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WIKIMEMO: A Portal for Italian Language and Culture Heritage Conservation

Introduction

Since 1861 more than 24 million of Italian people migrated abroad. Many of them came back: today, the Report 2007 of Fondazione Migrantes, [Fondazione Migrantes, 2007] says that Italian immigrants are found primarily in Europe and America (2,043,998 in Europe; 1,330,148 in America), although relevant groups of Italians can also be found in other parts of the world, such as Oceania (119,483), Asia (26,670) and Africa (48,223) (Figure 1a).

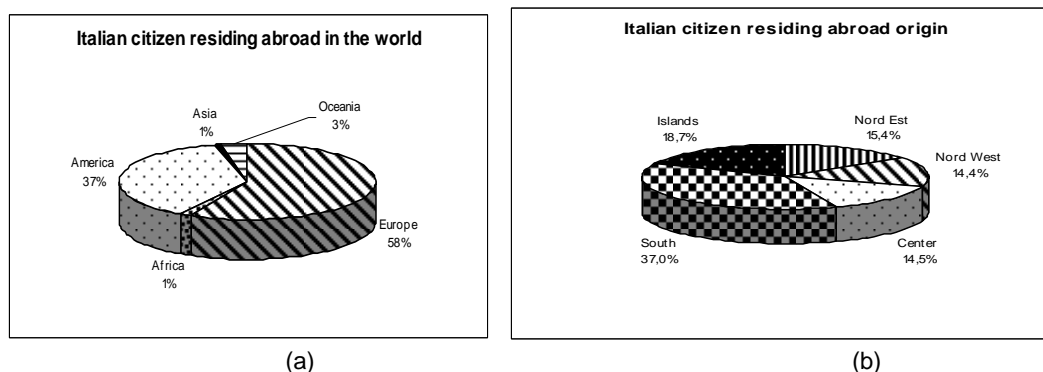


Figure 1 (a) Italian Citizen distribution in the world ; (b) Italian citizen residing abroad distribution percentage following the origin region [Fondazione Migrantes: Report 2007]

There are countries, like Germany, Argentina and Switzerland, where Italian citizens reach half a million units; France counts 350,000 Italian citizens, but this figure greatly increases, if we consider also naturalized Italians and French people of Italian origins; the same is true for America and Australia. More than 50% of the Italian citizens currently residing abroad were originally from southern Italian regions, from Sicily, Campania, Calabria and Puglia, in particular; 29.8% from the North (Lombardy and Veneto); 14.5% from the Centre (Lazio). (figure 1b). 18% of Italians living abroad are under age and 18% are over 65, which amounts to almost half a million units more than in the previous year.

Most immigrants were speaking only their village dialect and only after some time learned the guest country language (mainly only spoken). Often a lack of inference on Italian unknown dictionary and new contents came out like when a word to describe new realities (i.e. the usage of the word '*insuransa*' to indicate insurance (assicurazione in Italian)). The difficulties of local communication also due to a slow and insufficient learning of the new language induced the foundation of many associations. Most of these clubs kept tied to the village of origin or to some religious celebrations and their web pages keep this local vision. The Italian language becomes a subordinate code, while dialect lacks of glamour and weakens. The second generation of emigrants usually was in touch only with the dialect spoken in their families. Immigration is a complex process of psychological adaptation and change not only for immigrants but also for their children and for the children of their children, the so called second and third generations.

Many researchers said that foreign children are exposed to a process producing a self-laceration: rather, they exhibit multiple identities that are shaped by both the new realities and the home and familial context, they lives conflict among affective and cultural instances. Today the community with Italian origin add up to 10 million of people, including immigrant descendants in different countries. The Italian is now the fourth most studied language in the world and in the United States and the second one in Canada; it can boast about 200 million native speakers throughout the world (one third Italian citizens; one third local citizens of Italian origin; one third admirers of the Italian language). Italian embassies and organizations have expressed their apprehension that, in some ten or fifteen years' time, the children of Italians abroad not only will be able to speak Italian any longer, but they will also have problems in understanding it. It is important at this step to offer to the Italian communities living

abroad some facilities allowing them to strengthen their root identity enlarging their vision from root-tradition-village-region-dialect to root-tradition-village-region-dialect-country-Italian language.

The Portal Wikimemo

To help this process of Italian cultural heritage conservation for immigrants living abroad and for their familiars the portal Wikimemo have been designed. Its aim is to supply instruments to retrieve the records of the immigration experiences allowing their story telling through voices, sounds, pictures, documents, objects.

