Using the internet often seems a bounteous candy store through which one can pick and choose goodies at will. Nonetheless, there sometimes appear quite useful and intriguing sites, such as for full-text retrieval or indexing, that one cannot enter except with a password and/or proper identification. Overcoming such an impediment may require payment of a subscription fee. Generally this cost is so high that only institutions can afford it. Many institutions themselves cannot afford the fees. Thereby one loses the benefit of the resource.

At the same time, as do all fields of study and teaching, Portuguese requires that one have expertise in the use of library and research resources, a requirement that persists regardless of cost. Moreover, students, teachers, and scholars of this language may not often have...
many colleagues in the same specialization. They do not have as many persons with whom to consult regarding the development and application of their work. Pursuit of research weighs, therefore, the more heavily as an aid to obtaining expertise and advice.

Library and research resources are now increasingly in electronic format. Resources of this type offer extraordinary advantages in terms of ease of access and efficiency of searching. However, in addition to the cost of some of them, they present further challenges. What resources exist in electronic format? How are they of use? How are they used?

This article describes public-access (non-fee) internet resources in terms of their importance for the study and teaching of Portuguese and in relation to the key operations for using the materials. For Portuguese, the resources coalesce into four major groups:

- periodical literature indexes and abstracts
- library catalogs
- full-text retrieval of articles and books
- selected additional resources

It is important to point out from the beginning a key aspect of searching technique. One can search most electronic databases by author, title, subject, and keyword. Of greatest importance are the latter two since most research seeks information on a particular topic. Actually, even when a person searches by author or title, the choice of such access points may occur because they lead to topic-related information.

In order to achieve searches that produce ample and accurate results, one should use subject and keyword searching in conjunction with each other. A person may be both surprised and disappointed to do a subject search in an authoritative index, catalog, or database and learn that the source contains no materials. Such empty subject searches may be due, however, not to a lack of materials but to not entering a correct subject phrase. Whenever a precise subject search is negative, a keyword search should then be done. A keyword search often produces numerous results where a subject search produced none. However, the keyword search results may have many items irrelevant to one’s interests. One should check these results and identify the materials that contain exactly what one is seeking. In the record for each of these materials that match one’s interest, the subject phrase(s) under which it was cataloged should be noted. Doing a new subject search with these precise phrases, augmenting what one found in the keyword search, will produce results that are both ample and accurate for one’s interests.

I. Periodical literature indexes and abstracts

There are several electronic resources that include indexing of articles on the Portuguese language related to its teaching, literature, and culture. This category includes many that are fee-based, such as the Hispanic American Periodicals Index (HAPI), the Modern Languages Association (MLA) International Bibliography, Linguistics Abstracts Online, Linguistics and Language Behavior Abstracts, and the Bibliografía de la literatura española. Nonetheless, there are some others that are public access and quite significant and useful:
The Handbook of Latin American Studies has existed as an annual print publication since 1936, indexing and abstracting articles and books in the humanities and social sciences on and from Latin America. Edited by the Hispanic Division of the Library of Congress, this authoritative work offers free public access at http://memory.loc.gov/hlas/. It has been available online since the last decade, thereby allowing in seconds searches of literature for two-thirds of a century. One can search by author, title, or subject and by words in entry abstracts. The full-text abstract is provided. Searches can be done in English, Portuguese, or Spanish. A subject search for “Portuguese language teaching” finds 92 items, going back over a half century. Throughout its history, this handbook has concentrated not only on indexing publications on Brazilian literature but also on translations into English of Brazilian Portuguese works. One should also note that, although not available online, there is a one-volume Handbook of Portuguese Studies (Philadelphia: Xlibris, 2000 and see http://www2.xlibris.com/bookstore/bookdisplay.asp?bookid=7).

Hispania is the official journal of the American Association of Teachers of Spanish and Portuguese. Free access to the index of its articles from 1990 to 1995 is available at http://cervantesvirtual.com/hemeroteca/hispania/catalogo, and of those for the past three years at http://www.hispaniajournal.org/indexes.htm.

