



9th Erasmus Week

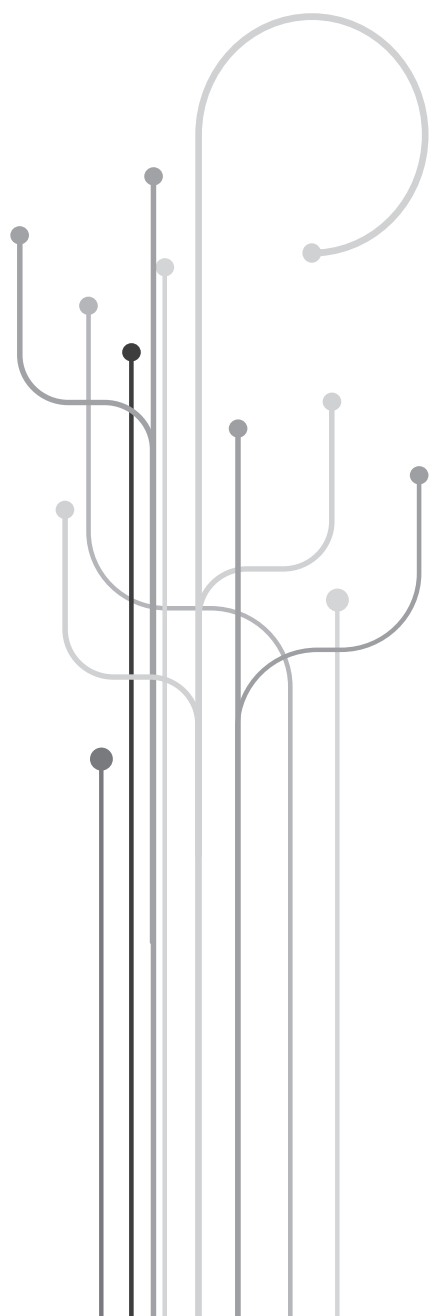
Teaching Crossroads

Edited by

Elisabete Silva

Clarisse Pais

Luís S. Pais



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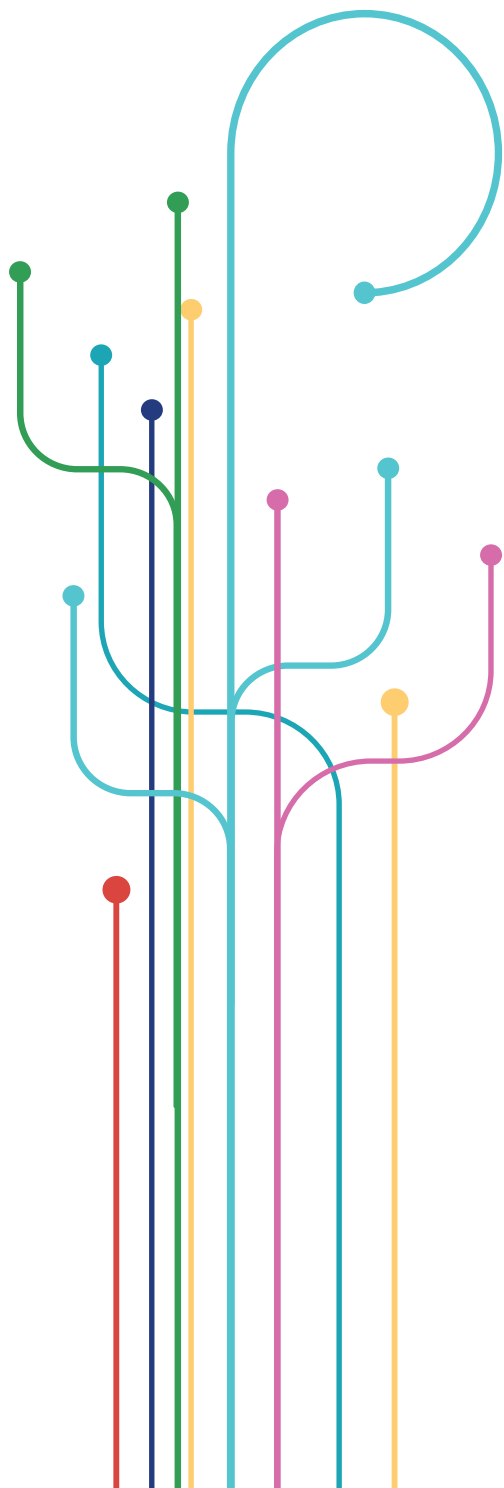
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Preface

Elisabete Silva; Luís S. Pais; Clarisse Pais

The Editors

Acknowledged for its unceasing promotion of the Erasmus mobility programmes, the IPB has been accredited with the Erasmus Charter for Higher Education 2014-2020 and awarded by the European Commission with the ECTS Label (for the period 2011-2014) as well as the Diploma Supplement Label (for the period 2013-2016). The IPB is proud to be one of the few national and international institutions that has been distinguished simultaneously with both quality labels. These awards represent a strong indicator of the international level achieved by the IPB as being on the top of the European Higher Education Institutes within the scope of the Erasmus mobility programmes.

After two numbers of Teaching Crossroads within the 7th and 8th IPB Erasmus Weeks, we are now proud to present the third number of Teaching Crossroads as regards the 9th Erasmus Week which took place in May 2013.

Once again, teaching staff, who participated in the academic and cultural event that made up the Erasmus Week by delivering seminars, lectures and/or workshops, were invited to make their texts available for publication.

In this number of Teaching Crossroads, we aimed, once more, at making the publication thorough regarding the accuracy and effectiveness of the articles presented. Therefore, for the first time, the texts have been peer-reviewed. We would then like to thank all the peer reviewers who most kindly and willingly reviewed the

texts, namely **Ana Paula Monte**, **Ana Paula Sismeiro**, **António Meireles**, **Cláudia Martins**, **Elisabete Silva**, **Maria Augusta Mata**, **Miguel Ângelo Rodrigues**, **Paulo Mafra** and **Rui Pedro Lopes** from the IPB.

The research areas focused on in this number are rather multidisciplinary covering the following knowledge domains: Information Technology and Applied Sciences; Nursing and Health Care; Economics; Law and Environmental Education; Education (Art, Linguistics and Translation and Culture Studies).

Patrick Siegfried devotes his attention to the importance of the service sector for the industry, highlighting the German situation in regard to the tertiary sector. In his article, the author presents several research approaches launched in Germany that deal with the recent developments in service engineering and service development research in Germany over the last years.

Axel Sikora gives us an overview on The Internet of Things (IoT) applications, such as ubiquitous computing and ubiquitous connectivity, Cyber Physical Systems (CPS), ambient intelligence, Machine-to-Machine communication (M2M) or Car-to-Car (C2C)-communication, smart metering, smart grid, telematics, telecare and telehealth. The author demonstrates how these applications are used today to increase efficiency and to improve the availability of information. Moreover, we are also shown the different phases of the evolution of embedded system for social-enabled applications, particularly in relation to the connectivity and information exchange.

Pedro Gutiérrez Moraño, **Belinda Basilio Fernández** and **José Luis Bote Mohedano** offer us a series of health hints and preventive measures, as far as Diabetes *Mellitus* (DM) and its consequences are concerned. In order to prevent the amputations related to the diabetic foot, the authors provide us with a series of effective preventive strategies to decrease the incidence, prevalence, morbidity and the costs of the diabetic foot and foot at risk, as well as to improve the quality of the attention process to people with DM in Primary Health.

Alba María Priego de la Cruz in her article entitled ‘Value added as a Source of Information for Stakeholders’ defines the concept of economic value added and evaluates the participation and behaviour of stakeholders in the generation and distribution of value added, which may be decisive in favouring the business activity.

María Rosa Vásquez Rodríguez with the text ‘Environmental policy: Environmental Education’ continues the same study that she presented last year, but this time with some more additional information. The author tries to settle a connection between economics and environmental policy and the impact of environmental education on the environment protection, pointing out the different instruments available to public administration that ensure the preservation of the environment.

Elisabeth Fernbach, with the very original and appealing title ‘With an open mind’, captures one’s attention by demonstrating that creativity can be taught with a cross curricular focus on new media. Therefore, she upholds that education in art and art in education epitomises the right path to self-discovery and to a clearer

understanding of the world and others, by presenting several possible tasks that can enhance creativity. Finally, she also offer examples of students' and children's art works as a result of these creative processes.

Cláudia Martins, the regular speaker for the lectures on Portuguese Culture and Language during our Erasmus weeks, presents now a very enlightening text on 'Diatopic Variation in Portugal: Notes on European Portuguese Dialects'. In this article, she describes, in a very detailed way, the geographical varieties of European Portuguese, namely the dialects in mainland Portugal and the islands of Madeira and Azores, based on the information gathered in the main linguistic atlases.

Bearing in mind the spirit of this publication, which is the promotion of cross-curricular studies and teaching mobility, this year we have also decided to include the texts of some of the IPB teachers who were given a grant within the Lifelong Learning Programme-Erasmus Mobility for Teachers during the last two years and thus delivered lectures in several European partner universities.

Isabel Chumbo went to the University of Zagreb in 2012 and there she gave a lecture under the title: "Translators censoring Propaganda – a case study on the translation of Salazar's speeches into English". The author presents a very insightful analysis of translation as a propaganda tool during the dictatorial regime of António Oliveira Salazar (1932-68) in Portugal.

Elisabete Silva went to the Riga Teacher Training and Educational Management Academy, Latvia, in May 2011 where she delivered a lecture on Isaiah Berlin, born in Riga, highlighting the man and the intellectual and focusing on the importance of education as a valuable asset in a person's life.



Information
Technology
and Applied
Sciences

The importance of the service sector for the industry

Patrick Siegfried

patrick.siegfried@hs-offenburg.de

*University of Applied Sciences Offenburg
Germany*

Abstract

The services sector is also called “tertiary sector” and has become increasingly important in the last few decades. The process of this occurring structural change is characterized by a significant increase in employment in the services sector. On the other hand, the former economic importance in traditional areas, such as agriculture and forestry, as well as manufacturing, is declining.

To have an overview it is important to look and to analyse the different research studies.

Keywords: *service engineering, service research*

Introduction

The relevance of the service economy in the German Economy is shown by the employment figures of 2007. Currently, 28, 80 million persons are employed in the service economy, 10.12 million in the manufacturing economy and 0,84 million in agriculture (including forestry and fishing). The service economy employs 72,42

percent of the total workforce of 39,77 million (Statistisches Bundesamt, 2008). In 1991, this proportion was only 59,48 percent. It accounts for 68,71 percent of the total value-added (Statistisches Bundesamt, 2008).

The service sector includes the following business sections:

- Trade and the hotel and restaurant industry,
- Transport and communication,
- Credit and insurance industry,
- Real estate and housing, renting, other economic services,
- Local authorities and social security,
- Education and training,
- Health, veterinary and social work, as well as,
- Other public and personal services.

The service can be divided into three different groups (Corsten, 2001, p. 21):

1. The term “service” is clarified by a list of examples (so-called *enumerative* definition).
2. The term “service” term is determined as a negative definition distinguishing it from stuff goods.
3. The term “service” is explicitly defined on the basis of constitutive characteristics, whereby it distinguishes between potential-oriented, process-oriented and outcome-oriented definitions.

In economic science, goods were mainly regarded as means of satisfying the needs of people (Blum, 1992, p. 2). This satisfying of needs is therefore considered a value-added feature. In the classification of the goods, services are included in intangibles.

The **enumerative approach** is defined by a list of performances that are considered services (Langeard, 1981). This approach can be found where industries are listed which have a character of services in the economy.

In the case of a **negative definition**, services are delineated from other types of performance (Altenburger, 1981). They are shown as a residual of unmappable activity types. This approach eventually leads to the sector theory. All services are assigned to the tertiary sector, when they cannot be assigned to forestry and agriculture (primary sector) or industrial output (secondary sector).

In the **constitutive characteristic viewing** those features are identified that characterize service [Scheuch, 2002]. In the area of services marketing, the third group is often favoured. In this case, the task-oriented definition is also considered in addition to the three previously mentioned definition approaches.

In the **potential-oriented** service definition, it is considered that potential created by people or machines can be regarded as service (Meyer, Mattmüller, 1987, p. 187). The **process-oriented** service assumes that:

Services in the broadest sense are addressing the needs of research serving processes with material and/or immaterial effect, whose implementation

and use require a synchronous contact between performance provider and performance recipient or rather their respective objects to meet the demand. (Berekoven, 2001, p. 23)

From the **results-oriented** point of view services are intangible assets produced for sale. The service is seen as the outcome of the process (Maleri, 1997, p. 4).

A further consideration is seen in the definition as an **activity-oriented service**. “Any human activity is in its actual and original sense a ,service,‘ i.e. a performance serving own or research interests.” One can also say: “What one does when working physically or mentally with or without connection to the material world in order to satisfy human needs is a service.” (Schüller, 1967, p. 19)

In conclusion, the following definition can be presented:

Services are separate, marketable benefits associated with the deployment (such as insurance) and/or the use of capabilities (e.g. hairdressing services) (potential orientation). “Internal (such as premises, personnel, and facilities) and external factors (i.e. those who are not in the sphere of influence of the service provider) are combined in line with the creation process (process orientation). The factor combination of the service provider is used with the aim to achieve (results orientation) value-added effects (e.g. an inspection of a car) on external factors or people (e.g. customers). (Meffert, Bruhn, 2009, p. 19)

Service research studies in the German economy

Until the late 1970s, the subject of service played second fiddle to material production (Häußermann, Siebel 1995, p. 134). In the classical economists service was regarded as unproductive, not adding value and very often as consumptive. Since the 1980s, the relevant economic literature has dealt more intensively with the topic of services. However, in the beginning, the focus was placed on the concept of service and quality of service (Nüttgens *et al.*, 1998, p. 15). In service sector research, services are increasingly examined in relation to technology, companies, economic growth, jobs, employment, innovation and prosperity (Gouthier *et al.*, 2007; Streich, Wahl, 2006; Baethge, Wilkens, 2001).

In the face of this radical change in consideration of services research, the German Federal Ministry for Education, Science, Research and Technology (BMBF) launched the initiative “Services for the 21st century” in 1994. Together with the developer “Arbeit und Technik” (current name: “Work and Services”) the BMBF has set up the funding area “service research”. At the instigation of the BMBF, the first service meeting was launched in 1995 to advance and promote the service economy. Before there have been workshops on service marketing since 1991.

Another milestone in service research was the future report “Service 2000plus” with the development of six fields of research from which derived research projects funded for one or two years, “priority initial measures”. Among other things, the project entitled “Market leadership through service bundling and customer-oriented

service engineering” led to the publication of the “DIN report 75”, as well as the special Ausgabe of the journal “Information management/consulting” under the title “Service Engineering” and thus formed the basis of the conception of service engineering as a discipline of its own (Bransch, 2005, p. 67; Fähnrich, Opitz, 2006, p. 89; Ernst, 1998, p. 7). Since 1999, the promotion was tendered by means of notices published as “guidelines”. The service meetings are an integral part of BMBF and were held for the eighth time in the year 2010.

Other research approaches that deal with the matter of service research and service engineering are described in the following:

At the DFKI-German Research Centre for Artificial Intelligence (www.dfki.de) there was the project “**CASET-Computer Aided Service Engineering Tool**” between 2000 and 2003. It was a computer-aided tool to document service engineering processes from brainstorming up to the provision of services. The subject of “**Learning in and with SMEs**” was the subject of a programme of comprehensive exchange of experiences in so-called thematic networks from 2002-2007. In the newly formed German Federal States, there has been the project “**Economy meets science**” from the BMVBS-Bundesministerium für Verkehr, Bau und Stadtentwicklung (www.bmvbs.de) since 2007, which is looking for new approaches for improved transfer of scientific and technical innovations into economic applications. 25 projects were approved of in the first round and seven more in the second round. Sys-Inno, “Systematic development of bottom-up innovation” is a project for SMEs in the newly formed states, which analyses comprehensive innovation requirements (www.sys-inNr.de). A research project of the BMBF on “export capability and internationalisation of services” was in place from 2005-2008, which involved among other things knowledge transfer between experienced companies and export newcomers, SMEs, in order to close the gap in service research (www.dienstleistungsexport.de). The BMBF launched the programme “**Innovation with services**” (www.hightech-strategie.de/de/250.php) in 2006. It is about the ability to enable SMEs to use appropriate management tools and design suitable processes. The ZIM, “**Central innovation programme SMEs**” was launched in July 2008 and offers small and medium-sized enterprises (www.zim-bmwi.de) a reliable perspective to support their innovation efforts by the end of 2013. It also encourages collaborative projects between SMEs and research institutions. A transfer project is the project of the DHI-Deutsche Handwerksinstitut e.V. of 2007 on the subject of “**Service engineering-driving innovation in SMEs**”, with the goal for SMEs to develop and test suitable business and process models (www.service-engineering-kmu.de).

In July 2008 the Landesstiftung Baden-Württemberg has announced a two-year project titled “**Knowledge transfer services research-use services to remain competitive**”. This scientific knowledge concerning Service Engineering is intended to be put into practice by SMEs, in particular by the manufacturing trade. It is therefore not a response to a legislative proposal from the Commission. Based on

the establishment of service research by the BMBF, one reacts to the increasing importance in service research and service development.

In summary, the following characteristics have emerged as a result of an intensive study of services:

- Services can be a differentiating competitive factor for manufacturing companies,
- Business-related services are on the increase,
- In the secondary and tertiary sectors services grow together to form hybrid solution offers,
- Customers are increasingly involved in the creation of services,
- Trends in the demographic development promote the service sector,
- Technically based services are produced and offered globally and must also face up to international competition.

In the field of service engineering the focus is also on the production of goods, similar attention is now being paid to service research. This enables us to work out the concepts of a “hybrid value creation” and examine the “value-in use”. An added value is thus created from the combination of products and services, in which the product has a lower value without the service. Therefore, service research should be seen as an exploration of both fields up to a service science. What is required are networks of multidisciplinary experts who combine these fields: “Customers do not look for goods or services per se, they look for solutions that serve their own value-generating processes.” (Grönroos, 2000, p. 4)

To date service engineering has made a significant contribution to the systematization and professionalization of service development. Services and tangible goods should no longer be considered separately from each other when it comes to their development. The customer is the focal point and expects a performance bundle of products and services. In the early 1990s, Engelhardt *et al.* (1993, p. 395) have performed studies on this subject. For these hybrid products global approaches must be created, including the adaptation of the methods, tools and process models. The first approaches of this development methodology “Hybrid product development” have appeared in the integrated development of inseparable product and service bundles (Spath, Demuß, 2003, p. 497). These developments cover only partial areas. Therefore, the topics that deal with hybrid products are a challenge for future work taking into consideration the subject of service engineering.

It should be noted that the planned case study should not deal with the transfer of findings from all areas of service research, but that there should be a focus on the area of **service engineering** and service development. This should, however, take into account not only approaches to the systematics and professional development of “pure” services but also the integrated development of services and benefits to form hybrid service bundles, as one has to assume a broad identity of the procedure models, methods and tools to be deployed. This content focus is justified by the

intended in-depth specialization in the field of service engineering. In this respect, the present treatment of level of research focuses on this area.

The research field of service engineering has been developed more intensively since the mid-1990s. In this context, the term of service engineering (Scheer *et al.*, 2003, p. 20) means the systematic development of services using appropriate approaches, methods and tools. In this respect, the terms service engineering and service development are used in the following text synonymously. The BMBF initiative “Services for the 21st century” founded in 1994 in conjunction with the first BMBF conference “Service of the future” held in June 1995 is often considered to be the “starting signal” for German service engineering research (Fährnich, Opitz, 2006, p. 88). This is true insofar as it was actually the first time that this topic had attracted a lot of attention, resulting in a variety of research projects and insights, and it has also led for example to the transfer of engineering methods to the services development. When looking at the state of research, it should not be overlooked that the development of new and the improvement of existing services have already been the subject of business research. Service blueprinting (Shostack, 1982) and the Gap model (Parasuraman *et al.*, 1985) are two instruments that have already been developed in the first half of the 1980s and also discussed in the German-speaking business literature and which are today an integral part of the spectrum of methods used in service engineering. Also the process model for the development of new services according to Scheuing and Johnson (1989) that is often cited in literature on service engineering has its origins in business studies.

What can be stated with some certainty is that the true “service engineering-boom” got underway with the beginning of the BMBF initiatives and the provision of appropriate funding for engineering and business research (see the overview provided in the Appendix under literature). Fährnich and Opitz (2006) give a very clear overview of the development of service engineering since the “starting signal” in 1995. Central contributions to the services research have emerged e.g. within the framework of the BMBF funding programme “Service engineering and service design” in the years 1999 to 2004. Important foundation work has been done already in the years 1998 to 2000 in Baden-Württemberg as part of the project “Service engineering-innovation and growth through systematic development of services” (funded by the regional Ministry of Science, Research and the Arts). Numerous projects with service engineering content on the priority topics “Export capability and internationalisation of services” and “Integration of production and services” are currently running under the BMBF programme “Innovation in services”. In this respect, the range of existing process models, methods and tools for service engineering is continuously expanding and, in the meantime, at a very high level. The status elaborated at this point may only have a provisional character. A clear overview is given in “Service engineering” (Bullinger, Scheer, 2006). Research on service engineering tends to be based on services having three dimensions, which

is a well-known concept from service marketing (Engelhardt *et al.*, 1993, p. 398): service provision, service creation process and service results. In this respect, it must be first determined that a systematic method-based service engineering must take into account all three dimensions, which means that product models, process models, and resource models are used, which, taken together, represent the **development methodology** (Fährnich, Opitz, 2006, p. 95).

An especially important role in the development of new services is played by **process models** that divide the process of developing a service into various phases, from the initial idea to the final realization, that have to be gone through systematically. The literature provides here a variety of concepts which can be broken down into process models, iterative process models and prototyping models (Schneider, Daun, 2006, p. 117).

In the various stages that are described by process models, different **methods and instruments** of service engineering may be used. In the course of time, a considerable range of those has developed in service research. The methods discussed are in part phase-specific, but also cross phase methods are considered. With regard to the performance dimensions similar can be said: the methods refer in part not only to the three service dimensions but they also help in the design of two or even all three dimensions and thus contribute to the product, process and/or resource modelling. A comprehensive, but somewhat older empirical study method used in practice can be found at Fährnich *et al.* (1999). Exemplary methods and instruments of service development, which cannot be discussed in detail at this point, include: Cost-effectiveness analysis, cost-benefit analyses, requirement analysis, strengths- weaknesses and opportunities-risks analysis, prototyping methods, target costing, analysis and effect analysis (FMEA), quality function deployment (QFD), service blueprinting, lead user concept, roadmapping, modularization/modular design principle and morphological box. This list is not exhaustive, and there can be overlaps in the content of these methods. The compilation shows what wealth of knowledge services research can now provide to service engineering in methodological terms.

Without a doubt, the **participation and integration of customers** plays a central role within the framework of service engineering. It runs through all phases of service development, and different phase-specific forms of customer integration can be used (Reckenfelderbäumer, Busse, 2006). In most cases this customer involvement also becomes apparent in the application of the above methods and instruments.

The outlined procedure models, methods and instruments which brought forth service research are therefore extremely varied. However, it is identified in the “Knowledge transfer service research” rightly that the implementation of these instruments in the field of small and medium-sized enterprises (SMEs) is still very inadequate. There are only few specific research results in this respect, because most research projects have not been adapted to the characteristics of SMEs.

The exception was e.g. the BMBF-funded project “Service engineering-drivers of innovation in SMEs” of ITB-Institute for technology of management in the German Crafts Institute e.V., which is however primarily focused on craft businesses. BMW-Bayrische Motoren Werke “Central Innovation programme” launched 1 July 2008 is expected to provide other findings, which are, however, not presently available. However, further research is needed in this regard irrespective of the specific requirements for the application of practices and methods in SMEs or the modifications of existing concepts.

References

- Altenburger, O. (1981). *Ansätze zu einer Produktions- und Kostentheorie der Dienstleistungen*. Berlin: Springer Verlag.
- Baethge, M. & Wilkens, I. (2001). *Die große Hoffnung für das 21. Jahrhundert?: Perspektiven und Strategien für die Entwicklung der Dienstleistungsbeschäftigung*. Opladen: Leske und Budrich
- Berekoven, L. Eckert, W. & Ellenrieder, P. (2001). *Marktforschung*. Wiesbaden: Gabler
- Blum, U. (1992). *Volkswirtschaftslehre, Studienhandbuch*. München: Oldenbourg Wissenschaftsverlag
- Bransch, N. (2005). *Service-Engineering – Eine kritische Bestandsaufnahme*, Berlin: Springer Verlag.
- Bullinger, H.J. & Scheer, A. (2006). *Service Engineering, Entwicklung und Gestaltung innovativer Dienstleistungen*, 2. [S.l.]. Berlin: Springer.
- Corsten, H. (2001). *Dienstleistungsmanagement*. München: Pearson Studium Verlag.
- Engelhardt, W.H., Kleinaltenkamp, M. & Reckenfelderbäumer, M. (1993). Leistungsbündel als Absatzobjekte – Ein Ansatz zur Überwindung der Dichotomie von Sach- und Dienstleistungen. *ZFBF. Schmalenbachs Zeitschrift für Betriebswirtschaftliche Forschung*, Heft 45, 395-462.
- Ernst, G. (1998). Dienstleistungen als Leitsektor in einer zukünftigen, humanen Gesellschaft. *Information Management and Consulting*. Zürich: Heft Service Engineering. 7-10.
- Fährnich, K.P., Meiren, T., Barth, T., Hertweck, A., Baumeister, M., Demuß, L., Gaiser, B. & Zerr, K. (1999). *Service Engineering: Ergebnisse einer empirischen Studie zum Stand der Dienstleistungsentwicklung in Deutschland*. Stuttgart: Fraunhofer-IRB-Verlag.
- Fährnich, K.P. & Opitz, M. (2006). Service Engineering - Entwicklungspfad und Bild einer jungen Disziplin. In Kristof Schneider, Christine Daun, Hermann Behrens, Daniel Wagner (eds.) *Service Engineering: Entwicklung und Gestaltung innovativer Dienstleistungen*. Berlin: Springer Verlag, pp. 85-112.