Internet is a major tool for the spreading of information and represents a unique opportunity to facilitate collaborative writing, as it attracts an ever wider number of potential authors. The first developmental phase of the Web followed the idea that "many read, few write"; the major tool of this phase was the browser. More recently, the development of Web writing tools, such as blog and Wiki technologies, laid the basis for an increase of the number of potential writers. The Wiki technology is an excellent tool for the collaborative production of texts. Its features (discussion pages, the chronology and notification of the changes made, the chance of identifying the paternity of the textual contributions etc.) make the "group work" particularly effective and facilitate the creation of a hyper-textual system that evolves in time. "Wikipedia" is a concrete example of the potential of this technology: in a very short time, it has become the greatest system of collaborative learning, with a community of users who are all willing to increase knowledge and share it free of charges.

Second and third generation Italian immigrants frequently feel the need to re-establish a link to their origins and would greatly benefit from the existence of a structured portal in which the information necessary for rediscovering differences, similarities and traditions in the Italian culture is offered in an organized, integrated and homogeneous format: a portal that aims to unify and reinforce the Italian identity while maintaining and respecting local specificities; a kind of virtual town square where people of different ages and origin meet to share experience and needs.

The cooperative Wiki system, within the portal, is based on the recover and the sharing of information about memories, traditions, language usage, needs etc. Information stored in the Wiki data base system, adequately organized and framed, can become themselves a large free and accessible reference corpus for linguistic, historical, social statistical studies.

The Wikimemo portal follows the philosophies of sharing, comparing and re-using resources. Among all, it proposes the goal of sharing documents, products and software instruments on written and spoken Italian language. It can be seen as a virtual place where it is possible to get different levels of information on Italian language, but also a place where sharing and comparing knowledge, experiences and traditions. This Portal want to be a place where a curious user can look up in resources organized following different metaphors (i.e. library, cooking book, pictures album etc) approaching our culture both because he/she is searching some specific data or simple because he find new information stimulating his/her curiosity.

The first Wikimemo level is the educational one: it proposes didactical instruments useful for ameliorating the language knowledge. The portal can offer tools for the language analysis like texts, frequency lexicon, form vocabulary, anagrams lists etc.. These instruments can be usefully accessed and enjoyed even from inexperienced users. It can become the place where re-link language, people, traditions, ways of filling, behaviors coming from their own original village, it allows the setting up of bridges with their own roots. It allows the language learning to young students living abroad through the help of their contemporaries living in Italy (peer to peer education) by using informal tool instead of classical language courses.

The second Wikimemo level, organized following the wiki system, is the 'creation' of a community enlarging portal's information, contributing with writing them i.e. creating a record or the description of traditions, recipes Italian people living abroad can remember. Old people can share their experiences telling their stories, their knowledge on the traditions: they can show old pictures and other material so that following generations can inherit this information estate, can taste it and supplement it with new knowledge. In this Portal section users can be authors of communicated information mirroring the knowledge sharing and exchange ideas. This section will be split up in modules organized on specific enlargeable domains.

Finally the Wikimemo dynamic section will allow the constitution of a corpus of written Italian language for this community that can become subject o study for researchers and that can contribute to ameliorate and to evolve the tools previously described. In figure 2 an example of the portal organization is shown for the topic: 'January 6th Epiphany day that in Italy is celebrated through many different folk and religious traditions.