The tables of contents, but not a complete index, are available for the journal, the Luso-Brazilian Review, published at the University of Wisconsin, Madison. The tables for recent issues appear at http://www2.wisc.edu/wisconsinpress/journals/journals/lbr_toc.html.

2. Library catalogs

Indexes indicate that a publication exists. However, to obtain a publication one needs to consult a library catalog to see what institution(s) hold it. Ideally one’s own library will have the item. However, in the absence of a local holding there are national and international library catalogs publicly available:

- Library of Congress (LC)
- Libweb

The Hispanic Division of the Library of Congress has the largest holdings on Portuguese in the US. The public access catalog of LC is available at http://lcweb.loc.gov/z3950/gateway.html (the Z39.50 interface is more user friendly than other sites). LC is not a lending library. Its catalog records, therefore, serve more for purposes of bibliographic verification, not as the basis for making a loan request. The records also serve another purpose. Given the exceptional size of LC’s Portuguese holdings, doing a subject or keyword search in the catalog, looking, for example, for “Portuguese teaching,” can result in an extensive bibliography, rapidly generated.

Libweb is a site (http://sunsite.berkeley.edu/Libweb/) that provides access to the catalogs of major public, academic, and research libraries around the
world. For Brazil there are 11, including the University of São Paulo; for
Portugal, 14, including Coimbra. Libweb also offers easy access to the
major libraries of other Romance language countries, particularly France
and Spain, with holdings on Portuguese. The importance of these catalogs
is not so much for obtaining materials as for verifying bibliographic data.
Actually obtaining materials (the original, a photocopy, a microfilm, or
electronic scan) depends initially on the interlibrary loan service at one’s
library but ultimately on the policy of the possible lending library.

There is a project for a Portuguese national union catalog, the Base Nacional
de Dados Bibliográficos (PORBASE) detailed at http://www.porbase.org/
o_que_e_porbase/Protocolo%20porbase.doc. A directory of libraries and
archives in Portugal, describing collections, is at http://www.sapo.pt/culturais/
bibliotecas/. Pergamum (details at http://www.pergamum.pucpr.br/
pergamum/php/index3.php) is a recently developed proprietary database
comprising an online union catalog of Brazilian university and research
libraries. One can consult a directory of Brazilian university and public
libraries at http://lanic.utexas.edu/la/region/library/#brazil.

3. Full-text retrieval of articles and books

The array of electronic indexes and catalogs now available is impressive.
However, they are only means to an end: getting to a publication. Electronic
resources now also allow one to obtain directly on a computer the full text of
a publication. There are databases that allow the full-text retrieval in Portuguese
or on the Portuguese language not only of articles but also books.

For articles the principal ones are:

- University of Texas Latin American Network Information Center (UT-
LANIC)
- Newslink
- Lusotopie
- Portuguese Studies Review

For books the databases are:

- University of Virginia Electronic Text Center
- National Libraries of Brazil and of Portugal
- Projecto Vercial: A Maior Base de Dados sobre Literatura Portuguesa
- Biblioteca Virtual Cervantes
- Biblioteche Virtuali in altre lingue [i.e., non-Italian]

UT-LANIC is a public access, electronic clearinghouse of sites and databases
related to the region and especially Brazil. The site for Brazil (http://
lanic.utexas.edu/la/brazil/) provides a section on “Media and Communication,”
that links one to journals, newspapers, magazines, and radio and television
stations in Portuguese. The latter station links do not, of course, provide text
retrieval. Also not retrieving text but nonetheless of great importance in relation
to the cultural background of Brazilian Portuguese are the sections for the
“African Diaspora” and the “Arts and Humanities.”

The text of newspapers and magazines in Portuguese, both current and
some back issues, are available via the public access site, Newslink (http://
/newslink.org/). It offers several dozen newspapers from Brazil, Portugal,
and Mozambique.
As of 2002 full-text retrieval of articles from Lusotopie: enjeux contemporains dans les espaces lusophones=Desafios contemporâneos nos espaços lusófonos= contemporary challenges in Portuguese-Speaking Worlds maintained by the Institute of Politics at the University of Bordeaux IV is available. The site is at http://www.lusotopie.sciencespobordeaux.fr/sommaire.html.

