## **SPRACHWISSENSCHAFT**



## The Spoken Language in a Multimodal Context

Description, Teaching, Translation

Jenny Brumme/Sandra Falbe (eds.)



## Jenny Brumme/Sandra Falbe (eds.) The Spoken Language in a Multimodal Context

Sprachwissenschaft, Band 16

# The Spoken Language in a Multimodal Context

Description, Teaching, Translation



Umschlagabbildung: Ponte delle Torri, © Elke Hübener-Lipkau

ISBN 978-3-7329-0021-3 ISSN 1862-6149

© Frank & Timme GmbH Verlag für wissenschaftliche Literatur Berlin 2014. Alle Rechte vorbehalten.

Das Werk einschließlich aller Teile ist urheberrechtlich geschützt. Jede Verwertung außerhalb der engen Grenzen des Urheberrechtsgesetzes ist ohne Zustimmung des Verlags unzulässig und strafbar. Das gilt insbesondere für Vervielfältigungen, Übersetzungen, Mikroverfilmungen und die Einspeicherung und Verarbeitung in elektronischen Systemen.

Herstellung durch das atelier eilenberger, Taucha bei Leipzig. Printed in Germany. Gedruckt auf säurefreiem, alterungsbeständigem Papier.

www.frank-timme.de

## **Table of contents**

JENNY BRUMME and SANDRA FALBE	
Introduction	7
Shorthand used for corpus citation in this volume	13
Museum	
PAOLO CAMPETELLA	
Multimodal communication in new archaeological museums	17
RAJKA BRAČUN SOVA	
Audience-focused interpretation of art in museums	31
TERESA SACCHI LODISPOTO	
Audio-guides: relation texte/images et compréhensibilité	43
radio gardes: readion texto mages et compronensionic	10
Education	
Valeria Damiani	
Words in education. Assessing Italian university students'	
lexical competence in writing	63
CARMELA MILA SPICOLA	
The spoken language in a multimodal context as a strategy	
to counter the school dropout problem	75
Linguistics	
Nadine Chariatte	
"Facebook Style": The use of non-standard features	
in virtual speech conditioned by the medium Facebook	93
Anais Holgado Lage and Álvaro Recio Diego	
The influence of oral discourse in chat language from a	
normative perspective: Deviations from standard Spanish	115
Sandra Falbe	
Speech style in fictional dialogue	135

## KATHLEEN PLÖTNER A propos des valeurs pragmato-sémantiques des récurrences ANIA HENNEMANN UDO MAI Les dimensions de la structure informationnelle à l'exemple **Translation** BLANCA ARIAS BADIA Fictional orality in the English and Spanish subtitles of Fontane Effi Briest, by R. W. Fassbinder ......197 EFFIE MOUKA Investigating translational norms in socioculturally ÈLIA SALA ROBERT Subtitling for deaf and hard of hearing children: ANDREA STOILKOV A picture's worth a thousand words. On the translatability ELENA VOELLMER When languages become the 'text' of a movie: AURORA FRAGONARA Le rôle de la parole dans l'adaptation en BD ALBA TOMÀS-ALBINA From literary translations to stage: The case of Sophocles' *Electra*, adapted by Jeroni Rubió and directed by Oriol Broggi (2010)......295

#### Introduction

The origin of this volume is the international workshop for PhD students *The spoken language in a multimodal context. Description, teaching, translation*, which took place at Universitat Pompeu Fabra in Barcelona, in December 2012. The conference was set up within the framework of the research project *Translating fictional dialogue: literary texts and multimodal texts* (FFI2010–16783, TRADIF) financed by the Spanish Ministry of Economics and Competition. The workshop was one of the activities promoted by the International Doctoral School *Culture, education, communication*, and it was developed with the participation of the Doctoral College *Syntagmes et locutions dans la phrase et dans le discours – Composition, figement, grammaticalisation*.

The International Doctoral School hosts an annual workshop programme which offers PhD students a platform for presenting their research and exchanging their ideas with participants from different sub-disciplines of the Humanities. The aim is to generate lively debate among participants with different research perspectives. The workshop was not confined to participants from the nine member universities; instead, it was open to all PhD students, giving them the opportunity to present their research on this year's topic, *spoken language* and *multimodality*.

In recent years, *multimodality* has gained increasing significance across those sciences concerned with investigating the function, use and development of media that combine visual and auditory elements. We opted for this broad research perspective in order to reflect the wide range of sub-disciplines from the Humanities involved in the Doctoral School. Moreover, the topic chosen for our workshop is closely related to our ongoing research project on the description and translation of spoken language. Our work started from the assumption that fictional dialogue constitutes the link that joins the literary text with the multimodal text. It is therefore thought to be the appropriate place for

<sup>&</sup>lt;sup>1</sup> Formerly: Ministry of Science and Innovation.

