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ORAL HISTORY-BASED EXHIBITS
DO THEY AFFECT VISITOR MOVEMENT IN MUSEUM EXHIBITIONS?
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ΠΡΟΦΟΡΙΚΕΣ ΑΦΗΓΗΣΕΙΣ ΩΣ ΕΚΘΕΜΑΤΑ
ΕΠΗΡΕΑΖΟΥΝ ΤΗΝ ΚΙΝΗΣΗ ΤΩΝ ΕΠΙΣΚΕΠΤΩΝ ΣΕ ΜΟΥΣΕΙΑΚΕΣ ΕΚΘΕΣΕΙΣ;

Eleni Boumpari / Ελένη Μπουμπάρη[*]

ΠΕΡΙΛΗΨΗ

Το παρόν άρθρο επιχειρεί να αναδείξει τους τρόπους με τους οποίους εκθέματα βασισμένα σε προφορικές αφηγήσεις επηρεάζουν την κίνηση των επισκεπτών μέσα σε μουσεία, αποδίδοντας έμφαση στη σχετική ερευνητική μεθοδολογία. Το άρθρο ξεκινά με την παρουσίαση της έννοιας της προφορικής ιστορίας μέσω μιας γρήγορης ανασκόπησης στις ρίζες της και παρουσιάζει τους τρόπους με τους οποίους οι προφορικές αφηγήσεις/ιστορίες μπορούν να χρησιμοποιηθούν ως μουσειακό υλικό προς έκθεση, με διαφορετικούς τρόπους και σε διαφορετικές περιπτώσεις. Στη συνέχεια επεξεργάζεται βασικές θεωρίες σχετικά με διαφορετικά μοτίβα κίνησης των επισκεπτών μέσα στους εκθεσιακούς χώρους μουσείων, καθώς και με την επίδραση των ηχητικών εκθεμάτων στις διαδρομές που ακολουθούν οι επισκέπτες και τέλος παρουσιάζει τη θεωρία του "Space Syntax," η οποία παρέχει τις περισσότερες από τις σχετικές ερευνητικές μεθόδους, καθώς και το θεωρητικό έναυσμα για τον συσχετισμό της κίνησης

[*]**Eleni Boumpari** is architect, specialised in the fields of Social Anthropology (MA) and Museum Studies (MSc). Lne.boubari@gmail.com

των επισκεπτών στον χώρο με την εμπλοκή επισκέπτη-εκθέματος. Το Μουσείο της πόλης του Βόλου αποτέλεσε το πεδίο μελέτης κατά το μήνα Ιούλιο του 2015. Οι μέθοδοι που χρησιμοποιήθηκαν ήταν η επιτόπια παρατήρηση επισκεπτών (εντοπισμός κίνησης επισκέπτη, χρονομέτρηση επίσκεψης, χρονομέτρηση στάσεων κλπ.), ερωτηματολόγια και συνεντεύξεις κλειστού τύπου. Τα ευρήματα της έρευνας αφορούν στους τρόπους με τους οποίους η κίνηση των επισκεπτών επηρεάζεται από εκθέματα βασισμένα σε προφορικές αφηγήσεις, στις επιπτώσεις που έχουν αυτού του είδους τα εκθέματα στη χρονική διάρκεια της επίσκεψης, και στις διαφορετικές ομάδες κοινού οι οποίες, για διάφορους λόγους, δεν μπορούν να χρησιμοποιούν κάποια είδη ηχητικών εκθεμάτων, όπως τα άτομα με προβλήματα ακοής ή οι μη ομιλούντες ελληνικά επισκέπτες. Το τελευταίο τμήμα του άρθρου αναφέρεται στα συμπεράσματα και διευρύνει την οπτική με προτάσεις βελτίωσης και καλές πρακτικές οι οποίες αφορούν τόσο το συγκεκριμένο μουσείο όσο και τον ευρύτερο τομέα των μουσείων.