- Gouthier, M., Coenen, C., Schulze, H.S., & Wegmann, C. (2007). *Service Excellence als Impulsgeber: Strategien-Management-Innovationen – Branchen*. Wiesbaden: Gabler Verlag.
- Grönroos, C. (2000). *Service Management and Marketing a Customer Relationship Management Approach*, (2nd ed.). Chichester: Wiley.
- Häußermann, H. & Siebel, W. (1995). *Dienstleistungsgesellschaften*, Frankfurt am Main: Suhrkamp Verlag.
- Langeard, E. (1981). Grundfragen des Dienstleistungsmarketin. *Marketing ZFP*, 3.(4), 233-240.
- Maleri, R. (1997). *Grundlagen der Dienstleistungsproduktion*. (4 Ausgabe). Berlin: Springer.
- Meffert, H. & Bruhn, M. (2009). *Dienstleistungsmarketing*, (6 überarbeitete Ausgabe). Wiesbaden: Gabler Verlag.
- Meyer, A. & Mattmüller, R. (1987). Qualität von Dienstleistungen. Entwicklung eines praxisorientierten Qualitätsmodells. *Marketing ZFP*. 9(3), 817-195.
- Nüttgens, M., Heckmann, M. & Luzius, M.J. (1998). *Service Engineering Rahmenkonzept. Information Management und Consulting*. 13, 14-19. Available at <http://bit.ly/1jKc5D6>
- Parasuraman, A., Zeithaml, V.A. & Berry, L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*. 49, 41-50. Los Angeles: University of Southern California.
- Reckenfelderbäumer, M. & Busse, D. (2006). Kundenmitwirkung bei der Entwicklung von industriellen Dienstleistungen – eine phasenbezogene Analyse. In Kristof Schneider, Christine Daun, Hermann Behrens, Daniel Wagner *Service Engineering: Entwicklung und Gestaltung innovativer Dienstleistungen*. Berlin: Springer Verlag, 141-166.
- Scheer, A., Grieble, O. & Klein, R. (2006). Modellbasiertes Dienstleistungsmanagement. In Kristof Schneider, Christine Daun, Hermann Behrens, Daniel Wagner *Service Engineering: Entwicklung und Gestaltung innovativer Dienstleistungen*. Berlin: Springer Verlag, 19-50.
- Scheuch, F. (2002). *Dienstleistungsmarketing*, (2. Ausgabe). München: Pearson Studium Verlag.
- Scheuing, E.E. & Johnson, E.M. (1989). A Proposed Model for New Service Development. *Journal of Services Marketing*. 3(2), 25-34.
- Schneider, K., Daun, C., Behrens, H. & Wagner, D. (2006). Vorgehensmodelle und Standards zur systematischen Entwicklung von Dienstleistung. In Kristof Schneider, Christine Daun, Hermann Behrens, Daniel Wagner (eds.) *Service Engineering: Entwicklung und Gestaltung innovativer Dienstleistungen*. Berlin: Springer Verlag, pp. 113-138.

- Schüller, A. (1967). *Dienstleistungsmärkte in der Bundesrepublik Deutschland. Sichere Domänenselbstständiger mittelständischer Unternehmen?*, Köln: Springer Fachmedien Wiesbaden.
- Shostack, G.L. (1984). Designing services that deliver. *Harvard Business Review*. 133-139.
- Spath, D. & Demuß, L. (2006). Entwicklung hybrider Produkte – Gestaltung materieller und immaterieller Leistungsbündel. In Kristof Schneider, Christine Daun, Hermann Behrens, Daniel Wagner (eds.) *Service Engineering: Entwicklung und Gestaltung innovativer Dienstleistungen*. Berlin: Springer Verlag, 467-506.
- Statistisches Bundesamt (2008). *Entwicklungen im Service-Sektor*, Wiesbaden: [s.n].
- Streich, D. & Wahl, D. (2006). *Moderne Dienstleistungen: Impulse für Innovation, Wachstum und Beschäftigung: Beiträge der 6. Dienstleistungstagung des BMBF*. Oxford: Oxford University Press.

The Internet of Things – State of the Art

Axel Sikora

Prof. Dr.-Ing. Dipl.-Ing. Dipl. Wirt.-Ing. Axel Sikora
axel.sikora@hs-offenburg.de

Professor of Embedded Systems and Communication Electronics
Offenburg University of Applied Sciences
Department of Electrical Engineering and Information Technology
Germany

Abstract

The Internet of Things (IoT), ubiquitous computing and ubiquitous connectivity, Cyber Physical Systems (CPS), ambient intelligence, Machine-to-Machine communication (M2M) or Car-to-Car (C2C)-communication, smart metering, smart grid, telematics, telecare, telehealth – there are many buzzwords around current developments related to the Internet.

This contribution gives an overview on such IoT-applications, as they are already used today to improve the availability of information, increase efficiency, push system limits and extend the value chain. At a closer look, the economic and technical development can be separated into different phases. It is interesting that we are currently at the threshold to a new phase, with decentralized and cooperative communication and control nodes as cornerstones. Thus, embedded

systems and their connectivity are in the middle of the scene.

This recent development is described along with some example projects from the author's team which are used in industrial automation, energy supply and distribution (home automation and smart metering), traffic engineering (cooperative driver assistance systems), and in telehealth and telecare.

Keywords: *Internet of Things, Cyber Physical Systems, Machine-to-Machine-(M2M)-Communication, Car-to-Car-(C2C)-Communication*

1. Introduction

All market analyses show that the market for embedded systems has been booming for several years now. Embedded systems are the major platform for the programmable, adaptive, "intelligent" microelectronic control of those products which are developed and produced in Europe and are important for the present and future economic success of Europe as high-tech location.

As early as in 2006, the German government's official "High-Tech Strategy" stated that 90 % of all microprocessors were not used in PC's, but in 'hidden' embedded systems. A white paper of the German VDE, the Association for Electrical, Electronic and Information Technologies, from 2010 (Verband der Elektrotechnik Elektronik Informationstechnik, 2010) expects an annual growth rate of 8.5 % until 2020, which means that the market of embedded systems will grow three times faster than the average growth of all IT-related expenses. And the BITKOM, the German Federal Association for Information Technology, Telecommunications and New Media (BITKOM, 2010) states that embedded systems

- play a key role in those industry sectors where Germany occupies a leading position, such as automotive manufacturing, industrial automation, mechanical and plant engineering, or is preparing to assume a leading role, i.e. environmental and energy engineering, or medical and healthcare engineering
- are an important market sector in itself. This is backed by the large cross-domain turnover and the demand from international investors.

In addition, a national roadmap on "Embedded Systems" by the ZVEI, the German Electrical and Electronic Manufacturers' Association (ZVEI, 2009), shows that major sectors of the German industry extensively use embedded systems, including car engineering, automation and production technology, aerospace technology, medical and health care, environmental and energy engineering, consumer electronics, mobile communication, railroad technology, and safety automation.

This penetration illustrates the significance of embedded systems not only for the industrial location of Germany and Europe, but also for our day-to-day life. We are already in the middle of the phase of ubiquitous computing, where we

use embedded systems as invisible helpers. Innumerable devices and systems are computer-controlled. Simple, but obvious examples are the washing machine at home or the electric window lift in our cars.

2. Embedded Connectivity

These intelligent or smart devices, smart sensors or smart actuators are nothing but elements of the first phase of a multi-phase and complex evolution. Three assumptions can be made:

- Assumption 1: Practically all embedded applications can draw benefits from the exchange of information.
- Assumption 2: This connectivity has evolved in multiple phases.
- Assumption 3: We are on the threshold to a new phase of embedded connectivity.

Assumption 1 is clearly the easiest. For the exchange of information, “connectivity” is required. It allows additional flexibility and performance, as applications can be distributed spatially and logically. In doing so, the measurement data of different sensors at different locations can be merged, actuators at different locations can be controlled, and the decisions of multiple intelligent computing nodes can be encountered. Thus, an added value can be generated through improved information. Also, cost might be reduced as information which has once been gathered in the system can be re-used by other elements in the systems.

For the second assumption, we can distinguish four phases in the utilization of smart systems. These are shown in Fig. 1. It should be mentioned that the products and applications of the earlier phases still co-exist with the products and applications of the later phases. Thus, embedded connectivity is already “postmodernist”.

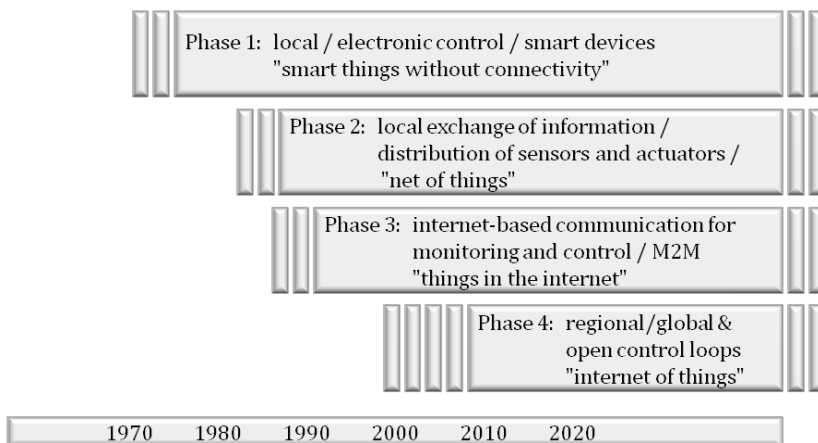


Figure 1 – Phase model of the Internet of Things

3. Phase 1 – “Smart Things”

Since the first phase, which started in the late 1970s, stand-alone devices have used algorithm, digital signal processing and software program execution for a local control. Local sensors might be read and their data might be processed. Decisions might be taken and their results might be forwarded to local actuators. This basic architecture is the same for many devices, be it anti blocking systems (ABS) of the first generation, control units for washing machines, or pacemakers.

4. Phase 2 – “Net of Things”

The second phase, which can be observed since the 1980s, exchanges information between spatially neighbored devices. Local networks allow the joint usage of the sensor data or other information. Decisions and results from one node can be re-used by a second node.

Examples for this trend can be found in the architecture of automotive communication busses, like the CAN-bus. It is important and beneficial to use the data from spatially distributed sensor. For example, an acceleration sensor pushes its data onto the bus. Multiple Electronic Control Units (ECUs) read and analyze this data. This might be the ECU for the airbag, the Electronic Stability Program (ESP), or the road handling control.

However, the networks of this phase don't provide open interfaces. No communication is provided from the car to the outside world. The extension of a given set of nodes by an additional node is technically very cumbersome.

Another application example can be found in the industrial automation, but with a slightly different network architecture. Whereas the current automotive architecture is completely decentralized, industrial automation systems nearly always come with a central computer. Although the concept of the spatially distributed programmable logic controls (PLC) is also known as decentralized control architecture, the networks have a hierarchical architecture with a central control computer. Local decisions can be taken locally. In many cases, they are dependent on the higher layers of the network pyramid.

5. Phase 3 – “Things on the Internet”

Quite simultaneously with, but mostly independently of this second phase, the Internet based communication for monitoring and operating has been developed. In the first row, this allows remote monitoring and improved observability of devices and systems, which might be dislocated all over the world. Applications might include process automation, point of sales (POS) and automated teller machines (ATM), home automation (alarm systems), energy generation and distribution, and many more. Elements of remote control can be included.

As a basis, mostly web-based technologies are used, because they allow two major advantages and thus a significant reduction of the required efforts. When

using a web application, then all functional software is on the server side and is loaded into the client environment on request only. This avoids the cumbersome version conflicts between user software and device software. Only the browser versions must be taken into account, which is – in most cases – not a major issue any more. The second advantage concerns another singularity of software, as there is no further need to have different software for local and for remote control. The web server can be implemented in the end node, but also on a gateway. Fig. 2 shows an example of such an embedded gateway for smart metering applications.

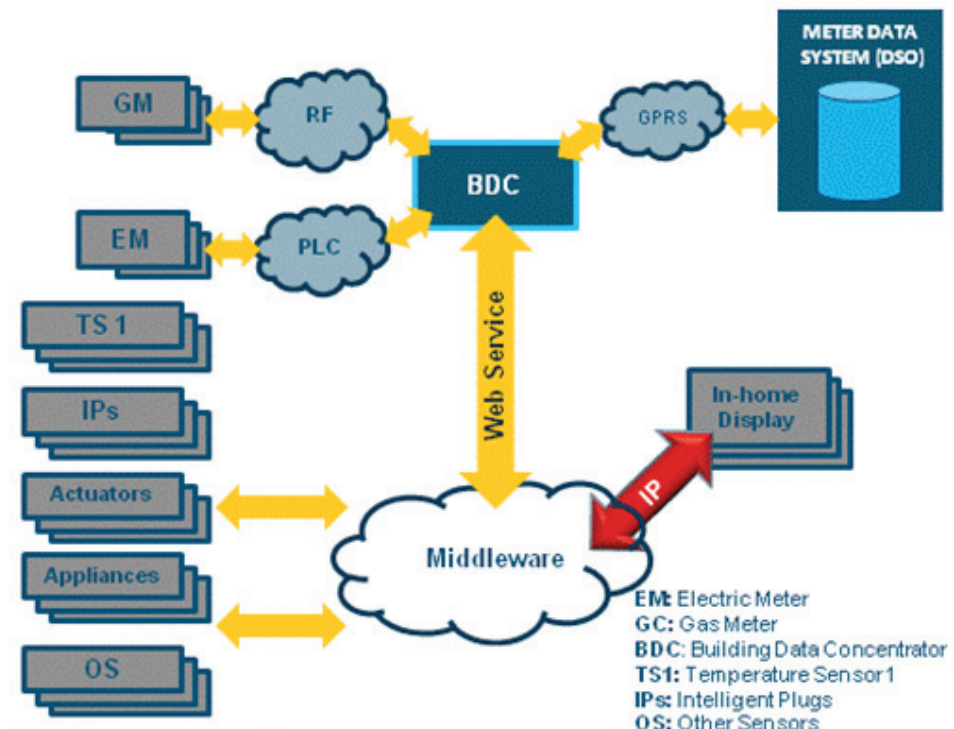


Figure 2 – A modern gateway as a typical example of the third phase [5]

In the applications which are encountered in the third phase of our mode, the client side has to perform up to three operations:

- First, monitoring and operating is executed by a human user.
- Second, a firmware update keeps the functionality of the system up to date.
- Third, the data is collected and stored automatically, so that the full communication flow is executed by computers only. This is also known as Machine-to-Machine (M2M) communication.

6. Phase 4 – “Internet of Things”

In the fourth phase, M2M communication reaches new levels with regard to range and volume of real-time information. The developments show the following characteristics:

- The communicating nodes offer increasingly open interfaces. In many cases, they are interconnected with more than one application. As the participating devices might be very heterogeneous, a middleware is required.
- The management of the network and the applications is more and more autonomous.
- The applications coupled in regional or global networks are increasingly used for real-time control, with the time constants becoming increasingly small.
- The spatially distributed systems are coupled more and more closely. The degree of cooperation continues to increase.
- The networks for the M2M applications will continue to grow. The requirements with regard to the scalability of the networks will become more and more demanding.
- Due to these requirements, the significance of centralized architecture will decline. The role of decentralized architectures will continue to emerge.

A few selected project examples from very diverse application examples might help to illustrate the concrete background of these trends. It is clear that there is no practical end to the applicability of cooperative systems:

Future traffic will be based on cooperative systems to increase the efficiency and the safety of the traffic flow. Despite all the significant and impressive advances in the field of environmental sensors (Lidar, Radar, ultrasonic, CMOS-cameras), the cost of these sensors remains relatively high. In addition, the reliability and accuracy of the sensors significantly depend on the measurement conditions (reduced visibility, metallic objects, and temperature interference).

Therefore, it might be much more efficient for a road sign to emit a message than detecting this road sign optically. Instead of a car tracking another car with optical and radar sensors for an adaptive cruise control (ACC) application, it might be much easier for this car to share its information.

As an example, the research initiative “Ko-FAS”, or “Cooperative sensing and perception for preventive road traffic safety” (cf. Fig. 3), develops complete subsystems for the Car-to-Car (C2C) and Car-to-X (C2X) communication and extends the idea of cooperative systems to many more participants.

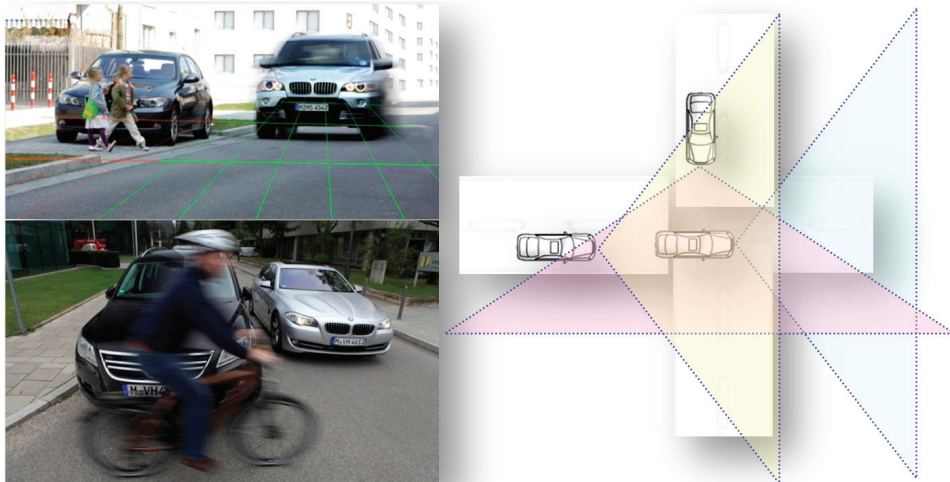


Figure 3 – Scalable cooperative systems from the research initiative Ko-FAS for “Cooperative sensing and perception for preventive road traffic safety” extends the idea of cooperative systems to more and more participants (kofas.de)

- The power-supply industry is currently undergoing a major change from centralized energy production and distribution to more and more decentralized combined consumers and producers (so called *prosumers*), and to more and more decentralized energy storage elements. This process and the continuation of high grid stability would be impossible without intelligent and interconnected elements. The so called “smart grid” could be the first highly scaled “killer application”. Extremely efficient communication protocols and implementations are required to enable the stable and safe operation of many thousands cooperative nodes.
- There is a direct link from energy to home and building automation. Through this link it might also be (finally) possible to come to a breakthrough in these markets, which have been blocked for decades mostly due to proprietary and closed systems.
- Telehealth and telecare are further excellent examples of how interconnected sensors and open exchange of information can help to improve the possibilities for analysis and reaction (cf. Fig. 4).

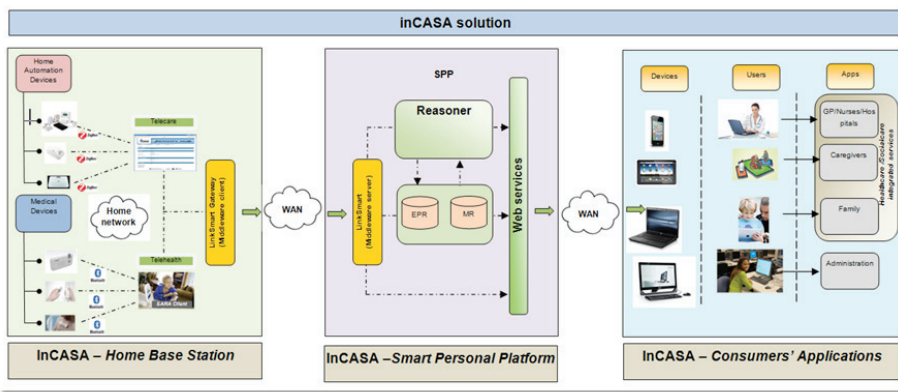


Figure 4 – Architecture of a heterogeneous network for combined telehealth and telecare applications in the European InCASA project (Incasa-project.eu, 2012).

7. Promises and Challenges

These examples prove that important societal challenges can be addressed by technical solutions. The utilization of interconnected devices in the Internet of Things can be an enabler to solve many problems of today. However, it should be clear that technical solutions cannot be more than just enablers.

7.1. Challenges with regard to communication technologies

Communication technologies have made immense progress during the last years and decades. The following challenges remain:

- The available wired and wireless channels must be used more and more efficiently in order to not only satisfy the growing appetite for broadband applications, but also provide access for the many narrowband applications from the Internet of Things.
- Energy efficiency must be improved. This might enable environmental-friendly, battery-free energy-harvesting systems, and also helps to reduce global energy consumption.
- The network technologies must support excellent scalability. All the examples mentioned above show that even local and regional networks can encompass hundreds or thousands of nodes.
- These large networks cannot be operated manually. Therefore, ad-hoc networking is required – without compromising the stability of the network.
- Communication must be secure. Without security to ensure confidentiality and privacy, there will be no acceptance and no safe operation can be guaranteed.

7.2. Challenges with regard to cybernetics

The communication channels improve the potential accuracy of control systems, as more information can be used for analysis and control. However, the theory and practice of cybernetics must answer the following requirements:

- Not only must the communication networks work as autonomously as possible, but also the applications themselves. Recent projects and discussions have coined the notion of *autonomia* with regard to intelligent tools and systems that are able to interconnect via the Internet, perceive situations, adapt to changing environments and independently interact with users.
- The control logic becomes more and more complex as the number of input parameters increases. The stability and functionality of the system or systems must be ensured.
- In this context, functional safety must be guaranteed, too, in an increasing number of critical applications.
- Completely new requirements of control logic must be considered. Due to the “new dead time elements” in communication channels, the lifetime of information must also be taken into account.
- A general issue is whether the complexity of the mutually and multiply interdependent systems remains manageable. Responsibility and accountability need to be discussed.

7.3. Challenges with regard to system development

Of course, many additional requirements must be observed in the context of the engineering of such systems, from the requirement analysis to modeling and partitioning, design, implementation, to testing and verification. In addition, lifetime management of hardware and software must be taken into account.

7.4. Challenges with regard to application development

With regard to application development, two ‘softer’ challenges must be taken into account:

- Firstly, the challenges of an intuitive and complete interaction between man and machine remain not only relevant, but will become even more significant, as an increased system complexity must be understood and managed.
- Secondly, the examples above have demonstrated that ‘island applications’ are on the retreat. Therefore, solutions are needed which support interoperability between different vendors, different protocols and different technologies. This is already a challenge for many markets. However, it will become even more difficult to interconnect products from different markets in the sense of a horizontal integration.

- This enlarged way of thinking is also a major precondition for the ongoing success of embedded systems and their connectivity. In this sense, embedded systems – through the mere fact of being embedded – are bound to the same destiny as their applications. If the applications are not successful in the markets, the same will hold true for the technologies involved. If there is no market pull, a technology push will not change the situation.

References

- BITKOM (2008). Studie zur Bedeutung des Sektors Embedded-Systeme in Deutschland. Available at http://www.bitkom.org//files/documents/studie_bitkom_embedded-systeme_11_11_2008.pdf (accessed 07 Jan. 2014)
- Bundesministerium für Bildung und Forschung (2010) *Ideen. Innovation. Wachstum. Hightech-Strategie 2020 für Deutschland*. Available at http://www.bmbf.de/pub/hts_2020.pdf (accessed 07 Jan. 2014)
- inCASA (2012). <http://www.incasa-project.eu>
- KOFAS. <http://www.kofas.de/>
- Sikora, A. & Landwehr, K. (2012). Communication Solutions for Smart Gas Meters and Energy Efficient Embedded Services. In *Embedded World Conference*.
- Verband der Elektrotechnik Elektronik Informationstechnik (2010) *Embedded Systems*. Available at http://www.vde.com/de/Verband/Pressecenter/Pressemeldungen/..._Fach-und-Wirtschaftspresse/2010/Seiten/2010-16.aspx (accessed 07 Jan. 2014).
- ZVEI - Zentralverband Elektrotechnik- und Elektronikindustrie e.V. (2009) *Nationale Roadmap Embedded Systems*. Available at http://www.zvei.org/Verband/Publikationen/Seiten/..._Nationale-Roadmap-Embedded-Systems.aspx (accessed 07 Jan. 2014)



Nursing and Health Care

Ulcers and Amputations Prevention in the Diabetic Foot. Screening to determine the Risk of Suffering Foot Lesions in Primary Care

Pedro Gutiérrez Moraño. Belinda Basilio Fernández. José Luis Bote Mohedano.

pegumo@unex.es

*University of Extremadura
Nursing Department
Spain*

Abstract

The diabetic foot is one of the most common and expensive lesions in the diabetes. Most of the non-traumatic amputations in the lower joint, which are carried out in diabetic people, are preceded by an ulcer in the foot.

The Primary Health is presented as the ideal environment to prevent the diabetic foot and the amputations in the lower joint, through the execution of a screening to detect the risk.

The executions of these exploration techniques in a systemic and recorded way will let the Primary Health professionals stratify the patients in function of the risk of suffering foot lesions and determining the kind of intervention to attain.

Keywords: *Diabetic foot, amputations of the lower joint, screening, prevention, Primary Health.*

Introduction

Diabetes *Mellitus* (DM) is a chronic disease which affects more than 347 million people in the world, according to the World Health Organization (Daniei *et al.*, 2011), it is currently considered the epidemic in the 21st century. The prevalence of this disease in a population between 20 and 79 years old is over 6.6%, estimating an increase of the 7.8% in 2030 (Lielith *et al.* 2004).

The socioeconomic costs which are associated with this disease are very important; people with DM can consume more direct resources than individuals with similar ages or sex with other chronic diseases (ADA, 2008).

Between the most common complications in the DM, we find the diabetic foot, (Weck, *et al.*, 2011) according to some authors “the diabetic foot syndrome”, it could be defined like an entity which encompasses different pathologies as diabetic neuropathy, the peripheral vascular disease, the Charcot-Marie-Tooth disease, the foot ulcer, the osteomyelitis and the amputation of the lower joint. (Abbott *et al.*, 2011)

The amputations of the lower joint are one of the most terrible complications in people with DM which produce a psychological disability, psychic traumas and a higher socioeconomic impact.

An amputation implies prolonged hospitalizations, rehabilitation processes, a prosthesis preparation, an intake of the healthcare and social resources and a drastic reduction of the quality of life in people who suffer this.

It is estimated that the direct economic costs of an amputation of lower joint associated with diabetic foot, are between 20.989 € - 41.978 €. The indirect costs are difficult to quantify, but it is estimated that they can be over 44.071 € if a higher amputation is produced (Ragnarson & Apelqvist 2005; Bakker & Riley, 2005).

The 84% of the non-traumatic amputations of the lower joint which are produced in people with DM are preceded by a foot ulcer, for this, the preventions in the foot ulcers constitute an effective measure to decrease the rate (Pecoraro, *et al.*, 1990).