The members are: the Universities Roma Tre, Foggia and Politecnica delle Marche (Ancona) from Italy, the Universität Potsdam from Germany, the Université Catholique de Louvain (Louvain-la-Neuve) from Belgium, the Université Paris Ouest Nanterre La Défense and the Université d'Avignon et des Pays de Vaucluse from France, the University of Ljubljana from Slovenia and the Universitat Pompeu Fabra from Spain.

evoking orality as well as conferring authenticity and credibility on the narrated plot and giving a voice to fictitious characters. Based on an inner-linguistic and cross-linguistic approach, our project aims to investigate how the authors of fictional texts achieve this mimesis or evocation of the spoken language.

The common denominator of our research is thus the unique potential of different modes, among them spoken language, to transcend themselves in both literary and 'more truly' multimodal texts.

During the workshop, we wanted to share our approach to multimodality tending towards the linguistic and translational with other contributors working within this tradition. But we were also particularly interested in experiencing the cross currents from other lines of investigation, such as the description of socio-pragmatic and cultural, (museum-)pedagogical and didactic aspects as well as semiotic aspects in general.

The contributions in this volume have been organised around different lines of investigation from different sub-disciplines. They reflect the different backgrounds and perspectives of the contributors, but also their shared concern for the spoken mode and its fusion with other modes, analysed in a wide variety of genres and texts.

The initial section specifically aims to tackle the interplay between verbal and non-verbal modes of expression from a *museological* perspective. With its emphasis on a wide variety of tangible and intangible artefacts, often exploited together with verbal labels, voices of guides, and in meaningful spatial arrangements, museums' practices and 'texts' lend themselves to being analysed in terms of orality and multimodality. However, few museums pay sufficient attention to the character of oral practices: "Dialogue and debate on orality does not, as of yet, seem to have found a firm footing in the museum. In many ways, this is a two-way stream whereby museum curators are not that interested in orality and oral historians are not that interested in materiality" (Byrne 2012: 24).

However, the three contributions in this section show how a new approach to the material culture exhibited in museums has experienced some fundamental changes over the last few years. Paolo Campetella studies multimodal communication in some of Rome's new archaeological museums; Rajka Bračun Sova questions the effectiveness of audience-focused interpretation of art in museums

of a former socialist country; and Teresa Sacchi Lodispoto tackles the relation of text and image as achieved by the use of audio-guides, a very recent aspect of museum presentation.

The overlap in didactic purpose makes it most convenient for multimodal issues raised in *museology* to be discussed together with *pedagogical* ones. As in museological accounts, the search for greater pedagogic effectiveness of teaching and teaching materials goes hand in hand with the desire to develop students' independent judgments and personal insights. Subsequently, Valeria Damiani studies the lexical competence of Italian university students in writing. Carmela Mila Spicola shows how the spoken language in a multimodal and interactive context can improve students' commitment to school and can therefore be a good strategy for overcoming the school dropout problem.

The next section is dedicated to a core aspect of the above-mentioned research project, namely *linguistic* analysis. The differences and the complex relationship between the spoken and written modes of language have a long tradition in the field of language description and the constitution of linguistic theories. In these chapters, topics which were believed to have been well exploited are approached from a fresh perspective, taking into account insights recently gained from the advent of new media.

The first two articles in this section study language use in the new forms of communication: Nadine Chariatte portrays how users of Facebook employ non-standard features of Andalusian variety in virtual communication. Anais Holgado Lage and Álvaro Recio Diego also describe the non-standard use of Spanish, but in chat communication. They try to determine the influence of the spoken mode on this type of written interaction from the normative perspective.

Although the contribution is listed in this section, the question which Sandra Falbe raises is more than a linguistic problem. In terms of semiotic complexity, this contribution investigates the constitution of style in fictional dialogue using the example of the TV series *Türkisch für Anfänger*. The language variation is called on to fulfil a certain function with regard to perspective-taking in the narrating plot of the series.

The following three contributions focus on certain linguistic phenomena observed in different types of communication where spoken and written modes

meet. Kathleen Plötner's article looks at the pragmatic and semantic values of repetition in utterances taken from pieces that try to simulate oral discourse. Anja Hennemann analyses the complexity of the Spanish conditional which serves to reproduce the voices of other people in news and press releases. Udo Mai's contribution closes the linguistic section. He studies the informational packageing in Italian as a first attempt at a unified theory of information structure.

The last section aims to tackle *translational* problems raised by the intersection of multiple modes in texts to be transferred to other languages and cultures. Subtitling is situated on the crossroads of such an intersection of modes which is why most of the articles included here challenge this practice. English and Spanish subtitles which accompany the *Fontane Effi Briest* have to support the reception of this film by R. W. Fassbinder in the target cultures. Blanca Arias Badia explores the effectiveness of subtitles in transferring the German version of the novel *Effi Briest*, well known in German speaking countries. Effie Mouka scrutinises the subtitling norms in socioculturally marked cinematographic discourse in Spain and Greece, while Èlia Sala Robert describes the current television practices of subtitling for deaf and hard of hearing children in the UK, Spain and Catalonia.