The Portuguese Studies Review, while not offering electronic article retrieval does have a site with abstracts of articles from recent issues at http://www.trentu.ca/psr/recent.html.

For books a leading public access site is the University of Virginia Electronic Text Center at http://etext.lib.virginia.edu/. This center has collected the texts of numerous publications in the public domain in English and other languages. A fascinating aspect of this resource is the ability to do keyword searching not just in one volume but across volumes. One can thereby do quite interesting textual analysis by identifying, for example, how many times the word “Portuguese” or “Brazilian” appears in thousands of books.

The National Library of Brazil offers a public access site (http://www.bn.br/Script/index.asp then click “Livros Eletrônicos”) providing the texts of many of the classics of late nineteenth to early twentieth century Brazilian literature. An even more extraordinary array of digitized books, especially for language and literature going back centuries, is available at the National Library of Portugal (http://bnd.bn.pt) in its Biblioteca Nacional Digital project. In addition, offering texts from medieval Portugal to the modern period, is the Projeto Vercial: a maior base de dados sobre literatura portuguesa at http://www.ipn.pt/literatura/index.html.

A public access site, maintained by an Italian publisher, Biblioteche Virtuali in altre lingue [i.e., non-Italian] at http://www.alice.it/virtual/net.vir/vnetext.htm#Portoghese offers a clearinghouse of web sites for hundreds of texts of classical literary works over the centuries from Brazil and Portugal. One of the most advanced and voluminous Spanish public access virtual libraries is the University of Alcalá’s Biblioteca Virtual Miguel de Cervantes at http://cervantesvirtual.com/index.shtml. The core of this collection is hundreds of books from Spain, Argentina, Chile, Mexico, and Cuba. Thereby it becomes a singular source of works in Spanish on Brazil, Portugal, and the Portuguese language.

4. Selected additional resources

There is a variety of sources beyond electronic indexes, catalogs, and full-text retrieval that can considerably support the study and teaching of Portuguese. These resources consist of:

- Dictionnaires
- Grammars
- Online Learning of Portuguese
- Certification of Portuguese Language Proficiency
- Portuguese Language Education and Teaching
- Radio and Television
- Ethnologue
- Language Maps
Portuguese Language Community

Google Search Engine

For dictionaries one of the most complete array of public access general and specialized works is at http://www.yourdictionary.com/languages/romance.html#portuguese. Ancillary to this site is one for Portuguese grammars at http://www.yourdictionary.com/grammars3.html#portuguese.

The most complete resource for online learning of any language is Languages-on-the Web, also known as lonweb, a privately maintained, public access utility. The page for Portuguese, at http://www.languages-on-the-web.com/links/link-portuguese.htm, is extraordinary in its offerings. It connects one to sites for: dictionaries, grammars, chat sites, online courses, schools, news periodicals, radio and TV stations, audio-visual and book vendors. Another site, in Russia, connecting to a wide range of study and teaching resources is at http://links-guide.ru/sprachen/romanistik/portuguese-language.html. A site that consolidates learning of Brazilian Portuguese is at http://www.geocities.com/litlight/portuguese.html. The University of Lisbon describes its program for certification of Portuguese language proficiency is at http://www.alte.org/members/portuguese/index.cfm.

For language education and teaching, the US Department of Education maintains the Educational Resources Information Center (ERIC), which maintains the Clearinghouse on Languages and Linguistics (CLL). Details of its resources are at http://www.cal.org/ericcll/about.html. Of special importance for Portuguese are the resources maintained by CLL on less commonly taught languages, described at http://www.cal.org/ericcll/faqs/rgos/lctl.html. Among the web sites referenced by CLL is iloveLanguages at http://www.ilovelanguages.com/. It references 113 web sites related to learning or teaching Portuguese.