Η **Ελένη Μπουμπάρη** είναι αρχιτέκτων με μεταπτυχιακό δίπλωμα ειδίκευσης (ΜΑ) στην Κοινωνική Ανθρωπολογία και (MSc) στις Μουσειακές Σπουδές. Lne.boubari@gmail.com

ABSTRACT

The paper aims to examine the ways in which oral history-based exhibits affect visitor movement in museum exhibitions and highlight the methodology used in order to accomplish that aim. The article starts with the initiation of the reader to oral history, through a fast-paced trace back to its origins. Next it presents the ways oral testimonies can be used as exhibiting material in different ways and cases. Later on, the reader familiarizes with the basic theories on visitor circulation patterns, the placement of oral history-based exhibits in relation to visitor routes and the presentation of 'Space Syntax" which provides most of the research methods but also the theoretical point of departure for the interrelation of visitor movement in space and visitor-exhibit engagement. The case study museum is the "Volos: Museum of the city," and the research took place in July 2015. The methods used were in situ observation of visitors (visitor tracking, timing, stops, etc.), questionnaires and interviews. The research findings are categorized into three major sectors: The ways visitor movement is affected by the different kinds of oral history-based exhibits; the effects of oral history-based exhibits on visit duration; and the audiences that for multiple reasons are unable to use some kinds of oral history-based exhibits, and especially sound exhibits, such as hearing impaired and non-Greek Speakers. The final part of the article summarizes the key issues that have risen by the analysis and concludes by making recommendations for the particular museum and for the wider museum sector through some proposals of good practice.

Introduction: Oral history and visitor circulation patterns

The aim of the present article is to present a part of a research undertaken in 2015 considering the methodologies that were used to examine in which ways oral history-based exhibits attract visitors and how do they shape their circulation patterns within the museum space. The scope of the research (Boumpari 2015) was to examine the ways in which these exhibits effect visitor movement; the kind of effects on visit duration; and the ways different audiences interact with them. My research interest was focused on whether the intended use of oral-history-based exhibits as main attractions was adopted by the visitors. The relevant research findings can act as guidelines for exhibition designers and museum curators but also as a theoretical tool for the analysis of an oral-history-based museum environment.

Oral history as a practice emerged during the mid-20th century initially in the form of audio recordings of oral evidence.[1] Since then, many museums have selected oral history archives but for many years museum professionals were hesitant to use them in the galleries. According to Chew (2002), during the 70's and 80's oral history entered the exhibition floor for good even though there was some skepticism around oral history, since in many cases the interviewing and recording methods were not quite professional. For Gazi and Nakou (2015:1) "successful practice can only be grounded in a deep understanding of oral history's historical, social, political, communicative, educational and representative dimensions".

In addition, it was the time when the physical collections by themselves were no longer sufficient as the only attractions, and "curators began to make room for more explanatory text and other learning aids, including first-person stories" (Chew, 2002:2). At first, oral evidence entered the museum exhibitions in the form of quotes on the exhibition panels. Oral testimonies were also used as complementary material to the collections of the museums and as a method for the collection of evidence, the reconstruction of historical environments and the contextualization of objects.[2] Although the inclusion of tape-recorded memoirs into exhibitions was widely applied during the 80's, the first recorded example of use of recordings within an exhibition dates back to the 50's.[3] Nowadays the use of oral histories within museums is a common practice. According to Nakou (2005:1), "contemporary museums tend to collect and exhibit both tangible and intangible cultural heritage,[4] and to use oral history not only as part of the contextual display of objects, but as a 'museum object' as well". Oral testimonies can be used as museum exhibits and this can be realized in several ways. An oral testimony is not just a recording of a personal story that can be transcribed into quotes or isolated sound bites or video segments. Oral testimonies are powerful tools that when used as part of an exhibit, awake sentiments and engage visitors to the

content of each story. Bartow-Melia and Mieri (2015:47) argue that, "oral histories bring to life the personal experience, emotions, and private memories that allow the museum visitor to connect with a historical story from a more humane perspective".