Andrea Stojilkov raises another important question. She questions the potential of other cultures and languages (Brazilian Portuguese, Italian and Serbian) to translate visual puns and allusions in films. The artistic expressivity also challenges the possibilities of translation when polylingual films have to be transferred to other cultures. Elena Voellmer therefore questions the manipulation of metalinguistic references in the German, Spanish and Italian versions of Tarantino's *Inglourious Basterds*.

The following contributions focus on two other genres with oral characteristics, and more particularly the adaption practices from higher written marked texts into pieces with spoken traits. Aurora Fragonara analyses the adaption of *Le Petit Prince* by Saint-Exupéry into the comic by Joann Sfar. Last but not least, Alba Tomàs-Albina spots the transformations from literary translations to stage by analysing the case of Sophocles' *Electra*, adapted into Catalan.

Apart from providing the opportunity to transcend narrow disciplinary boundaries, there are other more general benefits young scholars may draw from the study of multimodality. It may also generate practical suggestions for how multimodal means may be used effectively in the scholar's own practices, for instance in conference presentations.

In conclusion, we would like to express our thanks to all the contributors to this volume and to the scientific committee members, Anna Espunya (Universitat Pompeu Fabra), Gerda Haßler (Universität Potsdam) and Denis Le Pesant (Université Paris Ouest Nanterre La Défense). The English versions of all the articles were kindly revised by Sarah Presant Collins. We are also very grateful to Berit Kruse and Sybille Schellheimer for helping us with organizing and planning the workshop. Finally, we would like to thank the Faculty of Translation and Interpretation and the Department of Translation and Sciences of Language, which lent their human and financial support.

Jenny Brumme and Sandra Falbe Barcelona, September 2013

#### References

Byrne, Sarah. 2012. "Voicing the Museum Artefact." *Journal of Conservation and Museum Studies* 10 (1): 23–34.

### Shorthand used for corpus citation in this volume

Nearly all of the papers presented in this book draw on a more or less extensive study corpus of written or audiovisual texts. For reasons of homogeneity and economy of space, but also following the example of other books in this series, the editors have decided to use abbreviated citations for the corpus texts discussed in this volume. In the corpus section towards the end of each paper they precede and identify the full references.

In general, original publications discussed as corpus material are cited by their author's initials, e.g. for Quentin Tarantino's film *Inglourious Basterds* (2009) the shorthand citation QT is used in the paper. Translations are identified by their target language (see below). Thus, the Spanish version of the film is cited and listed as QTS.

In some cases, however, further differentiation was required, such as to distinguish several episodes of the same series. Here a keyword from the title has been added: UF-*Wolf* = Universum Film, ed. [2006] 2009. "Die, in der mich der Wolf kriegt." *Türkisch für Anfänger*, season 1, episode 11, broadcast March 30, 2006 in ARD. Munich: Universum Film. DVD.

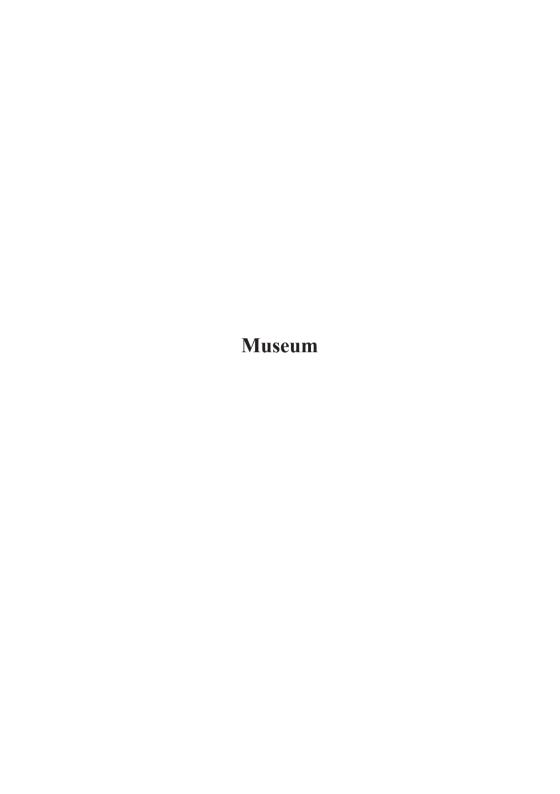
When different translations into the same language are discussed, the translator's (main) surname is added. This is the case, e.g, with the Catalan versions of Sophocles' tragedies: SC-Rubió identifies the Catalan adaption by Jeroni Rubió, while SC20-Riba and SC61-Riba means the translations by Carles Riba. In the first case the translation was published in 1920 and in the second case in 1961, as specified by the numbers in the shorthand.