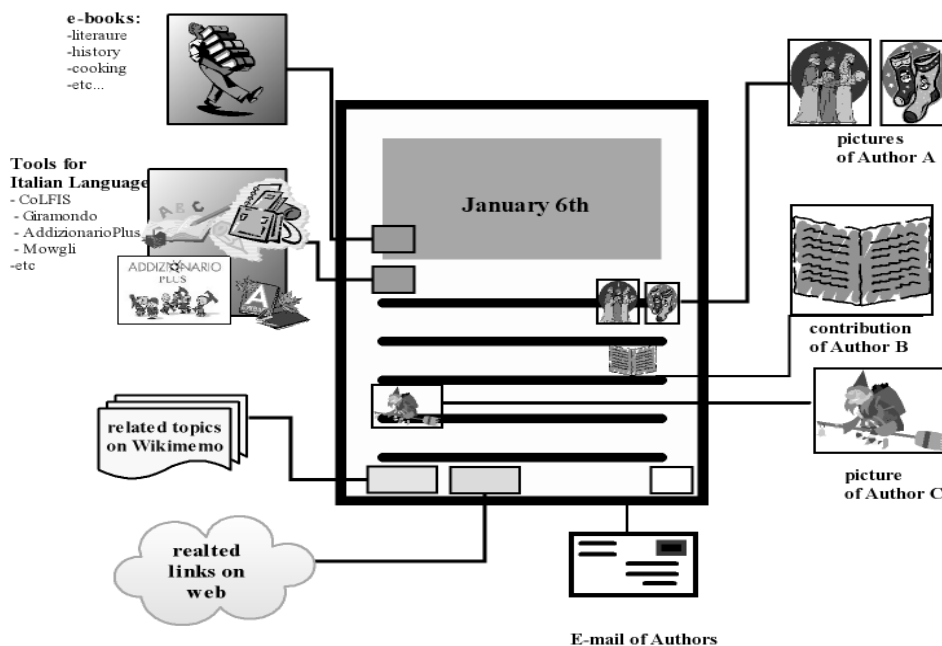


Figure 2 Autobiographical Writing Storage example on topic "January 6th"

The design of the Wikimemo Portal is focused on the following main subjects:

- Autobiographical writing. Autobiographical writing has recently been re-considered as an educational tool. Indeed, telling about ourselves is a means to learn about ourselves, our history and family, to re-discover our roots and to leave a trace of our existence. Given that each of us mirrors the world we were born in, we live in and we come from, sharing our memories allows us to re-construct and reinforce our images, memories and experiences. The recent growth in importance of this phenomenon has led to the birth of several initiatives that promote the sharing of autobiographical writings.
- Sharing of experiences and memories. Wikimemo focus on sharing and archiving autobiographical writings or on reconstructing events or experiences of specific geographical areas. Our portal will be a virtual workshop of the collective memory of Italians abroad, aimed at bringing to the suggestion of the users themselves, the traditions and customs of Italy as it used to be and as it is now.
- Sharing linguistic and cultural resources. The Internet features an ever growing number of portals offering services and resources connected to the Italian language and culture and which include: lists of Web sites or of reference tools and resources; online courses for learning Italian; electronic libraries with the work of famous Italian writers; texts about arts, cinema and history; newspapers and periodicals; bibliographies; electronic texts; dictionaries, encyclopedias and other teaching material. These portals are powered by associations aiming at promoting the expansion of Italian in the world, by Italian municipal and regional authorities and by Italian and foreign universities. Among the Web sites concerned with the Italian language, there is a great offer of linguistic information and tools for different types of users; many of these tools are not free of charges. Some well-structured sites offer teaching material and tools by providing links to external Web sites. However, no Web site offers space for teachers, researchers etc. to share their experience and results with the (scientific or general) community. A relevant aspect of the current project is the sharing of linguistic resources, articles, research material and information within a flexible virtual space.
- Sharing tools supporting the Italian language learning. Tools supporting the Italian language learning with special reference to lexical and morphological analysis, based on the corpora will be accessible on Wikimemo. Recently, several e-devices have been created, many of which will be available in the portal. Some of these are meant for pupils of primary schools, in order to improve their lexicon and their linguistic understanding, other are for adults.
 - ADDIZIONARIOPLUS (Turrini 2001, 2006), hypermedia workshop for improving linguistic competence, specifically designed for primary school pupils. The didactic environment invites to engage in activities normally considered difficult and tedious (such as consulting the dictionary) and stimulates the acquisition of new words and related experiences.
 - GIRAMONDO (Turrini 2002), prototype of a software allowing to build multimedia bilingual dictionaries, meant to help learning foreign languages, notably English.
 - MOWGLI, multimedia tool to support the integration in the school of cognitively impaired children, offers a path of sensorial/linguistic experience. By proposing lively experiences, this tool aims at improving the lexical and linguistic competence.

- CoLFIS (Corpus e Lessico di Frequenza dell'Italiano Scritto:), provides up-to-date information as for the frequency of Italian words. This allows, among other things, to derive precise indications as for the basic Italian lexicon.
- Lessico Elementare provides a dictionary of the most common Italian words. It contains the 6095 lemmas most frequently used in written texts for and from primary school pupils (from 6 to 10 years old). This dictionary comes from the evaluation of a corpus of about 1 million of words.
- Friendly user interface. The portal should be easy and ready to use, especially in its Wiki section, since the target of users comprises people mainly with a low degree of Information Technology literacy. It is necessary to avoid complex search interfaces and to focus on simplicity for what concerns navigation and information retrieval. In particular the portal should show:
 - free text search like in 'Google system'
 - automatic connection with contents stored in the archive. If a writer uses a keyword, the system relates it with pertinent information sources (articles, images,...). The Hyperlinks proposed by the system could optionally be manually modified by the writer
 - Thematic indexes: Wiki content will grow exponentially and in a few time it could result difficult to identify a particular "informative area". The portal will provide instruments allowing a thematic access to the content referring to defined ontologies.
 - Links to external content. The system will suggest pertinent link to the writers. Once validated such links will enrich the originally proposed content.
- Security tool. Security tools will be developed and used to prevent automated software from performing actions which degrade the quality of service of Wiki system, whether due to abuse or to resource expenditure. CAPTCHAs i.e. can be used to stop automated posting to Wiki, whether as a result of commercial promotion, or harassment and vandalism. It also can have the function of rate limiting, as automated usage of the service until such usage is done in excess, and to the detriment of other users. Some content control will be also performed to avoid porno intrusions.

