

Appendix Two

Statistical Maps of Internet Globalisation

Figure A2.1: The cost of staying connected, published in Wired magazine 2006. (Source: scanned version from <www.flickr.com/photos/24657869@N00/156209557>.)

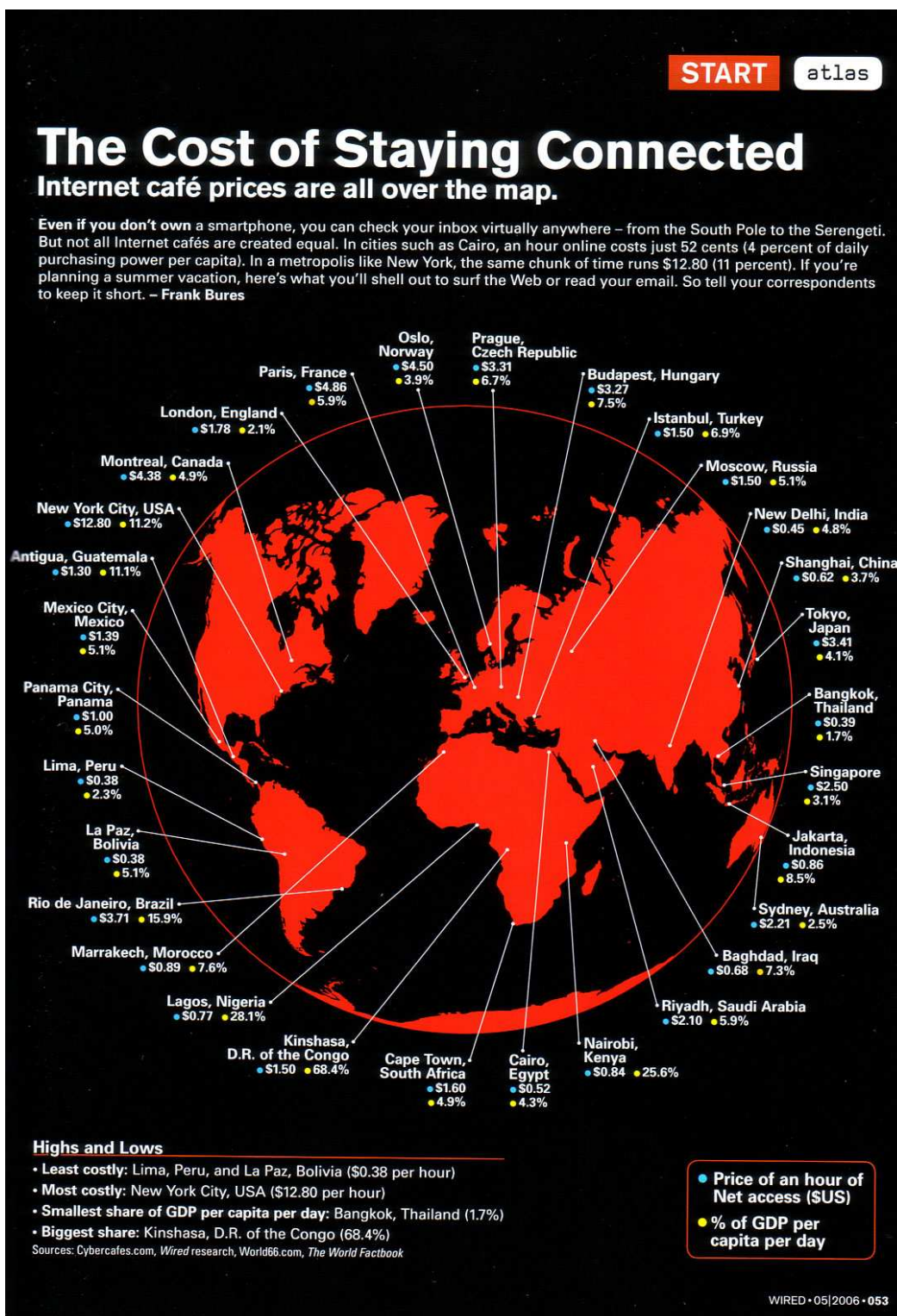
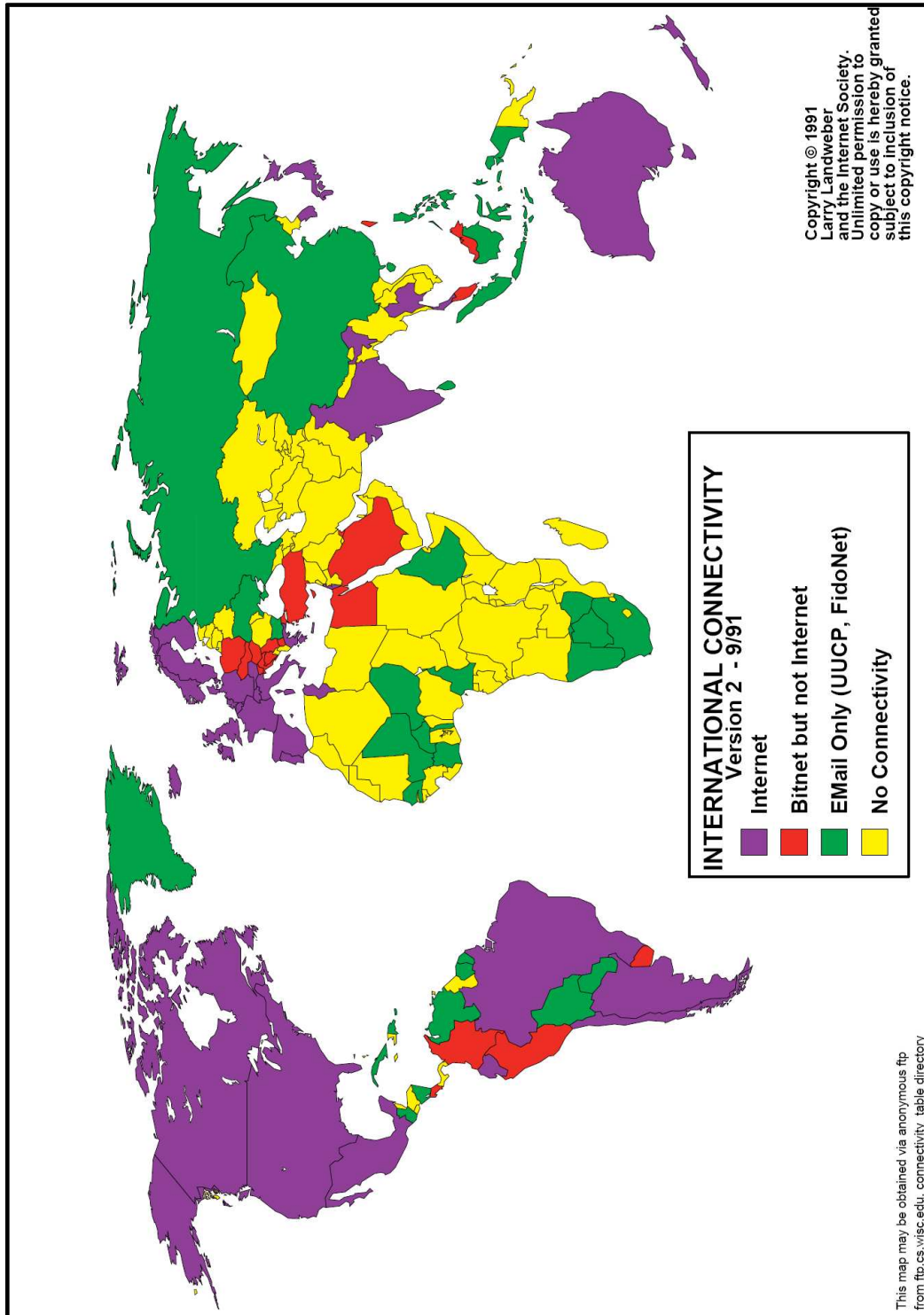
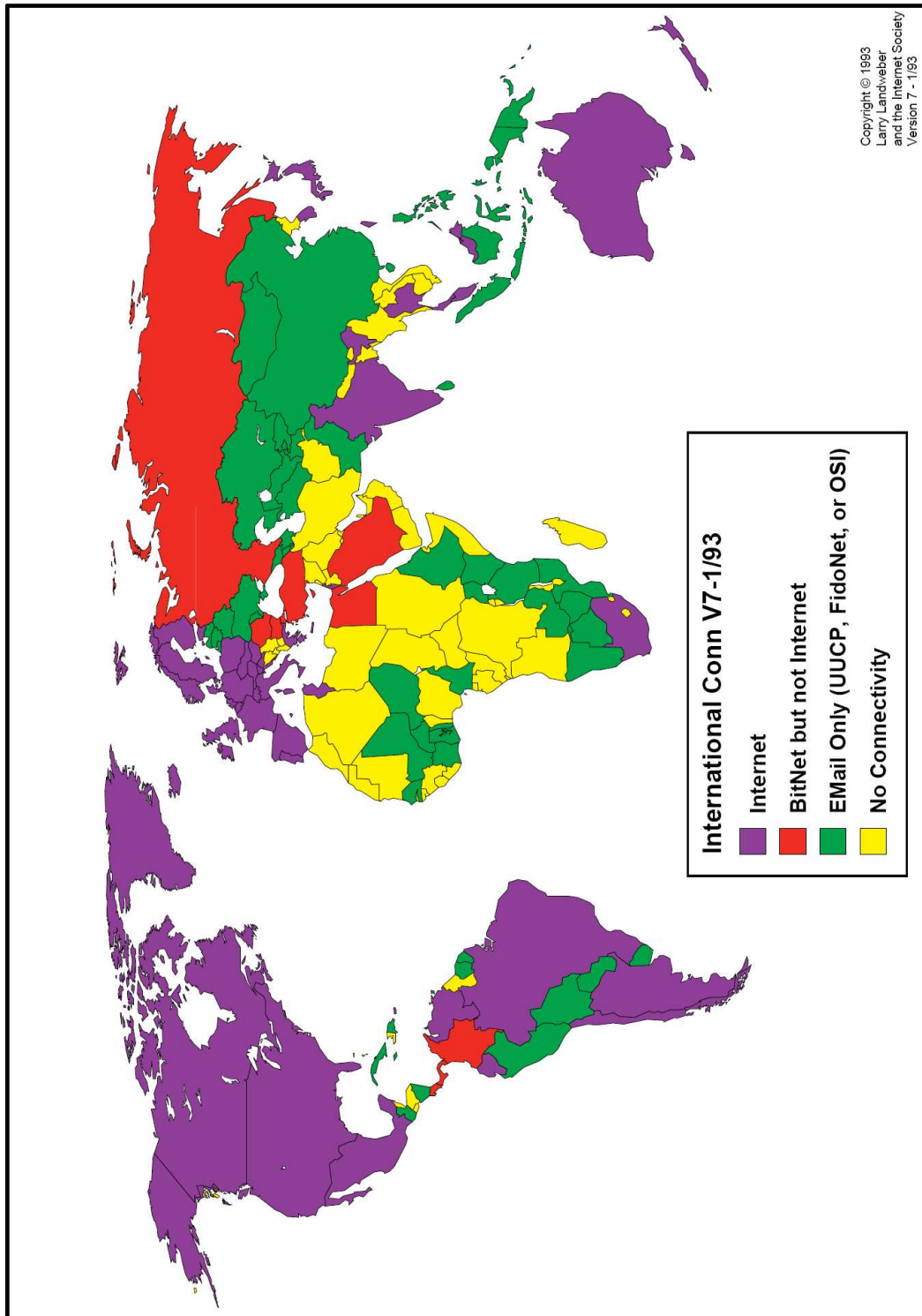
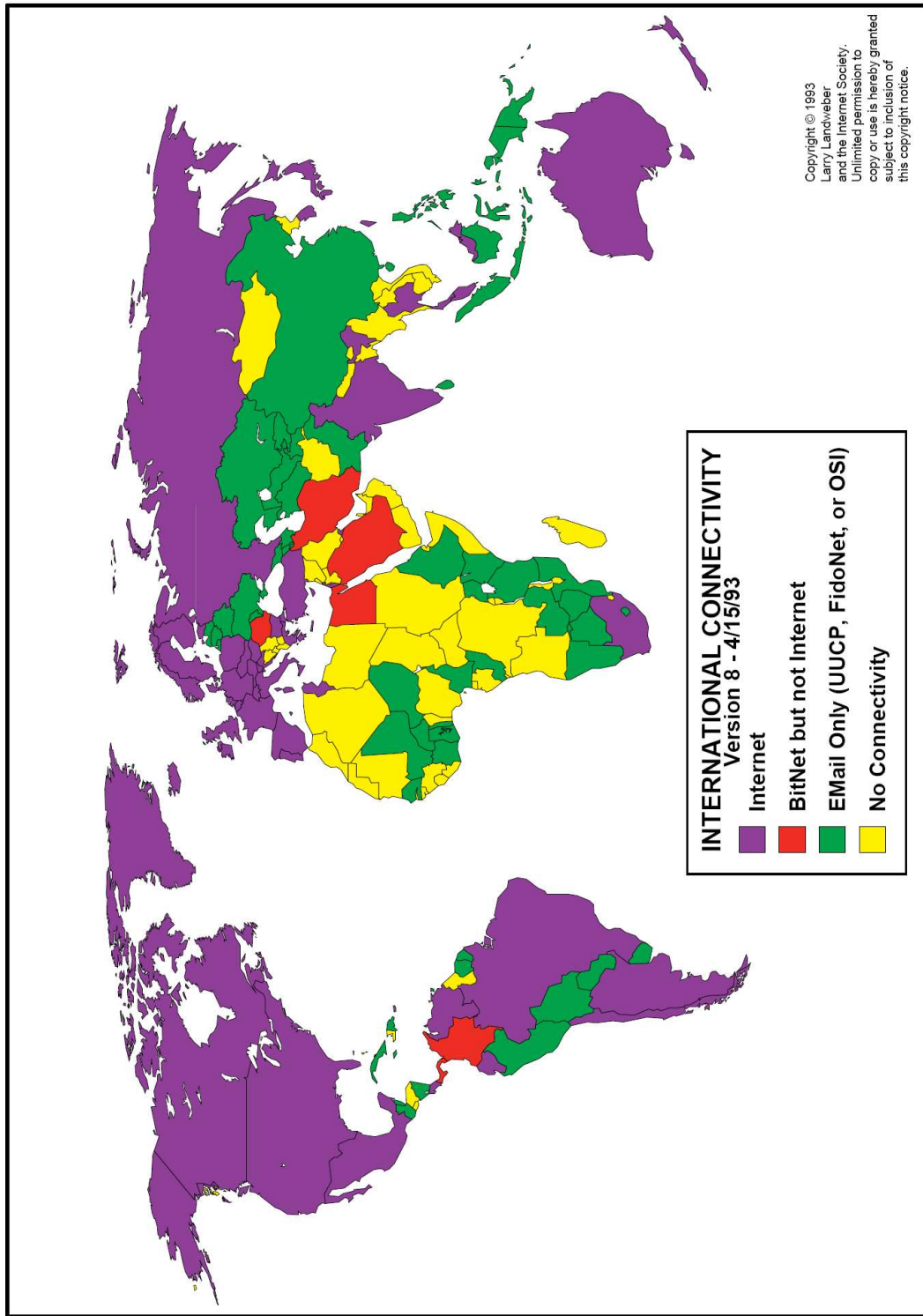
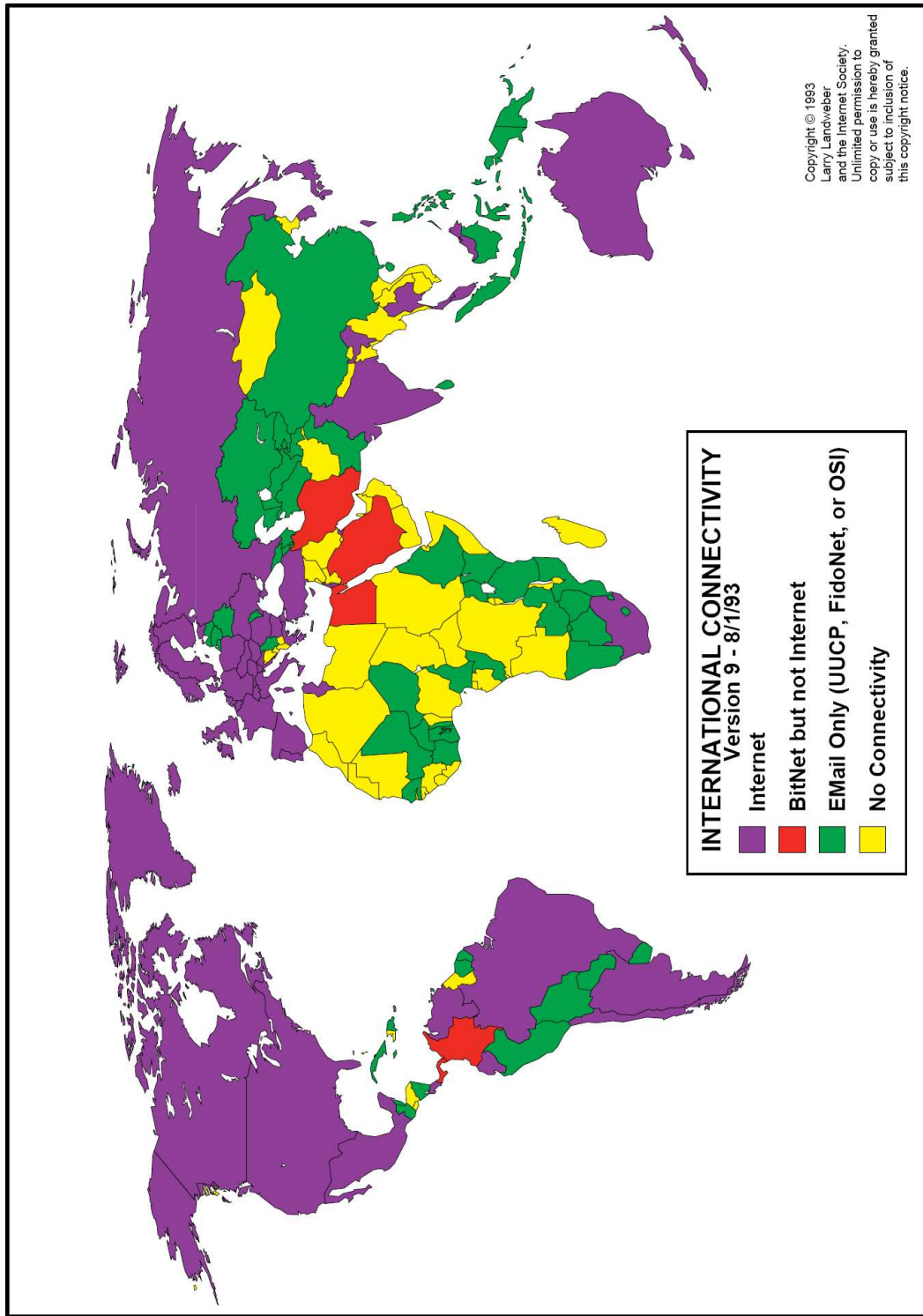