References to articles either written in English or French follow the recommendations of the 16th edition of *The Chicago Manual of Style* (2010).

The Chicago Manual of Style. The Essential Guide for Writers, Editors, and Publishers. 16th ed. Chicago and London: The University of Chicago Press, 2010.

## Target languages:

C	=Catalan	I	=Italian
E	=English	P	=Portuguese
F	=French	S	=Spanish
G	=German	SE	=Serbian



#### Paolo Campetella

Università degli Studi Roma Tre, Rome, Italy

### Multimodal communication in new archaeological museums

#### Abstract

The exhibition layouts in museums created on new archaeological sites in Rome are intended to inform a wide audience about the historical evolution of urban sites. To achieve this goal a new kind of reconstruction based on multimodal communication involving visual and virtual technologies has been introduced. This article analyses the communication strategies of these new archaeological museums in Rome through a literature review in order to identify aspects that are considered specific to the cultural mediation in such museums.

Key words: Archaeological Museums – Cultural Mediation – Museology – Museum Communication – Museum Education

#### 1. The various definitions of an archaeological museum

The nature and contents of the archaeological communication is changing for a number of reasons. There are new methodologies for on-site archaeological research. Urbanization is increasing bringing with it a renewed debate on the protection of historical and artistic heritage. Increasing numbers of visitors do not fit an easily identifiable profile. Digital technologies for communication and interaction are continuously changing in their development and the way they are implemented. The topic is made more complex by the lack of a single definition for museum or archaeological park. Barbanera (2011: 69-70) thinks of archaeological museum as a place designed to communicate the processes, the goals and the results of the current archaeological research. Swain (2007: 35–39) distinguishes between the museums that display a selection of the items that belong to past populations but have lost the information about their discovery contexts and those that aim to reconstruct the historical development by the information gathered through specific archaeological surveys. We refer to archaeological sites as *indoor* if they are turned into museums that display archaeological materials collections (Ruggieri Tricoli 2004: 43). The alternative

is referred to as *open air*. Assuming that each museum is an expression of the society to which it belongs but also the material representation of the thinking of the scientific and cultural community that has set it up in a particular historical moment (Zifferero 2004), the following contribution aims at analysing the communication processes and the educational potential of some museums created in recent years in Rome, whose organization reflects new approaches to archaeological research.

#### 2. Research, safeguarding and development of archaeological heritage

Before suggesting some analyses of new museums that are part of archaeological sites in Rome, it is necessary to clarify those features that make a museum different from an archaeological site. Even if the definition of a museum codified by the International Council of Museums (ICOM 2007) is now commonly shared, the scientific debate on the characteristics of an archaeological site makes fixing a definition more complicated. Manacorda (2007: 36-37) identifies an archaeological site as a place where the anthropogenic traces, found thanks to archaeological methods, can be linked with other presences that help to characterise the territory giving it a historical significance. Although it focuses its attention on an area that is spatially defined by the physical excavation boundaries, the archaeological research cannot disregard those connections that the place and the people who inhabited it established with the other territorial and cultural entities. This incisive and global feature of the research naturally gives rise to political and cultural choices regarding the conservation and protection of archaeological heritage. It is no coincidence, then, that the Charter of Lausanne, promoted by the International Council on Monuments and Sites (ICOMOS 1990), affirms that every archaeological site represents not only the heritage of the nation that it belongs to but that of the whole world. Archaeological research based on a survey strategy collects, interprets and builds cultural, temporal and spatial relations between movable or immovable findings, which are considered as documents rather than as evidence of human presence in a given territory. The archaeological survey proceeds by recognizing and interpreting the human traces left on the ground in order to understand their historical evolution. This universal feature of archaeological evidence assumes that the "stories from the ground" (the title of the first stratigraphic excavation handbook published in Italy, Carandini 1981) are to be told and shared.

#### 3. Communication in museums and archaeological sites

Besides the difficult choices that must be made in order to enhance the research and preservation of the archaeological sites, it is necessary to consider the ethical concerns that the communication of this heritage requires. The communication project of an archaeological site should be part of a cultural programme that cannot be separated from the social context and from those values shared by the local community that promotes it. Therefore a process of musealisation should foster the communication and mediation of the complexity of those cultural values which are hidden in the archaeological evidence (Ruggieri Tricoli 2000), taking into account the final recipients of this message. The archaeological sites and monuments cannot therefore simply be made accessible to visitors, but should undergo a cultural mediation process (Nardi 2011) that avoids transforming historical and anthropological documents into ruins with no identity. Effective museum communication should therefore be designed to encourage the interpretation of different values, tangible and intangible, represented by monuments or displayed artefacts, ensuring that all visitors are able to enjoy them in different ways. The design process must address the fundamental questions of what, how and to whom to communicate.