These action strategies to deal with the diabetic foot in the Health system must be framed in a sensitive way in the resources and activities in both Primary Health and specialty & hospital care, being the strategies to develop in Primary Health the object of analysis of this article.

In this regard, the prevention of the amputations has to have its origin in the first level of health being this the ideal environment to carry out a consensual screening and based in recent publications (Ozdemir *et al.*, 2013).

Objectives

1. Be aware as health professionals of the importance that the prevention of the diabetic foot has, as a first step, to prevent the amputations related to the diabetic foot.
2. Communicate the most effective preventive strategies to decrease the incidence, prevalence, morbidity and the costs of the diabetic foot and

foot at risk, and to improve the quality of the attention process to people with DM in Primary Health.

3. Have a consensus about the screening of exploration to deal with the diabetic foot and foot at risk in Primary Health, which will be based on the scientific evidences, which let a stratification of the risk of suffering foot lesions to prevent the amputations.

Materials and methods

Taking into account that the diabetic foot is by definition the foot of a person with DM who has an ulcer or lesion, it is necessary to establish an early stage in which the lesion has not happened yet, therefore we talk about foot at risk (figure 1).

It is considered foot at risk, “those people with DM, with a background of ulceration, neuropathy, peripheral vascular disease, arthropathy, dermatopathy, keratopathy, onychopathy, deformity, alteration of the biomechanical, unhealthy habits, that have an amputation and on the other hand that exist chronic complications of the disease”. (Hidalgo *et al.*, 2011).

Diabetic foot. Foot at risk.



Figure 1 – diabetic foot, foot at risk.

It is so very important to have in mind the foot at risk to work towards the preventive strategies to those patients who do not have a diabetic foot but they have the risk of suffering.

The preventive strategies to develop the first level of health have, (Reda *et al.*, 2012) in first place, an establishment of protocol of foot exploration. Therefore the first thing we should do it is to make a good anamnesis and an assessment of the patient to value which is his/her risk, his/her vascular state and his/ her neuropathic state.

The main aim is to identify the grade of the risk of suffering a foot lesion in which the patient is. To classify in one grade or another we can make use of the classification that the General Council of the Association of Official Podiatrists.

Classification of the foot at risk by the General Council of the Association of Official Podiatrists.
High-risk foot in people with DM, when they present one or more of the following risk factors: <ul style="list-style-type: none"> - Ulcer or previous amputation. - Peripheral vascular disease - Neuropathy.
Moderate risk foot , when they present at least one of the following factors: <ul style="list-style-type: none"> - Common complications of the DM as nephropathy and retinopathy. - Foot alterations as the deformities or the existence of onychopathy, keratopathy or helomas. - Biomechanics and structural alterations. - Inadequate practices and habits. - Bad visual acuity or impossibility of making the self-care
Low risk foot when there are no conditions that we have mentioned before.

Table 1 – Classification of the foot at risk by the General Council of the Association of Official Podiatrists (Bonilla et al., 2011)

This classification can identify the main pathogenic elements of the diabetic foot, and to establish a low risk or a moderate risk is easy, it is only necessary to carry out an anamnesis and a correct foot inspection, but to exclude that a foot is at high-risk implies the realization of a neuropathic and vascular exam.

The main aim of this article is to show two basic explorations of the foot at risk, which can be quickly and easily developed in the Primary Health, if the health centres have the necessary equipment to carry out these exploration techniques.

To carry out the neuropathic exam of the foot, the Boulton scales and the monofilament valuations of Semmes-Weinstein are used. (Meijer *et al.*, 2003)

To the foot vascular exploration, we use the Edinburgh questionnaire (Huysman & Mathieu, 2009) the capillary filled test, the determination of the ankle-brachial index with Doppler probe and an evaluation of the structural alterations and foot dermatopathy.

The necessary material to the exploration is showed in the following pictures (figures 2-8).



Figure 2 – Reflex hammer

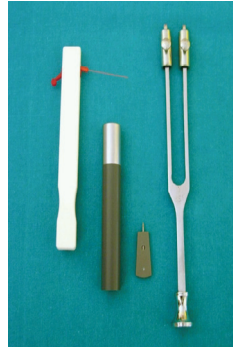


Figure 3 – Blunt-ended lancet



Figure 4 – Graduated tuning fork of Reidel Syffel



Figure 5 – Thermal barrier



Figure 6 – Monofilament of Semmes-Weinstein



Figure 7 – Vascular Doppler probe of 8 Hz



Figure 8 – Sphygmomanometer

General agreement about the neuropathy foot exploration

The first scale used to the neuropathic exploration in the foot at risk is the Neuropathy Symptoms Score (NSS). It is a scale in which is valued the neuropathy symptoms and in which the major punctuation shows a chief presence of symptoms.

NSS	YES	NO
Tiredness, hot or pain, burning sensation, numbness or tingling	2	0
Presence of these symptoms in calves and feet/ only feet	1/2	0
They are present during the day and at night/at night it gets worse	1/2	0
They wake up at night	1	0
Standing relief /walking	1/2	0
FINAL POINTS (max. 9)		

Table 2 – Neuropathy Symptoms Score (NSS)

The patient will be scored during the interview taking into account the presence of these symptoms which guide the neuropathic presence (Onde *et al.*, 2008).

The intensity of symptoms could change in function of the punctuation obtained, according to table 3:

Neuropathy slight symptoms	3-4 points
Neuropathy moderate symptoms	5-6 points
Neuropathy severe symptoms	7-9 points

Table 3 – Understanding results NSS

The second scale which value the neuropathy in the foot is based on the signs, it consists in the realization of different physical activities which value the different sensibilities in the foot, this is known as Neuropathy Disability Score (NDS).

To perform the NDS, it is necessary a reflex hammer, a blunt-ended lancet, the Graduated tuning fork of Reidel Syffel and a thermal barrier. The exploration will be carried out in both feet and the final punctuation obtained in each of the sections to the left foot and right will be a sum (Jayaprakash *et al.*, 2011).

NDS	PD			PI		
	Normal	Reinforcement	Abnormal	Normal	Reinforcement	Abnormal
Aquileo Reflex	0	1	2	0	1	2
Pain and Prick	Normal	Abnormal		Normal	Abnormal	
	0	1		0	1	
Vibration	Normal	Abnormal		Normal	Abnormal	
	0	1		0	1	
Temperature	Normal	Abnormal		Normal	Abnormal	
	0	1		0	1	
Total by foot						
TOTAL (max. 10)						

Table 4 – Neuropathy Disability Score (NDS)

A high punctuation will indicate a major presence of compatible signs with neuropathy; in table 5 are showed the equivalences with the points gained in the NDS.

Neuropathy slight symptoms	3-5 points
Neuropathy moderate symptoms	6-8 points
Neuropathy severe symptoms	9-10 points

Table 5 – Understanding results NDS

The use of the monofilament of Semmes-Weinstein gives us a good positive and predictive value, if we value the presence of neuropathy (Feng *et al.*, 2009), its use gives us an idea of the gravity and the application of the monofilament is carried out over the points which are showed in the figure 9.



Figure 9 – Scheme of points of the application of monofilament Semmes-Weinstein

It is considered that the proof of the monofilament will be altered when the patient is not able to detect the pressure in 4 points, either one.

The existence of a modified proof of monofilament entails the presence of severe neuropathy (Solomon *et al.*, 2010). The final diagnostic of neuropathy will be carried out in function of the algorithm which is showed in table 6:

Slight Neuropathy	NDS > 6	NDS 3-5 + NSS > 5
Moderate Neuropathy	+ Thresholdsvibratory ≤ 2	
Severe Neuropathy	+ Insensibility monofilament	

Table 6 – understanding results to the diagnosis of neuropathy

Consensus about the vascular foot exploration

The vascular exploration will be based in the anamnesis, observation and palpation to quantify the Edinburgh questionnaire (table 7) about the presence of peripheral vascular disease. The time determination of capillary filled and the determination of ankle-brachial index complete the proofs to detect the vasculopathy and the necessity of valuation by the service of vascular surgery.

Edinburgh questionnaire	Yes		No	
Pain for wandering	2		0	
Claudication	4		0	
Rest pain	8		0	
Decubitus pain	2		0	
Skin without hair, cold	2		0	
Palpation of pedís pulse	No	Reduce	Yes	
	4	2	0	

Table 7 – Edinburgh questionnaire

The understanding results are carried out by the punctuations in Table 8.

Normal	<4 points
EVP. Valuation by vascular surgeon	>4 points
EVP. Immediate valuation by vascular surgeon	>8 points

Table 8 – Understanding results of the Edinburgh Questionnaire

The ankle-brachial index determination gives us important information about the perfusion foot state. The index is obtained placing in the numerator the diastolic pressure in the pedia arteries or posterior tibial and in the denominator the systolic pressure of the arm (Lechleitner *et al.*, 2012).



Figure 10 – ankle-brachial index

Reduced values to 0.9 show a deficit of perfusion and presence of peripheral artery disease (L. Prompers *et al.*, 2008). High values indicate a presence of artery calcification. The common values can be seen in table 9.

Ankle-Brachial index > 1.4	Possible artery calcification
Ankle-Brachial index = 0.9 – 1.4	Normality
Ankle-Brachial index < 0.9	Indicative of arterial occlusive disease
Ankle-Brachial index < 0.5	Severe arterial occlusive disease

Table 9: Understanding results of ankle-brachial index

If protocols for the prevention of diabetic foot in Primary Health are used, they may reduce the rate or amputations and the costs for this complication.

The implementation of the proposed protocol exploration, not an increase in health expenditure, does not require complex technology. It is necessary to train and educate health professionals in these exploration techniques. If health authorities are not aware of the importance of prevention of diabetic foot, it may not reduce the rate of amputations or decrease costs of diabetic foot.

Conclusions

Stratifying the risk of suffering foot lesions in people with high, moderate and low DM, will let intensify the preventive actions according to the patient needs. Designing and performing a screening to early detect the risk of suffering a diabetic foot should be based on the scientific evidence. To explore the neuropathy existence we took into account the Neuropathy Symptoms Score, the Neuropathy Disability Score and the Monofilament of Semmes-Weinstein.

In the consensus of the vascular exploration we chose the determination of the Edinburgh questionnaire and the ankle-brachial index. The completion of these proofs in a systematic and documented way will help to prevent the onset of ulcer foot and decrease the rate of AMIs related to the DM.

References

- Abbott, C.A., Malik, RA, van Ross, E.R., Kulkarni, J. & Boulton, A.J. (2011). Prevalence and characteristics of painful diabetic neuropathy in a large community-based diabetic population in the U.K. *Diabetes Care*. 34(10), 2220-2224. doi: 10.2337/dc11-1108.
- American Diabetes Association (2008). Economic costs of Diabetes in the United States in 2007. *Diabetes Care*. Vol. 31(3), 596-615. doi: 10.2337/Dc08-9017.
- Baker, K., Riley, P. (2005). El año del pie diabético. *Diabetes voice* 50(1). Available at http://www.idf.org/sites/default/files/attachments/article_318_es.pdf
- Bonilla Toyos E., Planell Mas, E., Hidalgo Ruiz, S., Lázaro Martínez, J.L., Martínez Camuña, L., Mosquera Fernández, A., Novel i Martí, V. & Padrós Sánchez C. (2011). *Guía de protocolos de pie diabético*. Madrid: Consejo General de Colegios Oficiales de Podólogos.
- Danaei, G., Finucane, M.M., Lu Y., Singh, G.M., Cowan, M.J., Paciorek, C.J., Lin. J.K., Farzadfar, F., Khang, Y.H., Stevens, G.A., Rao, M., Ali, M.K., Riley, L.M., Robinson, C.A. & Ezzati, M. (2011) National, regional, and global trends in fasting plasma glucose and diabetes prevalence since 1980: systematic analysis of health examination surveys and epidemiological studies with 370 country-years and 2.7 million participants. *Lancet*. 2;378(9785), 31-40. doi: 10.1016/S0140-6736(11)60679-X.
- Feng Y., Schlösser F.J. & Sumpio BE. (2009). The Semmes Weinstein monofilament examination as a screening tool for diabetic peripheral neuropathy. *J Vasc Surg*. 50(3), 675-82, 682.e1. doi: 10.1016/j.jvs.2009.05.017.
- Hidalgo, S.O., García, F.M., Basilio, B.E. & Gutiérrez, P.E. (2011). El Pie de Riesgo y el Pie Diabético. In D.A. López, J.O. Ramos, F.R. Alonso, R.I. García (Eds) *Manual de Podología, Conceptos, aspectos psicológicos y práctica clínica*. Madrid, [s.n.].
- Huysman, E. & Mathieu, C. (2009). Diabetes and peripheral vascular disease. *Acta Chir Belg*. 109(5), 587-94. Available at <http://www.ncbi.nlm.nih.gov/pubmed/19994800>
- Jayaprakash, P., Bhansali, A., Bhansali, S., Dutta, P., Anantharaman, R., Shanmugasundar, G. & Ravikiran, M. (2011). Validation of bedside methods in evaluation of diabetic peripheral neuropathy. *Indian J Med Res*. 133, 645-649. Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3135993/> (Consultado el 12 de Enero de 2013)
- Prompers, L., Schaper N., Apelqvist, J., Edmonds, M., Jude, E., Mauricio, D., Uccioli, L., Urbancic, V., Bakker, K., Holstein, P., Jirkovska, A., Piaggese, A., Ragnarson-Tennvall, G., Reike, H., Spraul, M. Van Acker, K., Van Baal, J., Van Merode, F., Ferreira, I. & Huijberts, M. (2008). Prediction of outcome in individuals with diabetic foot ulcers: focus on the differences between

- individuals with and without peripheral arterial disease. The EURODIABE Study. *Diabetologia*. 51(5), 747–755. doi: 10.1007/s00125-008-0940-0.
- Lechleitner, M., Abrahamian, H. & Francesconi, M. (2012). The diabetic foot. *Wien Klin Wochenschr*. 124 Suppl 2, 39-41. doi: 10.1007/s00508-012-0264-4.
- Meijer, J.W., Bosma, E., Lefrandt, J.D., Links, T.P., Smit, A.J., Stewart, R.E., Van Der Hoeven, J.H. & Hoogenberg, K. (2003). Clinical diagnosis of diabetic polyneuropathy with the diabetic neuropathy symptom and diabetic neuropathy examination scores. *Diabetes Care*. 26(3), 697-701. Available at <http://www.ncbi.nlm.nih.gov/pubmed/12610024>.
- Onde, M.E., Ozge, A., Senol, M.G., Togrol, E., Ozdag, F., Saracoglu, M. & Misirli, H. (2008). The sensitivity of clinical diagnostic methods in the diagnosis of diabetic neuropathy. *J Int Med Res*. 36(1), 63-70. Available at <http://www.ncbi.nlm.nih.gov/pubmed/18230269>.
- Ozdemir, B.A., Brownrigg, J., Patel, N., Jones, K.G., Thompson, M.M. & Hinchliffe, R.J. (2013). Population-based screening for the prevention of lower extremity complications in diabetes. *Diabetes Metab Res Rev*. 29(3), 173-82. doi: 10.1002/dmrr.2383.
- Pecoraro, R.E., Reiber, G.E. & Burgess, E.M. (1990). Pathways to diabetic limb amputation. Basis for prevention. *Diabetes Care*. 13(5), 513-521.
- Ragnarson Tennvall, G. & Apelqvist, J. (2001). Prevention of diabetes-related foot ulcers and amputations: a cost-utility analysis based on Markov model simulations. *Diabetologia*. 44(11), 2077-2087. Available at http://download.springer.com/static/pdf/310/art%253A10.1007%252Fs001250100013.pdf?auth66=1386888441_aa2a14d71c64b621d6e658c326c88081&ext=.pdf
- Reda, A., Hurton, S., Embil, J.M., Smallwood, S., Thomson, L., Zacharias, J., Dascal, M., Cheang, M., Trepman, E. & Koulack J. (2012). Effect of a preventive foot care program on lower extremity complications in diabetic patients with end-stage renal disease. *Foot Ankle Surg*. 18(4), 283-6. doi: 10.1016/j.fas.2012.05.002.
- Tesfaye, S., Boulton, A.J.M., Dyck, P.J., Freeman, R., Horowitz, M., Kempner, P., Lauria, G., Malik, R.A., Spallone, V., Vinik, A., Bernardi, L., Valensi, P. & Toronto Diabetic Neuropathy Expert Group (2010). Diabetic Neuropathies: Update on Definitions, Diagnostic Criteria, Estimation of Severity, and Treatments. *Diabetes Care*. 33(10), 2285–2293. doi: 10.2337/dc10-1303
- Weck, M., Slesaczek, T., Rietzsch, H., Münch, D., Nanning, T., Paetzold, H., Florek, H.J., Barthel, A., Weiss, N. & Bornstein, S. (2011). Noninvasive management of the diabetic foot with critical limb ischemia: current options and future perspectives. *Ther Adv Endocrinol Metab*. 2(6), 247-55. doi: 10.1177/2042018811427721.
- Wild, S., Roglic, G., Green, A., Sicree, R., King, H. (2004). Global prevalence of diabetes: estimates for the year 2000 and projections for 2030. *Diabetes care*. 27(5), 1047-1053.



Economics

Economic Value Added as a source of information for stakeholders

Alba María Priego de la Cruz

albamaria.priego@uclm.es

*University of Castilla-La Mancha
Spain*

Abstract

The Economic Value Added (EVA) is the best accounting document that reports on the notion and transmission measure of value added generated and distributed by the company in a given period. In this sense, the EVA helps to satisfy the information needs of the stakeholders who have been involved in their production. In turn, this is a point of departure for dialogue and business negotiation, which will favor the scope of business objectives. Therefore, it is vital to evaluate the participation and behavior of stakeholders in the generation and distribution of value added, which may be decisive in favoring the business activity.

Keywords: *Economic value added; EVA; stakeholders; generation; distribution.*

Introduction

The Stakeholder Theory shows the new vision of the company as a union of interests, so that accounting information has to satisfy the interests of the company, which is formed by stakeholders (Gomez *et al.*, 2008). The majority of stakeholders wants information related to the generation and distribution of income produced in the company, in order to carry out its decision-making process. In this regard, the most useful accounting tool for determining the ability to give back to a particular factor to raise the residual income distribution is called *Economic Value Added* (EVA).

Thus, the purpose of EVA is to provide information about both the surplus generation and its distribution between the groups or individuals who have been involved in their production, constituting, at the same time, a reference point for dialogue and negotiation (Cea, 1982; Muñoz, 1984).

The value-added concept began to be used by economists since the last century, being applied, in principle, in the field of macroeconomics (McLeay, 1983; Ianniello, 2010), particularly in the area of national accounts. In the seventies, the value-added applied to the area of business management and developed by the academic view, which advocates social responsibility. However, the representation of EVA in the field of financial information presented by the companies came later with the publication of the Corporate Report, issued by the Accounting Standards Steering Committee (SAC).

In relation to accounting standards in Spain, until the publication of the commercial reform of Royal Decree 1643/1990, of 20th of December, which approves the Accounting General Plan of 1990, there was no reference in the legal accounting on the concept of value added, so as the components which integrate it or ways to find it. After the implantation of the Accounting General Plan 1990 begins to appear the concern of EVA, and the possibility of bringing in the accounting memory as additional information an analytical profit and loss account where this value appears. The Central Balance Sheet of Spain (1996, p.21) emphasizes the importance of value added in the profit and loss analytical account, indicating that it is a concept that measures business surplus from which incomes are distributed to stakeholders related to the company.

2. Economic Value Added: definition and calculation

The pioneer in the use of Economic Value Added was Alfred Marshall (1963) in his book called “The Principles of Economics”, however this concept began to be popular with the New York consulting firm Stern Stewart & Company that, in 1989, “develops a book value of economic value added patenting it with the name of EVA” (McLaren, 2000, p. 42). This consultant, in his book *The Quest for Value. The EVA Management Guide*, requires that EVA is a financial measure that is closer than any other indicator to capture the business economic utility, being the best

practical indicator to measure performance in the company (Bennett, 1994; Biddle *et al.*, 2000, Copeland *et al.*, 2000, McLaren, 2000 and 2004, Stern, 2002).

Also, Amat (1999) indicates that EVA is a tool to help you calculate and analyze the income generated by the company (Amat, 2003), taking into account the level of risk with which it operates. Therefore, it is a single indicator of business performance because it considers all relevant objectives of the company, providing further information to carry out decisions by shareholders that constitute the company.

Thus, it is relevant the disclosure of income earned by each firm through EVA, because of the importance it possesses in the formation of national wealth, due to the total income generated by the economy of a nation which is the sum of the value added of companies that form it (De Luca, 1998). For this purpose, its calculation considers the following aspects:

$$\text{EVA} = \text{R} + \text{I} + \text{D} + \text{T} + \text{A} + \text{PR}$$

Where:

R = Staff remuneration, including social charges

I = Interest on debt

D = Dividends paid to shareholders

T = Direct Taxes

A = Amortization

PR= Profit retained by the company (reserves)

For calculating EVA is necessary to use two documents from traditional accounting: the profit and loss account, which has the aim of showing the result of the exercise by a certain company (Larrinaga, 2001); and the distribution benefits, which include the amount of result that has been distributed as dividends and what amount has been allocated to the maintenance and enhancement of the company.

From the point of view of analytical accounting, EVA gives the possibility to know more clearly where the value added has been generated within the economic unit and the part which had to be applied (Muñoz, 1984). Thus, the EVA has two parts: the first, called income generation, which represents the excess value of the outputs obtained in relation to the value of the inputs; and the second, called distribution, where income achieved by the company shall be applied to the various stakeholders who have contributed to its creation (Gallizo, 1993; Ianniello, 2010) (see tables 1 and 2).

Table 1 – Creation of value added.

Sales of finished goods + - Stock
= Income from the activity -Material Consumption
= Gross value added - Rest supply center - Transformation Center - Shopping Centre - Administration Center
= Net value added activity - Sub-activity-center
= Value added distributable period

Source: Muñoz (1984)

Table 2 – Distribution of value added

Employees: - Wages and salaries, net. - Transportation of personnel. - Other social costs.
Financial Creditors: - Finance costs: interest on loans, interest on debentures and bonds.
Status: - Income tax. - Income tax of employees. - Contributions to Social Security
Owners: - Dividends.
Company: - Reserves. - Allowances

Source: Muñoz (1984)

3. Stakeholders involved in the generation and distribution of value added. Accounting perspective.

It is argued that the generation and distribution of the value depends on the relationships that companies profess with their stakeholders as well as the relationships that may exist between them. Therefore, it should be noted the analysis of each of them:

3.1 Shareholders or owners.

The shareholders or owners are a group of natural or legal persons who deposit capital in the company, then they must be remunerated via dividends and capital gains obtained.

The most important decisions to be taken by shareholders in the distribution of value added generated are:

- Participation in equity. This represents a return on capital invested by the owners in the company, materialized via dividends (Larrinaga, 2001). Thus, this reflects the proportion allocated to shareholders per unit of income generated, which would attract future investors.
- Participation of the company through self-financing. Self-financing includes funds generated by the company from its production process, intended for enrichment (retained earnings) and maintenance (excluding depreciation, provisions and impairments) (Archel *et al.*, 2009).

Thus, “the participation of self-financing on the total added value generated by the company demonstrates the ability of the company to deal with their resources, new projects, market diversification, etc.” (Hernandez, 1997, p. 153).

3.2. Employees

Hernandez (1997, p. 116) indicates that employees participation in the production process of the company through their work is “fairly presented to the state of value added and can be used to predict the future, in the context of collective bargaining (Dierkes, 1979), as well as distributing incomes by the employer as compensation for work”. The EVA is considered an instrument of great help to the workers, as it provides information to carry out their decision-making to the business environment, for example, the amount of time devoted to work, negotiating the amount perceived salary, benefits in the form of pension funds, commissaries, etc.

For this purpose, the EVA helps to create a suitable climate among workers to realize their importance in the final results of the company. Gallizo (2000) explains how the presentation of EVA increases a positive attitude toward the company workers, to be noted that they are the main participants in the income generated, thereby triggering a greater motivation towards achieving a better job, together with greater cooperation and increased identification to the firm possessing (Belkaoui, 1984).

3.3 Financial creditors (debt capital)

The resources provided by creditors earn interests, which are understood as a retribution for their application to factors of production, so it must be taken into account in the process of distribution of the income generated in the company. Therefore, the proportion of income that is assigned to this group of stakeholders is calculated by the interest that accrued during the fiscal year (financial expenses), which vary depending on the specific conditions of the financial market. This participation will report about the amount of interest of debt that the company has earned as remuneration debt capital for a rental unit (Hernandez, 1997).

3.4. State

State tax collection action in relation to the profit generated from the business is open to interpretation, depending on the consideration allocated to the tax effect on profits, either as income or as expense (Banegas *et al.*, 1998):

- a) From the point of view of *income*, the State will be referred to as a shareholder that makes contributions in kind, such as, for example, infrastructure (streets, roads, drainage, networks, for example) and services (police, firefighters, etc...) and that, hence, it must participate in the distribution of profit or as an element that should be considered when distributing the income generated by the company. Therefore, the income tax may be treated as a distribution of profits, since such stakeholder is, in part, a resource whose remuneration is in terms of benefit and thus can be considered as a shareholder. It is a shareholder, corresponding taxes paid to the distribution of dividends (Alonso, 1996, p. 117).
- b) And, from the point of view of *expense*, the State will be considered as a supplier of inputs. This position is based on the Theory of Entity claiming the following statements (Alonso, 1996), taxes paid to the state, not a shareholder. So, that can only be considered the same as a vendor in the broad sense, given as the company has the obligation to make payment of the tax. It therefore seems logical to separate taxation of dividends, because the first are mandatory, whereas the second is a societal choice.

In any case, the State is sometimes considered as a productive factor, when it has contributed to the creation of corporate value indirectly. Therefore, the State will be one of the beneficiaries of the process of distribution of value added generated in the company.

3.5. Customers

Customers contribute to the generation of business value using the cash flows to the companies that provide the purchase of goods and services from them.

The obtaining of customer value varies from one company to another, but in all of them there are some rules. Firstly, the company must improve customers' interests and, secondly, the resources should be organized to develop activities that produce the maximum strategic benefit from the company (Ianniello, 2010), keeping in mind the importance of customers' quality. Customers are key elements in the creation of business value therefore it is necessarily understandable.