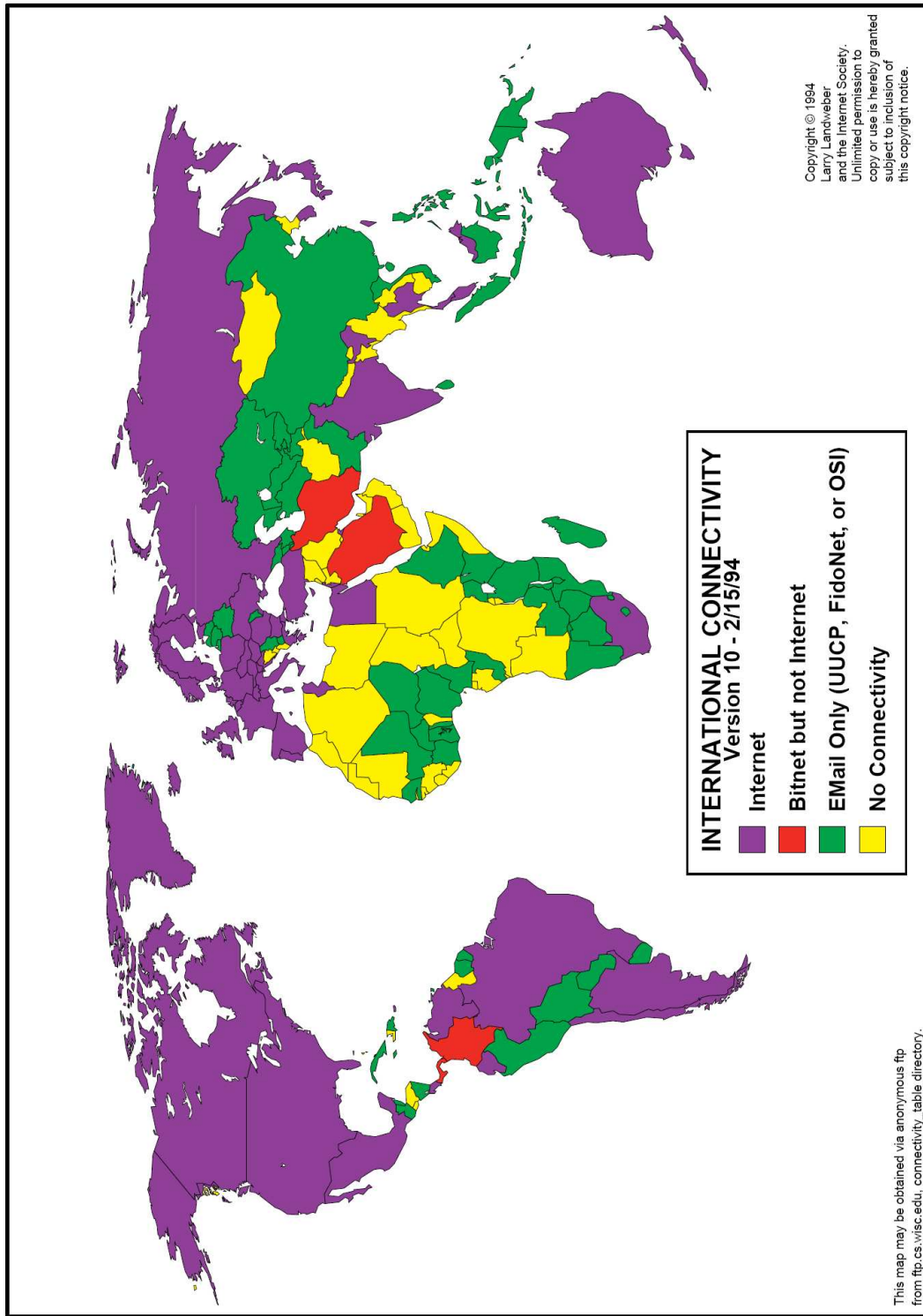
Figure A2.2: Sequence of 11 International Connectivity maps from 1991-1997 produced by Lawrence Landweber. (Source: <ftp.cs.wisc.edu/connectivity_table/>.)