The artefact that comes from an investigated archaeological area provides a big advantage: it offers the possibility of reconstructing the network of relationships that had been lost, but that the careful work of the archaeologist is able to document and interpret. It is up to the museum to re-establish that network of evidence and to make it understandable to the public. Contemporary museology suggests that the displayed findings should be as close as possible to their original discovery places to facilitate the communicative connection between contexts and objects (Ruggieri Tricoli 2004: 56). The artefact, within the network of the archaeological context, becomes a fundamental element in the reconstruction of the historical evolution of a site, not forgetting that it maintains an individual value, characterised by its functional aspects lost in antiquity.

Therefore, in order to have a full comprehension of the museum's message, the visitor should be able to identify a *code* to interpret the functional and cultural aspects of the exhibited objects and have *key information* to understand the historical, anthropological and cultural context in which the objects have been created and used (Antinucci 2004).

To achieve these communicative goals new digital technologies, based on the visual and virtual languages, have been devised and are now quite widespread (Pujol-Tost 2011). These technologies, which are characterised by a high level of adaptability to different types of visitors, might be used as effective communication tools, always keeping the scientific basis of the contents coherent and, more generally, without betraying the mission of the museum itself (Bounia and Economou 2012). The greater the narrative potential of the new technologies, the greater attention should be given to not overpower the perceptive and communicative potential of the original archaeological object (Ungaro 2010: 7-8). Many archaeological museums also use more traditional plastic models or reconstructive drawings to spatially represent the historical evolution of excavated areas. Graphic reconstruction represents an essential tool for archaeologists in the process of summarizing data and it can be integrated into the museum exhibition as an effective visual communication tool (Antinucci 2007). The museums analysed in this article generally do not integrate textual communication well in the exhibitions and often use specialised terms from cataloguing language code that are difficult to understand for the common visitors (Nardi 2010). Every aspect of the museum exhibition influences the epistemological processes during the museum experience, such as the architecture, the lights, the furniture, the displaying of the archaeological objects, the textual or graphic elements (Jacobi 2008, Moser 2010).

#### 4. New archaeological museums in Rome

The process of transforming archaeological sites into museums poses some problems in the definition of those spaces in terms of how they should be safeguarded and integrated into the urban areas. Each communicative action in such cases should focus on the aspects of historical evolution highlighting the

link between the visible archaeological evidences in the modern city and the information that we can still find in the subsoil (La Regina 2009).

#### 4.1. The museum of the Crypta Balbi

This museum was opened in 2001 as a section of the Roman National Museum in order to illustrate the urban development of a portion of the *Campus Martius* from the Roman period up to the present. Manacorda, who was the archaeologist in charge of the excavation works begun in 1981 in the area of the theatre of *Balbus*, suggested that it should be considered as a museum of archaeology since it shows the complexity of the archaeological research, which uses data from stratigraphic excavations and from other sources (architectural, literary, archival, anthropological) (Manacorda 2001). The area is still the object of archaeological surveys with the aim of exploring and understanding the historical evolution of the block and making the site and the museum safe (Vendittelli 2005).

This museographic structure takes us back in history through walkways in archaeological sites, past walls whose surface shows the transformations and adaptations of the ancient buildings. The site history is told in the section called "Archaeology and history of an urban landscape" through text panels, visual representations, topographic reconstructions, divided by ages, and simplified archaeological sections which help to better understand the transformations that occurred in the area. Beyond the few archaeological artefacts we also have other historical documents which are useful in the reconstruction of the historical and social development of the urban sites.

The second section of the museum, called "Rome from Antiquity to the Middle Ages", shows some aspects of daily life between the 5th and 9th centuries A.D. In this section the artefacts are displayed by topic to explain different cultural, social and economic transformations that occurred in different urban areas. The exhibits and visual panels are often used to recreate historical and cultural backgrounds. Moreover the museum continuously updates its reconstructive interpretations according to the different results of the archaeological studies in the area. This museum project allows the use of its contents for numerous educa-

tional programmes based on historical or thematic aspects that cover a wide time span.

#### 4.2. The museum of Imperial Forums at Trajan Markets

The museum, housed in the complex of the Great Hall and some central rooms of the Trajan Markets, displays architectural decorations and sculptures from the Imperial Forums. The fragments are complemented with extensive documentation that aims to reconstruct the evolution of urban squares, from their foundations as centres of the imperial power, to their progressive transformation in the Middle Ages, the construction of a Renaissance area, the so-called "Alessandrino district" and the large-scale excavations for the creation of Fori Imperiali Avenue in the 1930s. The archaeological data have been collected during extensive excavation works that since 2000 have had the goal of investigating these important areas.