3.6. Suppliers

Suppliers and companies have a mutual dependence, since some of them are essential for the survival of others (González-Benito *et al.*, 2003). Suppliers provide inputs required for the companies, with the objective that companies can carry out

their production processes. Thus, suppliers contribute to the generation of value added.

From this perspective, the practices used by the company to suppliers are oriented towards logistics management and, specifically, to the provisioning subsystem or more commonly called supply chain (Oly, 2005) due to their strategic nature and their impact on the extent of competitive advantages based on adding value and reducing cost simultaneously (Sarache *et al.*, 2009).

In short, the above features constitute fundamental elements to achieve proper operation of the procurement function, contributing positively to the proper functioning of the production process, as well as business income generation.

4. Conclusion

The theoretical approaches studied reveal a new vision of the company, to be considered as a coalition of interests. The coalition needs information that contributes to a better understanding of how things are happening in the company. An important part of this information is extracted from the public financial statements, which allow discerning the level of fulfillment of the expectations of all stakeholders. To meet the demands of the vast majority of stakeholders interested in information related to the generation and distribution of value added with which meet their participation and compensation, and thus make their decisions. Therefore, it has been carried the study of the accounting document EVA.

It has resorted to the EVA for a more transparent and clear vision of how economic events occur and how they can change the behavior of stakeholders, collaborationist and opportunist so depending on the generation and distribution of value added.

This is why the generation and distribution of value added in business will depend on the relationships established with its stakeholders, being especially relevant to unstable economic and financial moments.

References

- Alonso, I. (1996). *Tratamiento contable del impuesto sobre beneficios. Algunos casos particulares*. Madrid: Instituto de Contabilidad y Auditoría de Cuentas (ICAC).
- Amat, O. (1999). EVA. *Valor añadido económico. Un nuevo enfoque para optimizar la gestión, motivar y crear valor*. Barcelona: Ediciones Gestión 2000.
- Amat, O. (2003). *Análisis financiero de Estados Financieros. Fundamentos y aplicaciones con casos y ejercicios resueltos y cuestionarios de autoevaluación*. 7ª Edición. Barcelona: Gestión 2000.
- Archel, P., Lizárraga, F. & Sánchez, S. (2009). *Estados contables: elaboración, análisis e interpretación*. Madrid: Ediciones Pirámide.
- Banegas, R., Sánchez-Mayoral, F. & Nevado, D. (1998). *Análisis por ratios de los estados financieros (Análisis Externo)*. Madrid: Editorial Civitas.

- Belkaoui, A. (1984). *Socio-Economic Accounting*. Wesport: Quorum Books.
- Bennett, G (1994). EVA: Fact or Fantasy. *Journal of Applied Corporate Finance*, 7, 2, 71-84.
- Biddle G. R., Bowen, J. & Wallace, J. (2000). *Evidence on EVA*. Washington: University of Washington Business School.
- Cea, J.L. (1982). *Génesis y reparto de la variación de la productividad global de las entidades financieras. El Balance Social de la empresa y las instituciones financieras*. Madrid: I Jornadas de estudio sobre economía y sociedad. Ediciones Banco de Bilbao.
- Central Balance (2006). *Resultados anuales de las empresas no financieras*. Madrid: Banco de España.
- Copeland, T., Koller, T. & Murrin, J. (2000). *Valuation measuring and managing the value of companies*. Third Edition. [S.l.]: McKinsey.
- De Luca, M.M. (1998). *Demonstração do Valor Adicionado ± Do Cálculo da Riqueza Criada pela Empresa ao Valor do PIB*. São Paulo: Atlas.
- Dierkes, M. (1979). Corporate social reporting in Germany: Conceptual development and practical experience. *Accounting, Organizations and Society*. 4(1-2), 87-107.
- Gallizo, J.L. (1993). *Los estados financieros complementarios*. Madrid: Ediciones Pirámide.
- Gallizo, J.L. (2000). *El Estado de Valor Añadido*. Available at <http://www.5campus.com/leccion/cf009>. 01/09/2011
- Gómez Miranda, M.E., Torre Martínez, J.M. & Román Martínez, M. (2008). Análisis de sensibilidad temporal en los modelos de predicción de insolvencia: una aplicación a las PYMES industriales. *Revista Española de Financiación y Contabilidad*, 37(137), p. 85-111.
- González-Benito, J., Martínez-Lorente, A.R. & Dale, B.G. (2003). A study of the purchasing management system with respect to total quality management. *Industrial Marketing Management*, 32(6), 443-454.
- Hernández, M.C. (1997). *El valor añadido como indicador económico de la responsabilidad social de la empresa: una aplicación empírica*. Tesis doctoral de Ciencias Económicas y Empresariales. Universidad de la Laguna, Tenerife.
- Ianniello, J. (2010). The voluntary disclosure of the value added statement in annual reports of Italian listed companies. *Agric. Econ- Czech*, 56(8), 368-378.
- Larrinaga, C. (2001). Aspectos sociales y políticos del estado de valor añadido. *Revista de Contabilidad*. 4(8), 35-62.
- Marshall, A. (1963). *Los principios de Economía*. Madrid: Aguilar.

- McLaren, J. (2000). Una perspectiva estratégica del valor económico añadido. *Harvard-Deusto Finanzas y Contabilidad*. 33, 42-47.
- McLaren, J. (2004). La utilización del EVA como sistema de medición del rendimiento. *Harvard-Deusto Finanzas y Contabilidad*. 61, 70-74.
- McLeay, S. (1983). Value added: a comparative study. *Accounting, Organizations and Society*. 8(1), 31-56.
- Monks, R.A.G. & Minow, N. (2000). *Corporate Governance*. Massachusetts: Blackwell Business.
- Muñoz, C.I. (1984). *Aportaciones contables a los nuevos objetivos y enfoques socioeconómicos de la empresa*. Madrid: Instituto de Planificación Contable.
- Oly, N. (2005). Supplier selection and management strategies and manufacturing flexibility. *Journal of Enterprise Information Management*, 18(3), 330-349.
- Real Decreto 1643/1990, de 20 de diciembre, por el que se aprueba el Plan General de Contabilidad. Ministerio de Economía y Hacienda (1990).
- Sarache, W.A.; Castrillón, O.D. & Ortiz, L.F. (2009). Selección de proveedores: una aproximación al estado del arte. *Cuadernos de Administración. Colombia*. Bogotá, 22(38), 145-167.
- Stern, J., Shiely, J. & Ross, I. (2002). *El reto del EVA*. Barcelona: Gestión 2000.



Law and Environmental Education

Environmental policy: environmental education

María Rosa Vázquez Rodríguez

mariarosaines.vazquez@urjc.es

Facultad de Ciencias Jurídicas y Sociales

Universidad Rey Juan Carlos

Spain

Abstract

The public authorities have several instruments for the environment protection. The selection of the most suitable instrument for environment protection will depend for each particular case on the nature of the environmental problem. In addition to the legislative, economic and marketing instruments, public authorities have other instruments to ensure environmental protection and control, such as environmental education.

The environmental education plays an important role in the environment protection. This paper will outline the different instruments available to public administration in order to enable environmental control of productive activities and promote good conduct in favour of environmental conservation, highlighting the relevance of environmental education.

Keywords: *Environmental education, environmental policy*

1. Introduction

The environment plays a series of functions in the economy. As we all know, the economy only takes care of limited resources. The rational usage of natural resources becomes important through its scarceness or even exhaustion. Society's objective is to maximize its well-being from a set amount of limited resources onwards. Since there are market failures in some cases, such as external costs, the market cannot always achieve this objective. In these situations the allocation of productive resources is not realized efficiently by the market and state intervention is required to achieve this objective, hence the importance of state policies that affect the environment.

The authorities have a general interest purpose. Their objective is to offer services and goods to the community. Furthermore, all authorities have a constitutional mandate to protect the environment. In this way, all citizens in general and particularly all authorities are entrusted with protecting the environment both in the Spanish constitution and in the constitution of neighbouring countries.

Within the European Union, the environment acquires policy status with the Treaty on European Union (TEU). One feature of environmental policy is its cross relation with other policies. This means that the objective of protecting the environment must be part of the definition and realization of all authorities in every conduct.

2. Environmental Policy Instruments

An environmental policy is a public policy that has as its main objective the correction of this market failure (Austin, 1999), with the aim of improving the quality of life of the citizens (Fernández-Bolaños, 1998). This will internalize the 'externalities' into the decision making process. It also aims at preventing the occurrence of contamination, and of any economic activity that may be detrimental to the natural environment. However, it not only adheres to this aspect, but also encompasses the preservation of animal and plant biodiversity, including landscape spaces and biotopes of special interest (Fernández-Bolaños, 1998).

To ensure that the environmental policy is upheld, public authorities have multiple instruments to ensure environmental control of productive activity. Within these instruments the following can be highlighted:

2.1. Legislative Instruments

The purpose of legislative instruments is to structure private social and economic arrangements (Fiorino, 1999). They consist of legal regulations or planning that dictates specific conduct to be followed. They regulate business activity and the environment by defining regulations relative to all products and/or procedures; limiting or prohibiting the emission of contaminating agents (gases, toxic liquids, noise pollution); regulations that enforce or prohibit specific conduct (e.g. the

development of certain high ecological value areas, or Coastal Law that regulates beaches and adjacent territory).

2.2. Economic Instruments

All economic instruments are those that have an effect on the costs and benefits of economic agents (OECD, 1997), and try to modify the subject's behaviour towards the environment favourably.

Therefore, instead of mandating prescribed actions such as legislative instruments, the economic instruments achieve the environmental incentives of the agents (Tietenberg, 1990).

Several different types of economic instrument exist, all of which embody the same logic (Austin, 1999).

Indirect Instruments: The authorities can incur in investments or expenses for the provision of infrastructure (public transport, waste collection, sewage treatment, etc.), protective measures and/or the conservation of places of interest (national and natural parks, historical monuments, etc.), or decisions concerning the regulation and management of the territory.

Fiscal Policy Measures: The state has a wide margin of manoeuvre through fiscal policy to influence the economy of economic agents, whether it is through expenditure or income (Fernández-Bolaños, 1998). In principle, the authorities will tax or penalize all conduct they want to eradicate via public income, and will reward all favourable conduct to the environment through public expenditure.

Charges, fees or taxes, these are prices paid for discharges of pollutants to the environment (Austin, 1999).

They are intended to disincentive or modify conduct. All taxes have an important corrective function. They can stimulate the development of new, environmentally benign technologies and it can stimulate the reduction of waste. (Tietenberg, 1990). So, the regulator can control the overall level of pollution (Austin, 1999).

These impositions are formulated around the principle that those who contaminate will pay. Other impositions try to increase the cost of using resources.

Subsidies can be used to reward the reduction of discharges in a similar manner (Austin, 1999).

Negotiable Emission Permits issued as economic instruments to protect and improve the natural environment, stem from the need to reduce emissions released by specific industries into the atmosphere.

Instead of an effluent charge, a manufacturer would be required to hold a permit to release a given quantity of pollution (Austin, 1999).

By controlling the aggregate number of permits the regulator effectively controls the total release of pollution (Austin, 1999).

All **Environmental Criteria Included in Public Contracts** refer to the purchase or hiring of goods or services, taking into account not only their technical or economic aspect, but also their environmental aspect.

The authorities can freely choose what is to be purchased and can stipulate implementation clauses within the contract, i.e. how it must be performed. Thus, when purchasing a product or service, the authorities can consider criteria such as resource, energy or water management; reduction in waste production; request specific products or materials, or that the products purchased are eco-label certified.

2.3. Market-Based or Voluntary Instruments

Market-based or voluntary instruments are based on the population's rising environmental awareness, which demands a greater consumption of environmentally-friendly services and products (Fernández-Bolaños, 1998).

These instruments try to incorporate the environmental factor into the organisation of the company. This allows the organisation to identify and control the significant environmental aspects and their impact, and verify options for the reduction of resource or energy consumption.

These can include: environmental audits; environmental management systems, whether certified in accordance with the ISO 14001, the EMAS, eco-labels, etc (Fernández-Bolaños, 1998). Emas is a policy instrument of reflexive law. Emas is an example of reflexive law, it attempts to create incentives and procedures that induce entities to act in certain ways and to engage in internal reflection about what form that behaviour should take (Fiorino, 1999).

2.4. Environmental Education

The authorities have a fundamental instrument for promoting respect towards the environment through Environmental Education.

3. Environmental Policy: Environmental Education

The public authorities have several instruments for the environment protection. The selection of the most suitable instrument for environment protection will depend for each particular case on the nature of the environmental problem. In addition to the legislative, economic and marketing instruments, previously seen, public authorities have other instruments to ensure environmental protection and control, such as environmental education.

The aims of Environmental Education is “to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment” (Unesco, 1977)

The education must be reoriented towards a sustainable development. The environmental education would be the instrument towards a paradigm change.

The environmental education has the challenge of contributing to the sustainable development (Novo, 2009).

Within environmental education can be distinguished between formal education and non-formal. The environmental formal and not formal education are two realities that re-feed, to the effect that he contributes to the education of the consumer (Novo, 2009).

3.1 Formal Environmental education

The Spanish educational system, both primary and secondary, includes the environmental education in its curriculum.

The incorporation of the environmental education within the school curriculum means the recognition, from the point of view of the educational system, the role played by the environment in current society, while it is a response to the demands that come out from education (Muñoz, 2010).

Spanish System education programs incorporate contents related to the environment in various subjects, with the aim of providing an adequate formation in the so-called science of nature (biology, geology) supplemented with other experimental sciences (chemistry, physics)(Álvarez, 2002). This knowledge enables to understand the phenomena of the various elements of the natural environment as well as the problems arising from them (pollution, greenhouse effect, decrease of the ozone layer). This also shows the consequences of man actions on the environment (Muñoz, 2010).

Didactic units of environment matters include contents of attitudinal type, (Unesco-sponsored conference held in Tbilisi in 1977 already mentioned specifically the need for “a change of values, attitudes and habits”).

Within elementary and secondary education syllabus, environmental education will favor among students the development of attitudinal aspects, which are of especial importance in this matter. Attitudinal aspects have a special impact on the promotion of sensitivity and respect for the conservation of the environment, the observation, knowledge and care of its elements, and in general the participative and critical assessment of all aspects involved in the interaction of man and the environment (Vílchez, 2005).

The environment is not only recognized as a subject in the curricula of students but also has cross-curricula character. Cross-curricular themes or approaches today are widely introduced in the educational system of most European countries (CIDREE 2005). That means that the values of protection of the environment should be present in all subjects. And also that they not only should be considered as one more subject, but also on the basis of development of other materials. It is considered necessary to introduce the environmental education to imbue the contents of different curriculum subjects, i.e. environmental education should not be a discipline to be added in the curricula, but an articulator and an integrator

axis from the environmental problems of the context, which requires an interdisciplinary approach.

It is considered that it is not enough to introduce the environment within curricular documents, but that people have to live the protection of the environment, practising with the example so that the way in which the institution uses the resources and manage waste may not contravene the principles of sustainability (Correa 2004).

In the case that education is carried out in institutions of higher education the most positive contribution that a University can make for a more sustainable future is through their students, who are responsible for making decisions in the future. In this way, the challenge for the institution is to develop in students the ability to make decisions that take into consideration the principles of sustainability. This is due to the economic and social significance of the University, which is responsible for the education of future generations, so it can offer degrees and courses related to the management of the environment (Correa, 2004).

It is also in the universities of Education Sciences where future educators responsible for the environmental education of the new generations are educated (Álvarez, 2002). The environmental policy of an institution of higher education must take into account the collaboration with other stakeholders as local authorities, suppliers and other organizations who shared same environmental goals.

It is important to consider that an environmental policy must not be isolated, but it must be compatible with other policies (Correa, 2004).

3.2. Non-Formal Environmental education

Non-formal environmental education is focused on all levels of society (people in general, housekeepers, businessmen, tourists, etc.) and aims general population awareness about the environmental problems associated with economic activity and the ways to collaborate in the mitigation in the environment. These initiatives include activities of awareness-raising and dissemination of information, education and vocational training.

One of the characteristics of the good practices in Non-Formal Environmental Education is that are based in models that can be replicated in the management of other natural resources, and that many of the considerations of these programs may serve as well for the management of other natural resources.

Examples of good practice in Environment protection are the Spanish campaigns as the “clean Pyrenees campaign” (Cabrera and López, 2003) (environmental awareness for tourists on the problems arising from litter in the natural environment). Other examples are the campaigns of education for prevention of fires in the forest. “Get green” (Ayuntamiento de Madrid 2013) program of the city of Madrid aims to disseminate best practices in sustainable mobility, with impact on the city. Other campaigns that seek to raise awareness about the uncontrolled litter of urban waste

(organic matter, paper, glass,) in the seashore, to become aware of its toxicity and therefore the need for a proper handling.

All these corrective measures for environmental education programs listed above are not considered either expensive or difficult.

4. Conclusions

A good environmental management is creator of wealth. The public authorities have a wide margin of manoeuvre for the protection of the environment. The choice of the most suitable instrument will depend on each individual case and circumstance, as well as the nature of the problem in question.

The environmental education plays an important role in the environment protection.

Not always the solution to an environmental problem implies an infrastructure or legislation, but in some cases for certain problems, environmental education can be as effective as the use of an economic instrument as the establishment of an eco-tax.

The protection does not always mean intervention, in some cases, the best protection is non-intervention.

References

- Álvarez Suárez, P. (2002). *La Educación Ambiental en la Educación Formal (Universidad)*. La Educación Ambiental en el siglo XXI. Asociación Española de Educación Ambiental. Madrid: Edita Grupo Editorial Universitario.
- Ayuntamiento de Madrid (2013) *Programa Muévete verde*, <http://www.madrid.es/>
- Austin, D. (1999). *Economic Instruments for Pollution Control and Prevention – A Brief Overview*. World Resources Institute. http://pdf.wri.org/incentives_austin.pdf.
- Cabrera Millet, M. & López Martín, F, (2003). *Aragón limpio. Programa de Educación Ambiental*. Gobierno de Aragón. Servicio de Educación y sensibilización ambiental <http://www.conama.es/viconama/ea/pdf/20.pdf>
- Consortium of Institutions for Development and Research in Education in Europe (CIDREE). *Cross-curricular themes in secondary education*. March 2005. Belgium.
- Correa Ruiz, C. (2004), *Emas y el sector servicios. EMAS: análisis, experiencias e implantación*. Madrid: ECOIURIS.
- Fernández-Bolaños Valentín, A. (1998). *Incidencia de la Política ambiental en la actividad económica*. Madrid: Universidad Complutense de Madrid.
- Fiorino, D.J. (1999). Rethinking environmental regulation: perspectives on law and governance. *Harvard Environmental Law Review*, 23.

- Ley Orgánica 2/2006, de 3 de mayo, de Educación (B.O.E. de 4 de mayo de 2006).
- Ley Orgánica 8/2013, de 9 de diciembre, para la mejora de la calidad educativa (B.O.E. 10 de diciembre de 2013).
- Muñoz Vidal, J.M. (2010). La educación ambiental como eje transversal del currículo. *Revista digital Innovación y Experiencias Educativas*, 29.
- Novo, M. (2009). *El Desarrollo Sostenible. Su dimensión ambiental y educativo*. Madrid: Editorial Universitas, S.A.
- OECD (1997). *Evaluating Economic Instruments for Environmental Policy*, OECD, Paris.
- ORDEN PRE/116/2008, de 21 de enero, se aprueba el Plan de Contratación Pública Verde de la Administración General del Estado y sus Organismos Públicos, y las Entidades Gestoras de la Seguridad Social. (BOE de 31 de enero de 2008.)
- Pearce, David & K. Turner(1990). *Economics of Natural Resources and the Environment*. Hertfordshire: Harvester Wheatsheaf.
- Plata Suárez J. & Martín Teixé G. (2007). Pasado, presente y futuro de la Educación Ambiental en la formación inicial del profesorado. *Revista electrónica interuniversitaria de formación del profesorado*. Santa Cruz de Tenerife (España).
- Programme “Muévete Verde”. The City of Madrid.
- Tietenberg, T. H. (1990). The poverty connection to environmental policy. *Challenge*. 33, 26-32.
- Tietenberg, T. H. (1990). Using economic incentives to maintain our environment. 33(2), 42.
- UNESCO (1977). *Intergovernmental Conference on Environmental Education*. Tbilisi.
- Vázquez Rodríguez, M.R. (2013). Environmental policy: economic and market-based instruments for environmental protection. Elisabete Silva, Clarisse Pais and Luís Pais (eds.). *Teaching Crossroads: 8th IPB Erasmus Week*. Bragança: Instituto Politécnico de Bragança.
- Vidal Salazar, M.D. & Matías Reche, F (2007). *Análisis de la percepción medioambiental de trabajadores del sector turístico granadino para la detección de carencias formativas: un estudio empírico del comportamiento medioambiental de las empresas turísticas granadinas*. Conocimiento, innovación y emprendedores: camino al futuro. Logroño: Universidad de la Rioja.
- Vílchez López, J.E. (2005). *El reto de la educación medioambiental en la formación del profesorado de educación primaria: muestrario de actividades*. Escuela Abierta: Revista de Investigación Educativa. 8, 97-128.



Education

With an Open Mind

Elisabeth Fernbach

elisabeth.fernbach@kphvie.ac.at

KPHVIE Campus Krems

Faculty of Education

Austria

Abstract

Education in art and art in education is a road to self-discovery and to understanding others and the world. The central aim in the following essay is to teach creativity with a cross curricular focus on new media. The first part of the paper explains the term “creativity” and how we can foster it in an educational environment. The second part suggests possible tasks and shows students’ and children’s art works as a result of these creative processes.

Keywords: *education, art, new media, creativity, emotions*

Creativity

Visual arts allow children to express their feelings, thoughts and visions. Creative processes are demanding for both teachers and children. Creativity gives children the opportunity to express their own ideas whereas teachers need to provide stimulus and motivate children in their creative processes. The term creative process can be

best explained by using the Latin terms “procreate” and “recreate” which explain recreation and procreation in the creative process.

“Recreate” means the editing of an existing image, pattern or theme. “Procreate” means that we create something new, without using a guideline, and that we use our own ideas and visions. Comparable terms to explain the concept of the creative process in German are “denken” and “vorausdenken” which mean to think and to think ahead. (H. Schmitt, 2002, p. 6)

How do we succeed in creating such a process in an educational environment? Teachers should always stress the importance of the way they teach and not only the end goal.

For example we can reach the mountaintop by taking an easy path and offer everyone the same route, or we can give the children the opportunity to choose their own paths. Teachers give advice and stimulate, providing the children with a safety net. In other words, the children decide the way they want to create their paths and do not follow a given route. The children use methods they are comfortable with and that suit their personal needs. Thus, they are not imitators or followers, but develop their own thoughts and creative processes. Working and thinking independently strengthens their minds and provides confidence.

Independent work routine and identifying self in the artwork lead to further thought processes which are also useful in other subjects, and parts of life. This creates a positive environment for transforming information.

Feelings and Colours

The usage of colours is always linked to a particular feeling. We all have a favourite colour and we often surround ourselves with our favourite colours; we decorate our homes with these colours. Children feel comfortable in a friendly and colourful environment and start to recognise their favourite colours at an early age.

Social and cultural meanings of colour are communicated by specific idioms and phrases. Here are some examples of idioms for the colour family red.

- To see red.
- Become red in the face.
- To be in the red.
- You are a red rag for me!
- See the world through rose-coloured glasses.

Emotion Cards and Colour Cards

Emotion cards allow us to recognise our own emotions and become emotionally competent. The project develops further, children build better relationships to other children in their age group, thus strengthening their social competence. Children learn to recognise and name feelings, and get the opportunity to express their feelings and perceive those of others. Dealing with negative emotions and

learning to control of one's own and those of others along with the impulses related to them is highly important in this part of the process. As a result, we become more body-conscious, self-conscious and learn to control our bodies better. The aim of this project is to widen our perspective, become more emphatic and considerate of others through understanding of colours and their effect on us. (M. Seitz and R. Seitz, 2002, pp. 90-120)

Faces and Facial Expressions

At this time I would like to mention Paul Ekman who, in his study, focuses on facial expressions and combining them with emotions. His study exhibits that facial expressions show how we feel. However, cultural norms and codes can make our expressions more pronounced, more understated or eliminate them completely. (Krüger 2012, p. 15)

Ekman's study also shows that recognising faces and recognising facial expressions are two separate things and are performed in different parts of the brain. As a result, by recognising emotions we do not perceive the face of a person, but rather the morphology of their expressions. (Ekman, 1978, pp. 124-156)

This means that facial expressions can be seen in objects other than faces. Imagine all the faces you see in rootstocks, plug-socket and cars. These faces reflect different feelings and sometimes they seem friendly and sometimes scary. This also explains the success of Harvey Ball's (1963) "Smileys"; the yellow, dot-eyed, curve-mouthed, minimalist imitations of human faces. In addition to this, nowadays, Scott Fahlman's emoticons which are used in texting, prove that only very few parts of a face are needed to express emotion. An old Austrian nursery rhyme is another example of the above mentioned simplicity: "Punkti, Punkti, Strichi, Strichi fertig ist das Mondgesichti." – "Dot, dot, line, line finished is the moon face." (Krüger, 2012, pp. 14-25)

An emoticon is derived from the words emotion and icon. (Plattner, 2008, pp. 110-111)

:)	%-)	:(:(
Smiley	to squint	sad	very sad
:c	:x	:&	:*)
unhappy	kiss	speechless	silly
:D	:I	*.*	:O
laughing	serious	I am speechless	screaming
:p	::DDD	xD	8-)
sticking your tongue out	I am laughing out loud	cool	cool

Table 1 – Emoticons - some examples

Practical Implementation

After a short introduction to the combined use of colours and emotions, the students should try to see objects or animals in clouds , stains or shapes they find in their personal environment.

Task 1: Try to find out the feelings

The teacher shows an emotion card and asks the children to recognise the feeling. To help with the task, facial expressions can be used to convey the feeling. Look at the eyes and the mouth. Observe the child's posture. Try to imitate similar facial expressions.

The aim of this exercise is to match the emotion cards with the right feelings. As a result we find synonyms and increase our communications skills.

Figure 1 – Emotion cards



- | | | | |
|-------------|-------------|-----------|---------------|
| → confused | → angry | → furious | → malicious |
| → depressed | → satisfied | → hurt | → guilty |
| → bored | → surprised | → scared | → pensive |
| → exhausted | → sad | → shy | → mischievous |

Table 2 – Possible feelings

Task 2: Match colour cards and feelings

The children choose an emotion card and choose colour cards that match the feeling.