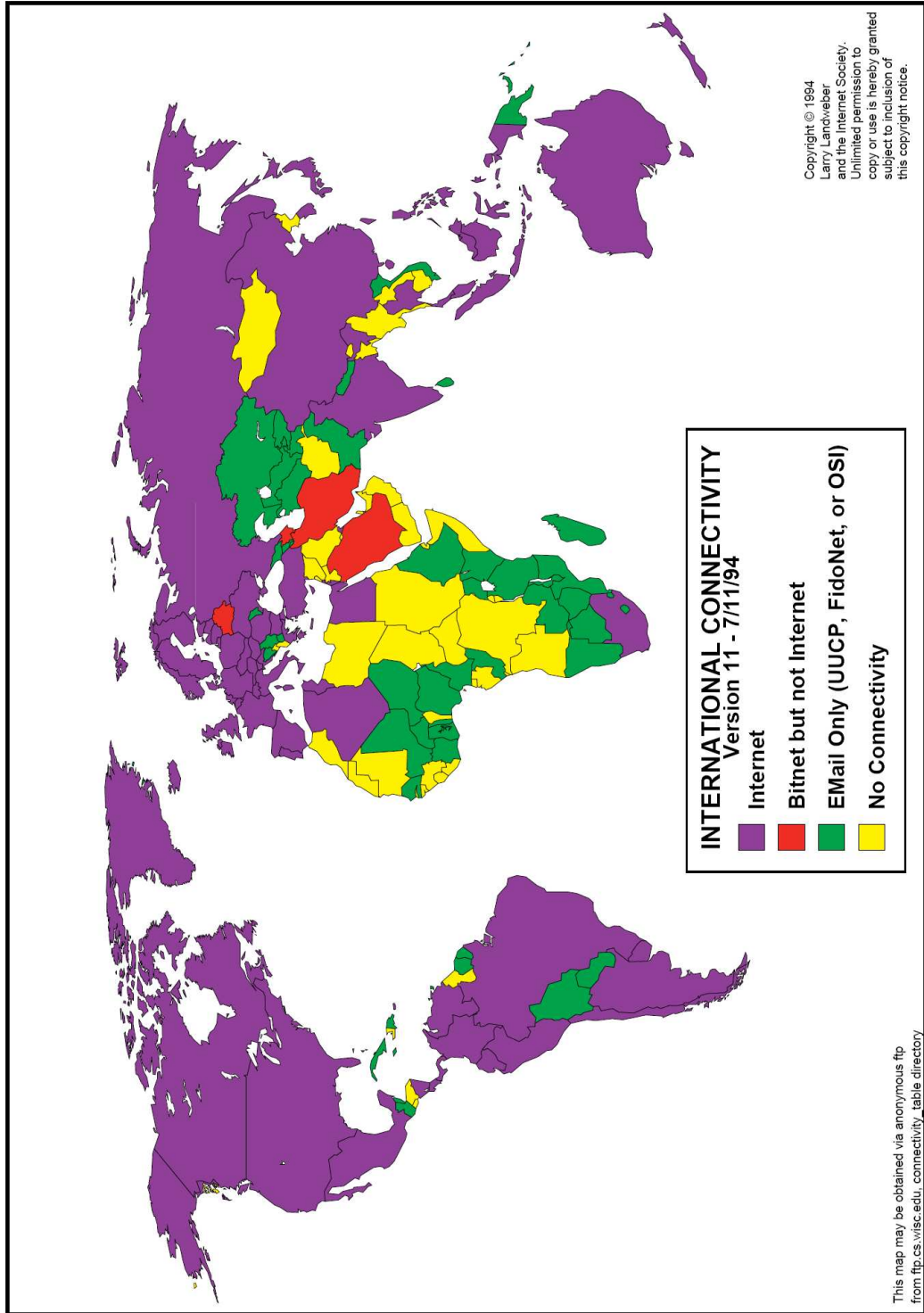


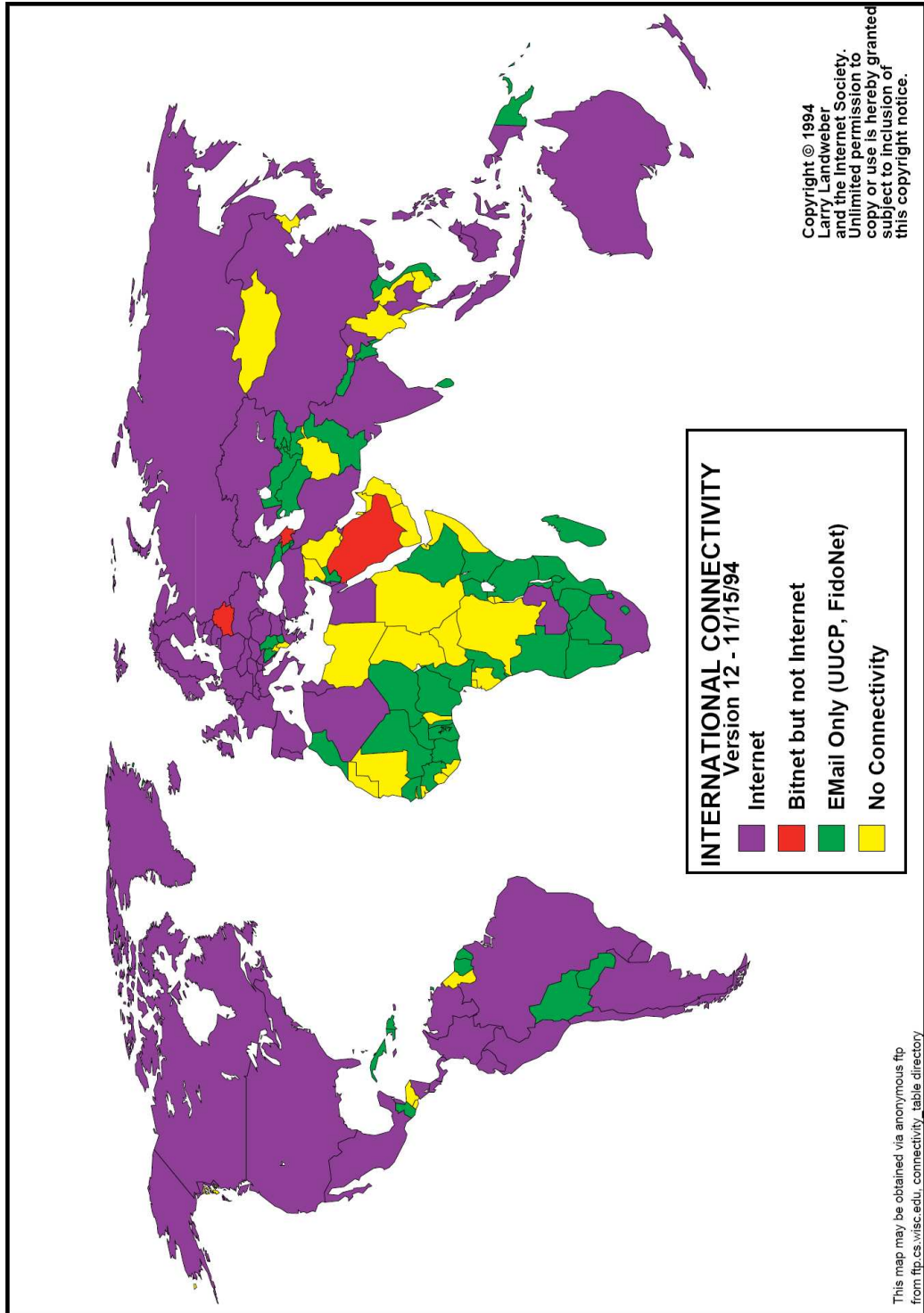


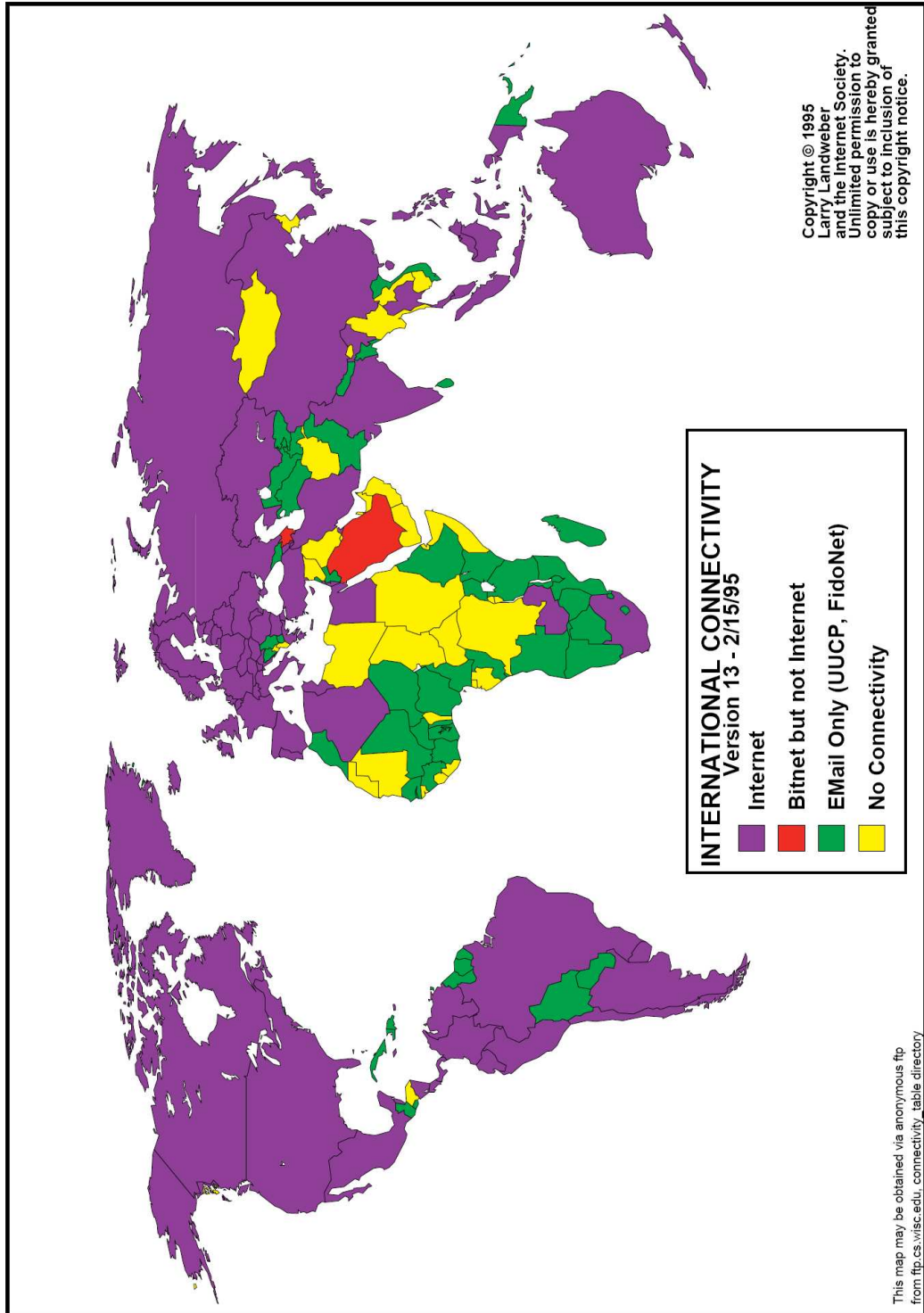


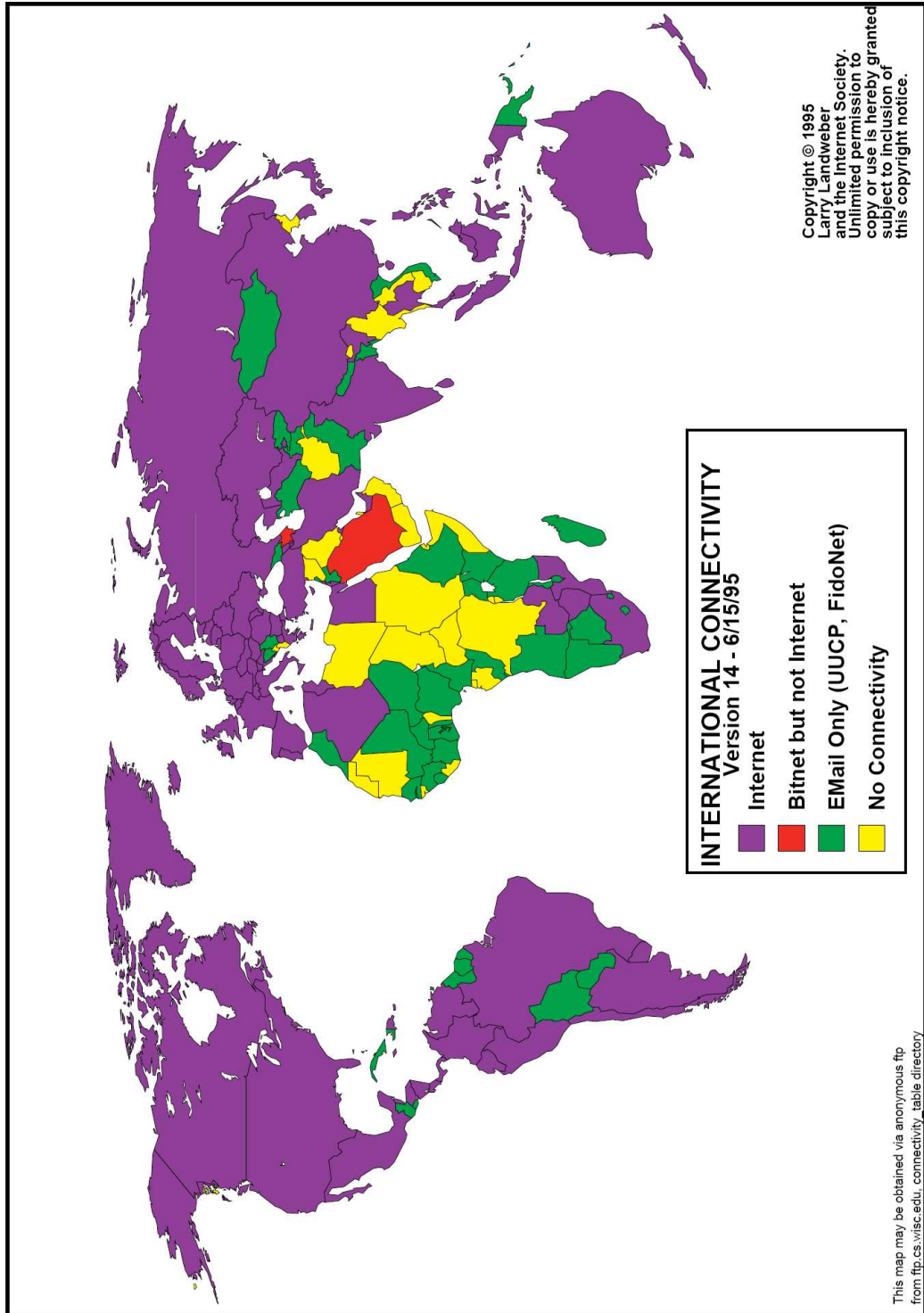


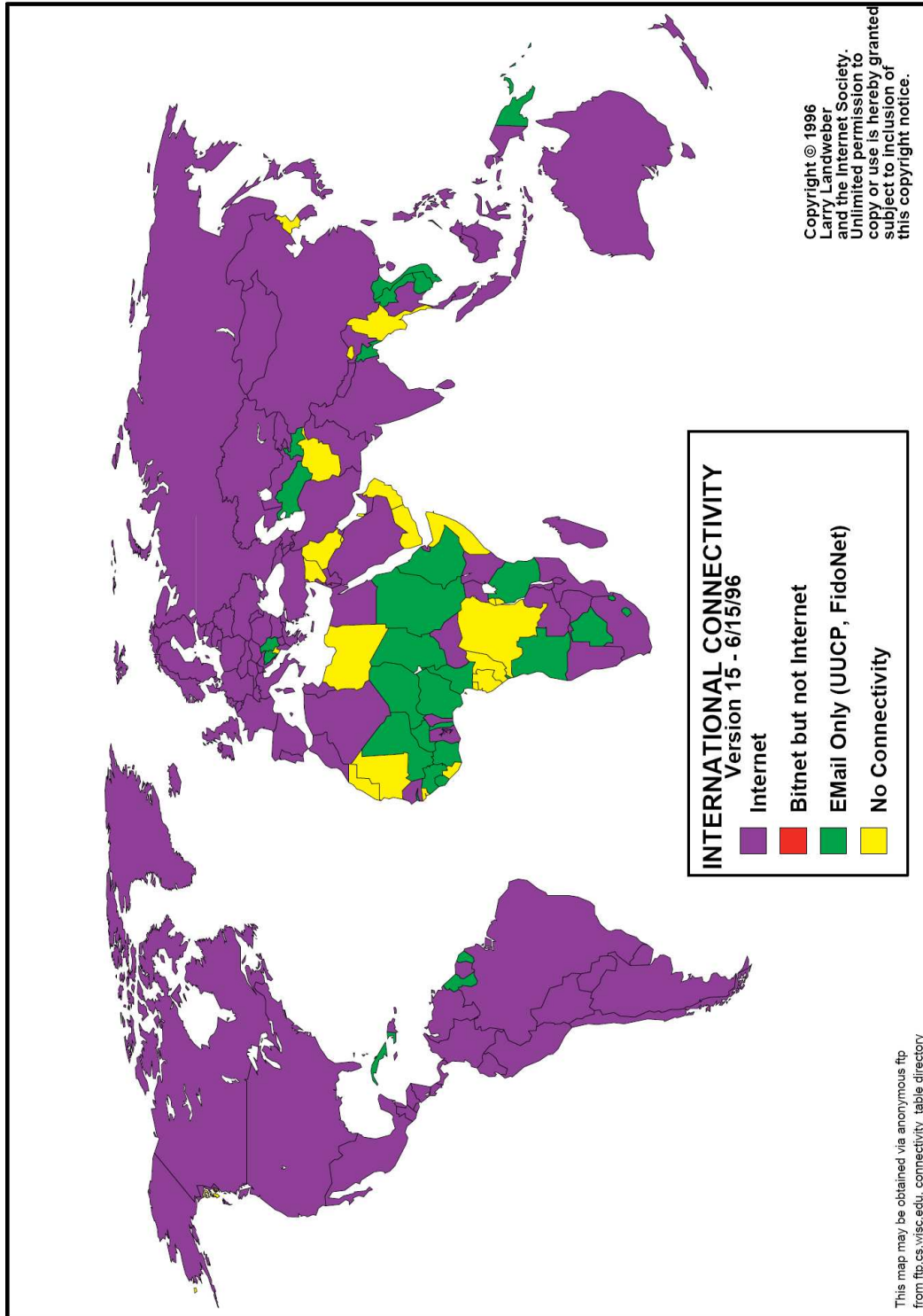












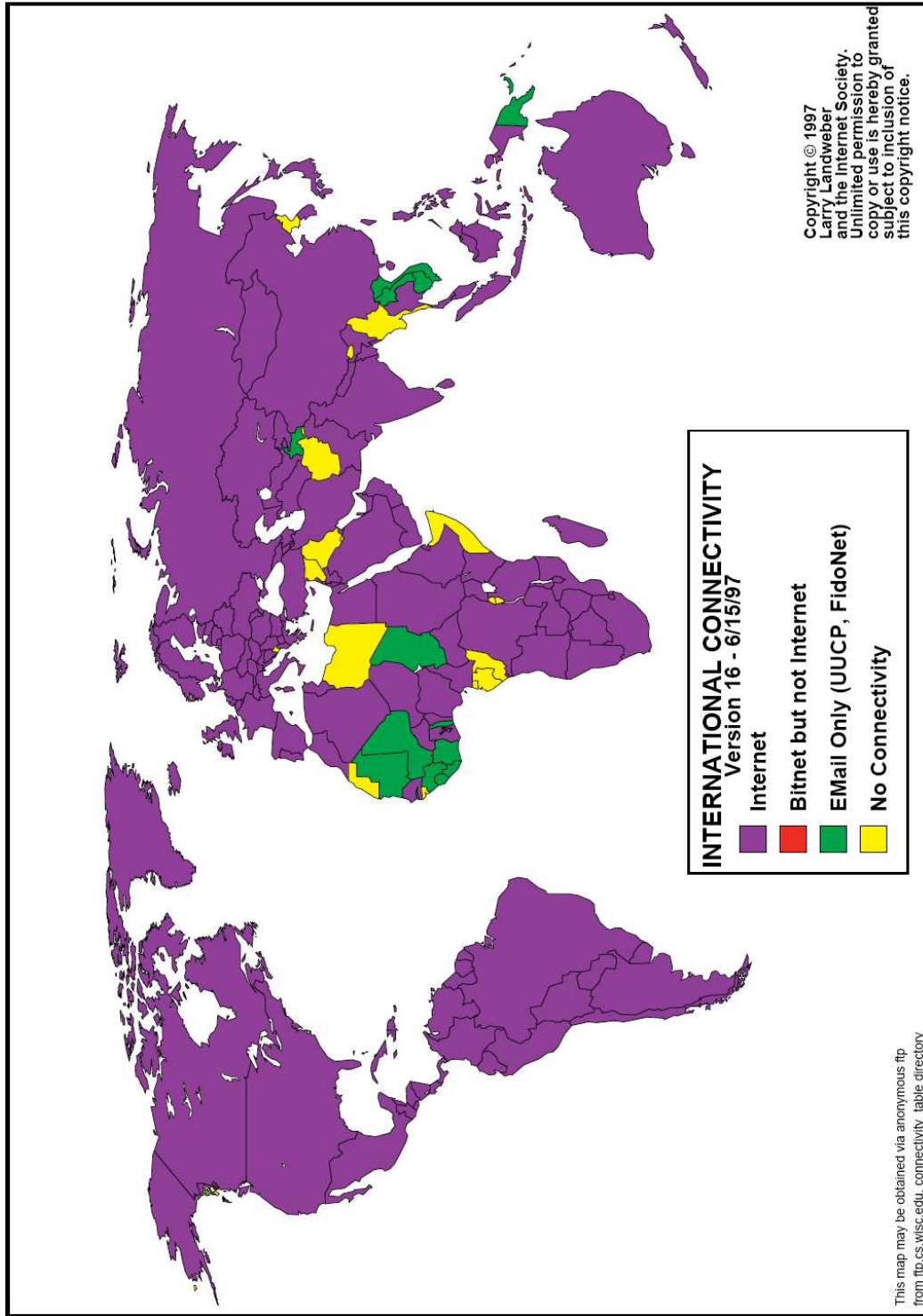


Figure A2.3: Two example maps from the ‘FAQ: International E-Mail Accessibility’ survey produced by Olivier MJ Crepin-Leblond; maps legend also provided. (Source: <www.nsrc.org/codes/bymap/ntlgy/>.)