Milella defined this museum as a "museum of architecture" (2010: 12) of ancient Rome. The historical development of each square with their architecture and decorations is singularly illustrated in the Great Hall, through the use of panels and screens that show textual elements and visual and virtual reconstructions of the archaeological areas. Each room exhibits at least one admirable architectural element. In virtual reconstructions the exposed architectural element is placed in its original position in the building; the vision becomes progressively broader until it can encompass the whole monumental square and eventually the entire complex of the Imperial Forums. In this way the visitor can easily identify the exact architectural site to which the original fragment belonged. At the same time, the visitor comes to consider it as an irreplaceable element in the process of the historical reconstruction of the site.

In order to make the topics addressed by the museum more comprehensible, different types of representations have been implemented: settings with life-size monumental fragments, archaeological drawings, digital 3D reconstructions, traditional visual reconstructions, watercolor drawings to facilitate the perception of ancient spaces, documents and old pictures. The data from questionnaires, filled in by visitors, have suggested the "re-thinking" of those parts of the settings considered not to be effective from the communication point of view by

adding more references to the current urban site (Sartini and Vigliarolo 2010). This aspect might reflect the difficulty of having a complete spatial perception, so important in the archaeological monuments such as the Roman Forums, because of the distance between the site of the exhibition and the archaeological sites. In fact, from the Markets of Trajan you can see only a small portion of the area once occupied by Trajan's Forum. The decision to exhibit a few finely crafted architectural fragments, though well contextualised by various innovative reconstructions, does not make the communication complete since it lacks an essential perceptual and visual reference which might be realised with the next visit to the archaeological areas.

The exhibition, mostly focused on architectural documentation of Imperial Forums, does not elaborate on the implications of social-historical representations of imperial power, for example through the clarification of iconographic references. Finally, the selection of the displayed materials reflects mostly the period of construction and use of the Forums. The historical evolution of the area documented by the recent excavations is represented by a few panels with visual representations and a video that introduces the exhibition.

#### 4.3. Domus of Palazzo Valentini

The Museum Domus of Palazzo Valentini, the seat of the Province of Rome, sets out to explain the relationship, or in some cases the contrast, between the historical narrative and the archaeological site. The excavations started in July 2005 and from the beginning the results were so encouraging that the site was immediately extended and an exhibition was designed (Del Signore 2008).

The archaeological research itself has been carried out taking into consideration the future museum project. This decision is explained by the public nature of the place in which the investigation took place. Archaeological excavations have shed light on the remains of two patrician *domus* of the late second and third centuries and traces of a sacred or public complex suggested by the monumental grandeur of the architectural buildings discovered close to Trajan's Forum. Some traces of an underground bunker, built during World War II, allowed the organization of a section dedicated to the reconstruction of Trajan's Forum and to the description of the reliefs from Trajan's Column.

The exhibition was designed by Piero Angela, probably the most famous Italian TV presenter of documentary shows, which involved some of his colleagues including the physicist Paco Lanciano who in recent years has been active in devising multimedia tools for scientific museums. This project was designed according to the following principle: "on the side of the public for the language, on the side of the experts for the contents" (Angela 2008: XII). Virtual images, videos, light and sound effects have been employed to reconstruct the original context directly onto the archaeological remains. This direct link with the excavation site is also emphasised by the presence of some artefacts, especially stone ones, still on the ground and by the labels used to identify the archaeological anthropic layers. It is possible to go inside the museum only through visits which are virtually guided by Alberto Angela's voice that introduces contents in a simple language using key words, with the support of high definition projections which take place in various spaces. The videos projected on the walls of the sixteenth-century foundations are essential parts of the visits since they reveal some topics related to the historical and cultural background of domus owners and to the building techniques used by Romans. Finally, it suggests a virtual reconstruction of each building complex. The section dedicated to a virtual reconstruction of the reliefs of Trajan's Column represents a historic and artistic document of highly effective communication in spite of the difficulties in bringing it to fruition.

Some archaeological objects are exhibited during the guided tours without any references to the site but only to show the type of material found during the excavations. The visits turn out to have a strong communicative effect, boosted by the darkness of the underground area and the long waiting time for enjoying the virtual animation. The screening of virtual material is very effective even when the tight narration of each location makes it difficult to have a complete understanding of how entire complexes have been reconstructed and transformed over the centuries. On the other hand, those exhibitions where there are no textual panels or graphic reconstructions do not allow visitors to experience the museum according to their own interests and do not encourage visitors to visit the site again.

Actually this type of mediation makes the archaeological musealised site similar to a temporary exhibition. A kind of language close to that used in documentaries and the use of visual tools can be considered useful for educational purposes. However, this limited type of communication reduces the museum's experience to a single contact with the archaeological item, when it would be reasonable to regard it as a valuable tool that can be used several times during the educational programmes. Finally, a survey aimed at verifying the effectiveness of the cultural choices and of communication tools implemented should contribute to the successful assessment of the museum project, which is now based merely on the number of visitors to the archaeological area (Angela 2008).

