor Outlying Islands	
Uruguay	
Uzbekistan	
Vanuatu	

Venezuela	
Viet Nam	
Virgin Islands, British	
Virgin Islands, U.S.	
Wallis And Futuna	
Western Sahara	
Yemen	
Zambia	
Zimbabwe	