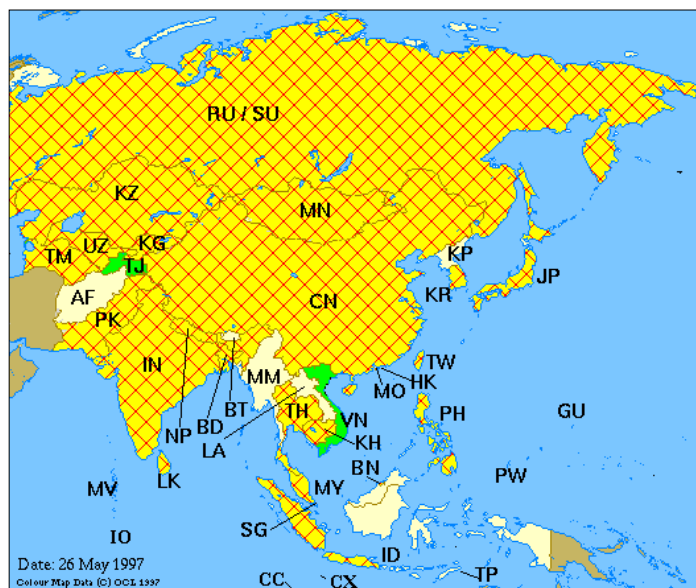
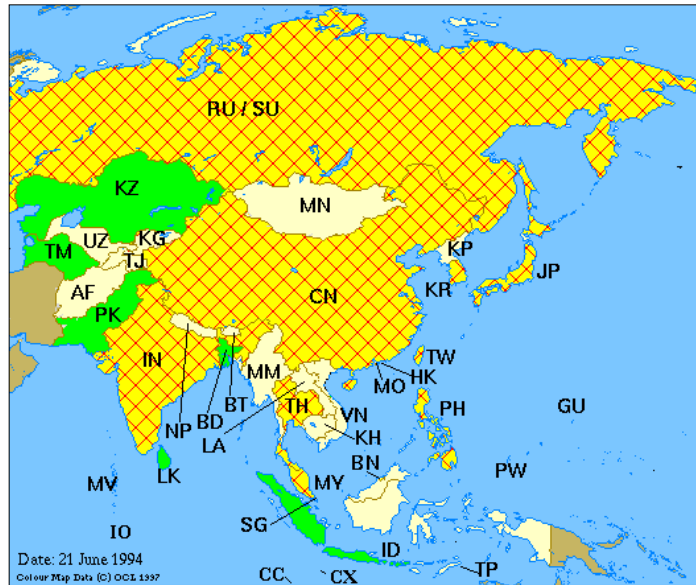


Figure A2.4: Updated version of the 1997 International Connectivity map produced by Mike Jensen. (Source: <www3.wn.apc.org/africa/afstat.htm>, no longer available online.)

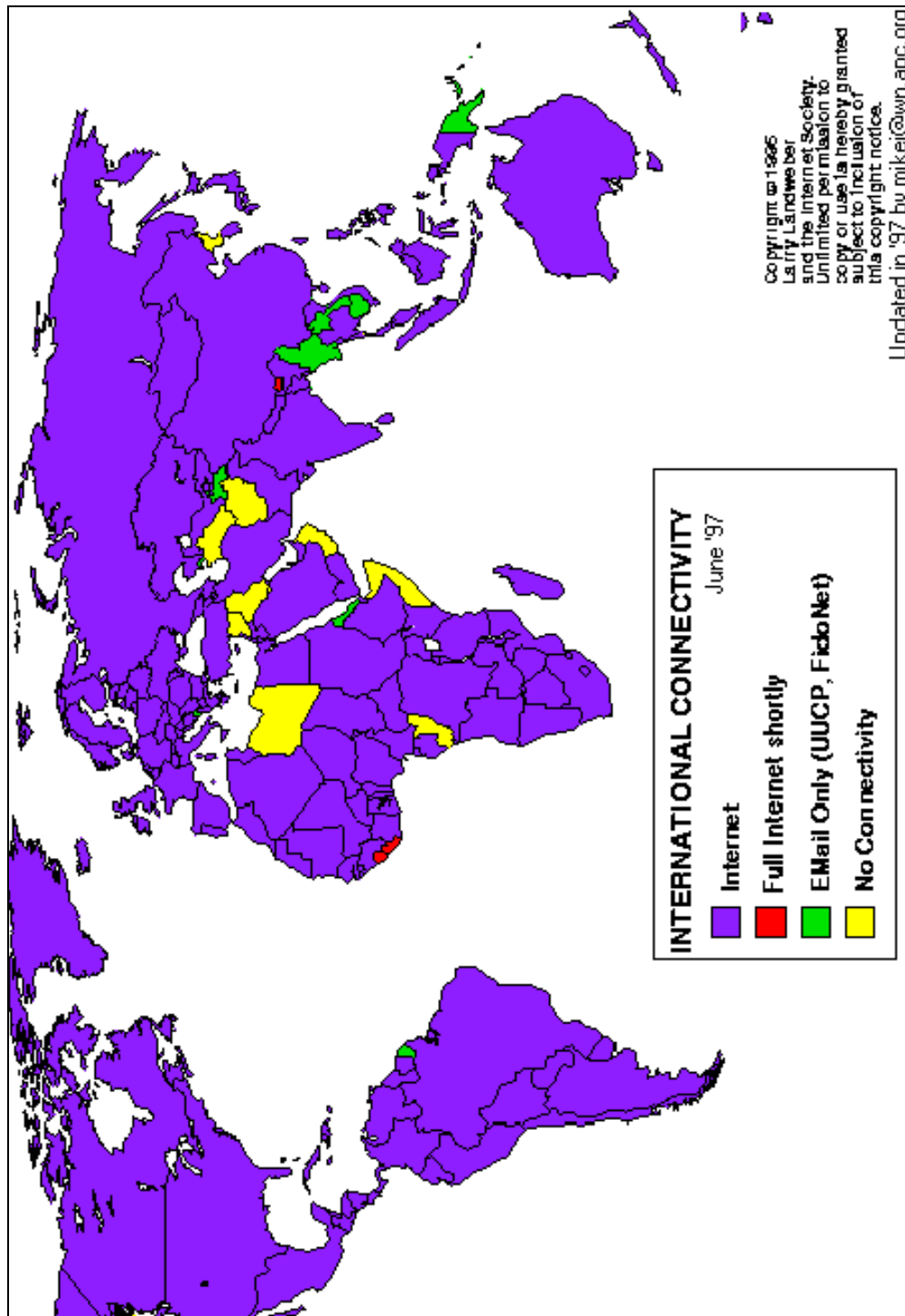


Figure A2.5: The ‘Pentagon’s New Map’, published by Esquire magazine to illustrate a story about Thomas Barnett’s work, March 2003 (Source: <www.thomaspmbarnett.com/images/books/pentagons_new_map_small.jpg>.)

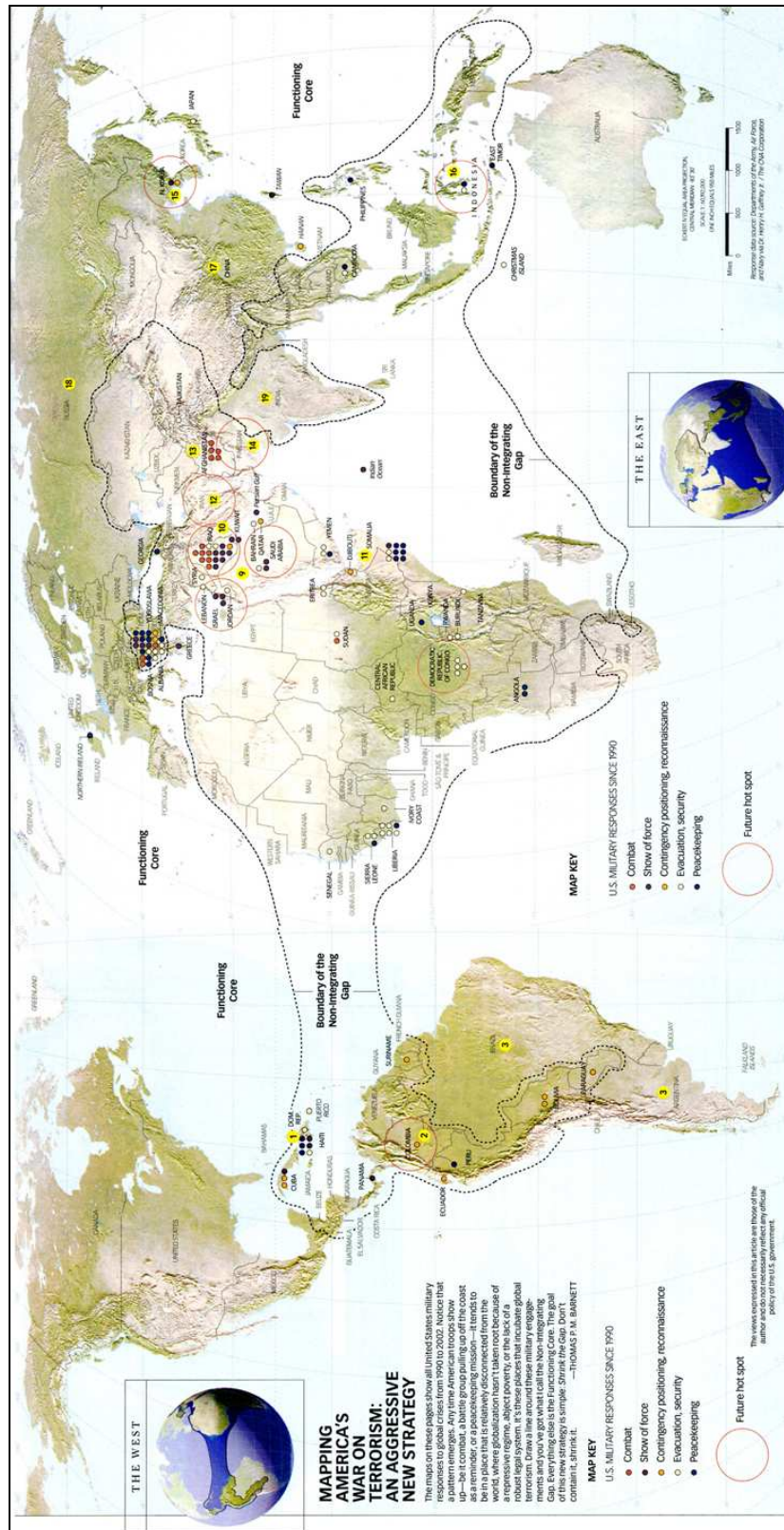


Figure A2.6: Data table of the International Connectivity survey, December 1991. (Source: <ftp.cs.wisc.edu/connectivity_table/>.)

INTERNATIONAL CONNECTIVITY
Version 3 - December 2, 1991

Please send corrections, information and/or comments to:

Larry Landweber
Computer Sciences Dept.
University of Wisconsin - Madison
1210 W. Dayton St.
Madison, WI 53706
lhl@cs.wisc.edu
FAX 1-608-265-2635

Include details, e.g., on connections, sites, contacts, protocols, etc.

Thanks to the many people from around the world who have provided information.

In the following, BITNET is used generically to refer to BITNET plus similar networks around the world (e.g., EARN, NETNORTH, GULFNET, etc.).

SUMMARY

NUMBER OF ENTITIES WITH INTERNATIONAL NETWORK CONNECTIVITY = 89

BITNET Col. 2 (Entities with international BITNET links.)

b = minimal < 5 domestic sites = 18
B = widespread >= 5 domestic sites = 28
x = uncertain = 2

INTERNET Col. 3 (Entities with international IP links.)

I = operational = 33
i = soon available = 3

UUCP Col. 4 (Entities with international UUCP links.)

u = minimal < 5 domestic sites = 40
U = widespread >= 5 domestic sites = 38

FIDONET Col. 5 (Entities with international FIDONET links.)

f = minimal < 5 domestic sites = 10
F = widespread >= 5 domestic sites = 43

Col 6 = * = New connections expected in near future.

---- AF Afghanistan (Republic of Afghanistan)
---- AL Albania (Republic of Albania)
---- DZ Algeria (People's Democratic Republic of Algeria)
---- AS American Samoa
---- AD Andorra (Principality of Andorra)
---- AO Angola (People's Republic of Angola)
---- AI Anguilla
----* AQ Antarctica
---- AG Antigua and Barbuda
BIUF AR Argentina (Argentine Republic)
---- AW Aruba
-IUF AU Australia
BIUF AT Austria (Republic of Austria)

---- BS Bahamas (Commonwealth of the Bahamas)
 ---- BH Bahrain (State of Bahrain)
 ---- BD Bangladesh (People's Republic of Bangladesh)
 ---- BB Barbados
 BIUF BE Belgium (Kingdom of Belgium)
 ---- BZ Belize
 ---- BJ Benin (Republic of Benin)
 ---- BM Bermuda
 ---- BT Bhutan (Kingdom of Bhutan)
 --u- BO Bolivia (Republic of Bolivia)
 ---f BW Botswana (Republic of Botswana)
 ---- BV Bouvet Island
 BIUF BR Brazil (Federative Republic of Brazil)
 ---- BN Brunei Darussalam
 --UF BG Bulgaria (Republic of Bulgaria)
 --u- BF Burkina Faso (formerly Upper Volta)
 ---- BI Burundi (Republic of Burundi)
 --uf BY Byelorussian SSR (Byelorussian Soviet Socialist
 Republic)
 ----* CM Cameroon (Republic of Cameroon)
 BIUF CA Canada
 ---- CV Cape Verde (Republic of Cape Verde)
 ---- KY Cayman Islands
 ---- CF Central African Republic
 ---- TD Chad (Republic of Chad)
 ---- IO Chagos Islands (Indian Ocean)
 BIUF CL Chile (Republic of Chile)
 --u- CN China (People's Republic of China)
 ---- CX Christmas Island (Indian Ocean)
 ---- CI Cote d'Ivoire (Republic of Cote d'Ivoire)
 ---- CC Cocos Keeling Islands)
 b-u- CO Colombia (Republic of Colombia)
 ---- KM Comoros (Islamic Federal Republic of the Comoros)
 ----* CG Congo (People's Republic of the Congo)
 ---- CK Cook Islands
 b-u- CR Costa Rica (Republic of Costa Rica)
 --u- CU Cuba (Republic of Cuba)
 b-U- CY Cyprus (Republic of Cyprus)
 BiUF CS Czechoslovakia (Czech and Slovak Federal Republic)
 BIUF DK Denmark (Kingdom of Denmark)
 ---- DJ Djibouti (Republic of Djibouti)
 ---- DM Dominica (Commonwealth of Dominica)
 --u- DO Dominican Republic
 ---- TP East Timor
 b-u- EC Ecuador (Republic of Ecuador)
 b-u- EG Egypt (Arab Republic of Egypt)
 ---- SV El Salvador (Republic of El Salvador)
 ---- GQ Equatorial Guinea (Republic of Equatorial Guinea)
 --UF EW Estonia
 ---f ET Ethiopia
 ---- FK Falkland Islands (Malvinas)
 ---- FO Faroe Islands
 --u- FJ Fiji (Republic of Fiji)
 BIUF FI Finland (Republic of Finland)
 BIUF FR France (French Republic)
 --u- GF French Guiana (Department of Guiana)
 ----* PF French Polynesia
 ---- TF French Southern Territories
 ---- GA Gabon (Gabonese Republic)
 ---- GM Gambia (Republic of the Gambia)
 BIUF DE Germany (Federal Republic of Germany)