Which colour do you find matches this feeling?

Would you like to tell us why you've chosen this colour?



Figure 2 – Picture of emotion cards and multi-colour cards, 2011

Task 3: Emotion balloons

How are you feeling right now?
Draw your face on a balloon.
How is your classmate sitting next to you feeling?

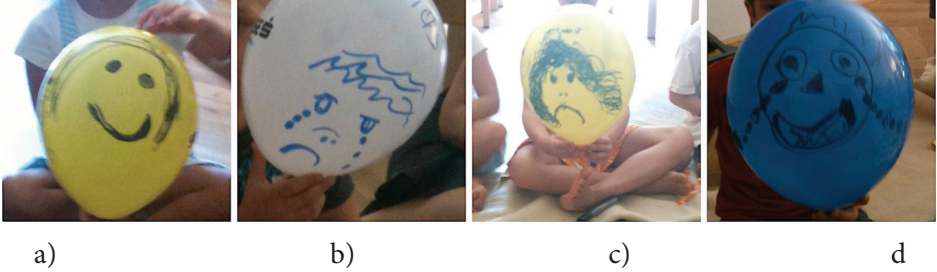


Figure 2 – a, b, c, d: Balloons with faces

Task 4: Children make their own emotion cards.

In today’s society children at nursery school age are already familiar with new types of media. We can use the completion of the targeted task as an opportunity to discuss excessive usage of game consoles, mobile phones and computers.

Try to create your own emotion cards.

Think about a particular feeling, act it out and take photos of each other while acting out.

Task 5: Open your eyes 1!

Use image editing software.
Choose a background colour - preferably a light colour.
Draw lines in another colour over the whole image.
Try to find a recognisable object formed by intersecting lines.
You can also draw a kind of net.
Fill the areas with other colours.

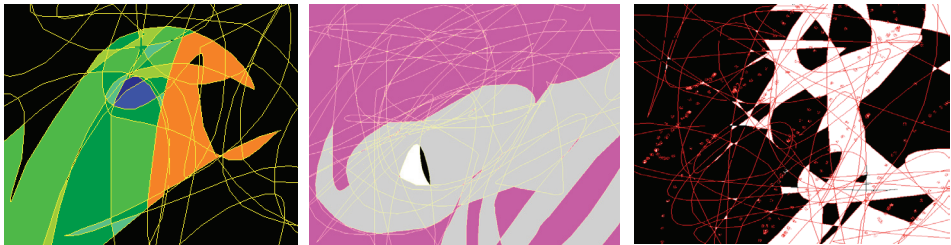


Figure 3 – Lines and stains by two students and a five-year-old child (left to right).



Figure 5 – Students' art work, Krems 2012

Task 6: Open your eyes 2

What can you see in this cloud picture?

Express your visions and ideas.

Draw on the picture.

Look carefully at the sky today.

Observe how the clouds change shape.



Figure 6 – Cloud formation

Task 7: Open your eyes 3

Search the building carefully.

Look for stains or shapes that look like something you recognise.

Take a picture of the object or surface.

Edit the image with an image editing program.

Complete the picture with the missing details.



Figure 7 – Students' art work, Krems 2012

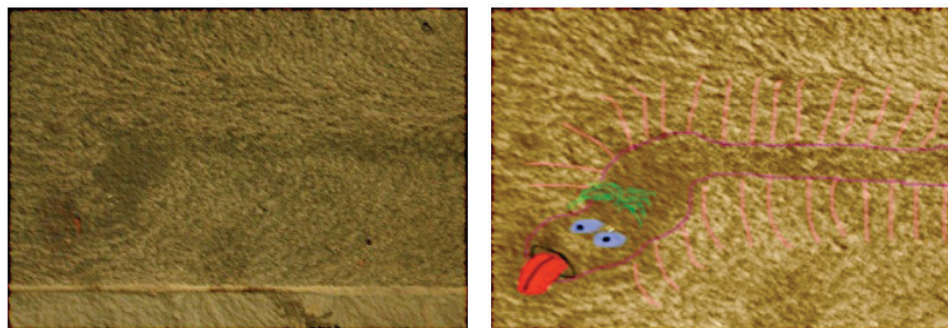


Figure 8 – Students' art work, Krems 2012

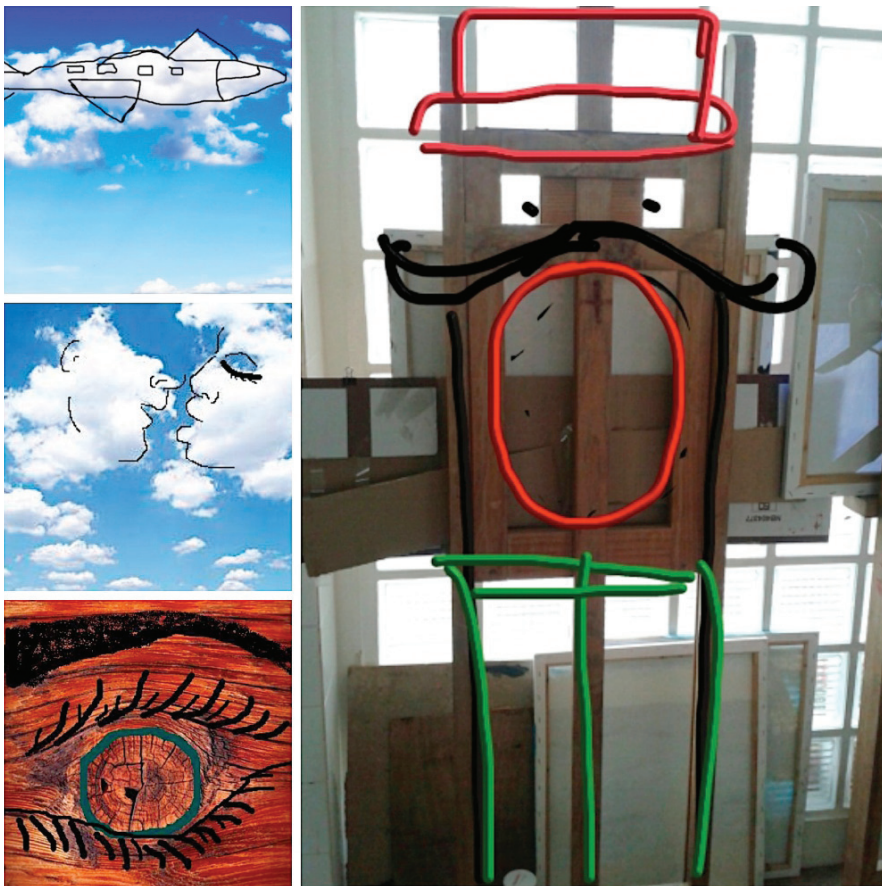


Image 9 – Students' artwork, IPB Bragança 2013

References

- Ekman, Paul (2004). *Gefühle lesen – Wie Sie Emotionen erkennen und richtig interpretieren*. München: Spektrum Akademischer Verlag.
- Ekman, Paul (1978). Facial Signs: Facts, Fantasies and Possibilities. In T. Sebeok (ed.): *Sight, Sound and Sense*. Bloomington: Indiana University Press. pp. 124-156.
- Jusim, Julian (2000). *Wenn kleine Hasen schlafen gehen*. Basel: Beltz Verlag.
- Krüger, R. (2012). Gesichtsausdrücke lesen – Emotionen verstehen. Die neurobiologischen Grundlagen der Verarbeitung mimischer Zeichen bei Menschen mit ASS (Teil 1). In *Heilpädagogik/3*. Wien: Verlag Kaiser. pp.14-25.
- Lobe, M. (1961). *Hannes und sein Bumpam*. München: Jugend und Volk.
- Plattner, Rosa Maria (2008). *Das neue Sprachbastelbuch*. Wien, G&G Verlagsgesellschaft.
- Seitz, Marielle und Rudolf: (2002). *Rot, Gelb, Blau und alle Farben. Grundlagen und Spielideen für die pädagogische Praxis*. München: Don Bosco.
- Schmitt, H. (2002). Kreativität-entbehrliches Konstrukt oder Wesensmerkmal des Kunstunterrichts. In *K&U*. 261. Stuttgart: Klett Verlag. pp. 4-11.

Diatopic variation in Portugal: notes on European Portuguese dialects

Cláudia Martins

claudiam@ipb.pt

*Polytechnic Institute of Bragança, School of Education
Portugal*

Abstract

Languages can vary considerably according to several factors, namely geographical, social or pragmatic. This paper shall focus on diatopic or geolinguistic variation of European Portuguese, the overall designation that encompasses the dialects spoken both in mainland Portugal and in the islands of Azores and Madeira, as well as by the immigrants scattered through Europe. Starting from the discussion of the dichotomy language versus dialect, we will present the various linguistic atlases designed by Leite de Vasconcelos, Paiva Boléo and Lindley Cintra. Based on Lindley Cintra's new proposal from 1971, the main isoglosses in Portugal shall be presented and explained in order to allow the distinction of the Galician, the northern Portuguese and the mid-southern Portuguese dialects, the latter being where the islands are included. A final word shall be directed to the Mirandese, the second official language in Portugal.

Keywords: diatopic variation; dialectology; linguistic atlases; European Portuguese; northern and mid-southern Portuguese dialects.

Introduction

If the recorded linguistic echoes of the past are predominantly White and Anglo-Saxon, (...) how much will we ever learn about the language of the ethnic minorities which form an important part of the British history? If past echoes are predominantly male, will we ever discover what role women played in the history of English? And if these echoes are all so closely tied to standard dialect, with writers dismissing regional dialects as ‘sadly battered and mutilated’ or ‘quaint and eccentric’, will we ever discover our real sociolinguistic heritage? (Crystal, 2004, p. 2)

In the words of Mateus and Andrade (2000), the Portuguese language emerged from Vulgar Latin in Galicia, “which was founded in the 3rd century and was a part of the Roman-occupied lands of Gallaecia and Asturica” (idem, p. 1). Due to this, “Portuguese is a Romance language closely linked to Castilian and Catalan” (ibidem). Despite this proximity, the indigenous languages spoken in the Iberian Peninsula during the Roman occupation helped them to diverge.

Later, between the 5th and 7th centuries, the peninsula was invaded by Germanic peoples, firstly by Suevi, who were overthrown in the 7th century by the Visigoths. There is no denying that the influence these Germanic peoples had on Iberian Peninsula was decisive and left a mark in its numerous languages and dialects. The language continued spreading through what is now known as Portugal, following the conquest of the country to the Moors, which went on until the 13th century. The Arabs influenced the languages, however, especially in the many words related to agricultural activities and domestic objects. Then, with the launch of the Portuguese Discoveries, the language was taken to the five continents and enjoyed a brief period as *lingua franca* in South America, Africa and Asia (idem, p. 2).

Nowadays, it is the national official language in Portugal and Brazil and it is also spoken in Angola, Mozambique, Cape Verde, Guinea-Bissau, São Tomé and Príncipe Islands, as well as in Macau and Timor. Portuguese main varieties are European Portuguese, Brazilian Portuguese and what is generally known as African Portuguese, which is a rather fuzzy designation, since it aims at recognising an unlikely degree of uniformity when dealing with 7 different nations situated in such diverse locations.

Portuguese stands as a living language that is scattered throughout the five continents, despite its many differences not only among the above-mentioned varieties, but also internally in its numerous dialects, divergent in terms of pronunciation, grammar and vocabulary (Cunha & Lindley Cintra, 1986, p. 9). Nonetheless, Paiva Boléo (cit. Cunha & Lindley Cintra, 1986, p. 9) stated that travelling up and down Portugal allows one to experience the exceptional unity and homogeneity that defines the country, such that cannot be found in other Germanic or Romanic countries. Although it is not our intention to jeopardise the beliefs of such a relevant name

in Portuguese philology, the fact remains that this is a rather outdated statement – from the 1960s – and the present paper intends to show that unity does not mean equality, as Silva Neto reported in 1963 (cit. Cunha & Lindley Cintra, 1986, p. 10).

Another issue we intend to address is the fact that in every nation of the world, there is a linguistic standard that is regarded as the pronunciation model followed by the population in general and sought after by the upper classes as a distinctive feature of their social status. In the words of Cunha and Lindley Cintra (1986, p. 4), it stands as the linguistic ideal for the whole of a community.

This standard usually coincides with the variety spoken in the capital of the country, the place of power and of government: for instance, in Spain, Madrid appears as the model for Castilian, despite the fact that each *región autónoma* has its own variety; in England, London stands as the ultimate example of Received Pronunciation, supported further by what is referred to as the Queen English and the BBC English; in Portugal, Coimbra was once the centre of power, having shifted in the 1250s to Lisbon. The status of standard varieties may also be related to other historical, communicative or pedagogical reasons.

Throughout the centuries, these national standards have acquired connotations of prestige, education, wealth and social status and have been usurped by the upper classes as an ideological weapon to assert their position in society and their superiority towards others who did not possess this asset or could not use the language correctly – this is one of the manifestations of a prescriptive attitude towards language.

The concept of a standard variety appeared in the 19th century as a result of the ideology of Romanticism that intended to assert nations and their history through the discovery of the past, especially their mainstream literature. The somewhat forged concept of national language started then being used as a tool that encouraged national identity and supranational cohesion, annulling the legitimate existence of other varieties and their different linguistic choices.

In line with this, Araújo (1996, pp. 504-505) states that the expansion and dissemination of the national variety has been embraced by public school which, by teaching the standard variety, has neglected the fact that the speakers of regional varieties already know how to speak the language. This has led not only to the development of prejudice among those who know only this prestigious variety, but also to the increasing lack of awareness of dialectal diversity.

In the case of Portugal, the various successions of monarchs and governments have presented the country as monolingual since the acknowledgement of the *Condado Portucalense* in 1143 as an independent nation. This erroneous assertion neglects the fact that not only do we have a language other than Portuguese, probably spoken since the 12th century – the Mirandese language –, but we also possess numerous dialects deeply entrenched in Portuguese history.

Therefore, it is our intention to discuss the linguistic diversity that defines Portugal, in order to demystify the idea that we are the oldest monolingual country in Europe. Added to this, we wish to briefly present some important concepts, such as those of language and dialect, and describe some of the features that distinguish the most important dialects in mainland Portugal and the islands of Azores and Madeira. Finally, a brief introduction shall be made about Mirandese, the second official language in Portugal, acknowledged in 1999.

Variation, language and dialects

Tá a ver? Como isto há diferenças de nomes de terras p'ra terras?!¹

(recordings from the Linguistic and Ethnographic Atlas of Portugal and Galicia, dated from 1974)

Barros Ferreira *et al.* (2005, p. 482) uphold that language is a rather thorny concept to deal with, which has been given various definitions according not only to the branches of linguistics handling the concept, but also the linguist theories in question. One of the usual definitions is as a political and institutional concept that matches an abstract linguistic system that, for political, social and economic reasons, achieved functional and sociological autonomy for its speakers. The details of each language are offered in grammars, dictionaries, spelling agreements, among others. On the other hand, language is also referred to from a historical perspective and is linked to the concept of dialect. However, the frontiers for these dialects are not always clear-cut: they can become more prominent in relation to neighbouring dialects, or they can diverge into varieties that evolve their separate ways.

According to these same authors (2005, pp. 482-483), there are no linguistic differences between a language and a dialect, strictly speaking, but rather differences in terms of status: a dialect is always a variety of a certain linguistic system that is officially acknowledged as a language. For instance, Portuguese is alive in its European, Brazilian and African varieties, and each is in fact subdivided into other linguistic varieties that occupy smaller geographic areas. However, they all share common features that do not differ substantially, despite the fact that Brazilian and African Portuguese tend to diverge into different directions when compared to European Portuguese.

Conversely, Paiva Boléo (cit. Barros Ferreira *et al.*, 2005, p. 483) believed that, regardless of the level of resemblance among dialects, they are all dialects nonetheless and are distinguished according to the distance towards the standard variety. But the fact remains that there are no clear physical frontiers among dialects in the same country, lest in neighbouring countries.

Mané (2012, p. 41) mentions the situation of Greece, which was extremely rich in dialects, both spoken and literary varieties, that catered for different needs: the Ionic Greek was used to describe historical events; the Doric for the literary chorus and Attic for tragedy. Each of these literary varieties turned into functional dialects, which, in the post-classical period, gave birth to a unified *koiné* in Athens, the cultural and political centre in Greece.

In addition, as far as the use of a language is concerned, language can be understood from two different perspectives: on the one hand, a structural or formal dimension, focusing on the description of its form, and, on the other, a functional dimension that aims at describing its usage in communication. The formal perspective regards language as mental phenomenon, whereas the functional considers language as a social phenomenon. Sociolinguistics will be then concerned with the functional dimension of language and refer to a dialect as a variety, an unbiased term to name the linguistic code shared by a group of people. Dialectology focuses on dialects as variations of a common code, a variety that can be social or regional, distinguished in terms of pronunciation, lexicon and syntax (Mané, 2012, pp. 42-43).

Language might also be defined as a diasystem, a concept that Weinreich (cit. Trask, 1996, p. 112) has put forth in 1954, as a linguistic analysis set up to encode or represent a range of related varieties in a way that displays their structural differences. De Schutter (2010, p. 73) elaborated further, speaking of a complete set of varieties (diachronic as well as diatopic-synchronic) supposed to derive from one ancestor. In each linguistic system, there are centrifugal forces for innovation and centripetal forces for conservation and, from the balance reached from this confrontation, various varieties emerge, one of which will be the standard variety already mentioned.

The European structuralist linguistics, namely the school of Coseriu, set forth three levels of variation, based on the prefix *dia-*, which means during, throughout time. As Barros Ferreira *et. al* (2005, p. 480) state, these are diatopia, diastratia and diaphasia, levels of variation that can occur in terms of phonetics, phonology, morphology, syntax, semantics and lexically.

Diatopic variation comes from the Greek *topos*, meaning place, meaning geolinguistic or dialectal variation which is related to geographical factors. This is the focus of Dialectology, the science that attempts to uncover and describe the inherent characteristics of different regions, in order to identify more or less coherent areas of linguistic phenomena (i.e. isoglosses), as well as determining the causes that led to their development (ibidem).

As for diastratic or social variation (stemming from the Greek *stratos*, which means layer or level), society establishes a hierarchy, an organisation of its own social groups, which have to comply with hierarchical demands. Linguistic constraints derived from life in society and the stratification of the use of the language is not chaotic, but it rather obeys to certain regularities. Sociolinguistics is thus the science

that devotes attention to this type of variation, trying to set up relations between social variables and linguistic phenomena. Sociolects, jargons and technolects are examples of such variation (idem, pp. 480-481).

At last, diaphasic variation (from the Greek *phasis*, meaning speech or discourse) consists of the variation that occurs due to pragmatic and discursive factors. Speakers can use different linguistic registers or styles according to the type of discursive situation. This is the case of idiolects (ibidem).

Barros Ferreira *et al.* (2005, p. 484) identify the creation of the *Atlas Linguistique de la France* between 1902 and 1910, by Gilliéron and Edmont, as the birth of Linguistic Geography that consists of the cartographic study of dialects. It presented itself as the first scientifically accurate linguistic atlas, a group of maps of a territory that represent and situate the realisations of the linguistic paradigms under study, making a register of their respective geographic variations.

These atlases do not necessarily need to be extensive, but present the opportunity to visualise the geographic distribution of linguistic phenomena and to restrict their extension, providing more information about their areas of use, of dissemination and of expansion, as well as evolution stages. Therefore, these are invaluable instruments for Dialectology and the History of Languages.

Portuguese linguistic atlases

The first Portuguese linguistic atlas was published in 1893 by Leite de Vasconcelos – *Mapa Dialectológico do Continente Português* [Dialectological Map of the Portuguese continent] – and marked the beginning of Linguistic Geography in Portugal. In his atlas, Leite de Vasconcelos presented, on the one hand, dialects, subdialects and varieties, and, on the other, co-dialects where he included Mirandese, *Guadramilês*, *Rionorês* and Galician-Portuguese. Later in 1901, Leite de Vasconcelos put forth another proposal in his doctorate thesis – *Esquisse d'une dialectologie portugaise* [Sketch of Portuguese dialectology] –, followed by one other in 1929, in his fourth volume of *Opúsculos* [Opuscles] (Lindley Cintra, 1983, p. 122).

Paiva Boléo continued this quest, conducting a linguistic questionnaire sent by ordinary mail to primary teachers and priests in various villages in Portugal (Salema, 2007, p. 23). It started in 1942 and was concluded with the help of Boléo's pupil Maria Helena Silva, among other students. Their *Map of Dialects and Falares* was organised into *falares* (ways of speaking), which for Leite de Vasconcelos had been dialects and the like, identifying Mirandese, *Guadramilês*, *Rionorês* and *Barranquenho* as the only dialects in the country, even excluding Galician (Lindley Cintra, 1983, p. 123).

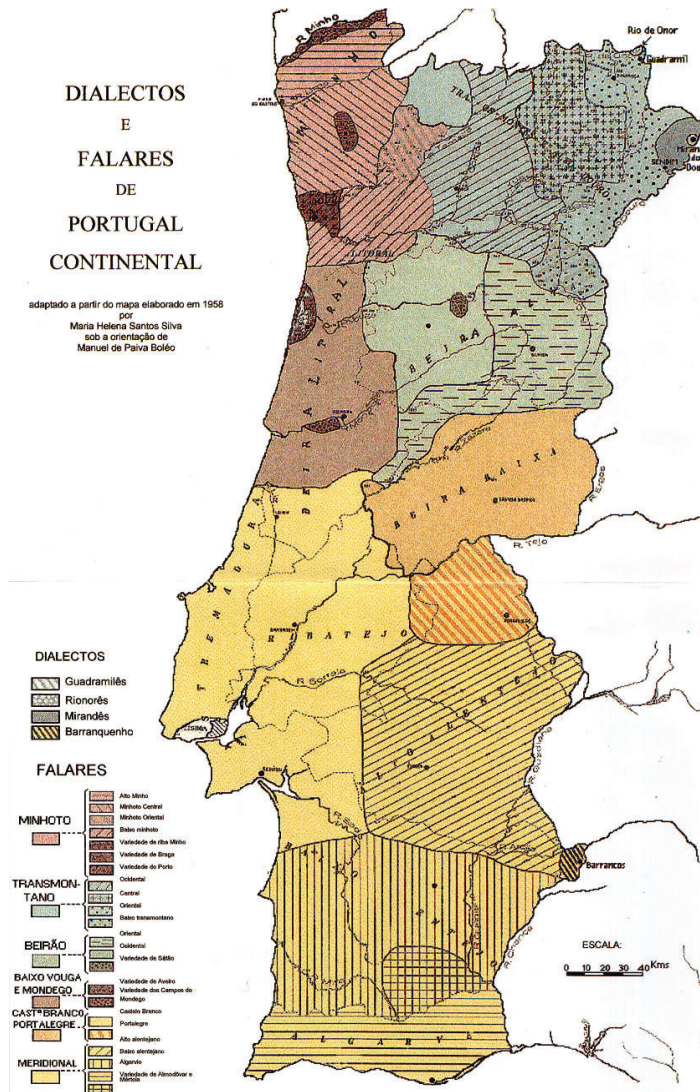


Figure 1 – Dialects of Portugal according to Silva and Boléo from 1958.

Later, in 1971, Lindley Cintra presented a new proposal, called *Nova proposta de classificação dos dialectos galego-portugueses* [New proposal for the classification of Galician-Portuguese dialects]. Mota & Bacelar do Nascimento (2006, p. 941) regard this as a moment of the utmost importance for dialectal studies, nowadays assured by the Group of Dialectology of CLUL (the Linguistic Centre of the University of Lisbon), which participates in the European atlases of ALE (Atlas Linguarum Europae) and ALiR (Linguistic Atlas of the Romance Domain).

Despite these extensive studies, Portugal still does not possess a linguistic atlas. As mentioned above, Portuguese could be characterised by its apparent uniformity and reduced dialectal differentiation when compared to what occurs in other Romanic or even Germanic languages. The main differences are indeed in phonetics, thus the reason this area has been studied the most; nonetheless, there are also differences in the remaining levels, namely phonological, morphological, syntactic, lexical and semantic (Barros Ferreira *et al.*, 2005, p. 491).

According to Lindley Cintra (1971 cit. Barros Ferreira *et al.*, 2005, p. 491), Portuguese dialects can be divided into three main groups: Galician dialects, northern dialects and mid-southern dialects. We shall focus only on the last two, since Galician has diverged from Portuguese into a different language not only because of the establishment of political borders since the 12th century, but also due to the transfer of the Portuguese *corte* to the south from the 13th century onwards (Barros Ferreira *et al.*, *ibidem*). Therefore, Galician evolved in a different direction, becoming the language of a dominated territory and suffering the continuous and quite aggressive influences of Castilian, whereas Portuguese continued its development as the main language of the territory, developing its standard variety further from north dialects and closer to the features of southern dialects. Notwithstanding, Galician and Portuguese are two dialects of the same historical language – Galician-Portuguese –, but, in spite of this, Galician shall not be the concern of our paper.

In dialectological studies, work is based on the observation of isoglosses, the boundaries between different linguistic phenomena, which enable the distinction of dialects or groups of dialects and whose boundaries seldom overlap. Concerning isoglosses, Lindley Cintra (1971 cit. Barros Ferreira *et al.*, 2005, p. 492) established the following five isophones as the distinctive features for the Portuguese dialects:

- the absence of a distinction between [v] and occlusive [b] or fricative [β];
- the so-called sibilant system of the pre-dorso dental [s] and [z] and the corresponding apico-alveolar fricatives [ʃ] and [ʒ];
- the distinction between [tʃ] and [ʃ];
- the maintenance of the diphthong [ow] in its two different realisations – [ow] or [ɐw];
- and the monophthongisation of the diphthong [ej] into [e].

Portuguese dialects in the mainland

Based on the above-mentioned characteristics, Lindley Cintra (cit Barros Ferreira *et al.*, 2005, p. 491) identified the following dialects in mainland Portugal:

- Galician dialects,
- northern Portuguese dialects
- and mid-southern Portuguese dialects.