The scope of the present research is to examine in which cases a visitor is attracted by an oral history-based exhibit, and as a result when does he decline from his route in order to approach it. The hypothesis in itself presupposes that visitor movement and circulation patterns are influenced by exhibits. To examine that, we will need to introduce a toolkit of important theories that structure the theoretical basis, construct the methodology and facilitate the research analysis. More specifically, Bitgood's (2006) "interaction approach", which assumes that both visitor factors (prior knowledge, interests etc.) and exhibit factors (such as exhibit design, architecture etc.) influence "visitor attention, circulation and movement, mental processing, and learning" (p. 464), is a principle to be considered throughout this article. Tzortzi (2014) coincides with Bitgood, as she claims that the ways in which museum intent is realized are expressed through visitor movement. Monti and Keene's (2013) contribution to this article is the summary of the characteristics that make exhibits attractive to visitors. Bitgood (2006) has also provided a clear distinction of visitor circulation patterns, which will be later compared with the findings of the present research. More specifically, the patterns proposed by Bitgood are: a) turning right at choice and keep walking on the right side of space b) walking on a mental straight line from entrance to exit (inertia) c) back tracking d) walking on the main path. Bitgood's (2006) most important contribution in the present toolkit was the "general value principle",[5] which supports that, visitors' costs and profits are constantly readjusted during their visit.

Another series of tools embraced by the present research analysis were those of Guler's (2014) exhibition design checklist.[6] Specifically, orientation towards the closest and most interesting exhibit; checking if there is enough space for the visitor to move in the visitor circulation area; checking visitor circulation continuity; and visitor time limitations were selected and will be used further on to help clarify the findings of the present research.

The third pylon of theory is "space syntax" which provided the foundation of methodologies used. "Space syntax" originates from the field of architecture and 'is both theory and method that can be employed in the analysis and description of the built environment' (Monti & Keene, 2013) The tools of space syntax that reveal the strongest and most attractive exhibits according to Tzortzi (2007, 2014), are based on movement tracking and taking static snapshots. Also, the high rate of direction changes as a tool reveals a rate of "active" visitor-exhibit engagement.

The example of an oral-history-based museum

"Volos: Museum of the city" was the case study museum of the present research. The museum was inaugurated on 22 December 2014 in the city of Volos, Thessaly, Greece, managed and run by the Municipal Organization of Museums, Libraries and Archives of Volos. The Museum's first and temporary exhibition was organized under the title "Volos – Nea Ionia. So far away – So close". The exhibition is dedicated to the 90 years from the inauguration of the refugee settlement of Nea Ionia (at the periphery of the city of Volos) and the influence of the mass arrival and settlement of the refugees at the city. The oral stories of different inhabitants of the city was the main issue we wanted to highlight in this exhibition. They are intertwined in the museum narration in the form of sound exhibits, written extracts, complementary texts, graphs or object supporting text. The floor plans below (Diagram 1 and Diagram 2) show the different thematic units within the museum and indicate the proposed visitor route.
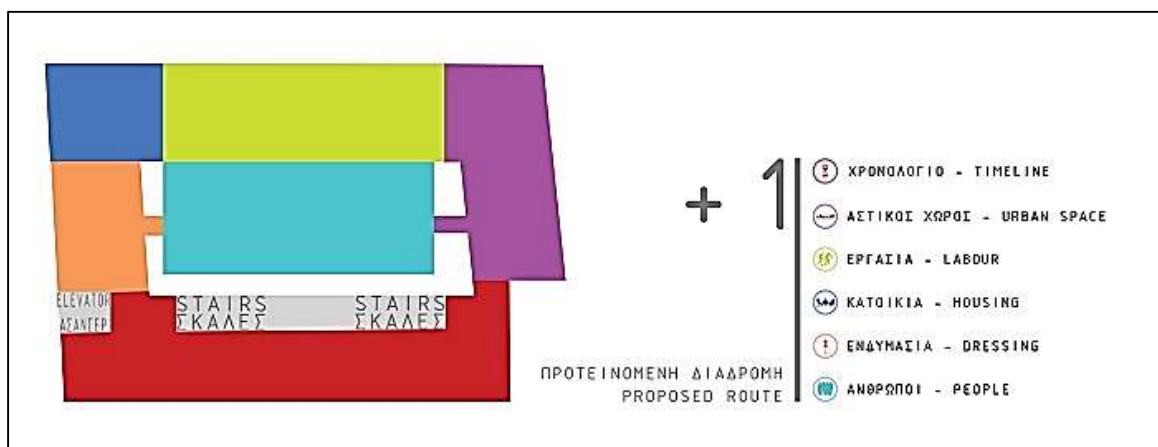