---- GH Ghana (Republic of Ghana)
 ---- GI Gibraltar
 BIUF GR Greece (Hellenic Republic)
 ---f GL Greenland
 ---- GD Grenada
 --u- GP Guadeloupe (French Department of Guadeloupe)
 ---- GU Guam
 --u- GT Guatemala (Republic of Guatemala)
 ---- GN Guinea (Republic of Guinea)
 ---- GW Guinea-Bissau (Republic of Guinea-Bissau)
 ---- GY Guyana (Republic of Guyana)
 ---- HT Haiti (Republic of Haiti)
 ---- HM Heard and McDonald Islands
 ---- HN Honduras (Republic of Honduras)
 B--F HK Hong Kong (Hisiangkang, Xianggang)
 biUF HU Hungary (Republic of Hungary)
 -IUF IS Iceland (Republic of Iceland)
 bIU- IN India (Republic of India)
 --u- ID Indonesia (Republic of Indonesia)
 ---- IR Iran (Islamic Republic of Iran)
 ---- IQ Iraq (Republic of Iraq)
 BIUF IE Ireland
 BIuF IL Israel (State of Israel)
 BIUF IT Italy (Italian Republic)
 ---- JM Jamaica
 BIUF JP Japan
 ---- JO Jordan (Hashemite Kingdom of Jordan)
 ---- KH Kampuchea, Democratic (formerly Cambodia)
 ----* KE Kenya (Republic of Kenya)
 ---- KI Kiribati (Republic of Kiribati)
 ---- KP Korea, Democratic People's Republic of
 BIUF KR Korea, Republic of Korea
 b--- KW Kuwait (State of Kuwait)
 ---- LA Lao People's Democratic Republic
 --UF LV Latvia
 ---- LB Lebanon (Lebanese Republic)
 ----* LS Lesotho (Kingdom of Lesotho)
 ---- LR Liberia (Republic of Liberia)
 ---- LY Libyan Arab Jamahiriya (Socialist Peoples's Libyan
 Arab Jamahiriya)
 ---- LI Liechtenstein (Principality of Liechtenstein)
 --uF LT Lithuania
 b-uF LU Luxembourg (Grand Duchy of Luxembourg)
 ---F MO Macau (Ao-me'n)
 ---- MG Madagascar (Democratic Republic of Madagascar)
 ---- MW Malawi (Republic of Malawi)
 b-uF MY Malaysia
 ---- MV Maldives (Republic of Maldives)
 --u- ML Mali (Republic of Mali)
 ---- MT Malta (Republic of Malta)
 ---- MH Marshall Islands (Republic of the Marshall Islands)
 --u- MQ Martinique (French Department of Martinique)
 ---- MR Mauritania (Islamic Republic of Mauritania)
 ---- MU Mauritius
 BIuF MX Mexico (United Mexican States)
 ---- FM Micronesia (Federated States of Micronesia)
 ---- MC Monaco (Principality of Monaco)
 ---- MN Mongolia (Mongolian People's Republic)
 ---- MS Montserrat
 ---- MA Morocco (Kingdom of Morocco)
 ----* MZ Mozambique (Republic of Mozambique)

---- MM Myanmar (Union of Myanmar)
--u- NA Namibia (Republic of Namibia)
---- NR Nauru (Republic of Nauru)
---- NP Nepal (Kingdom of Nepal)
BIUF NL Netherlands (Kingdom of the Netherlands)
---- AN Netherlands Antilles
---- NT Neutral Zone (between Saudi Arabia and Iraq)
--u- NC New Caledonia
-IuF NZ New Zealand
--u- NI Nicaragua (Republic of Nicaragua)
--u- NE Niger (Republic of the Niger)
---- NG Nigeria (Federal Republic of Nigeria)
---- NU Niue
---- NF Norfolk Island
---- MP Northern Mariana Islands (Commonwealth of the
Northern Mariana Islands)
BIUF NO Norway (Kingdom of Norway)
---- OM Oman (Sultanate of Oman)
---- PK Pakistan (Islamic Republic of Pakistan)
---- PW Palau (Republic of Palau)
---- PA Panama (Republic of Panama)
--u- PG Papua New Guinea
--u- PY Paraguay (Republic of Paraguay)
x-u- PE Peru (Republic of Peru)
--uF PH Philippines (Republic of the Philippines)
---- PN Pitcairn Island
biUF PL Poland (Republic of Poland)
BIUF PT Portugal (Portuguese Republic)
BIUF PR Puerto Rico
---- QA Qatar (State of Qatar)
----* RE Re'union (French Department of Re'union)
----* RO Romania
---- RW Rwanda (Rwandese Republic)
---- SH Saint Helena
---- KN Saint Kitts and Nevis
---- LC Saint Lucia
---- PM Saint Pierre and Miquelon (French Department of Saint
Pierre and Miquelon)
---- VC Saint Vincent and the Grenadines
---- SM San Marino (Republic of San Marino)
---- ST Sao Tome and Principe (Democratic Republic of Sao
Tome and Principe)
B--- SA Saudi Arabia (Kingdom of Saudi Arabia)
--u- SN Senegal (Republic of Senegal)
--u- SC Seychelles (Republic of Seychelles)
-- - SL Sierra Leone (Republic of Sierra Leone)
bIuF SG Singapore (Republic of Singapore)
---- SB Solomon Islands
---- SO Somalia (Somali Democratic Republic)
-IUF ZA South Africa (Republic of South Africa)
BIUF ES Spain (Kingdom of Spain)
--u- LK Sri Lanka (Democratic Socialist Republic of Sri
Lanka)
---- SD Sudan (Republic of the Sudan)
---- SR Suriname (Republic of Suriname)
---- SJ Svalbard and Jan Mayen Islands
---- SZ Swaziland (Kingdom of Swaziland)
BIUF SE Sweden (Kingdom of Sweden)
BIUF CH Switzerland (Swiss Confederation)
---- SY Syria (Syrian Arab Republic)
B-uF TW Taiwan

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---- TZ  Tanzania (United Republic of Tanzania)
--uF TH  Thailand (Kingdom of Thailand)
--u- TG  Togo (Togolese Republic)
---- TK  Tokelau
---- TO  Tonga (Kingdom of Tonga)
---- TT  Trinidad and Tobago (Republic of Trinidad and Tobago)
bI-- TN  Tunisia
B--- TR  Turkey (Republic of Turkey)
---- TC  Turks and Caicos Islands
---- TV  Tuvalu
b-UF SU  USSR (Union of Soviet Socialist Republics)
---- UG  Uganda (Republic of Uganda)
--UF UA  Ukrainian SSR (Ukrainian Soviet Socialist Republic)
---- AE  United Arab Emirates
bIUf GB  United Kingdom (United Kingdom of Great Britain and
Northern Ireland)
BIUF US  United States (United States of America)
---- UM  United States Minor Outlying Islands
x-uf UY  Uruguay (Eastern Republic of Uruguay)
----* VU  Vanuatu (Republic of Vanuatu, formerly New Hebrides)
---- VA  Vatican City State
--u- VE  Venezuela (Republic of Venezuela)
---- VN  Vietnam (Socialist Republic of Vietnam)
---- VG  Virgin Islands, British
---- VI  Virgin Islands, U.S. (Virgin Islands of the United
States)
---- WF  Wallis and Futuna Islands
---- EH  Western Sahara
---- WS  Western Samoa (Independent State of Western Samoa)
---- YE  Yemen (Republic of Yemen)
---- YD  Yemen, Democratic (People's Democratic Republic of
Yemen)
B-U- YU  Yugoslavia (Socialist Federal Republic of Yugoslavia)
---- ZR  Zaire (Republic of Zaire)
----* ZM  Zambia (Republic of Zambia)
---f ZW  Zimbabwe (Republic of Zimbabwe)

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Figure A2.7: A simplified version of an International Connectivity map used as an illustration in a research monograph. (Source: author scan from Castells 1998, 94.)

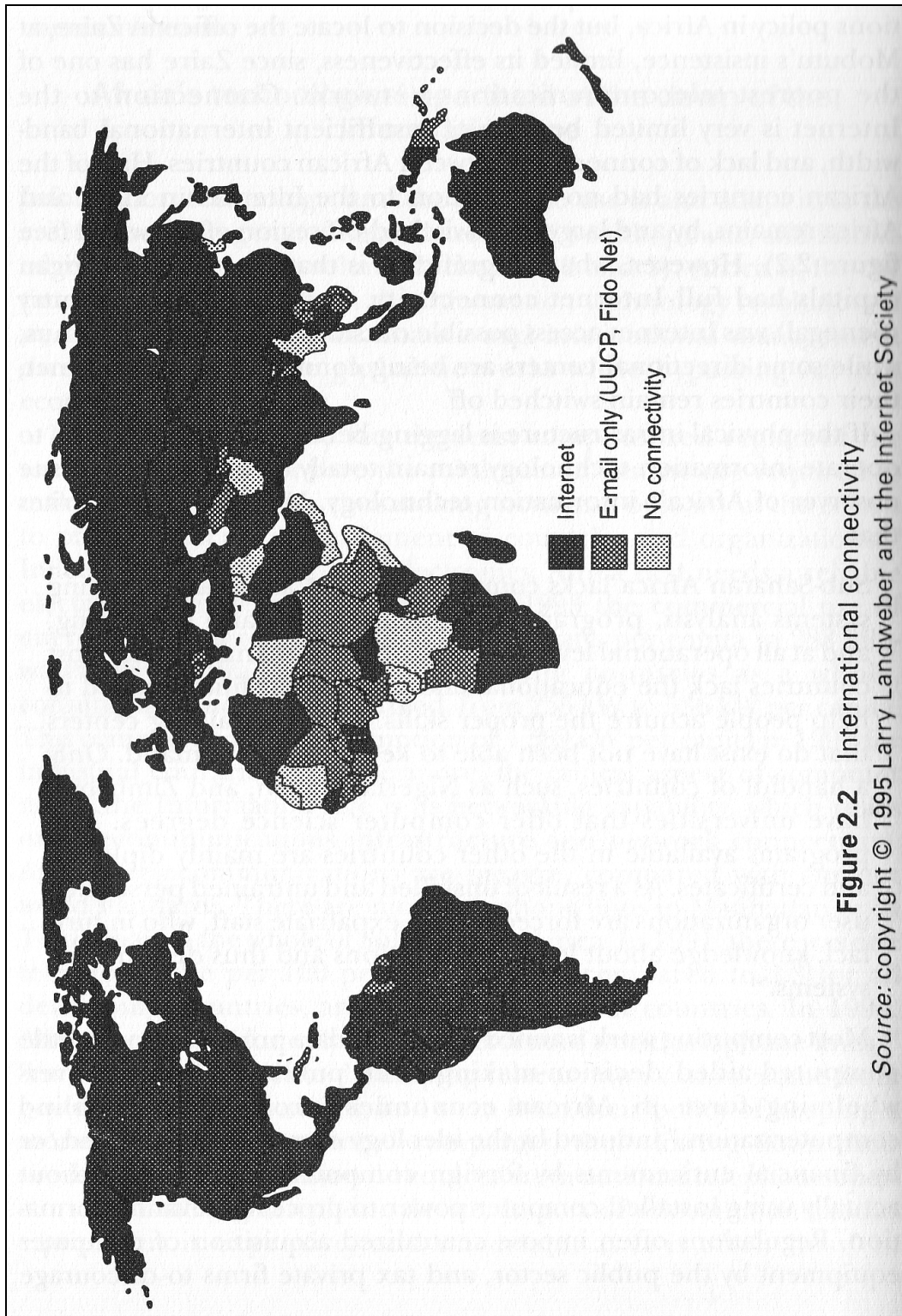


Figure A2.8: Modified versions of two International Connectivity maps used as an illustrations in a policy document by the Brazilian government. (Source: Ministerio de Ciencia y Tecnología, 2001, 4.)

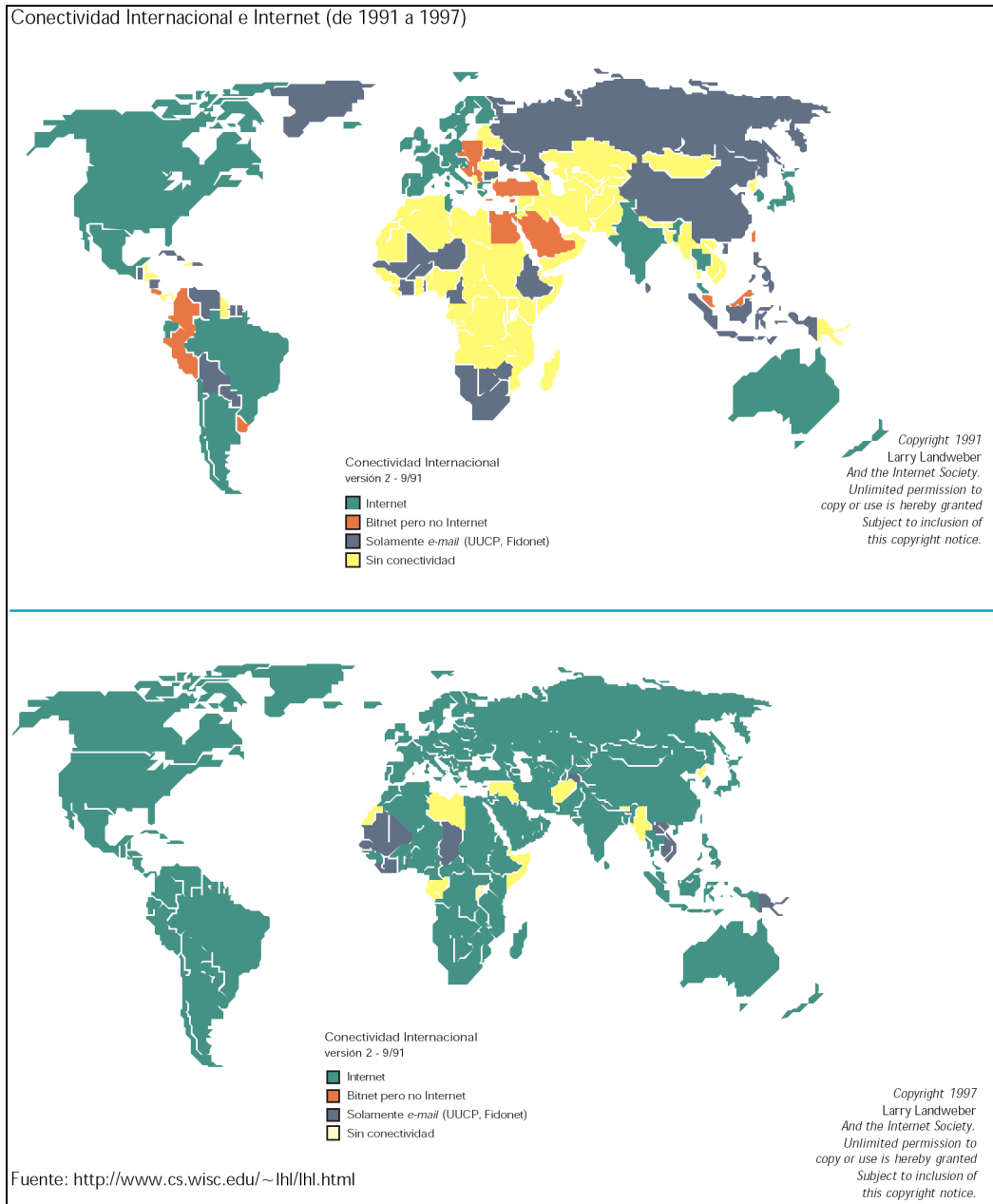


Figure A2.9: Digital Opportunity Index Worldwide, 2005, produced by the International Telecommunication Union. (Source: <www.itu.int/osg/spu/publications/worldinformationsociety/2006/World.pdf>.)