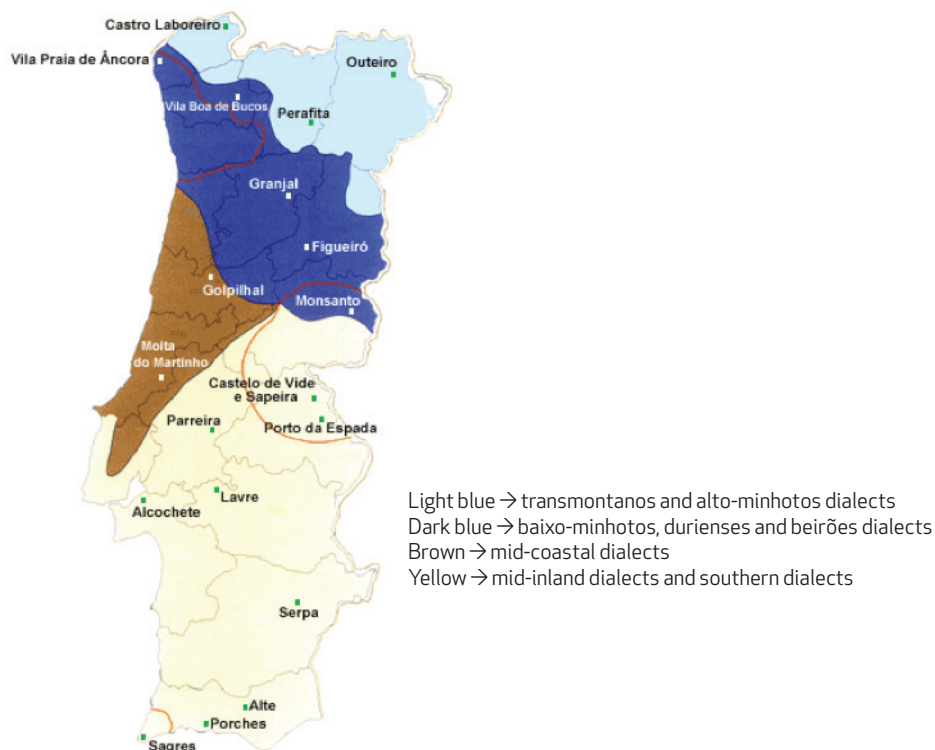


Figure 2 – Classification of the Galician and Portuguese dialects
 (from Instituto Camões, based on Lindley Cintra's original maps).

Within the northern dialects, two further groups are distinguished:

- the *transmontanos* (Trás-os-Montes) and *alto minhotos* (Alto Minho) dialects (the light blue area of the map)
- and the *baixo-minhotos* (Baixo Minho), *durienses* (Douro) and *beirões* (Beiras) dialects (the dark blue area of the map).

The first group of dialects – the *transmontanos* and *minhotos* – is differentiated from the second by means of the traditional system of 4 sibilants: 2 apico-alveolar consonants [ʃ] and [z] and 2 pre-dorso-dental consonants [s] and [z] (currently referred to as lamino-dental according to Andrade & Slifka, 2006, p. 2). These two pairs were not only of different origins, but also identified different graphemes. In terms of the apico-alveolar, [ʃ] corresponds to the initial *s-* and *-ss-* in the middle of word, whereas [z] matched the intervocalic *-s-*. As for the pre-dorso-dental consonants, [s] represented *ce* or *ci* and *ç*, while [z] was produced when *z* was written in initial or medial position. For instance, *seis* [ˈʃejʃ] (six) and *passo* [ˈpaʃu] (step)

is produced with [ʒ] versus *cera* ['serɐ] (wax); and *rosa* ['rɔzɐ] (rose) with [ʒ] versus *fazer* [fɐ'zɐ] (to do or to make) with [z]. Differences between *segar* [ʒe'gar] (to reap) and *cegar* [se'gar] (to become blind) and *coser* [ku'ʒɐr] (to sew) and *cozer* [ku'zer] (to cook) were only achieved with the distinction between [ʒ] and [s], and [ʒ] and [z], respectively – the so-called phenomenon of *sesseio*, whereas in the standard variety we speak of *ceceio*, the use of only the pre-dorso sibilants (Barros Ferreira *et al.*, 2005, p. 494).

This four-consonant system survives in an isogloss that includes part of Alto Minho, most of Trás-os-Montes, a small area of Guarda (near the Spanish border) and a few places in Beira Alta. Conversely, this fourfold system is simplified to the apico-alveolar [ʃ] and [ʒ] alone in the *baixo-minhotos*, *durienses* and *beirões* dialects, with the exception of the coastal areas (*ibidem*).

In the group of the latter dialects, the main coastal city is Oporto, where there are other traits that must be mentioned, namely the pronunciation of [b] in the words spelt *v*, e.g. **binho*² (instead of *vinho* (wine) ['biɲu]), or **abó* (instead of *avó* (grand-mother) [v'bo]) (Cunha & Lindley Cintra, 1986, p. 11). This phenomenon of replacing [v] for [b] when *v* is spelt equals the situation in Spain, where there is no difference between the two sounds regardless of the way the words are spelt; there is only [b]. Because this is strongly felt to be dialectal, in the Portuguese northern dialects, there is a tendency for hypercorrection, in which speakers, wishing not to incur in their usual “mistake” (frequently a target of mockery from speakers of other dialects), end up producing a [v] where [b] is to be said, e.g. *voi* ['voj] instead of *boi* ['boj] (ox).

Also in this second group of northern dialects, Bastos Ferreira *et al.* (2005, p. 495) also refer to the diphthongisation of the medial vowels [e] and [o] into [je] and [wo] or [wɛ] as a distinctive feature: ['pjezu] for *peso* (weight); [si'jwɔrɐ] or [si'jwɛrɐ] for *senhora* (lady, woman). The same authors highlight the fact that, in Oporto, speakers tend to maintain the ending -om in all the words ending in -ão, which the standard variety replaced by -ão, such as in *pão* ['põn] (bread) or in *mão* ['mõn] (hand).

Another feature that is typical of the *baixo-minhotos* and *durienses* dialects is the diphthongisation of the [e] and the [o], especially when these are followed by a palatal consonant [j], [ɲ] and [ʎ], of which these are examples: **obeilha* [u'bejʎe] instead of *ovelha* [o'veʎe] (sheep); **feicho* ['fejʃu] instead of *fecho* ['feʃu] (zipper); **ainho* ['ajɲu] instead of *anho* ['ɛɲu] (lamb). Conversely, in Trás-os-Montes, there is a tendency to monophthongise the diphthongs [ow] and [ej] into [o] and [e], which is also a distinctive characteristic of the southern dialects. Despite this apparent tendency to monophthongise, Trás-os-Montes maintains the old dialectal diphthong [ɛw] in words spelt with *ou*, such as *vassoura* [bɛ'sɛwrɐ] (broom), *passou* (from the verb *passar*, to pass) [pɛ'sɛw].

In the group of *transmontanos* dialects, one other feature should be added: the pronunciation of *ch* as a palatal affricate [tʃ] (which is [ʃ] in the standard variety and in the majority of mid-southern dialects), e.g. **tchave* ['tʃab] (key), **tchuva* ['tʃubɐ] (rain). The pronunciation of [tʃ] allows to distinguish words spelt with *ch* from those written with *x*, which in turn are produced [ʃ], e.g. *enxada* [ɛŋ'ʃadɐ] (hoe), *xaile* ['ʃajɫ] (shawl), *buxo* ['buʃu] (boxwood). This feature is not found in Minho.

The mid-southern dialects are distinguished from the above-mentioned northern dialects on basis of the simplification of the four-sibilant system, benefiting the pre-dorso-dental sibilants (the above-mentioned *ceceo*), which is nowadays the standard variety. Therefore, Lindley Cintra (cit. Barros Ferreira *et al.*, *idem*) identifies the following groups in this mid-southern group:

- mid-coastal dialects (including Estremadura and Beiras)
- and mid-inland dialects (comprehending Ribatejo, Beira Baixa, Alentejo and Algarve).

The boundary that separates these two sub-groups is the monophthongisation of the diphthong [ej] into [e] that includes Óbidos (in the Estremadura region), comes down to Lisbon and reverts to northeast until Castelo Branco (in the centre of Portugal). However, Lisbon is considered an isle, where the diphthong [ɛj] is produced, and not the corresponding [ej], as in *leite* (milk) as ['lɛjt] instead of ['lejt], which is maintained in a large area of monophthongisation.

Cunha & Lindley Cintra (1986, p. 17) also refer that the mid-southern dialects are characterised by the reduction of the diphthong [ow] into [o], as in **oro* ['oru] instead of *ouro* ['owru] (gold) or **lora* ['lorɐ] instead of *loura* ['lowrɐ] (blonde).

In the extensive area of the mid-inland and southern dialects, Barros Ferreira *et al.* (2005, p. 496) identify two varieties that present a considerable change in the quality of the vowels. In the variety corresponding to Beira Baixa and Alto Alentejo, the distinctive features are:

- the palatalisation of [u] in [y] (what Cunha and Lindley Cintra (1986, p. 17) name the French u) in words such as *tu* ['ty] instead of ['tu] (you), *mula* ['myle] instead of ['mule] (mule);
- the palatalisation of the vowel [a] in [ɔ], when the vowel is preceded by the vowels [i] or [u], the glides [j] or [w] or even a palatal consonant;
- the palatalisation of [o] in [ø], resulting from the monophthongisation of [ow] – **ôtra* ['otrɐ] instead of *outra* ['owtrɐ] (other or another); **pôco* ['poku] for *pouco* ['powku] (few or little);
- the labialisation of the vowels [e] and [ɛ] – **réde* [rɛd] for *rede* [red] (net); **querér* [kɛrɛr] for *querer* [kerer] (to want);
- the dropping of the final non-stressed vowel [u], written as -o, or its reduction to [i] – **cop* ['kɔp] instead of *copo* ['kɔpu] (glass).

The other sub-group Barros Ferreira *et al.* (ibidem) describe is Barlavento in Algarve, a rather less extensive area, where there is a chain shift in the open vowels:

- the back vowels become more open, occurring the vowel [æ] that matches [ɛ] – *afilhêdo [ɛfi'λɛdu] instead of afilhado [ɛfi'λadu] (godson) or *fumér [fu'mɛr] for fumar [fu'mar] (to smoke);
- the central vowel [a] velarises and is pronounced as [ɔ] – bata ['batɛ] (smock) pronounced almost as bota ['bɔtɛ] (boot);
- the quality of the vowel [ɔ] becomes closer to that of [o];
- [u] palatalises in [y], as in the variety of Beira Baixa and Alto Alentejo – tud ['tyd] instead of tudo ['tydu] (everything);
- and the final non-stressed vowel [u] drops – again the example *cop ['kɔp] instead of copo (glass).



Figure 3 – Some phonetic features identified in the Portuguese dialects
(Lindley Cintra, 1970 cit Barros Ferreira et al., 2005, p. 501).

Added to the isophones, Cunha and Lindley Cintra (1986, p. 18) state that there are also lexical differences to be taken into account, especially between south and

east parts of the country. On the one hand, the northern and centre-north dialects are characterised by their conservativeness and the maintenance of the older words and, on the other hand, the southern and eastern parts of the country are distinguished by their lexical innovations. Therefore, it can be said that the mid-southern dialects favour lexemes from Arabic origin, while northern ones prefer those from Latin or Germanic origin. This is particularly clear in the following examples, in which the first is the northern word and thus the older, and the second the southern and more recent: *almeca* vs. *soro de leite* (whey); *ceifar* vs. *segar* (to reap); *ordenhar* vs. *mogar* (to milk cows); *mugir* vs. *amojar* (to moo); *amojo* vs. *úbere* (udder); *borrego* vs. *anho* or *cordeiro* (lamb); *chibo* vs. *cabrito* (goatling); and *maçaroca* vs. *espiga* (corn cob).

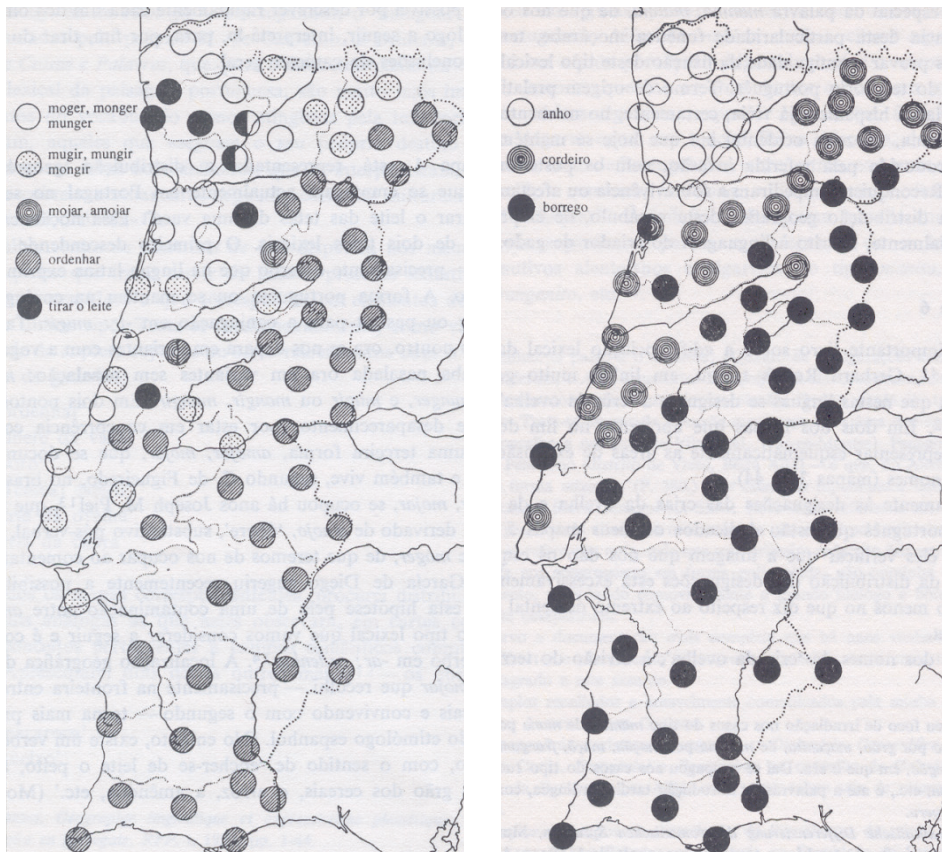


Figure 5 – Maps of the geographical distribution of some words in Portugal
(Lindley Cintra, 1983, pp. 62, 76).

Ribeiro (in Lindley Cintra, 1983, pp. 173 onwards) lists a thorough collection of words that provides further evidence of the distinction between a more conservative northern lexicon and a southern lexicon of Arabic origin. However, it should be mentioned that some of these doublets have become semantically divergent, thus their meaning may now be slightly different and specialised, as in the cases we shall point out:

- *bofetada* vs. *tabefe* (slap)
- *bolso* vs. *aljibeira* (pocket)
- *cisterna* vs. *algibe* (cistern)
- *cortinha* vs. *quintal* (garden or vegetable garden)
- *cuecas* vs. *ceroulas* (knickers and long-johns, a difference in the length of the piece of underwear)
- *dor-de-cabeça* vs. *enxaqueca* (headache and migraine, a difference in the intensity of the pain, as well as its causes)
- *feito* vs. *façanha* (deed)
- *migas* vs. *açorda* (bread soup)
- *palmada* vs. *açoite* (smack)
- *petisco*, *pitéu* vs. *acepipe* (appetizer)
- *porco-montês* vs. *javali* (boar)
- *quarto* vs. *alcova* (bedroom and alcove)
- *tapete* vs. *alcatifa* (rug and carpet, a difference in size)
- *tijolo* vs. *adobe* (brick)
- *travesseira* vs. *almofada* (pillow).

Dialects in the islands

From Cunha and Lindley Cintra's (1986, p. 19) point of view, the islands of Madeira and Azores³ extend the characteristics of mid-southern dialects in mainland Portugal, thus not bearing the four-sibilant system (but rather the two pre-dorso-dental sibilants) or the neutralisation of [v] and [b], or even the affricate [tʃ]. They are also defined by the tendency to monophthongise the diphthong [ow] into [o], though the monophthongisation of [ej] into [e] is occasional, occurring only in the island of S. Miguel, in the archipelago of Azores. In the remaining islands of Azores and Madeira, the diphthongs are maintained and [ow] is frequently articulated as [oj].

Despite this resemblance of features towards the mid-southern dialects, the islands also further deviate from the Portuguese standard. For instance, the island of S. Miguel has several distinctive features, common to the Beira Baixa, Alto Alentejo and Barlavento, which are:

- the articulation of the palatalised [y] as in tudo ['tyd] (everything), escudo [iʃ'kyd] (shield);
- the velarised [a], pronounced as [ɔ] – *voca ['vɔkə] instead of vaca ['vakə] (cow);

- the dropping of the final unstressed vowel [u], written as -o – ['gat] for gato ['gatu] (cat) or ['kɔp] for copo ['kɔpu] (glass);
- and the palatalisation of the monophthongised diphthong [ow] into [ø] (Cunha & Lindley Cintra, 1986, p. 19; Barros Ferreira *et al.*, 2005, p. 496-497).

As far as the island of Madeira is concerned, it also possesses unique phonetic features: the diphthongisation of the stressed vowels [i] and [u] in [ej] and [ɛw], as in *filha* ['fɛjɫɛ] or ['fijɫɛ] (daughter), *navio* [nɛ'vɛju] or [nɛ'vijɫu] (ship) and *lua* ['lɛwɛ] (moon); and the consonant l if preceded by the vowel [i] or the glide [j] palatalises, e.g. *vila* as ['viɫɛ] or ['vɛjɫɛ] (village); *ceroilas* as [sɪ'rojɫɛj] (long johns) (Cunha & Lindley Cintra, 1986, p. 19; Barros Ferreira *et al.*, 2005, p. 497).

According to Vasconcelos (1901) and Pestana (1965) (cit Andrade, 1993, p. 20-22), the palatalisation of the l is frequently accompanied by the de-palatalisation of lh, such as *dál* ['dal] instead of *dá-lhe* ['daɫ] (give it to him/her) and *tilado* [ti'ladu] instead of *telhado* [ti'ɫadu] (roof). Despite these examples, there is little evidence that this is a generalised phenomenon in Madeira.

Mirandese: the second official language in Portugal

In northeast Portugal, there is a group of several dialects of Asturo-Leonese origin, the language of the ancient kingdom of Leone, which are found in the district of Bragança – *Rionorês* in Rio de Onor, *Guadramilês* in Guadramil and Mirandese in Miranda do Douro. Three dialects have been identified in the Mirandese language: *Raiano*, *Central* and *Sendinês*, an issue which remain to our days controversial.

The discovery of Mirandese was made by Leite de Vasconcelos in 1882, who published in that same year an account of Mirandese in the newspaper *Penafidense*. This account was based on his acquaintance with a Medicine student from Miranda, studying in Porto at the time– Manoel António Branco de Castro, who served as his main informant and was convinced his language was no more than “uma língua charra” (an uncultivated language, a rather pejorative description of Mirandese, the result of centuries of prejudice), with no rules nor regulations. Only in 1884 was he able to visit Miranda do Douro himself, enabling him to later publish a 830-page-long grammar and anthology of Mirandese, condensed in 2 volumes.

Mirandese was since the time of Vasconcelos's discovery doomed to die out, but the truth is that it has been able to survive the beginning of the new millennium and is still spoken by a few thousand speakers. This accomplishment is due to not only the extraordinary literary production, but also to a long path of political struggle that enabled the connection of some Mirandese people with CLUL (Linguistic Centre of the University of Lisbon) and the University of Coimbra, which led to the publication of a normalised spelling agreement, a grammar and dictionaries (Mota & Bacelar do Nascimento, 2001, p. 932).

Even before the acknowledgement of Mirandese, several authors attempted to systematise the general features that define Mirandese, supporting its origin as Asturo-Leonese, namely Verdelho (1993, p. 14-15), and Cruz, Saramago and Vitorino (1994, pp. 281-293). The information provided by these authors attempts to demonstrate that Mirandese follows a myriad of phonetic phenomena that can be traced back to the evolution of Portuguese and of Castilian alike, as we shall see below in table 1:

Latin	Leonese	Mirandese	Observations
-L-	-l-	-l-	e.g. malo (M), mau (PT), malo (SP)
-N-	-n-	-n-	e.g. luna and lhuna (M), lua (PT), luna (SP)
PL-, CL-, FL-	-tʃ-	-tʃ-	e.g. chiuba (M), chuva (PT), lluvia (SP)
F-	f-	f-	e.g. fame (M), fome (PT), hambre (SP)
X [KS]	ʃ	ʃ	e.g. peixe or xarda (M), peixe (PT), pez (SP)
-LL-	-y- ~ -ʎ-	-ʎ- ~ -l-	e.g. castielho (M), castelo (PT), castillo (SP)
<ou-, -ei-	-ou-, -ei-	-ou-, -ei-	e.g. cousa (M), coisa (PT), cosa (SP)
Ē	ye ~ya	ye ~ i	e.g. fierro (M), ferro (PT), hierro (SP)

Table 1 – From Latin to Leonese and Mirandese

(adapted and translated from Verdelho, 1993, and Cruz, Saramago and Vitorino, 1994).

In 1982, an attempt to include Mirandese in the public curricula of schools in Miranda do Douro was made, but it was then refused for being a “foreign” element to the syllabi. It was only in the school year 1986/1987 that Mirandese integrated the offer at schools in Miranda do Douro only for those attending the 5th and 6th grades. Since the acknowledgment of the language, the offer of Mirandese as an optional subject has been gradually extended to include primary school and pupils from the ages of 12 to 17.

The efforts that led to the acknowledgement of Mirandese as the second official language in Portugal in 1999 was the result of a unanimous decision by the Portuguese Parliament and thus regarded as a victory. Nonetheless, the intervention of the Portuguese government has proved to be a bitter disappointment, failing to aid both in financial terms and in the long-sought linguistic policy and planning.

Conclusion

In this paper, we attempted to show that the history of any language surpasses the sole perspective of the standard variety, a false construct that seeks to neglect and ignore all other varieties that make up the real history of any language, as stated in Crystal’s (2004) quotation to our introduction.

Despite not having concerned ourselves with the history of Portuguese, our intention was to demonstrate the importance of understanding European Portuguese in terms of its diatopic differences and presenting its dialects with their rightful place in the language. We achieved this by reviewing the three main linguistic atlases developed by Leite de Vasconcelos still in the 19th century and by Paiva Boléo and Lindley Cintra in the second half of the 20th century. It was mainly based on this latter atlas that we presented the five main phonetic features, or isophones, that allowed us to distinguish the northern dialects from the mid-southern dialects. Notwithstanding, not all isoglosses are that neatly designed, due to the fact that many features overlap at times and a strict delimitation is seldom possible.

Regardless of this, the thorough description of these isophones was conducted, as well as the provision of examples to illustrate the difference between the standard and the dialect pronunciations. Along with the phonetic features, attention was devoted to lexical differences in European Portuguese dialects that divide the country into the Latin conservative lexicon of the north and the Arab innovative lexicon of the south.

Finally, we could not conclude our paper without mentioning another linguistic minority in Portugal, “sadly battered and mutilated” throughout the centuries, and so frequently presented as “quaint and eccentric” (Crystal, 2004, p. 2). This was the reason we offered a few notes on the “discovery” of Mirandese at the end of the 19th century and its continuous struggle until the lawful acknowledgement as an official language in Portugal, in equal legal status to that of Portuguese and Portuguese Sign Language.

Endnotes

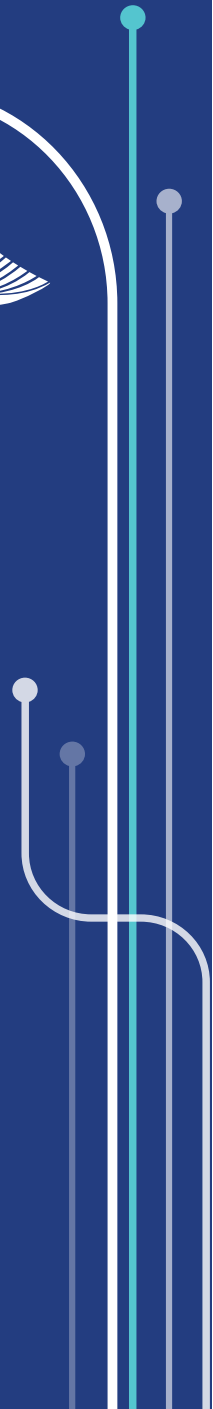
- 1) My translation of the excerpt: “You see? That there are differences in the words from place to place?”.
- 2) The asterisk shall be used to identify any Portuguese word that is not written in the standard spelling, but rather in a way that attempts to illustrate the dialect in question. Curved brackets will encompass a translation of the Portuguese words into English, while square brackets will present their phonetic transcription.
- 3) There are nine major Azorean islands divided into three main groups: Flores and Corvo to the west; Graciosa, Terceira, São Jorge, Pico and Faial in the centre; and São Miguel, Santa Maria and the Formigas Reef to the east. As for the Archipelago of Madeira, it includes the islands of Madeira, Porto Santo, the Desertas and the Savage Islands.
- 4) Mirandese, in this table, refers to the varieties spoken in the villages Constantim, Duas Igrejas and Sendim as presented by Cruz, Saramago and Vitorino (1994).