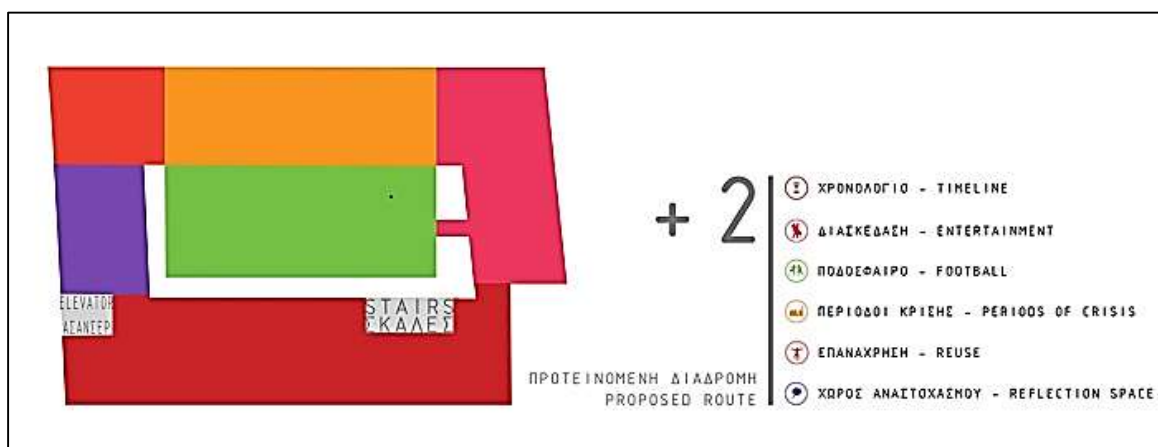**Diagram 1: Floor plan of level +1.**

Diagram 2: Floor plan of level +2.

There were many different reasons that led me to choose to study this particular museum. First of all, I was interested in studying an oral history-based museum and the particular museum is one of the very few oral history-based museums in Greece. Another important reason was that it was a new museum that had not been studied yet, so I would be able to collect original material and create a solid basis for future reference on oral history-based museums in Greece. The last reason for choosing the "Volos: Museum of the city" as my case study was the fact that since I personally had participated in the making of this exhibition by conducting the museological and museographical study in collaboration with the historian and designer of interactive scenarios Ioulia Pentazou and the architect Ioannis Salesiotis, I had extended knowledge of the centrality on the museum's intentions as far as the exhibits based on oral testimonies are concerned.

In order to be able to study different kinds of exhibits based on oral testimonies, I chose to study three of the thematic units displayed; "Labour," "People" and "Entertainment". More particularly, in the thematic unit "Labour" different aspects of labour were presented not only as an effort of newcomers to survive in the new "homeland" but also as a way to be active and creative. In order to be able to highlight these aspects the mediums used were: print images, text, objects, sound stations (stations where a visitor can stop and wear headphones in order to listen to oral testimonies) and sound showers (special roof speakers that reproduce oral stories in a small radius around).

In the thematic unit "People", people are presented as the core of the city. A dozen of life stories of people of different backgrounds are presented in order to help visitors understand the city's multicultural nature. The mediums used in that unit are 12 objects (school desks), which are also used as sound stations. On top of the school desks people's biographies are displayed in the form of written texts.

In the thematic unit "Entertainment" some types and places of entertainment that are met only in one of the two distinctive areas of the city are displayed together with some common types and places of entertainment that are presented through written testimonies. The mediums used in this unit are large-scale photos, written extracts of oral testimonies, some objects and a sound exhibit.

Research methodology

The main part of the research in-situ was conducted in "Volos: Museum of the City" (VMoC), since it is one of the very few oral history-based museums in Greece.

In the present article we are going to focus on the research methodologies that were used in order to support and contextualize the case of the study. In order to be able to

come to some conclusions as far as visitor movement in relation to oral history-based exhibits is concerned, different methods of data gathering were used.