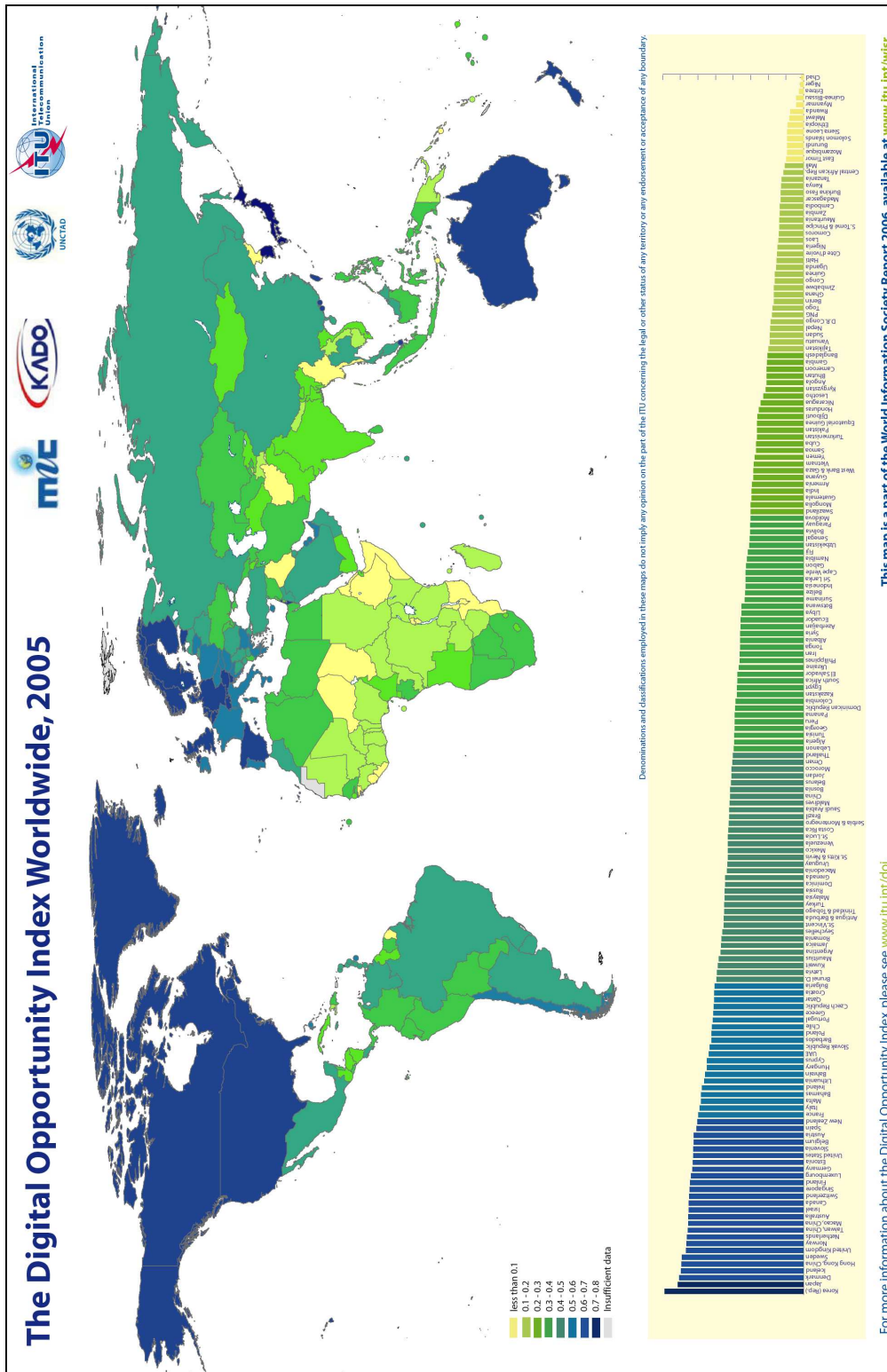


Figure A2.10: The growth of Internet hosts mapped at regular intervals through 1991-1994. Countries only appear on the map only once they had an Internet connection. (Source: author scan from Batty and Barr 1994, 707-708.)

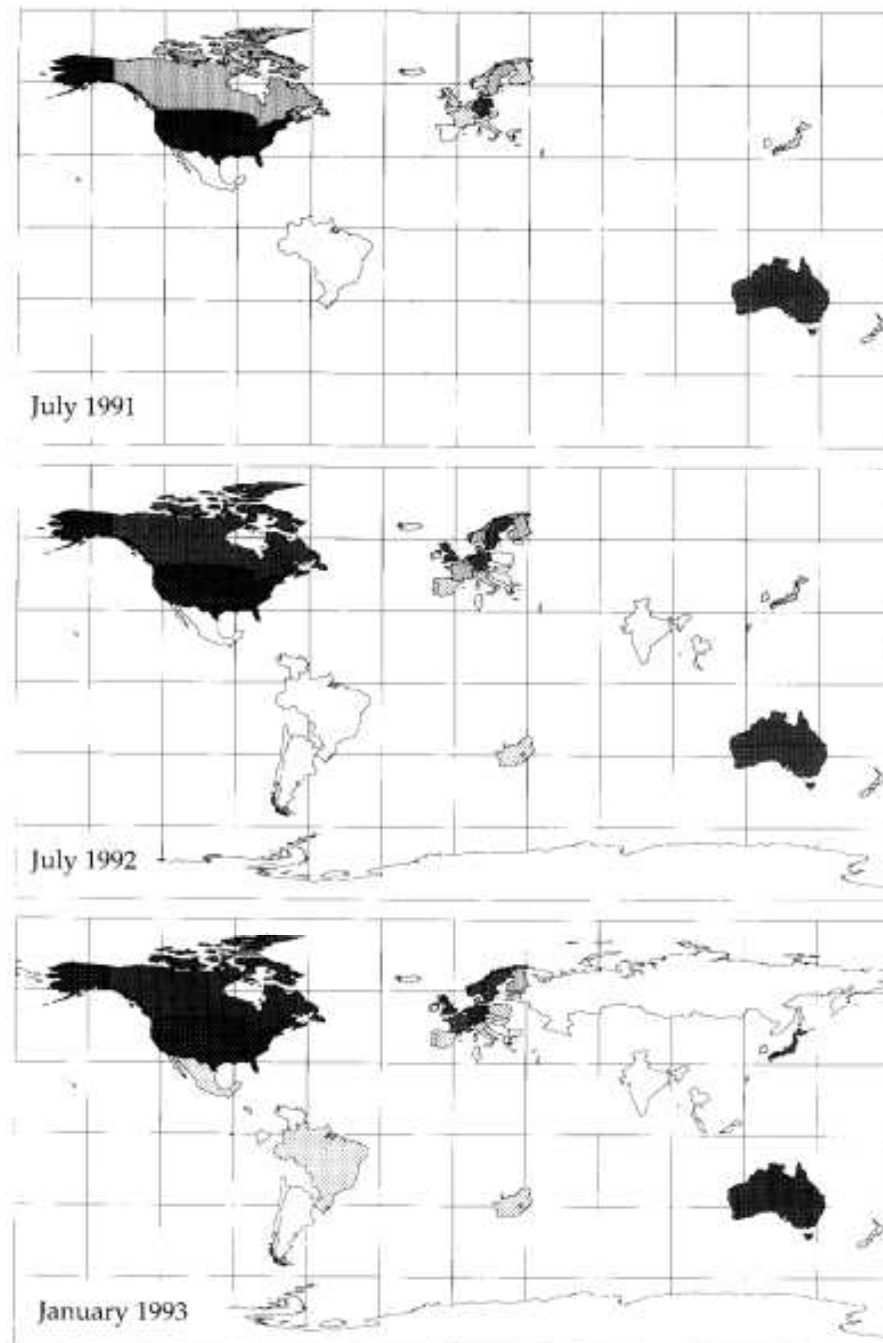
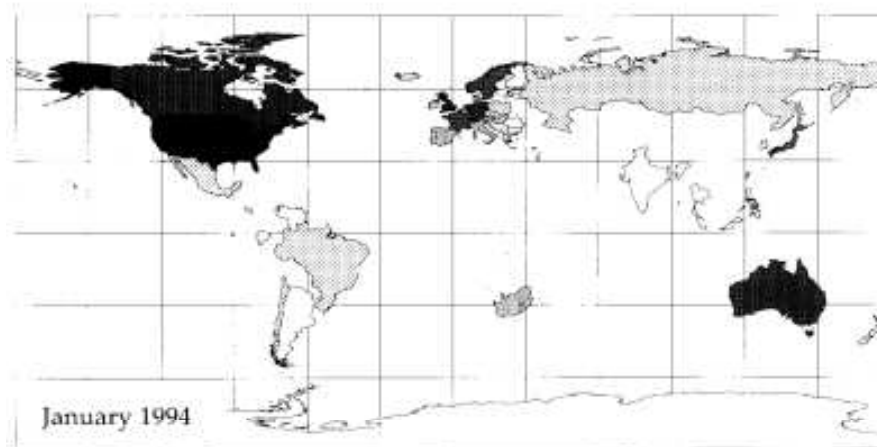
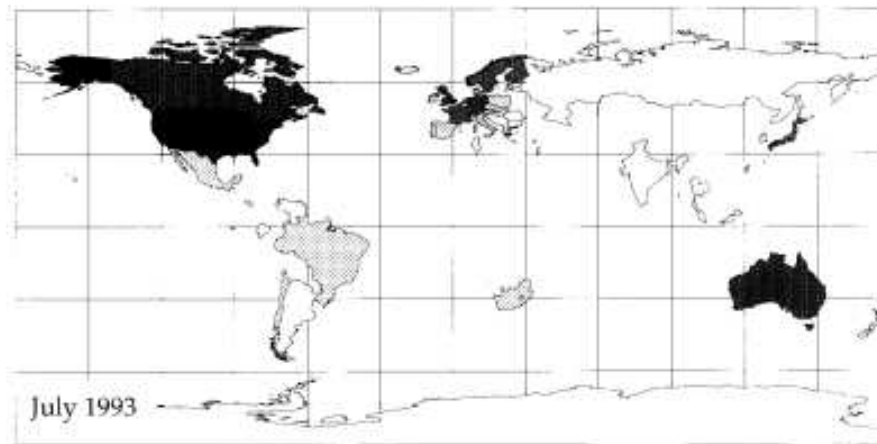


Figure 5. The diffusion of the Internet.



Number of Hosts 1991-1994

■	— 100000 to 500000	(1)
■	— 10000 to 100000	(1)
■	— 5000 to 10000	(3)
■	— 2000 to 5000	(6)
■	— 1000 to 2000	(4)
■	— 100 to 1000	(19)
□	— 1 to 100	(18)

Figure 5. Continued.

Figure A2.11: The 'Network Society Map', 1997. Map research and conception by Nico Macdonald; cartography by Chapman Bounford; published by World Link. (Source: <www.spy.co.uk/research/worldlink/>.)

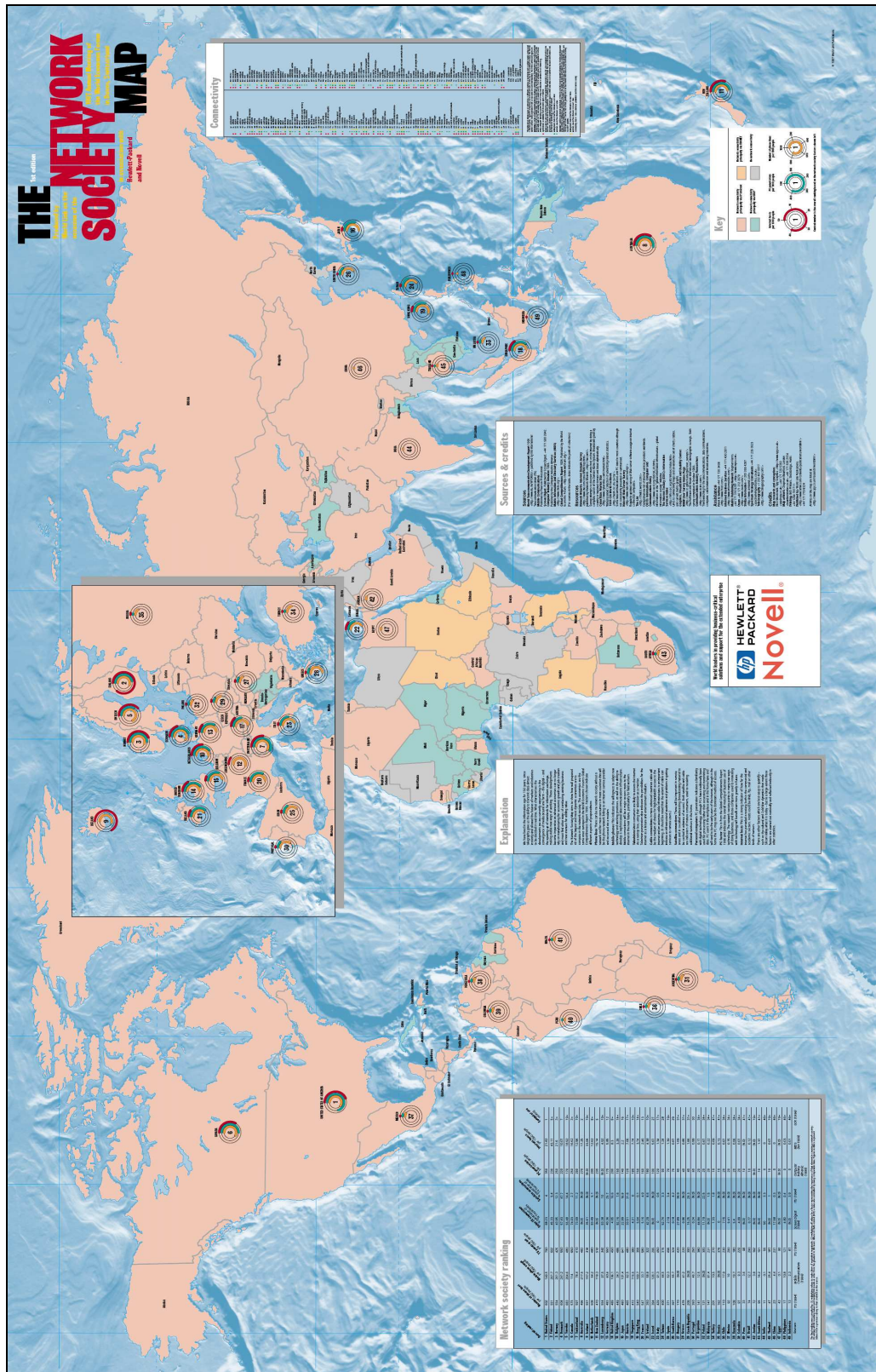


Figure A2.12: ‘Wired Countries of the World’ produced by World Information Access Report 2007
 WIAREport.org. (Source: <http://wiareport.org>.)