References

- Andrade, A. & Slifka, J. (2006). A phonetic study of sibilants produced by 2 speakers of a northern Portuguese. Available at <http://bit.ly/1eMUmvY> (accessed 14-03-2014).
- Araújo, I. (1996). Didáctica da Dialectologia In Duarte, Inês e Matilde Miguel *Actas do XI Encontro da APL: volume 3 – Gramática e varia*. Lisboa: Colibri. pp. 503-515.
- Ferreira, M.B. *et al.* (2005). Variação linguística: perspetiva dialectológica. In Faria, Hub; Emília Ribeiro Pedro; Inês Duarte; Carlos Gouveia (org.). *Introdução à Linguística Geral e Portuguesa*. Lisboa: Caminho. pp. 479-502.
- Gramática da Língua Alentejana. Available at <http://acll.home.sapo.pt/gramatica.html> (accessed 14-03-2014).
- Cintra, L.F.L. (1983). *Estudos de Dialectologia Portuguesa*. Lisboa: Sá da Costa Editora.
- Cruz, L.S.; Saramago, J. & Vitorino, G. (1994). Os dialectos leoneses em território português: coesão e diversidade. In *Variação linguística no espaço, no tempo e na sociedade: Actas do encontro regional da Associação Portuguesa de Linguística*. Lisboa: Associação Portuguesa de Linguística & Colibri.
- Crystal, D. (2004). *The Stories of English*. [S.l.]: Penguin Books.
- Cunha, C. & Cintra, L.F.L. (1991). *Nova Gramática do Português Contemporâneo*. Lisboa: João Sá da Costa.
- Schutter, G. (2010). Dialectology. In Fried, M., Östman, J-O., Verschuren, J. (eds) *Variation and change: pragmatic perspectives*. Amsterdam: John Benjamins. pp. 73–80.
- Mané, D. (2012). As concepções de língua e dialeto e o preconceito sociolinguístico. *Via Litterae – Revista de Linguística e Teoria Literária*. 4(1), 39-51.
- Mateus, M.H. & Andrade, E. (2000). *The Phonology of Portuguese*. Oxford: Oxford University Press.
- Mota, M.A., Nascimento, M.F.B. (2001). Le portugais dans ses varieties. *Revue Belge de Philologie et d'Histoire*. 79, 931-952.
- Trask, R. L. (1996). *Dictionary of Phonetics and Phonology*. London: Taylor and Francis.
- Salema, L.F.P. (2007). *Consciência e caracterização fonética de variação dialectal em Português Europeu*. Unpublished Master's dissertation. University of Aveiro.
- Verdelho, T. (1993). Falares asturo-leoneses em território português. *Lletres Asturianas*. 50, 7-25.
- Wittmann, L.H., Pêgo, T. & SANTOS, D. (1996). Português brasileiro e português de Portugal: algumas observações. In Duarte, Inês e Matilde Miguel (Org.) *Actas do XI Encontro da APL*. Vol. 3. Lisboa: Colibri. pp. 465-487.



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Translators censoring Propaganda – a case study on the translation of Salazar’s speeches into English

Isabel Chumbo

ischumbo@ipb.pt

*Polytechnic Institute of Bragança, School of Education
Universidad Rovira I Virgili, Intercultural Studies Group
Portugal*

Abstract

This study analyses translation as a support of propaganda during the dictatorial regime of António Oliveira Salazar (1932-68) in Portugal with particular emphasis on the 1930s and 1940s when many of the foundations of the regime were laid. The research is developed in two parts. First it investigates the relevance Salazar’s regime attributed to translation, mainly from Portuguese into English. Second it analyses a set of speeches by Salazar in order to understand how translators were influenced by the natural constraints of living and working in a dictatorship thus originating the occurrence of self-censorship.

Keywords: *Censorship, self-censorship, translation techniques, history*

Introduction

This article is the result of my Erasmus mobility visit to the University of Zagreb in Croatia, where the English department of the Faculty of Letters was so kind to receive me and to host my lectures. The very attentive audience provided me with comments and insights into my subject of study due to their recent national history.

Censorship refers globally to the suppression of information in several forms and happened in different places all over Europe (Merkle, 2002, p. 9). As it is known, censorship still exists today in many same or other forms which will be mentioned in this article, and it is known to exist for centuries in many places.

If we go back to Freud's writings in *Die Traumdeutung* we will understand that censorship mechanisms exist in order to create a censor in each individual (Freud, 1981, pp. 656-720). In the introduction to the *TTR* issue on Censorship and Translation Denise Merkle emphasizes that Freud's

rich psychoanalytic legacy has strongly marked the reflection on social organization of a number of twentieth-century thinkers, Marcuse and Bourdieu, to name only two, having explored the relationship between repression (censorship) and civilization/society from Marxist and sociological perspective, respectively (Merkle, 2002, p. 14).

Between 1926 and 1974 Portugal lived under a dictatorship, first a military one and then another one divided in two periods starting from 1932: under Oliveira Salazar (1932-1968) and Marcelo Caetano (1968-1974).

Since 1926 there was a centralized censor department, although the history of censorship in Portugal goes back to several centuries before. There was only one state press agency and newspapers had to apply to that agency for news.

Propaganda seems to be an obvious part of a dictatorship. Everywhere in Europe the twentieth century provides examples of dictatorships which found several media to pass their message efficiently to the people. From posters to radio broadcasting and itinerant cinema many were the ways found to manage collective attitudes and behaviours.

Oliver Thomson (1999) explains that there are several types of propaganda, being the political the most important one in this case. He states that the politicians' objective is to conquer or justify the political power and that the final aim is "nationalism, patriotism and respect for authority" (p. 23). The new media, like cinema were used in combination with the illusion of masses on a great scale.

As seen, the area of this study is the history of translation during the dictatorial regime of António Oliveira Salazar. More precisely, the topic of the research is the role of translations in Salazar's propaganda, with particular emphasis on the 1930s and 40s as well as on the translation of a corpus of his speeches into English by translators working for and in the SPN- *Secretariado de Propaganda Nacional*.

This study's objective is twofold. On the macro-level it aims to investigate the relevance Salazar's regime attributed to translations, mainly from Portuguese into English in the 30s and 40s. These decades were seminal for the implementation of the regime, namely through major repression guidelines which were to outlive Salazar, until 1974, year of the Carnation Revolution.

The analysis of Salazar's speeches will provide us with information relevant for the micro-level of the study, especially when referring to the set of procedures used by translators, the most important being word shifts, omissions and additions.

Translation from within the regime was very important and constituted a real industry. Although produced in a censored environment (inside SPN) translators would self-censor and use techniques such as omissions or substitution. The translations produced improved the image of Portugal in Europe and in the USA.

Bearing in mind the two-fold objective of this study the quantity of translated material will also be mentioned, so that the relevance of translation in the global propaganda policy of the regime can be clarified. Unfortunately the *Index Translationum* does not refer to technical translations (politics, economy) from Portuguese into other languages.

Literature review

During the thirty six years Portugal was under Salazar' dictatorship, every cultural intervention in whatever its form, was thoroughly controlled by the official censorship commission and reported to the SPN and from there to the top of the system. The censorship committees were mainly composed of military and men of letters, other times by people who were illiterate and there was tight legislation to enforce official censorship which was spread across the country with the help of the political police – PIDE.

Censorship occurred in a very bureaucratic manner and several ministries had censor departments, although the *Direcção-Geral da Censura* officially existed in the Ministry of War and Domestic Affairs. There were Press Offices, Reading Offices (*Gabinete de Leitura*), to which all printing presses and editors had to apply for publication licenses, Public Shows Examination and Classification Committee (for theatre and cinema) and many other departments (Azevedo, 1999, p. 55-56).

The censorship system was redesigned in 1933, including a Board (*Direcção de Censura*), committees and delegations spread throughout the country. Still according to Azevedo, censorship mechanisms contributed to create a "virtual Portugal" and were an instrument to manipulate both consciences and behaviours (Azevedo, 1999, p. 23). He also confirms that censorship and propaganda went together, a phenomenon which is common to other dictatorships (see Rundle, 2000; Sturge, 2000; Merino and Rabadán, 2000) and that the supreme commander of all this was Salazar himself (Azevedo, 1999, p. 56).

Because he was the *Presidente do Conselho* (president of the government) the propaganda was under Salazar's direct supervision through the SPN first (1933-1944), then through the SNI (1944-68). The law that created SPN states that its role was also to "coordinate all information regarding actions from the several ministries, in order to show evidence, in our country and other, that the Portuguese State lives in a spirit of unification, when referring to past and future works" (My translation of *Decreto-Lei* 23:054, 25th September 1933, artº 2).

The SPN starts its action in October 1933 and Salazar holds a speech where he argues that this new office's purpose is not to praise the government but to fight a battle against "error, lies, defamation or simply ignorance" (my translation of Salazar, 1935, p. 264).

This office comprised an internal and external section. In Portugal the office had eight main objectives to pursue: to regulate the relation between the press and the state, to promote publications on the governments activity, to organize an information service on the work done by the different ministries, to support the ministries actions, to organize public manifestations for the population with educational purposes, to prevent the dissemination of ideas which might harm the national interest, stimulate and find a solution to cooperate with Portuguese artists and writers through the creation of awards which would develop an art and literature "acentuadamente nacionais", and use resources such as radio-broadcasting, cinema and theatre in order to fulfil its tasks (*Decreto-Lei* 23:054, 25th September 1933, artº 4).

The same law establishes SPN's action abroad: cooperation with all the national departments outside Portugal, monitoring of all official press services outside the country, and a third objective which is related to the production of translations inside the propaganda machine.

All departments of the state were to cooperate with the SPN in these matters and people working for the Propaganda Office had free access to all public performances.

The action in other countries is justifiable with all the examples from other dictatorships in Europe but also by the context. Every nation was trying to adjust to a different political map after the failure of imperialism and therefore, "é de suma importância o apoio da opinião pública internacional, tanto para o regime que se afirma como para o espaço colonial" (Paulo, 1994, p. 75).

This approach to other countries and cultures is the reason why translation gained importance in the whole propaganda system:

The contact with the exterior and the necessity to amplify international support originates the approximation to several countries. Therefore, several works based on the objectives and guidelines of the regime are translated into English, French, Spanish, Italian and German (my translation of Paulo, 1994, p. 76).

Azevedo (1999) considers that the SPN was rather efficient in the pursuit of its purposes until 1940, the time of the propagandistic climax, with the Historic Exhibition of the Portuguese World, a very popular event, taking place in Lisbon in that very same year.

The director of the SPN, António Ferro, was a well-known journalist and writer and he implemented what he called the “Policy of the Spirit”, the true following of the regime’s guidelines.

In 1944 Salazar ends Ferro’s commission as leader of the SPN. The war had had its influence and Salazar decides on a new name (SNI) for the same old ways, its objectives being “to improve the image of the regime, making it more efficient regarding information and propaganda” (my translation of Azevedo, 1999, p. 170).

Writing in times of dictatorship is not an easy task. The whole censorship system is attentive and tries to delete everything which is regarded against the regime. The military dictatorship had already established a set of rules for the different media and spread them as instruction for their local leaders across the country. In those days the main target of censors already was the press although freedom of speech was consecrated in the Constitution. Many of the guidelines from the military dictatorship passed on to Salazar’s, whose regime implemented more detailed action under some general rules.

To summarize the document known as “Instruções Gerais” there were to be no disrespectful references to the state and all other people of importance, no news causing public alarm, no references to people in exile or who had been deported, no extensive details on crimes of passion, no reference to suicides unless they were of recognized criminals, no reference to child murder unless in context with the news on the assassin’s sentence, no allusions to censorship itself and no blank spaces in newspapers are just some of the many guidelines (Azevedo, 1999, pp. 387-388).

In 1936 new regulations were found for censorship compiled in a document titled as “Regulamento dos Serviços de Censura”. It established what was subject to prior and post-censorship, being the press the most important part of it. Before proceeding any further terminology regarding different types of censorship should be cleared. Regarding the Portuguese example we can say the system was divided in two types of the phenomena: prior and post-censorship. This classification is drawn on Merkle’s introduction to the *TTR* issue on Censorship and Translation (Merkle, 2002, pp. 11-12).

Prior censorship happened mostly with newspapers and magazines. Every single piece of writing should go through censorship first and censors would expect a journalist to rewrite the same piece of news two, three times a night, so that the result would be convenient to the regime.

Post-censorship resulted mainly in the banning of books. And many were banned. Studies undertaken by the *Comissão do Livro Negro do Regime Fascista* (Black Book Commission on the Fascist Regime, my translation), whose purpose

was to analyze the real action of censorship during dictatorship, came up with a surprising number. Over 75 thousand books were apprehended in publishers' storages and over 3.000 titles were banned.

A famous case is the banning of *Time* Magazine for several years, because on the 22nd July 1946 it published a cover story on Salazar calling him the dean of dictators.

The journalist César Príncipe (1994) states that all the rules created over the years of dictatorship transformed Portugal into a virtual country, because there was no prior censorship, no political prisoners, no suicides, no abortion, no war, no hippies, no strikes, no drugs, no homosexuals, no hunger, no pollution, no typhus, and the ministers were never sick, did not eat and had no car accidents. It was a fiction against reality (p. 12).

During my research in the Archives I have not found evidence of an official policy regarding translations but several authors have suggested the existence of *unwritten rules* (my emphasis) which may be classified as self-censorship. (José Saramago, cited in Azevedo 1999, p. 32)

Spain seems to have replicated this idea under Franco. Merino and Rabadán (2002) clarify that there was a “subtle form of covert self-censorship: authors were aware of unwritten rules and they knew what had to be done to comply with or subvert the values of the Establishment” (p. 127). Sturge (2002) shows a diverse viewpoint on this by saying that in Germany “direct intervention by the state was less important than the system of self-regulation by the agents of book publishing and distribution themselves” (p. 154).

Portuguese Literature, Foreign Literature and Translations: different action

All publishers had to submit the books they intended to publish to the official censorship system, where after a thorough analysis the censor would decide if the book received authorization to circulate or if it was to be banned or still, if there were any suggestions as to delete or change texts.

Before reading the book, which would take from two days to one week, the censor had to fill a form indicating who sent the book (the editor, the police, etc.), how many books were to be printed, the title, the author, editor, the translator, the printing press and the publication's final destination. Then the book was read and a report completed the form, with the indication of “Autorizado” or “Proibido” (authorized or prohibited).

The main impediments for publication were themes related to politics, sex and religion. Then there were the authors who were permanently *persona non grata* for the regime and forced to exile. Internal memos report that any reference to the following writers was to be excluded: Urbano Tavares Rodrigues, Sophia de Mello Breyner Andresen, Francisco de Sousa Tavares, Natália Correia, Augusto

Abelaira, Jacinto do Prado Coelho, because “these writers are dead!” (my translation, Azevedo, 1999, p. 512)

On the whole, the panorama regarding domestic literature was the same across European dictatorships. In Italy the censorship machine “did succeed in weeding out anything written by Italian opponents of the regime, most of whom were now living in exile” (Dunnet, 2002, p. 100). Only Germany’s fascist regime presented a different perspective. According to Sturge, the Nazi regime disliked the public taste for translations because they were “weapons to undermine the *Volk*, the racialized folk community invoked by Nazi discourse” (Sturge, 2002, p. 153).

In Portugal, the publishing industry was allowed a certain margin of liberty when it came to foreign literature. As long as the established order was not challenged with subversive references it was possible to go around censorship. Paradoxically the state preferred to allow the circulation of translations instead of national literature as a way to deviate attention. Again a phenomenon which was common to Italy where although the publication of translated novels could not be encouraged openly by a nationalist government, there was however a pragmatic acceptance that, if publishers were to survive, they needed to be able to offer readers translations (Dunnet, 2002, p. 98).

In the period called *Estado Novo* or New State, foreign literature had the opportunity to flourish in Portugal, sometimes even with the censor’s consent. Portugal liked to value its picturesque characteristics and disliked foreign influence in every field, from politics to literature. Nevertheless, throughout the years of dictatorship a large number of books was translated from English, French and German.

Translated books were a commercial success dictatorship was not able to guess or even prevent. In the form of low-cost book collections, books were sold out very easily. For publishers and translators this was good. Publishers did not want their books to be banned after publication because this represented a financial burden and to prevent this they were careful not to publish anything that would attract the censor’s eye.

On the one hand translators (many times authors to be) earned their money translating, while publishers were relieved not to have the political police apprehending books in their warehouses. On the other hand, literary establishment disliked what they called an “excess and proliferation of translations”. Critics would complain in the *Revista do Grémio Literário*, the official magazine of the publishing houses association, but to no avail (Seruya, 2004, p. 39). The 1940s saw the appearance of two very important collections: *Livros RTP* published by Verbo and *Clássicos Inquérito* published by Inquérito. They were cheap, with more or less the same number of pages, comprised about 100 books and were sold at a pace of one per month. *Livros RTP*, one of the most popular collections, even had several editions until 1974 and is currently considered a rarity.

In these collections publishers offered the public novels by Graham Greene, Oscar Wilde, Leo Tolstói, Goethe and the so-called “acceptable” Portuguese authors like Camilo Castelo Branco or Júlio Dinis, just to name a few.

Research into the censorship of books in Portugal during the dictatorship is difficult, documents are missing and although reports of the censors were recently made public, it must be said that records referring to several years are missing, others are incomplete. In other cases there are a lot of details concerning one specific work.

Unlike the censorship’s attitude of establishing rules for the press, there was no such thing for censors dealing with foreign literature or translations. The reports on books show that there was a lot of subjectivity involved, sometimes different censors would have a different way of reading one same work and most of them regarded translations as unimportant.

In 1943 *La Joie de Vivre* by Émile Zola was translated into Portuguese and the censor who read the translation reported the following on May 15th: “The French edition has been authorized, but when reading certain detailed passages in translation, I realize that publishing this book may not be convenient” and suggests the book to be forbidden (SPN/SNI File 628, Report 2241).

Another report, from July 3rd the same year argues that the translation of *The Professor* by Charlotte Brontë should not be allowed based on the fact that there are some passages on social upheaval. Although the recommendation was to ban the book, the truth is that it ended up being published (SPN/SNI File 628, Report 2312). Examples like these show us that it was very difficult for translators to guess what went through the censor’s mind.

In the *Gabinete de Leitura* (Reading Office), official readers, some of them only holding primary education, would censor books after being printed. Sometimes censors would allow a book based on the fact that it had been circulating for too many years in its source language, although the translation was not considered good or adequate for the Portuguese people. In those days all major Portuguese authors were either imprisoned or in exile, others worked as translators and later became well known writers themselves.

Technically speaking, books were supposed to be published only after being approved by the censor but this was not always the case. Sometimes translations could even circulate at the publisher’s risk.

From within the regime

The regime wanted favourable opinions from abroad reported and therefore a team of translators were employed by the SPN to scan foreign press and translate articles of interest. As previously explained, a section of this Office was dedicated to external propaganda and therefore to translation. Archaeological work in the Oliveira Salazar Archive (AOS) has proven that in those days the State was heavily

worried with its image around the world and there was a huge amount of work translated by the so-called “official translators” (AOS/CO/PC-16A).

The existence and role of the official Propaganda Office (Secretariado de Propaganda Nacional – SPN/ later Secretariado Nacional de Informação – SNI) is not ignored by the Portuguese historians, nevertheless their focus is mainly on the actions undertaken by the Office as an organ of control and repression on others and hardly ever on the Office as a center of production or industry of translation.

Helena Matos (2004) gives a different insight. She is aware that the SPN/SNI housed translators for propaganda purposes and even that it organized translation contests where T.S. Eliot was a member of the jury. The scope of her work is just to give an overview of the propaganda machine; therefore there is no follow up for this information. Nevertheless, she clearly points out an activity of attracting foreigners to write about Portugal. Promoting Portugal was serious business for the regime and this is corroborated by SPN/SNI’s budgets.

According to Matos (2004), the money spent by SPN shows

The political intention of reinforcing Portugal’s international prestige, but also the will to provide credibility to the government, based on these foreigner’s opinions, hence considered independent (p. 56).

Besides attracting intellectuals from other countries, translations of speeches, lectures or other writings by the dictator were on top of the in-house production. To promote the image of Salazar was the SPN’s main guideline. There are hardly any other written productions from other members of the government in whatever language.

Translations of Salazar’s books became a political issue in 1934. The director of the SPN, António Ferro wrote a book on Salazar which in Portuguese reads *Salazar. O Homem e a sua Obra* [Salazar. The Man and his Work] and was published in 1933. Ferro’s wife, Fernanda de Castro, worked as a translator into French and translated that book. The title in French became *Salazar, le Portugal et son Chef* (1934). The translator’s choice created a political incident between Salazar and the president of the Republic, Óscar Carmona, who supposedly was the leader.

Ferro had been touring France before this book saw the light of day, trying to convince intellectuals and journalist of the charm of Portugal. Paul Valéry, member of the French Academy wrote the preface to the translation of Ferro’s book, a fact which gave the book immediate visibility. A good promotion of the book as well as a party at the Hotel Ambassadeur helped sales a lot. SPN’s budgets show how important that preface was. As a matter of fact it was more expensive than the party itself (AOS/CO/PC-19).

Matos emphasizes the opinions expressed by foreign writers and artists. She says: “... these texts sound like rhymes”, which means that all of them ended up

writing more or less the same about the dictator, which is a well-known technique for propaganda to be effective (Matos, 2004, p. 54).

In that very same summer, writer Martin du Gard (he wrote *Lettres Portugaises* (1934) and one chapter is dedicated to Salazar - "La dictature du professor") and artist Paul Colin toured Portugal. "Expenses with foreigners" appears as an important part of SPN's budgets.

In 1935 the SPN continues the work of glorifying Salazar's image. Intellectuals are constantly invited to come to Portugal. The English edition of Ferro's book is published as *Salazar, Portugal and her Leader* (1939), containing a preface by Austen Chamberlain. In July that same year a Translation Prize is created and awarded to the best translation of one of Salazar's speeches. It was awarded to a student of Portuguese at the Hamburg University (AOS/CO/PC-19, page 166).

Salazar's speeches seem to be a particular source of interest for the SPN. António Ferro is especially dedicated to this task and spends some time in France during 1937 to promote the French translation. At the same time Ferro was representing Portugal at the International Exhibition in Paris (AOS/CP-112, file 3.3.11, pages 242 and 243).

It can be said that the SPN operated in a pioneering way for the time in Portugal. Besides inviting foreign journalists and artists to Portugal, the Propaganda Office also supported Portuguese authors financially and bought their books. Pamphlets and brochures on economic matters were particularly important because they were a way to prove Salazar's financial miracle in a country which had been bankrupt for years.

In fact a lot was translated in those days by in-house translators. Besides tourist brochures, politics and economics were the main themes. The collection *Salazar Says* comprises several booklets with speeches by the leader and all the major texts written and delivered at conferences by Salazar ended up being translated.

In a first stage SPN had people working with the category of translator, but in the early 40s there was a public service reform and translators ended up integrated with very common names for their functions and were not referred to as translators anymore. Although all the official translators worked for the SPN they were in fact commissioned by the Foreign Office Ministry, the Interior Ministry and even Salazar himself.

It is not easy to assess if these translations were effective concerning its purpose of improving the image of the country. Nevertheless there are some clues which can be taken into account. In 1949 a book of quotations in the foreign press on Portugal was compiled by *União Nacional* and although this fact may have biased the whole question, the fact is that newspapers like the *Times* could not have been manipulated to publish certain comments on Salazar and his action. The book is organized according to countries and many personalities are quoted, for instance Mircea Eliade.

In 1942 *The Times* publishes that “a obra de Salazar é tão grande que honraria qualquer país do Mundo/ Salazar’s work is so great, it would honour any country in the world” (Matta, 1949, p. 171). Bearing this inflamed version of Salazar’s work in mind, I will henceforth focus on some of Salazar’s speeches which compose the corpus of this case-study.

Data and Methodology

The corpus which is the pillar of this case-study is composed of 28 speeches compiled in *Doctrine and Action* (1939) and their original version organized in *Discursos* (1935), as well as other speeches by Salazar also published by SPN/SNI. Para-texts, such as introductions were also taken into account.

Several documentary sources (correspondence, budgets, files) from the Oliveira Salazar Archive (AOS) will be referred to and others which may be relevant.

No specific methodological model has been elaborated to investigate the proposed objectives and hypotheses, however, textual analysis was used in order to isolate micro-units of the text and the correspondent strategy.

The number of translations happening from within the regime has never been studied and this flow has not been analyzed from the statistical point of view.

In order to test the hypotheses a pilot-study was carried out on randomly chosen speeches. When analyzing Salazar’s speeches I will draw on Molina and Albir’s (2002) concepts of translation techniques. As these authors point out, translation techniques describe the translator’s options and give indication about the general methodology the translator adopted (p. 499). The several techniques used were analyzed in order to find out if translators used self-censorship procedures.

Still the definition of strategies presented by these authors cannot be forgotten, they are viewed as “an essential element in problem solving”, more precisely related to the “mechanisms used by translators throughout the whole process to find a solution” (Molina, 2002, p. 507). Strategies are part of the process while techniques affect the result. Five basic characteristics to define techniques were used in this pilot study: they affect the result of the translation, they are classified by comparison with the original, affect micro-units of the text, are discursive and contextual by nature, and are functional.

Paraphrasing Tymoczko (2000) translators must make choices, selecting aspects or parts of a text “to transpose and emphasize”. The fact that only some aspects are chosen, *partiality*, in the author’s definition, “is not merely a defect, a lack, or an absence in a translation – it is also an aspect that makes the act of translation *partisan*: engaged and committed, either implicitly or explicitly” (p. 24).

These choices or options also govern the dynamic and functionalist approach proposed by Molina and Hurtado Albir (2002) on translation techniques. They clearly differentiate techniques from strategies saying that the first affects the result and the latter are part of the process. Although they are different, when looking

at historical texts they cannot be completely separated. The authors explain that strategies “are the procedures (conscious or unconscious, verbal or non-verbal) used by the translator to solve problems that emerge when carrying out the translation process with a particular objective in mind” (p. 508). This particular objective can be closely related to censorship and propaganda, as well as the aim of giving one particular image of the country.

The perspective that technique and strategies are an essential differentiation but it is the analysis of the choices made by the translator concerning a specific micro-unit of the text which will give us ideas about the self-censorship hypotheses.

Salazar’s Speeches: how were they censored?

António Oliveira Salazar published five books of speeches in Portuguese, but only one was translated into English. As a matter of fact it is not a complete translation of the first volume of the speeches in Portuguese. It is more like a negotiated solution between the translator and the leader, compiling some of his most important speeches from the first two Portuguese books.

Doctrine and Action was published in 1939 by Faber and Faber in the United Kingdom. The book contains a preface by Salazar himself, dated 1936. This is the date the translation began and the speeches were gathered. The SPN used to receive indications by the chief of government on how to proceed with the translation and since the whole process was very bureaucratic it took several years to see the light of day.

Research in the Oliveira Salazar Archive has so far indicated that usually translations were sent out and in the office, so that several people could revise them. This is certified by filed correspondence in AOS/CO/PC-16A.

In order to test the idea that techniques such as omission and substitution were used by translators to self-censor I have randomly chosen three speeches from *Doctrine and Action*, more precisely: “The National Interest in the Policy of Dictatorship”, “National Propaganda” and “The Place of the New Portuguese State in Europe’s Political Evolution”.

The next step was to find words, expressions or other text units which might contain a political or ideological concept. To start from the target text is based on Gideon Toury’s idea (1995) that “translations are facts of target cultures” (p. 24), and later developed by José Lambert and Hendrik van Gorp in the article “On Describing Translations” (1985). Their proposal of comparison between target and source texts is indicated for literary texts, but can easily be applied in this case as well.