More specifically, the case study research consisted of three different research tools: visitor observation techniques, questionnaires, and interviews. As far as fieldwork is concerned, it was carried out from Saturday 27 June until Friday 10 July 2015 in the form of participant observation. Visitors were carefully observed and the data were recorded in three different ways: a) Visitor movement tracking, where visitor movement was depicted in the form of lines on the floor plan of the exhibition. Visitor movement timing, where visitor stay in the exhibition was timed, and visitor movement stops, where visitor stops were also depicted on the floor plan as small or bigger circles depending on the duration of stop (Tzortzi 2014; Hillier & Tzortzi 2006), b) structured observation of visitors (Powell & Kokkranikal 2014) which included "Gallery observation record sheets" (Monti & Keene 2013) and "static snapshots" (Tzortzi 2007), c) questionnaires (Monti & Keene 2013) and finally d) interviews (Roppola 2013).

In order to observe the visitors and give out the questionnaires or conduct the interviews, I visited the museum during the opening hours of that period. The visitors whose movement was tracked (Diagram 3) and timed (Diagram 4) were eight. During the observation, visitors' movement was drawn on a scaled floor plan of the museum and their stops were recorded in a distinct way. Lines represented movement, dots represented stops and circles represented extended stay and use of sound-exhibit or engagement with oral history-based exhibits.
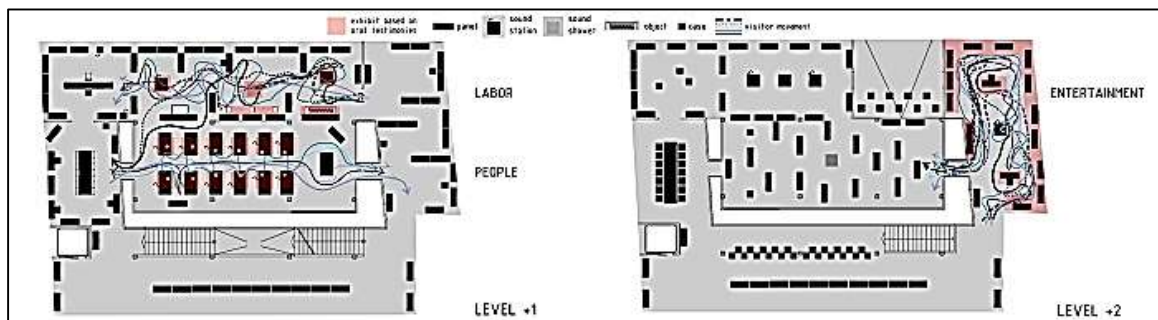

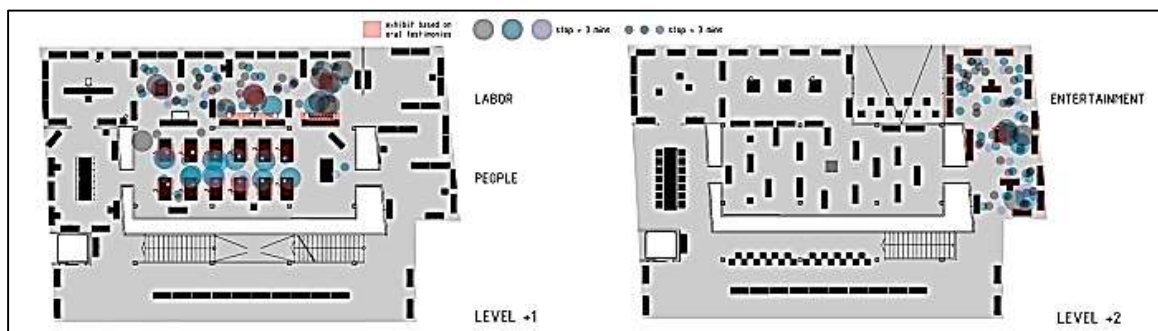**Diagram 3: Visitor movement tracking**

Diagram 4: Timing of visitor stops

Observation was conducted on three, three-hour periods during which I followed and observed the visitors across all the three units under study. Visitors on average spent 14 minutes in "Labour" thematic unit (25' max. / 5' min.), 15 minutes in "People" thematic unit (45' max. / 2' min.) and 9 minutes in "Entertainment" thematic unit (15' max. / 5' min.)