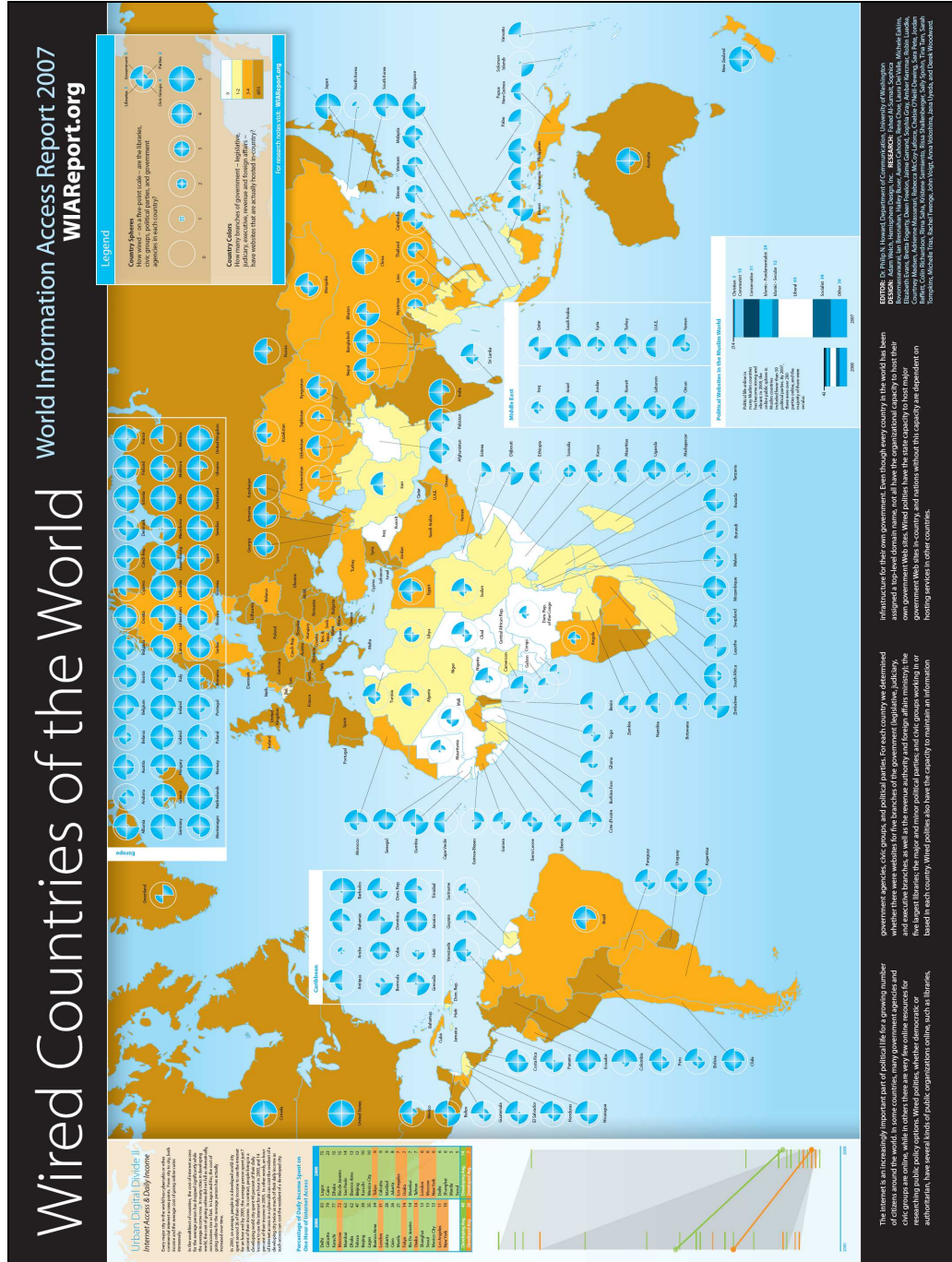


Figure A2.13: A dasymetric version of the International Connectivity map produced by Mike Holderness, 1996. (Source: <www.poptel.org.uk/nuj/mike/cyberdiv.htm>.)

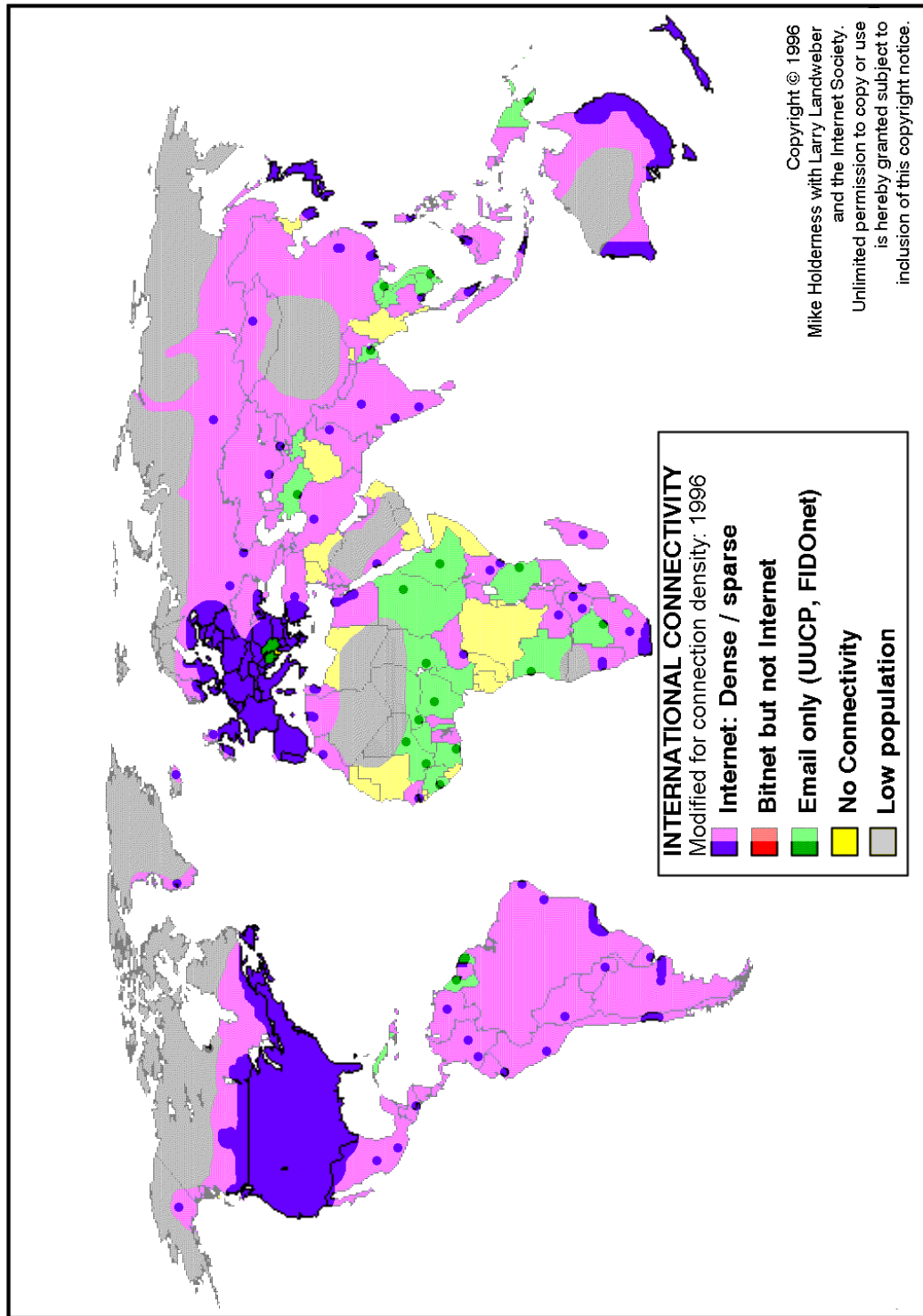
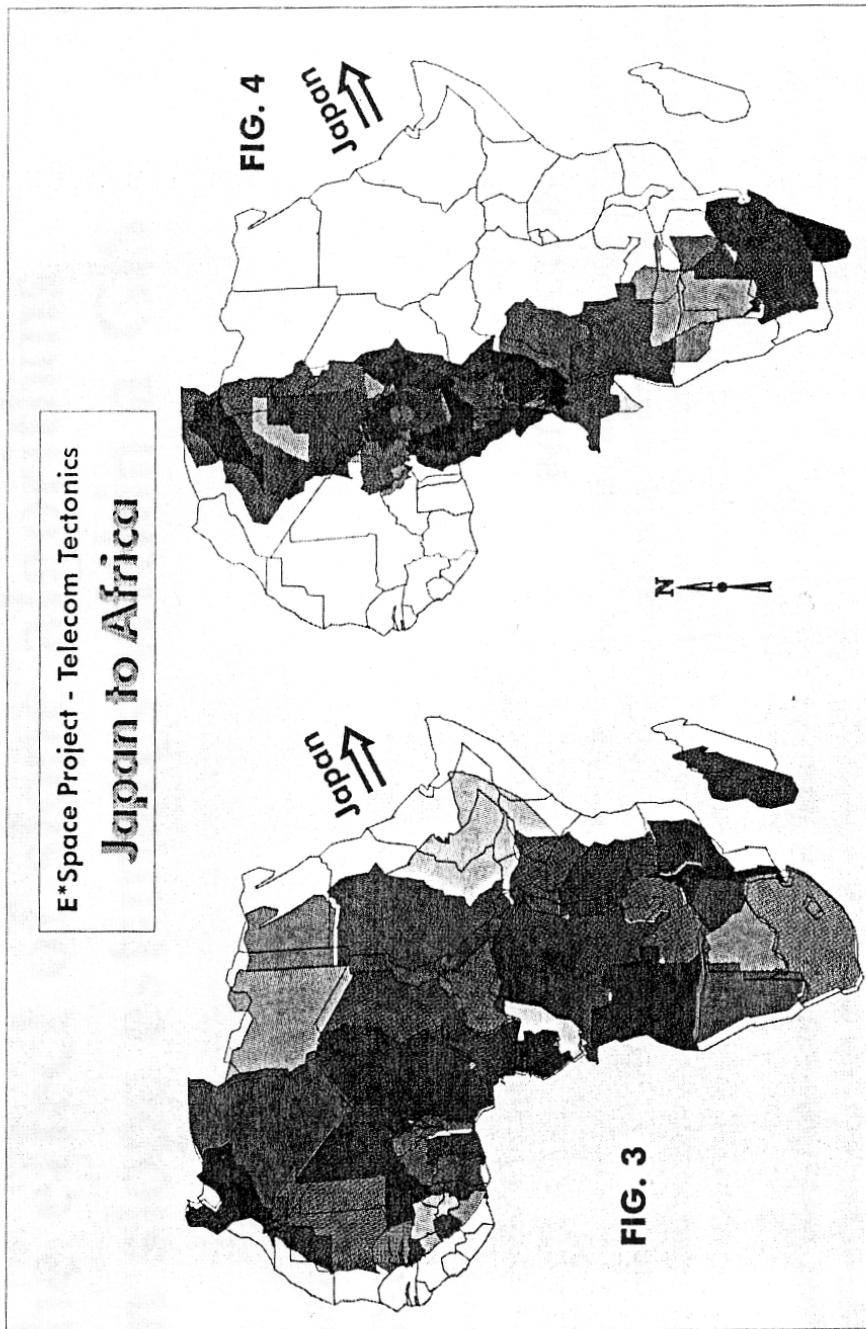


Figure A2.14: Distance-based cartogram produced by Colin Arrowsmith
 (Source: author scan from Arrowsmith and Wilson 1998, 7.)



Figures 3 and 4: Non-contiguous cartogram of electronic space for the African continent as seen from Japan using a scale factor of 0.2 (Figure 3) and 1.0 (Figure 4). Notice the radial distribution of all countries, with centroids placed on an arc centered in Japan.

Figure A2.15: Internet users per capita 1990 cartogram poster, produced by the Worldmapper project, 2006. (Source: <www.worldmapper.org/display.php?selected=335>.)

Figure A2.16: Full size view of Internet users per capita 1990 cartogram, produced by the Worldmapper project, 2006. (Source: <www.worldmapper.org/display.php?selected=335>.)

Figure A2.17: Internet users per capita 2002 cartogram poster, produced by the Worldmapper project, 2006. (Source: <www.worldmapper.org/display.php?selected=336>.)

Figure A2.18: Full size view of Internet users per capita 2002 cartogram, produced by the Worldmapper project, 2006. (Source: <www.worldmapper.org/display.php?selected=336>.)

Figure A2.19: Internet users 2005 cartogram produced by ExploMap Technologies, 2007. (Source: <http://explomap.free.fr/world_map_internet_users_2005.pdf>



Figure A2.20: Digital divide cartogram produced by Govcom.org, April 2005.
 Country size is inversely proportional to level of Internet usage. (Source:
 <www.govcom.org/maps/map_set_wsis/GC0_Maps_set_3.0_digitaldivide_inver_t.pdf>.)

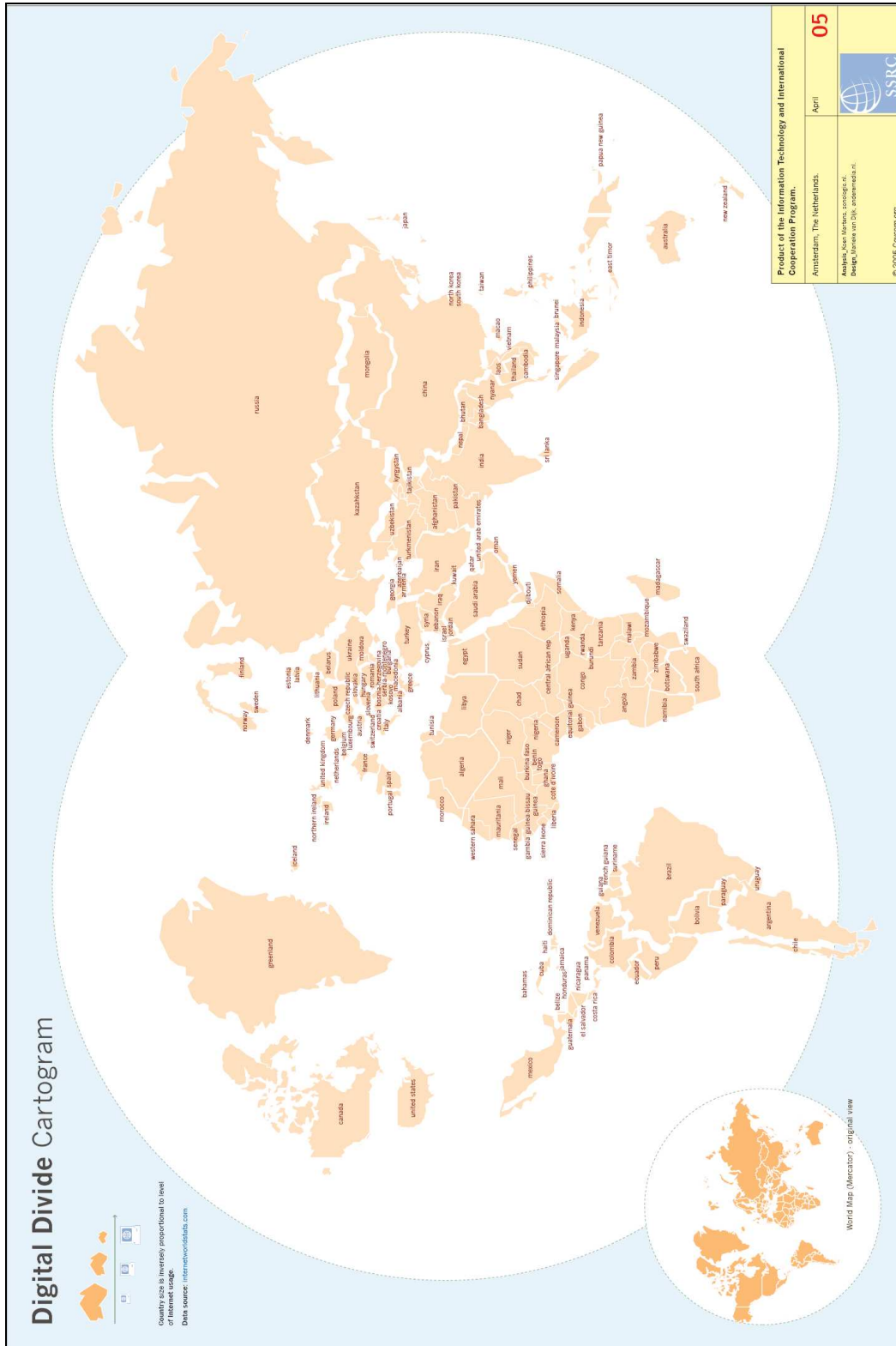


Figure A2.21: Country codes of the world cartogram produced by Byte Level Research. Countries represented by their two letter Internet domain names and sized proportionally to their population. (Source: <www.bytelevel.com/map/ccTLD.html>.)