#### 4.4. A comparison between exhibitions and their communication

The exhibitions examined in this paper reflect the new perspectives of the archaeological museographic design in Rome. Some of them are more innovative in terms of the use of new technologies; others are more traditional from a communicative point of view. Certainly, they all share the same aim, namely communicating the historical evolution of the archaeological site. The following considerations try to explain how these exhibitions have developed the previously described principles put forth by the current debate on archaeological communication.

All the examined exhibition paths introduce the historical evolution of the site, highlighting the sources of the archaeological research. The goal is to communicate how it is possible to understand the historical evolution of the site through a careful collection, cataloguing and study of the traces left on the ground. In order to connect different archaeological sites, the designs of the exhibits and virtual reconstructions represent the diachronic evolutions and transformations that have occurred in the course of history. The attention to the documentary value of the discovery context emerges from the way the findings are arranged, artificially reproducing their original spatial features (Crypta Balbi), or allowing a direct view over the unchanged excavation area, with some findings arranged as they were discovered (Domus of Palazzo Valentini). Crypta Balbi pays particular attention to the reconstruction of the historical and social context. The

projections used in the Domus of Palazzo Valentini exhibition complete the information about the archaeological site and provide significant explanations about the sociocultural background of the period under consideration.

The exhibitions at Crypta Balbi pay greater attention to the communication of functional and cultural aspects of the exhibited findings, with a section of the museum entirely dedicated to this issue. On the other hand, the findings in the Domus of Palazzo Valentini exhibition play a marginal role, with the exception of those that are directly necessary to show specific characteristics of site, and virtual reconstructions represent functional aspects of the architectural elements exhibited in the Museum of the Imperial Forums.

The Museum of the Imperial Forums does not assure a full connection between the artefacts and the archaeological site because of the distance between them.

The texts displayed in the exhibitions, which are often quite long and contain technical terms, require a good knowledge of the historical background (Crypta Balbi). By contrast, the Museum of the Imperial Forums uses a simpler language, while the Domus of Palazzo Valentini exhibition does not use textual displays at all, since all information is delivered by the narrating voice during the projections.

Crypta Balbi and the Museum of the Imperial Forums exhibition allow different museum experiences according to the needs of the visitors. It is possible to arrange specific programmes responding to particular educational requirements, whereas the Domus of Palazzo Valentini layout does not allow any possible customization of the museum communication. As a consequence, any visit to the museum, at any time, will always be the same experience and therefore the visitors are not encouraged to come back.

Unfortunately, there is very little data about the assessment of the communication systems in the museums under consideration. The only evaluations carried out are generally based on the number of visitors during specific periods. The Museum of Imperial Forums has planned some evaluations through questionnaires and the direct observation of visitors. The results led the curators to change some parts of the exhibition.

#### 5. A new image of the archaeology of Rome

Rome has a distinctive archaeological heritage, enriched day by day by new research projects that investigate the subsoil with the purpose of documenting and preserving the traces of the past, threatened by urban development and new infrastructures. The archaeological investigations, using new methods of excavation, are transforming and redefining the historical knowledge about the development of the city. The image of a historical city that is changing continually is replacing the idea of the 'Eternal City'.

Educational research can devise and experiment with new forms of cultural mediation of the archaeological heritage of Rome. In the wake of this new attention to a contextual understanding of the archaeological information, as demonstrated by the exhibitions previously considered, it is necessary to devise a mediation that relates the cultural potential of museum collections with the places in the city where archaeological traces are integrated or appear as 'silent' ruins in the urban pattern. A unique, dynamic and extremely complex heritage can then be accessible for everyone.

#### 6. References

Angela, Piero. 2008. "Palazzo Valentini. Nuova proposta per la visita agli scavi archeologici."
In Palazzo Valentini. L'area tra antichità ed età moderna: scoperte archeologiche e progetti di valorizzazione, edited by Roberto Del Signore. Rome: Provincia di Roma.

Antinucci, Francesco. 2004. Comunicare nel museo. Rome: Laterza. [Percorsi; 62].

——. 2007. *Musei virtuali: come non fare innovazione tecnologica*. Rome: Laterza. [Percorsi; 101].

Barbanera, Marcello. 2011. "Verso una nuova museografia? Il Museo della Crypta Balbi e il Museo della Centrale Montemartini." In *Il museo verso una nuova identità: atti del Convegno internazionale di studi*, edited by Mariaclaudia Cristofano, Claudia Palazzetti, coordinated by Maria Dalai Emiliani, 66–77. Rome: Gangemi.

Bounia, Alexandra, and Maria Economou. 2012. "The Use of New Technologies in Museum Education in Greece. Lessons from Research." *ICOM Education* 23:31–41.