Related to CLL resources are those of the Center for Advanced Research on Language Acquisition (CARLA) at the University of Minnesota. Chief among its resources for Portuguese is a site at http://carla.acad.umn.edu/lctl/access.html that allows one to search for Portuguese courses, during the regular academic year or in summer sessions, at US colleges and universities; in study abroad programs, in primary and secondary schools, and through distance education opportunities. Moreover, it also offers a virtual picture album for Portuguese at http://carla.acad.umn.edu/VPA/vpa.html as a supplementary teaching resource.

Radio and television in Portuguese offer exceptional opportunities for learning about language. One can listen to radio and TV channels through special audio-video software programs. A free version of such software, RealOne Player, with access to radio stations worldwide, is available at http://uk.real.com/freeplayer_r1p.html?try=2nd. Particularly the public access, education, and news channels offer excellent programs of interviews with writers, intellectuals, scholars, and public figures. Free access to international television channels is available at the site called “tv4all” at http://tv4all.com/portal.htm, maintained by the Internet TV Forum. It includes broadband channels in Portuguese from Brazil (15; non-broad, 30) and Portugal (8, non-broad, 11). Some Portuguese programming appears on the Vatican channel. A Galician station is also available.
To know where Portuguese is spoken, Ethnologue, maintained by SIL (Summer Institute of Linguistics) International, provides a free access online guide (http://www.ethnologue.com/show_language.asp?code=POR) to the number of Portuguese speakers by country and to variations in the use of the language. A site offering an extensive array of language maps is at http://bamse.ling.su.se/~ljuha/maps.shtml. Maintained by the linguistics department at the University of Stockholm, the Portuguese segment is at http://www.orbilat.com/Modern_Romance/Ibero-Romance/Portuguese/index.html. A sample of maps available is one for dialects in Portugal at http://www.orbilat.com/Maps/Portuguese/Portuguese_dialects.html and for Galician at http://www.orbilat.com/Maps/Galician/Maps.html. The richness of this site cannot be underestimated because its array of maps is only one aspect of further resources it offers of descriptive grammars, histories, glossaries, and texts.

An interesting web address maintained at the University of Glasgow that consolidates the internet sites of lusophone countries is at http://www2.arts.gla.ac.uk/PortLang/webbies.html. It provides connections to web sites in Brazil, Portugal, the Azores, Madeira, Angola, Mozambique, Cabo Verde, Guinea-Bissau, São Tomé e Príncipe, Macau, and East Timor. The Community of Portuguese-Speaking Countries has its site at http://www.cplp.org/ and is especially helpful for monitoring news regarding official developments in the Portuguese language worldwide.

Resources on the internet for just about any discipline are constantly, even relentlessly, expanding. One of the wonders, even a godsend, for exploring these mammoth resources is the Google search engine (http://www.google.com/). Now storing more than three billion web pages (astonishingly, web pages only began to appear ten years ago) and able to search millions of sites thoroughly and accurately in fractions of a second, it has become a key element in managing the torrent of electronic data in the Information Age. Google even provides searching capability exclusively for web sites that are in Portuguese (http://www.google.com/language_tools?hl=en). Moreover, one can also limit Google searches to web sites just in Brazil or Portugal. Furthermore, one can limit searches not just by language or country but also by keyword. Thereby, for example, one can find all sites in Portuguese that are related to “linguistica.” One can even set Google to operate in Portuguese (of either Brazil or Portugal). An interesting and surprising way to test Google is to enter your own name as a search term. Any page on the internet that has your name should appear. Another search engine with very broad searching power is Dogpile at http://www.dogpile.com/.

In conclusion, it should be apparent that within your computer there is a store of resources for the study and teaching of Portuguese equal to some of the best libraries in the world and considerably beyond the scope of most standard libraries. However, knowledge of these resources is still limited. As those who teach Portuguese obtain expertise in knowing about and using them, they will pass this knowledge on to their students. Thereby the universe of expertise should grow. Such growth in use can then increase demand for further resources. The growth of expertise, users, and resources can very much depend, therefore, on the extent to which we make “a biblioteca virtual nossa biblioteca.”