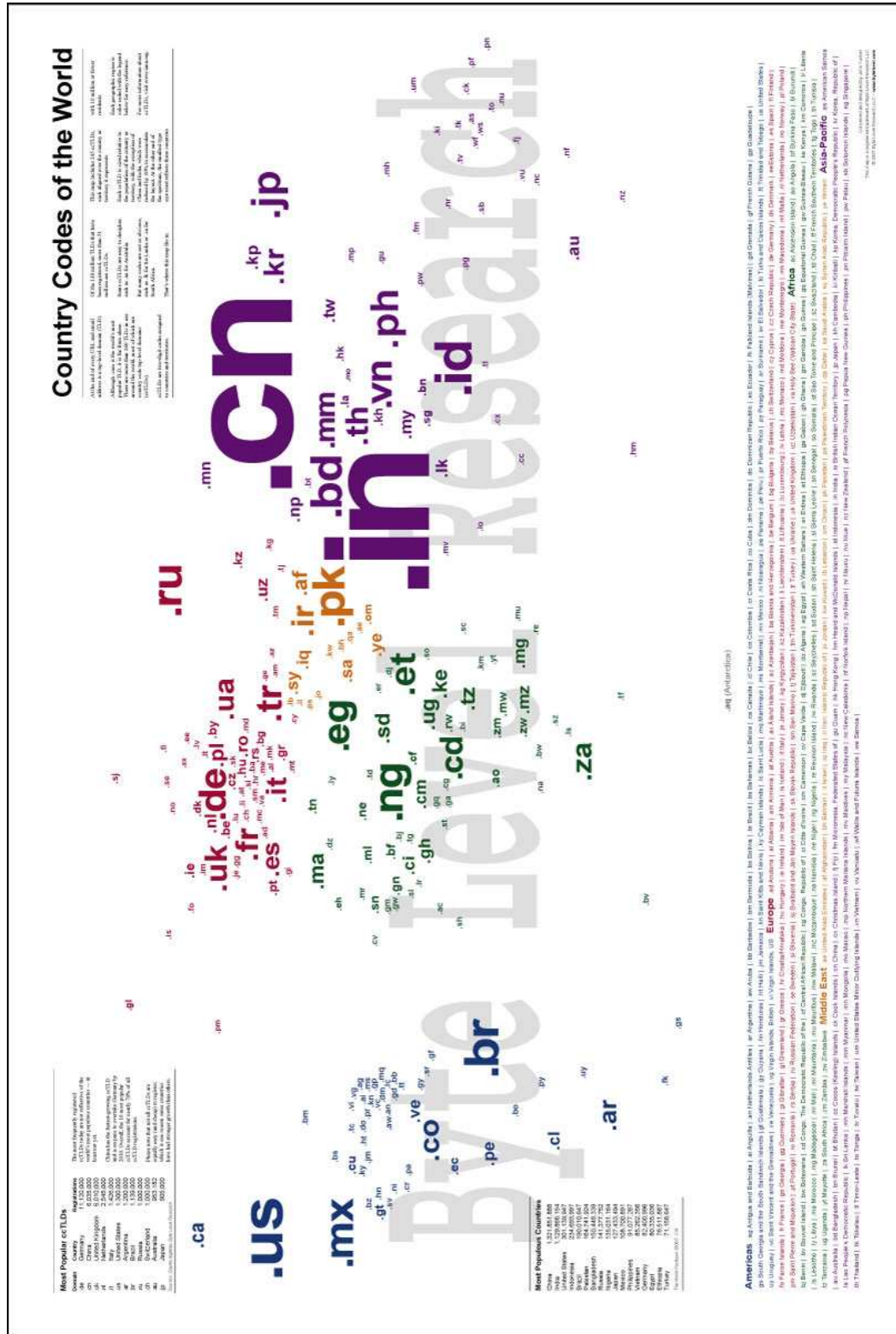
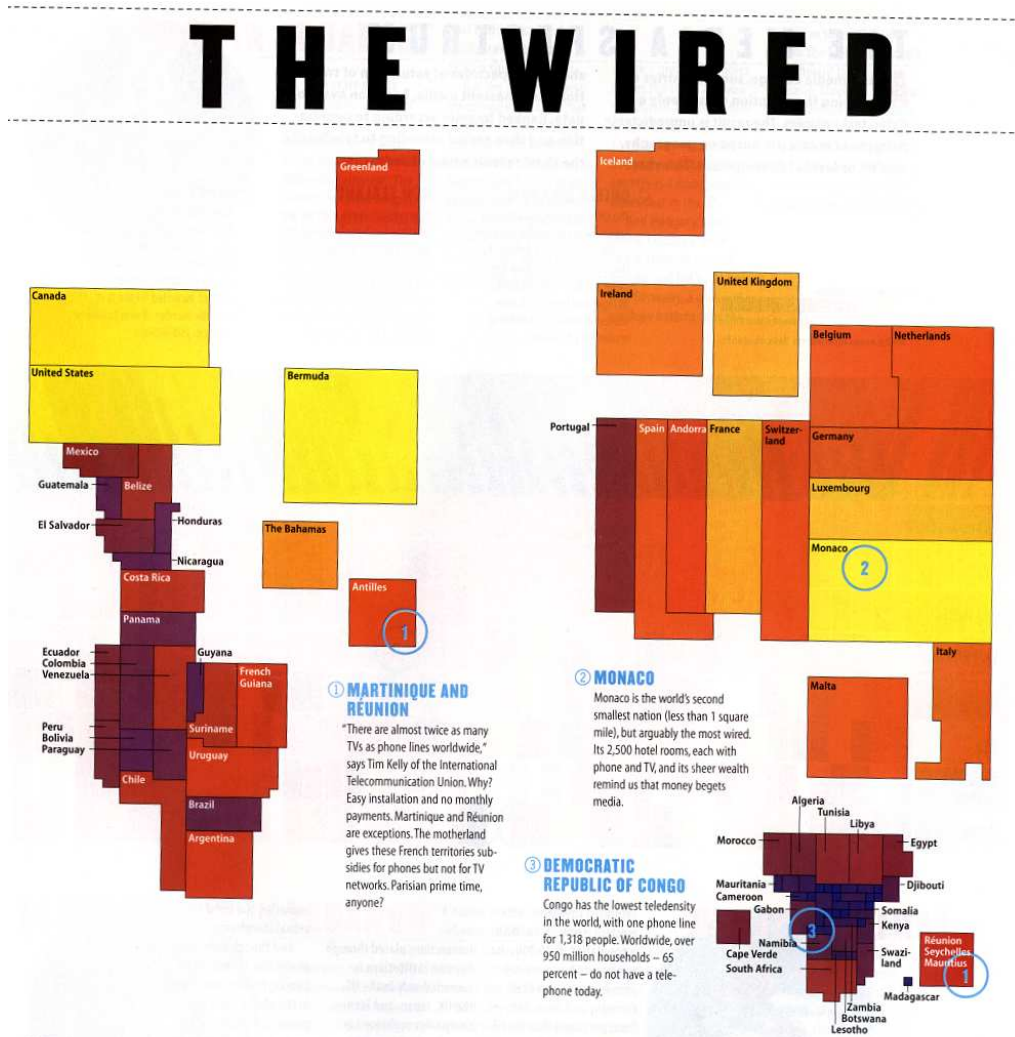


Figure A2.22: First page of 'The Wired World Atlas' produced by Wired magazine. (Source: author scan from original, Conners-Petersen 1988, 162.)



ENVISION THE GLOBE ACCORDING TO THE DENSITY OF TRADITIONAL MEDIA — TVS AND

As you watch CNN piped into Tegucigalpa's airport lounge or witness a granddad greeting arrivals with his cell phone still to his ear, you might think the spread of global media is near completion. Life is a circus of image and sound bite, seemingly synchronized and playing non-

stop around the world. But once you're past the duty-free shop, you see little uniformity in the use of communications technologies.

Take a look at where TV is pervasive or Net hosts are sparse, where satellite dishes abound or PCs don't, and you find a planet that's wildly

diverse. Cable use per capita in Dominica is six times greater than in France. In Cambodia, 71 percent of all phone users are cell phone users. Rarely will you find clear patterns in the ways media penetrate markets and influence our lives.

Figure A2.23: Second page of 'The Wired World Atlas' produced by Wired magazine. (Source: author scan from original, Connors-Petersen 1988, 167.)

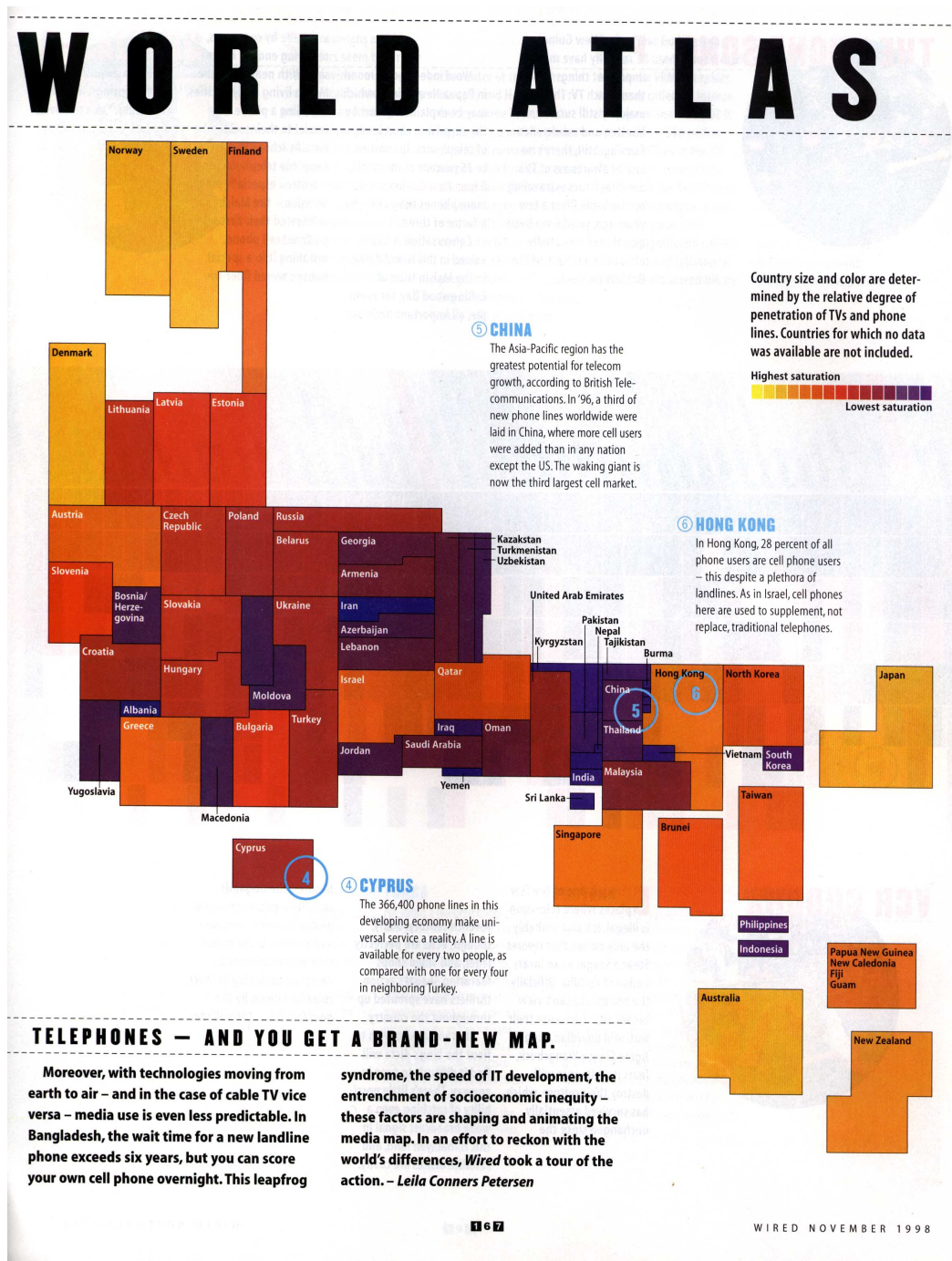


Figure A2.24: Freedom to Connect, produced by Wired magazine, August 1997.

(Source: scanned version from Harpolod 1999, no pagination.)

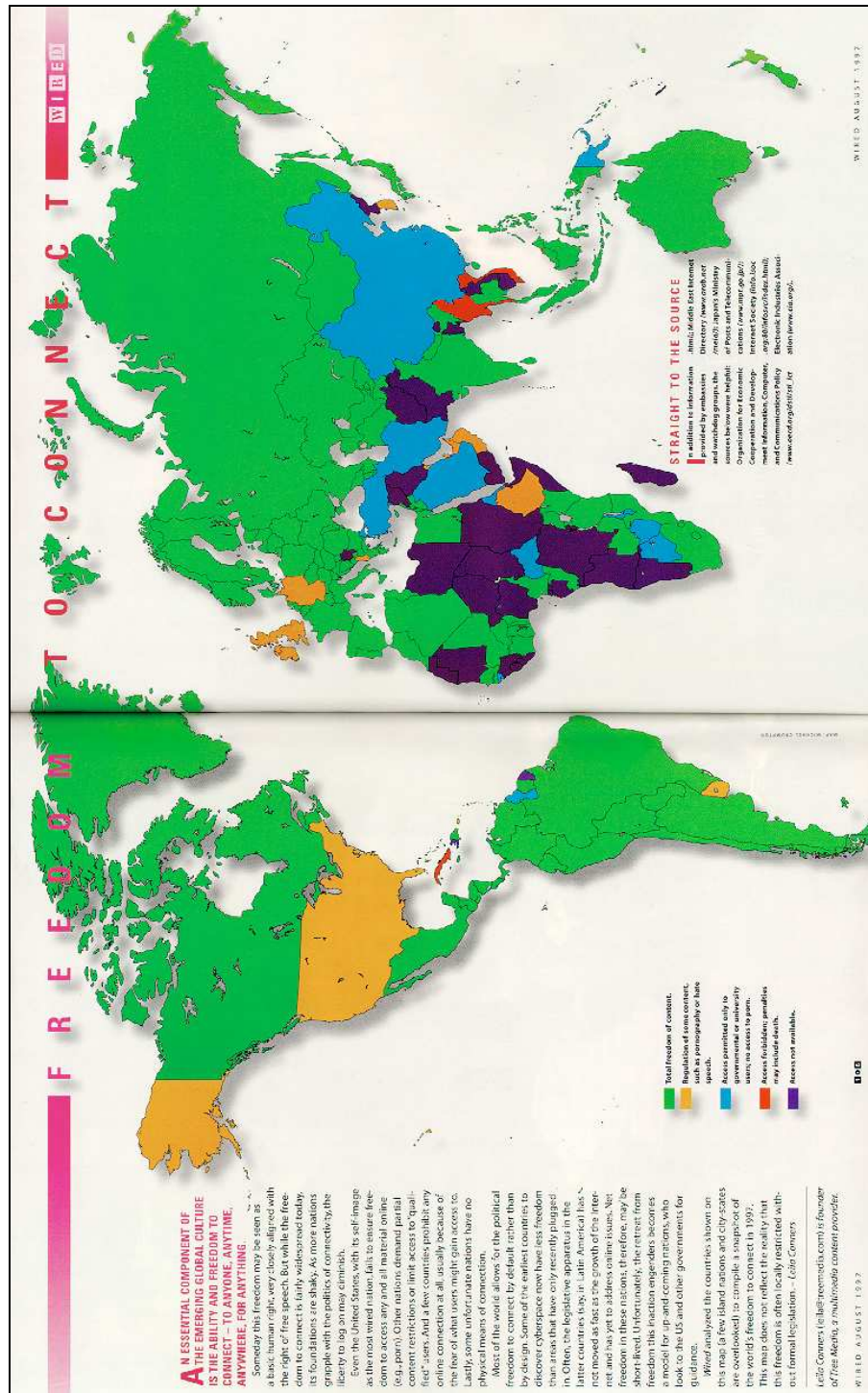


Figure A2.25: Internet's 'black holes' produced by Reporters without Borders as part of a campaign against online surveillance and censorship. (Source: <www.rsf.org>.)