Carandini, Andrea. 1981. Storie dalla terra: manuale dello scavo archeologico. Bari: De Donato.

Del Signore, Roberto. 2008. "Palazzo Valentini. Domus Romane e Piccole Terme. Dalle scoperte archeologiche alla valorizzazione." In *Palazzo Valentini. L'area tra antichità ed* 

- *età moderna: scoperte archeologiche e progetti di valorizzazione*, edited by Roberto Del Signore, XIX–XXIX. Rome: Provincia di Roma.
- ICOM. 2007. *ICOM Statutes*. [Paris]: International Council of Museums. Accessed January 12, 2013. http://icom.museum/the-organisation/icom-statutes/.
- ICOMOS. 1990. Charter for the Protection and Management of the Archaeological Heritage. [Lausanne]: International Council of Monuments and Sites. Accessed January 12, 2013. http://www.international.icomos.org/charters/arch\_e.pdf.
- Jacobi, Daniel. 2008. "Studiare il rapporto tra visitatori e strumenti di mediazione. Mediazione e strumenti interpretativi." *Cadmo* XVI (2): 35–46.
- La Regina, Adriano. 2009. "L'archeologia e il suo pubblico." In *L'archeologia e il suo pubblico*, edited by Adriano La Regina, XI–XIV. Florence: Giunti.
- Manacorda, Daniele. 2001. Crypta Balbi: archeologia e storia di un paesaggio urbano. Milan: Electa.
- ——. 2007. *Il sito archeologico: fra ricerca e valorizzazione*. Rome: Carocci. [Le bussole; 279].
- Milella, Marina. 2010. "Il sistema di comunicazione integrato nel Museo dei Fori Imperiali." In *I Mercati di Traiano. Didattica, divulgazione, tecnologie: le scelte sperimentali e la risposta del pubblico*, edited by Lucrezia Ungaro and Maria Paola Del Moro, 11–14. Rome: Palombi.
- Moser, Stephanie. 2010. "The Devil is in the Detail: Museum Displays and the Creation of Knowledge." *Museum Anthropology* 33 (1): 22–32.
- Nardi, Emma. 2010. "La mediazione culturale nei musei come forma narratologica." *Cadmo* XVIII (1): 33–48.
- ——. 2011. Forme e messaggi del museo. Shapes and Messages of the Museum. Milan: FrancoAngeli. [Ricerche sperimentali].
- Pujol-Tost, Laia. 2011. "Integrating ICT in Exhibition." *Museum Management and Curator-ship* 26 (1): 63–79.
- Ruggieri Tricoli, Maria Clara. 2000. *I fantasmi e le cose: la messa in scena della storia nella comunicazione museale*. Milan: Lybra immagine. [Architettura e design].
- 2004. "La reintegrazione culturale e il processo di musealizzazione nel quadro del concetto di affidabilità." In *I siti archeologici. Dalla definizione del valore alla protezione della materia*, edited by Maria Clara Ruggieri Tricoli and Cesare Sposito, 10–67. Palermo: Davio Flaccovio.
- Sartini, Marco, and Paolo Vigliarolo. 2010. "Il futuro del sistema di comunicazione del Museo dei Fori Imperiali." In *I Mercati di Traiano. Didattica, divulgazione, tecnologie: le scelte sperimentali e la risposta del pubblico*, edited by Lucrezia Ungaro and Maria Paolo Del Moro, 15–24. Rome: Palombi.

- Swain, Hedley. 2007. *An Introduction to Museum Archaeology*. Cambridge, New York: Cambridge University Press.
- Ungaro, Lucrezia. 2010. "Comunicazione e formazione, valorizzazione e conservazione: binomi inscindibili o contrapposizioni irrisolvibili? Il museo luogo di conoscenza, formazione, sperimentazione e applicazione di tecnologie innovative." In *I Mercati di Traiano. Didattica, divulgazione, tecnologie: le scelte sperimentali e la risposta del pubblico*, edited by Lucrezia Ungaro and Maria Paola Del Moro, 5–12. Rome: Palombi.
- Vendittelli, Laura. 2005. "Lo scavo, il restauro e l'allestimento museale nel complesso della *Crypta Balbi* (Roma)." In *Domus romane: dallo scavo alla valorizzazione*, edited by Francesca Morandini and Filli Rossi, 233–238. Milan: ET.
- Zifferero, Andrea. 2004. "Allestimenti museografici e identità storica dei musei." In Archeologia del museo: i caratteri originali del museo e la sua documentazione storica fra conservazione e comunicazione, edited by Fiamma Lenzi and Andrea Zifferero, 59–79. Bologna: Compositori. [ER Musei e territorio, Instituto per i beni artistici naturali della Regione Emilia Romagna; 2].