Another seven visitors were closely observed (structured observation) and their movement was recorded in the "Gallery observation record sheet". Visitors were also photographed during their encounter with oral history-based exhibits (static snapshots). Since I was not recording visitor conversations, just visitors' use of space through static snapshots the research was under minimal risk.

Apart from the Greek-speaking visitors, during the fieldwork period I was also given the opportunity to observe non-Greek-speaking visitors and a "hearing impaired" young couple. Both of these visitor categories were carefully examined and the results were discussed separately.

As far as the questionnaires are concerned, 32 were finally filled out. Table 1, summarizes all questionnaire findings as far as thematic unit "Labour" is concerned. Each participant was given a "Participant information sheet" before being given the questionnaire and was also given the opportunity to ask possible questions before, during and after the procedure of filling out. At the end of the questionnaire the participant signed an attached consent form. The questionnaires were only given out to Greek-speakers, which at the time seemed legitimate, since non-Greek- speakers would not have been able to answer to all of these questions that concerned the sound exhibits.

Non-Greek-speakers were observed during their visit. For the same reason the "hearing impaired" couple was also only observed and not given a questionnaire to fill out. At the moment I am afraid that observation without interviews or questionnaires was an unsuitable approach for these audiences, since I realized that I have deprived them of the chance to express their valuable opinions on the sound-exhibits.

In total five interviews were conducted during the research period. An interview questionnaire was prepared in advance and during the interview was adjusted according to each interviewee's responses. Each interviewee was given a "Participant information sheet" before the start of the interview and was also given the opportunity to ask possible questions before, during and after the interview. After the end of the interview the interviewee signed a consent form. As far as the target audience of the interviews was concerned, my aim was to try to approach locals and visitors, both men and women. As I discovered, women were more willing to be interviewed, and due to lack of visiting-the-city visitors, also local visitors were more easily to access. Finally I managed to conduct five interviews of which: two were Volos residents (a woman and a man), two

were students that live in the city for the last five years but come from other cities (a woman and a man) and one was tourist from Austria (a woman).

Data from questionnaires		
Visitor interactions with gallery	No	%
Exhibit that first attracted your attention in "Labour" thematic unit	**22 / 32**	**69**
Roasted chick pea machine	6	27
typographic elements	2	9
photos of industry workers	2	9
info about Matsaggos factory	7	32
other (child labor, women labor etc)	5	23
Did you pay attention to the sound-shower oral histories?	**29 / 32**	**91**
stand and listen	12	41
walk around and listen	15	52
both	2	7
Did you listen to the sound-station oral histories?	**26 / 32**	**81**
stand and listen	12	46
sit and listen	14	54
Any further suggestions?	**8 / 32**	**25**
Translation in English	4	50
More digital exhibits	1	13
The sound of the sound-shower is too low	1	13
More exhibits (tools, other subjects etc)	2	25

Table 1: Data from questionnaires (part of the original Table).

All the fieldwork was conducted under minimal risk and was covered by the University of Leicester's ethics blanket cover. The data that resulted from the research in the form of field-notes were analysed using mapping methods for visitor tracking (Tzortzi 2014; Hillier & Tzortzi 2006), data organization and interpretation. Furthermore, additional literature research was carried out in order to support the unexpected findings that came up during the data analysis.

General findings on visitor circulation routes in the "Labour" thematic unit

Visitor movement and circulation patterns are not influenced by all kinds of exhibits. And still, when they are, they are influenced in various ways depending on several different reasons. In particular, as far as oral history-based exhibits are concerned, the kind of exhibit (audio reproduced from headphones, sound-shower, graphic, written quotes, videos etc.) is directly interrelated to both the exhibition design and the narration, and thus the same kind of oral history-based exhibit may influence visitor movement in different ways within different exhibition set-ups. In this part of the article three key issues will be reported but only the first will be analysed.