Doctrine and Action compiles some of Salazar’s most important speeches, almost all of them related to international policies. The chosen speeches are from the thirties, a time when many of Salazar’s pillars concerning propaganda were established.

After listing micro-units of the texts the techniques used were classified in order to understand the implication of the occurred alteration, word shifts or deletions.

It was important to understand if the final version of the text contained different ideas from the initial version and if these might have contributed to improve the image of Portugal in Europe, in this case, the United Kingdom.

The number of omissions is of extreme importance, not only because of the quantity in itself but mainly because of the quality or output of the English text. The speech “National Propaganda”/”Propaganda Nacional”, held at the opening of the SPN Office in October 1933 contains a paragraph in the Portuguese version which is completely deleted in the final text:

Vamos abstrair de serviços idênticos noutros países, dos exaltados nacionalismos que os dominam, dos teatrais efeitos a tirar no tablado internacional. Tratemos do nosso caso comezinho. / Let’s abstract ourselves from similar entities from other countries, from the exacerbated nationalism that dominates them, from all those dramatic effects on the international stage. Let’s just look at our very simple case (Salazar, 1936, pp. 258-9)

The critique is rather obvious. Salazar claims that he wants a Propaganda office which should be different and suggesting he does not approve of his fellow dictators’ ideas. This would not be a good passage to translate if the final aim was to promote the image of Portugal abroad, especially not through a publishing house which already was prestigious in those days.

In the speech “The Place of the New Portuguese State in Europe’s Political Evolution”/ “O Estado Novo Português na Evolução Política Europeia” the English version omits an adjective related to Portugal’s independence which was very dear to Salazar and his followers. On page 335 of *Discursos*, Salazar refers to the “alma da Nação”, to the “forças componentes do nosso ideal colectivo” and consequently to “nossa independência peninsular”. The English version keeps everything in the right place except for the independence, which is transformed into “traditions of independence”, an expression which takes away a lot of the patriotic value of the original expression.

In the same speech the translator chooses to omit “multidões de egoísmos” and decides to transform that in a people who “demands”.

Omissions also occur at para-text level, with deletion of the original introduction to the speeches, when Salazar addresses the audience or gives other sort of information. In the English version a brief text introduces the speech saying where and when it was held, many times the opposite of what happened in Portuguese where there are long contextualizations for most of the speeches.

These are just a few examples of what happens at a much more general level in a lot of other speeches by Salazar which were translated into English.

Conclusion

Archival work proves that translation from within the regime was an industry and that this feature of the dictatorship needs to be studied. Researchers on censorship, propaganda and translation in Portugal have not paid enough attention to what happened from the inside in order to improve the image of the country. This text provides an example and a new insight to how translation cooperated with the propaganda of the regime in a context largely under-studied in Portugal. In-house translation and the way translators perform in a dictatorship can certainly make the difference in the image of a country. This case-study seems to confirm that and allow a whole new line of research in the field of history of translation in the country.

References

- Azevedo, C. (1999). *A Censura de Salazar e Marcelo Caetano*. Lisboa: Caminho.
- Azevedo, C. (1997). *Mutiladas e Proibidas. Para a História da Censura Literária em Portugal nos Tempos do Estado Novo*. Lisboa: Caminho.
- Decreto-Lei 23:054, 25th November 1933
- Dunnet, J. (2002). *Foreign Literature in Fascist Italy: Circulation and Censorship*. *TTR, Censure et traduction dans le monde occidental*, 15(2), 97-123. Available at <http://www.erudit.org/revue/ttr/2002/v15/n2/007480ar.html>
- Freud, S. (1981). *Obras Completas*. Vol. I, Madrid: Biblioteca Nueva.
- Lambert, J. & Hendrik van Gorp (1985). On Describing Translations. In Hermans, T. (ed.), *Manipulation of Literature*. New York: St. Martin's Press. pp. 42-53.
- Matos, H. (2004). *Salazar – A Propaganda (1934-38)*. Lisboa: Temas e Debates.
- Matta, C. (1949). *Projeção de Salazar no Estrangeiro*. Porto: União Nacional.
- Merino, R.b & Rabadán, R. (2000). Censored Translations in Franco's Spain: The TRACE Project – Theatre and Fiction (English-Spanish). *TTR, Censure et traduction dans le monde occidental*, 15(2), 125-152. Available at <http://www.erudit.org/revue/ttr/2002/v15/n2/007481ar.pdf>
- Merkle, Denise, (2002). *TTR, Censure et traduction dans le monde occidental*, 15: 2
- Molina, L. & Hurtado Albir, A. (2002). Translation Techniques Revisited: A Dynamic and Functionalist Approach. *Meta*, 47(4), 498-512.
- Paulo, H. (1994). *Estado Novo e Propaganda em Portugal e no Brasil. O SPN/SNI e o DIP*. Coimbra: Minerva.
- Príncipe, C. (1994). *Os Segredos da Censura*. Lisboa: Editorial Caminho.
- Salazar, A.O. (1935). *Discursos (1928-1934)*. Coimbra: Coimbra Editora.
- Seruya, T. (2004). A Tradução como espaço de interculturalidade na vida literária do Estado Novo: o caso das coleções. In *Actas do VII Seminário de Tradução*

Científica e Técnica em Língua Portuguesa: 2004. Lisboa: Fundação para a Ciência e Tecnologia.

Sturge, K. (2002). Censorship of Translated Fiction in Nazi Germany. *TTR, Censure et traduction dans le monde occidental*, 15(2). Available at <http://www.erudit.org/revue/ttr/2002/v15/n2/007482ar.pdf>

Thomson, O. (1999). *Easily Led. A History of Propaganda*. Stroud: Sutton Pub.

Toury, G. (1995). *Descriptive Translation Studies and Beyond*. Amsterdam: John Benjamins.

Tymoczko, M. (2000). Translation and Political Engagement. Activism, Social Change and the Role of Translation in Geopolitical Shifts. *The Translator*, 6(1), 23-47.

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Isaiah Berlin and the Role of Education: from Riga to Oxford

Elisabete Mendes Silva

esilva@ipb.pt

*Polytechnic Institute of Bragança, School of Education
University of Lisbon Centre for English Studies
Portugal*

Abstract

Being the result of a lecture to Latvian students in May 2011, this article aims at introducing Isaiah Berlin, who was born in Riga in 1909. The focus will be on the man and the intellectual, how his life experience (his childhood in Russia and the fact that he was an emigrant in Britain) affected his intellectual route, and how he became a defender of liberalism and value-pluralism.

Furthermore, special attention will also be given to Berlin's opinions on Education, the way he regarded the educational problems of his time and how education should be enhanced in order to escape from obscurantism and dogmatism towards a freer intellectual life and also to develop capacities for thought and feeling. Berlin believed education, and particularly university education, could be a powerful means to achieve these ends.

Keywords: pluralism, liberalism, diaspora, education

Introduction

This article embodies the result of my Erasmus mobility to the Riga Teacher Training and Educational Management Academy in May 2011, within a Lifelong Learning Programme Erasmus grant for teachers. I defended my PhD thesis on Isaiah Berlin in 2012 and the year before I was still doing research. For that reason, going to Riga represented a unique opportunity to witness in loco the city where Isaiah Berlin was born in 1909.

Therefore, in my lecture I intended to introduce Isaiah Berlin to the Latvian students and discuss his with them. My focus was on the man and the intellectual, the way his life experience – his childhood in Russia and the fact that he was an emigrant in Britain – affected his intellectual route. Oddly enough and to my surprise, students, who were around 20 to 22 years old, hadn't heard about the author before. The name was familiar only to one of the professors who were accompanying some of the students. My task revealed then much more challenging.

Besides, and as most of my audience would very soon become teachers, I also gave special attention to Berlin's opinions on Education, how he saw the educational problems of his time, which continue applicable to nowadays' education. Berlin believed education, and particularly university education, could be a powerful means to escape from obscurantism and dogmatism towards a freer intellectual life.

This article is divided in three main parts: to begin with, Berlin's main achievements, briefly describing some of his major works and ideas. Secondly, I focus on Berlin's personal life, from Riga to Oxford, highlighting other names in the intellectual diaspora. Finally, the last point is dedicated to the role of Education as it was seen by Berlin, establishing also some links with Education in Portugal, now and the time when the Portuguese were under the dictatorial regime, led by Salazar.

Berlin's main achievements

Isaiah Berlin is mostly remembered as an Oxford intellectual renowned in every academic circle. Berlin started to study philosophy and only later did he become interested in the History of Ideas. He chose this area of study because at some point in his life he realized how eager he was to learn more about one's ancestors and understand the course of history and the ideas behind every historical event, as he had pointed out in an interview to Ramin Jahanbegloo:

As a philosopher I was not lonely. When I taught philosophy at Oxford I was a member of a group of philosophers, we all spoke the same language (...). Then my interests changed. The history of ideas is not fashionable in British academic life. In fact I became intellectually somewhat isolated. There are not many people I could talk to about this. This is not a subject which the English take much interest. Maybe it does not interest people

who assume that their ideas are universally accepted, hence they do not bother to understand their history. (Jahanbegloo, 2007, p. 91)

His work achievements are mainly related to the topic of liberty and to the concept of value-pluralism. Berlin did indeed dedicate his life to studying and writing about liberty and its importance in people's lives. Berlin renowned works include "The Hedgehog and the Fox" (1953), "Historical Inevitability" (lecture delivered in 1953 and published in 1954), *The Crooked Timber of Humanity. Chapters in the History of Ideas* (1992), *Against the Current. Essays in the History of Ideas* (1997a), *The Sense of Reality: Studies in Ideas and their History* (1997b), *Concepts and Categories: Philosophical Essays* (2000a), *Three Critics of the Enlightenment: Vico, Hamman, Herder* (2000b), *The Power of Ideas* (2002), *Russian Thinkers* (2008). Isaiah Berlin's political thought focuses on an interpretation of our political, historical and cultural past, as a way of facing current reality and also as a means to provide us with the crucial questions of our present life. In his interesting, precise and detailed journey into the world of ideas, Berlin always alerts us to the power of abstract ideas which can be the cause of a lot of distress in the world based on power abuse. And of course, history has already proven this right several times, namely the Second World Wars in which the ideals of fascism and national-socialism were supported by 19th century ideas on eugenics and natural selection resulting in an inflamed idea of nationalism, as Berlin so repeatedly stated (Berlin, 1992, p. 245).

However, he became internationally famous for "The two Concepts of Liberty", which he wrote in 1958 and delivered at the inaugural lecture at All Souls College in Oxford as he was honoured with the Chichelle Chair in political and social theory, and on his theory of value-pluralism. Pluralism for Berlin meant the ideal of liberty to choose ends without claiming eternal validity to the ends of life. Human values are thus incommensurable and in constant conflict and rivalry with one another.

In "Two Concepts of Liberty" Berlin concentrates on the recognition of liberty and on the importance of individuality. Based on these premises, Berlin devised the idea of the two concepts of liberty: the negative liberty and the positive liberty. The latter is about the idea of being your own master, of not being influenced by external factors. Positive Liberty worries about finding answers to the questions: "Who governs me?" Do others govern me or do I govern myself? If others, by what rights?" (Jahanbegloo, 2007, p. 40). The former concept devotes itself to the area of control and not to its source, and it tries to answer the following questions: 'How far does government interfere with me? How many doors are available to me?'

However, I believe that the choice of the history of ideas as his main area of study and all his concern with the concept of liberty was, somehow, moulded by his own personal experience and his roots. Isaiah Berlin was a Jew born in a former Russian State, Latvia. This legacy would definitely influence his life and his political thought.

Berlin: from Riga to Oxford

Berlin was born in Riga, on June, 6, 1909, in a middle-class family. Later on, when Berlin was asked about his birthplace he gave a very laconic answer, of which part is reproduced here:

‘Where were you born?’ an official asked Isaiah. ‘In Riga,’ was the unexpected reply. ‘Where is that?’ came the suspicious query. Isaiah was feeling puckish that day. ‘It is’, he replied with literal accuracy, ‘a port of the Eastern Baltic. ‘Who does it belong to?’ with the air of one delivering a lecture to a backward class, Isaiah answered, ‘My native country of Latvia, when I was born in it in 1909, was indeed a part of the Russian Empire. However, during the First World War it was annexed, along with the other Baltic States, by Germany under the Treaty of Brest-Litovsk, but only, as you doubtless recall, for a short time. At the Peace Conference the independence of these States was recognised and they remained in this happy state until re-annexed by Russia in 1940. However, they were re-occupied by the Germans in 1941. (Berlin, 2009, p. 536)

Even though this might seem a somehow cold-hearted and distanced answer about his hometown, Berlin considered it as a “little bourgeois democratic republic, provincial, not very interesting, nobody very distinguished, as far as I know, but a perfectly decent place in which people could be free and happy” (Polanowska-Sygulska, 2006, p. 108).

The author of Berlin’s excellent biography, Michael Ignatieff, also gives emphasis to his birthplace and stresses his main memories of his house in Riga:

His memory of his birthplace was framed by two sphinxes, standing guard at the entrance to the Albertstrasse apartment, reclining plaster figures with paws, breasts and a pharaoh’s head-dress. They are still there – mossy with damp and chipped with age – guarding the entrance to the Art Nouveau apartment block where he was born, on the fourth floor, on 6 June 1909. (Ignatieff, 2000, p. 10)

His father, Mendel Berlin, adopted his grand uncle’s last name, Berlin. Shaya Berlin was the millionaire of the family, having made his money in timber. Mendel Berlin also entered this business with his grand uncle, and he was doing well in life. They lived at 2A Alberta Ieva (Albert Street), in a very trendy street, with German Art-Nouveau buildings, as figures 1 and 2 show.



Figure 1 – Alberta ieva
(My photographs)



Figure 2 – Entrance to Berlin's house building 2A

He spoke German until the age of three and then, as his parents didn't send him to school, he got a Russian governess and became a Russian speaker. He read all the novels of Jules Vernes in Russian, as well as Dumas' works and Tolstoy's War and Peace. However, the future political events would alter the destiny of the Berlin family. In 1915, when Riga became the front line of First World War, they moved to Andreapol. Then, later in 1917, they moved to Petrograd and there Isaiah witnessed the Russian Revolution at the age of eight and, in correspondence he exchanged with Beata Polanowska-Sygulska, he confessed that the ones who witnessed the revolution would find it difficult to adhere to the Communist cause:

(...) I saw the Russian Revolution in 1917. Anyone who has gone through it even as an innocent child, as I was at the age of eight, would have found it difficult to join the Communist Party later; I never knew anybody who was there at the time, and went abroad, and nevertheless later became Leninist in the West. But of course there may have been such people. (Polanowska-Sygulska, 2006, p. 108)

He would remember very vividly this moment all his life. This event would, in fact, be a determinant factor for the choice of liberalism as his political inclination. In 1920, when Latvia was made independent, Isaiah and his family returned to Riga but only to stay two more months. Immediately after, the Berlins moved to London, England, where his father had already established some business contacts and had all the money transferred to English banks.

England meant the start of a whole new life. Isaiah Berlin had no difficulties adjusting to a new reality. He was a good student, and in 1928 Berlin won a scholar-

ship to Oxford, entering thus Corpus Christi College. He was also at New College (1938-50) and later at All Souls College (1957-67) where he became a don. Michael Ignatieff described Berlin at that time, considering Oxford the turning point in the author's life:

He went up to Oxford in the autumn of 1928, a plump young man with crinkly black hair and animated dark eyes, bushy eyebrows and thick glasses. He wore a three-piece suit like his father and in photographs cradled his left arm. His mother worried about him – he was bookish; didn't dance; didn't circulate – but she needn't have done. Oxford was a liberation. He was getting away from his parents and launching himself into the big world. (Ignatieff, 1998, p. 46)

Oxford would be his home, the place where he always returned to after his absences. Berlin really felt homesick when he had to leave Oxford for some years during the Second World War, when Berlin worked for the British Library of Information in New York and Washington and he always showed opposition to totalitarianism and to communism. During Cold War, in “The Hedgehog and the Fox” Berlin distinguishes precisely between the ones who know one only big thing, the hedgehogs, and the ones who know many things, the foxes. That is, the latter are open to many possibilities life offers us and are willing to discuss and doubt them, whereas the former, one-eyed, linger on only absolute truths taking them for granted at any time, regardless of the changes in the status quo of societies.

Great-Britain benefited greatly from the coming of exiled intellectuals, such as Isaiah Berlin, Arnaldo Momigliano (1908-1987) and John Plamenatz (1912-1975), as they gave a whole new approach to the history of ideas in Britain. However, contrary to Momigliano who dedicated his work to British thinkers, Berlin, Russian by birth, Jew by blood, heritage and legacy, and British by adoption, preference and tribute, studied Russian and German thinkers, such as Herzen, Vico and Herder.

Berlin's contribution in Washington to the war efforts, along with his visit to the famous Russian poet Anna Akhmatova turned him into a public personality, being thus invited to participate in BBC's radios broadcasts and television shows. This popularity brought him prestige among his peers and British society:

Akhmatova and the war had changed him. The thirty-seven-year-old who returned to Oxford in April 1946 was a more seasoned and accomplished figure than the naïve accomplice of Guy Burgess' transatlantic expedition in June 1940. He had proved himself, and the world's view of him shifted accordingly. The prestige of the Washington despatches gave him a reputation in Whitehall that percolated through to the upper reaches of London society. Berlin became someone it was creditable or amusing to know. Society hostesses invited him to dinner; the BBC asked him to broadcast. (...) By 1951 he was being seriously considered as a candidate for the Wardenship of All Souls; in 1953, for

the Wardenship of Nuffield College. His reputation began to ripple out around him. (Ignatieff, 1998, p. 170)

Berlin and the Role of Education

Besides being an intellectual, writing about many topics, ranging from political philosophy to the history of ideas (his main field of study) or just simply about his personal impressions on personalities belonging to different areas (Churchill, Akhmatova, Pasternak, Chaim Weizmann, Albert Einstein, L. B. Namier, Felix Frankfurter, Aldous Huxley, to name just a few), Berlin was mainly an Oxford don and he felt very comfortable and at ease in this role. He served as President of Wolfson College (1966-75) which he founded. From 1975 onwards he was a professor at All Souls College. Berlin had a very clear idea of the purpose of education and, of course, tried to instil his students' minds with the importance of education regarding its role against ignorance.

In Berlin's mind, education meant to every man the chance to find out what kind of world they lived in, what they have made, are making, and could make of it. This can only be done if they are aware of what other men are thinking, feeling and doing, and how and why. According to Berlin, unless men didn't want to learn more about the world they lived in, they would continue living in obscurity (Berlin, 2000, pp. 214-5). Contrary to this position, Portugal lived its dark period in education during Salazar's rule, as Salazar had a quite different opinion from Berlin's. The President of the State, António de Oliveira Salazar, believed that if the population was kept illiterate, less social problems there would be. Against party pluralism, the 'Estado Novo' extended from 1933 to 1974 and constrained people's personal and political liberties. The motto of this period, as it is common in dictatorships, was based on the defence of family values, sustained in an ultra-Catholic framework. Education was neither widespread, nor was it a key area in the policies of the 'Estado Novo'. The country was in a retrograde condition and people from the most secluded areas, namely the interior regions of mainland Portugal, survived living and working in agriculture. Illiteracy was consequently higher in these regions than in the main cities, Lisbon, Porto and Coimbra.

Isaiah Berlin produced rather interesting and curious remarks about Portugal, more specifically about Lisbon and Estoril, the only places he went to. In his forced stops in Lisbon in January 1941, when coming from America to England, due to the Second World War controls, Berlin defined the country as "very agreeable", "... Lisbon full of remarkable faces & buildings", but with "simple Portuguese" (Berlin, 2005, pp. 252-3).

Berlin believed that teachers played a crucial role in this battle against indolence, ignorance and obscurantism, as he points out:

In what follows I shall assume that to understand the world in which we live is (...) good rather than bad; that most men cannot achieve this

without much conscious effort or, as a rule, without help, in particular the help of teachers; and therefore such obstacles to this process as indolence, ignorance, dogmatism, obscurantism, active dislike of the intellect and rational argument, hatred of novelty, (...), are views to be exposed and fought. (Berlin, 2000, p. 216)

Furthermore, Berlin (2000, p. 216) also emphasizes the importance of having one's "capacities for thought and feeling developed even though that might mean not fitting into some centrally social pattern, however pressing the technological demands of their societies." Education, and in particular university education, holds then the relevant position of powerfully sustaining the possibility for personal relationships and personal life that the human being is entitled to.

Berlin highlights, as C.P. Snow had also defended in *The Two Cultures* in 1959, the importance of both the sciences and the humanities as a powerful means to solve the world's problems. In an increasing technological world, Berlin alerts to the dangers of ignorance of most of the population, leaving open ground for scientists and experts who, one-eyed, could turn the world into some sort of totalitarian society: "This situation breeds systematic misunderstanding, and leads to the accumulation of power by the experts – scientific middlemen – whom the awe of both public and politicians renders relatively immune to democratic control." (Berlin, 2000, p. 218)

Even though this might be a utilitarian reason for a programme of general education in universities, Berlin recognizes its importance for mankind at large. Being an empiricist himself, Berlin therefore proposes the enhancement of imagination and intellectual exhilaration through discovery and observation driven by universities:

Merely to preach, merely to encourage scientists to study history or sociology or philosophy, or the great works of man (...) simply to encourage students of literature or sociology to grasp the methods and the goals of molecular biologists or solid state physicists, seems plainly useless. (...) What can be done is something different. To assist scientists or mathematicians towards some understanding of how historians or critics arrive at their judgements (which involves an uncertain but indispensable type of imaginative insight) and how they justify them (an exercise in logic, although at times an unorthodox kind of logic), is at once more feasible and far more intellectually valuable than an attempt to 'civilise' a chemist by dwelling on the properties of the *Divine Comedy*, or the ceiling of the Sistine Chapel (...). If this task is to be performed, it can be accomplished not by precept but only by example – by the discovery or training of teachers of sufficient knowledge, imagination and talent to make the student see what they see: an experience which, as anyone knows who has ever had a good teacher of any subject, is always fascinating, and can be transforming. (Berlin, 2000, p. 159)

A paradigmatic example of Berlin's pretension to give Education this role of stimulating students' minds through imaginative insight and at the same time exercises in logic is the Wolfson College where the two cultures, the Sciences and the Humanities, are given their due attention. In the College's website we can read the following:

Renowned for a truly interdisciplinary approach to research, Wolfson benefits from the depth and diversity of an international academic community of students and Fellows representing the very best in their field. Wolfson is equally strong in humanities and sciences, making it an ideal home for our interdisciplinary Research Clusters. Covering subjects from quantum foundations to the ancient world, each draws on the scholarly expertise within the College to foster innovative approaches to interdisciplinary research. (<https://www.wolfson.ox.ac.uk/academic>)

In the website (<https://www.wolfson.ox.ac.uk/history/berlin>) we can also read about the importance of Berlin as the College's founding president. Berlin created "the college in his own image, a modern, democratic, multicultural, multidisciplinary, international, free of unnecessary hierarchy or fusty rituals." In fact, according to Michael Hughes (2009, p. 248), Berlin revealed instrumental in the College's creation as a building and institution.

Unfortunately, nowadays in Portugal, education policies tend to go the other way round. A few years ago, under the leadership of a Socialist Minister of Technology and Higher Education, the Sciences and technology were pivotal areas. Humanities meant unemployment and lack of entrepreneurship and, of course, were secondary in the progressive plans of the Minister Mariano Gago. More recently, under a social-democrat and neo-liberal government, Education is in retreat if we compare it with the policies being adopted in the rest of Europe. More money cuts are expected on Higher Education, delaying thus Portugal once more in the trail of knowledge and keeping people in ignorance in a backward country unable to keep up with the pace of progress of other western countries.

Conclusion

To conclude, based on Berlin's premises, that is "the capacity for rising to a clear perception of structures of thought and knowledge, of their similarities and differences, or their methods of discovery and invention and their criteria of truth and validity" (Berlin, 2000, p. 223), only by providing this right education, could men be lifted intellectually. That should be one of the main goals of higher Education in every country that supports liberty and pluralism.

Defending these values and ideals all his life, Berlin set them in motion in the way he lived and worked always believing in the powerful influence of both the sciences and the humanities in the formation of people that would hence not be

constrained with a one-eyed, short-sighted vision of the world but should learn how to look at it in a pluralistic and humanistic way.

References

- Berlin, I. (1992). *The Crooked Timber of Humanity: Chapters in the History of Ideas*, Henry Hardy (Ed.). New York: Vintage Books.
- (1992). *The Bent Twig. On the Rise of Nationalism. The Crooked Timber of Humanity: Chapters in the History of Ideas*, Henry Hardy (Ed.). New York: Vintage Books. pp. 238-261).
- (1997a). *Against the Current: Essays in the History of Ideas*. Henry Hardy (Ed.). London: Pimlico.
- (1997b). *The Sense of Reality: Studies in Ideas and their History*, Henry Hardy (Ed.). London: Pimlico.
- (2000a). *Concepts and Categories: Philosophical Essays*. Henry Hardy (Ed.). Princeton: Princeton University Press.
- (2000b). *Three Critics of the Enlightenment: Vico, Hamann, Herder*. Henry Hardy (Ed.). Princeton: Princeton University Press.
- (2002). *The Power of Ideas*. Henry Hardy (Ed.). Princeton & Oxford: Princeton University Press.
- (2005). *Flourishing: Letters 1928-1946*, Henry Hardy (Ed.). London: Chatto & Windus).
- (2008). *Russian Thinkers*. Henry Hardy (Ed.). London: Oxford. Penguin Books.
- Ignatieff, Michael (1998). *Isaiah Berlin. A Life*. London: Chatto & Windus.
- Ignatieff, Michael (Ed.) (2009). *The Book of Isaiah. Personal Impressions of Isaiah Berlin*. Oxford: The Boydell Press in association with Wolfson College.
- Jahanbegloo, R. (2007). *Conversations with Isaiah Berlin*. London: Halban.
- Potanowska-Sygulska, B. (2006). *Unfinished Dialogue*. New York: PrometheusBook.
- Wolfson College – Oxford University. Available at <https://www.wolfson.ox.ac.uk/academic> (accessed 22 April 2014).
- Wolfson College – Oxford University. Available at <https://www.wolfson.ox.ac.uk/history/berlin> (accessed 5 January 2014).

Teaching Crossroads