Conclusion

The experience of each person shouldn't be wasted but it should be transmitted to future generations as heritage of a specific historical time, of a folk tradition, etc. Indeed the culture of a people should be kept rescuing its data from oblivion so that they can be analyzed and looked from the new generations. In this paper the design of a portal for Italian immigrants is proposed. It follows some main guidelines connected to sharing, comparing and re-using resources, documents and tools for Italian language. Since the conservation of cultural heritage of the original country is a problem common to each immigrant community, the portal structure can be re-proposed for analog experiences with different languages.

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Bibliography

- Anelli S., Bianchi Bandinelli R., Guantini S., Turrini, G. (2004) MOWGLI: uno strumento multimediale di supporto all'integraz. scolastica dei ragazzi con disabilità cognitive, Benvenuti & Cavaciocchi, Livorno
- Bertinetto P.M., C. Burani, A. Laudanna, L. Marconi, D. Ratti, C. Rolando, A.M. Thornton: Corpus e Archivio Lessicale dell'Italiano Scritto contemporaneo (CoLFIS) in formato digitale consultabile presso ILC, Unità Staccata di Genova (<http://www.ge.ilc.cnr.it>).
- Cutugno P., L. Marconi, G. Morgavi, M. Morando: CoLFIS: sistemas de interrogacion online, X Simposio Internacional de Comunicación Social, Actas-I, pp.505-510, 2007.
- Cutugno P., L. Marconi, D. Ratti, C. Rolando: "El Lenguaje en el nuevo milenio", VII Simposio Internacional de Comunicación Social, Actas-I, pp. 152-156, 2001.
- Cutugno P., L. Marconi, D. Ratti, C. Rolando: (2003) "The Usability of e-Book technology for the treatment of linguistic data", Advances in Technology-Based Education: Toward a Knowledge-Based Society (m-ICTE2003), A. Mendez Vilas, J. A. Mesa Gonzalez (Eds.), Vol. III, pp. 1842-1846.
- Chellapilla k. , Larson K., Simard P., Czerwinski M.(2005). "Computers beat Humans at Single Character Recognition in Reading based Human Interaction Proofs (HIPs)" (PDF). Microsoft Research. <http://www.ceas.cc/papers-2005/160.pdf> .
- Del Rio N., Durán J. I., Turrini G., (2006) Addizionario: a Tool for the Emergence of Indigenous Language as a "House of Being" in Turrini G & Bianchi F. (Eds.) Hypermedia for Education and Research, Linguistica Computazionale, Vol. XXVI, pp 263-282.
- Fondazione Migrantes "Rapporto Italiani nel mondo 2007", IDOS, Roma <http://www.rapportoitalianinelmondo.it/>
- Marconi L., M. Ott, E. Pesenti, D. Ratti, M. Tavella: "Lessico Elementare (Dati statistici sull'Italiano scritto e letto dai bambini delle elementari)", Zanichelli, Bologna, ISBN 88-08-09538-X, 1994.

- Ratti D., L. Marconi, G. Morgavi, C. Rolando: "Flessioni, rime, anagrammi: l'italiano in scatola di montaggio", Zanichelli, Bologna, ISBN 88-08-03052-0, 1988.
- Rolando C., D. Ratti, L. Marconi, P. Cutugno: "Estudio de la problemática relativa a la navegación en INTERNET y perspectivas para la creación de instrumentos que se puedan facilitar al usuario", VII Simposio Internacional de Comunicación Social, Actas-II, pp.528-532, 2001.
- Turrini G., Alberti C., Santullo M.L., Zanchi G., (1995), Capire l'antifona: dizionario dei modi di dire con esempi d'autore, Zanichelli, Bologna.
- Turrini G & Bianchi F. (Eds.) (2006) Hypermedia for Education and Research, LINGUISTICA COMPUTAZIONALE, Vol. XXVI, pp 1-293
- Turrini G., Cignoni L., Paccosi A., (2001) Addizionario: a Pupil's Innovative Tool for Language Learning (http://ifets.ieee.org/periodical/vol_2_2001/turrini.html)