First, the effects of oral history-based exhibits on visitor movement routes were studied. Visitor movement might be affected in terms of direction choices but also in terms of stops. Both number of stops and their duration, define visit duration, which can be depicted in the additional movement and stop diagrams. So, secondly, the analysis focused on the effects of oral history-based exhibits on visit duration. The third key issue that came up from the research was that for some audiences there are no effects on their movement, since the oral history-based exhibits cannot be experienced. In particular, sound exhibits are inaccessible to visitors with "hearing impairments" (Mellemsether 2010) and non-Greek-speaking audiences.

In some cases, what the questionnaires showed did not agree with the findings of the structured observation of visitor behaviour. The fact that observation and questionnaire results are divergent is possibly due to the fact that the questioned participants were aware of the kind of exhibits the present research was focused on, so they "exaggerated" a little on their responses as far as the use of sound-stations is concerned, and the truth possibly lies somewhere in between.

The effects on visitor movement

In order to try to identify whether oral history-based exhibits can affect visitor movement within the museum, two questions had to be answered. Do oral history-based exhibits act as attractors of interest for visitors in such a way that they affect or formulate visitor movement? And if so, in which cases does this happen? The "attracting power" of an exhibit was introduced in 1928 by Robinson, as "the power of an exhibit to attract viewers, measured by what proportion of visitors stopped to look" (Hooper-Greenhill 2006: 365). In order to decide whether oral history-based exhibits can act as "attractors" that affect visitor movement, several viewpoints had to be taken into account. According to Bitgood (2006: 464), "with respect to visitor circulation, the interaction perspective assumes that visitor movement patterns through museums are influenced by both what the visitor brings to the museum (prior knowledge, interests, 'agenda') and the design of the museum (exhibit elements, architecture, open space)."

While studying visitor movement, a primary finding was apparent: movement deviations, which can be considered as an indicator of points of attraction in an exhibition. In the case of the thematic unit "Labour" (Image 1), a movement deviation was taken into consideration in relation to its proximity to a certain oral history-based exhibit each time, while in the "People" (Image 2) and "Entertainment" units (Image 3), where all the exhibits are oral history-based, the ratio was affected by the number of oral history-based exhibits. What became obvious through the present research was that distinctive visiting patterns occurred in each thematic unit and exhibits based on oral testimonies were central to their formation.

**Image 1. Snapshot from visitors in thematic unit "Labour"
in proximity to exhibits based on oral testimonies. (E. Boumpari archive)**

**Image 2. Snapshot from visitors in thematic unit "People"
in proximity to exhibits based on oral testimonies. (E. Boumpari archive)**

**Image 3. Snapshot from visitors in thematic unit "Entertainment"
in proximity to exhibits based on oral testimonies. (E. Boumpari archive)**

Let's have a closer look into the "Labour" thematic unit, which is mixed-media-based. Enlarged photographs and accompanying texts are combined with physical objects, sound-stations and a sound-shower, so the focus of the visitor can be divided among material, visual and oral information. The aim in this unit was to identify in which ways the oral history-based exhibits, always in respect to Bitgood's (2006) "interaction approach", which assumes that visitor movement is influenced by both visitor and museum factors, affected visitor movement.

In general, visitor movement seems to be highly influenced by oral history-based exhibits in the thematic unit "Labour", as the visitor movement track diagram depicts. In Diagram 5 different visitor movement patterns overlap in certain spaces. These spaces in most cases coincide with the existence of oral history-based exhibits. At first glance, it seems that most visitors are close to following the proposed route (Diagram 6), which equally includes all exhibits but is intended to highlight oral history-based exhibits. A more thorough look reveals that visitors tend to move in the centre of the space, as Bitgood's (2006) "short-cut" factor principle advocates. This means that in general, visitors try to take the fewer steps in order to decrease the cost of their circulation within the museum. As a result, they tend to move in the centre of spaces glancing at the periphery of the exhibition. Usually the most "economic" movement is moving on a mental straight line from entrance towards exit, which is also called "inertia" (Bitgood 1995). This tendency does not exclude deviations from the central path, but in order to deviate, visitors will have to be "attracted" by an exhibit that will "worth" the deviation. During the observation some visitors seemed to try to stay on the central circulation path (Diagram 5). But, most times the exhibits kept taking the visitors off course as it is shown on visitor movement diagram. Visitors seemed to go on and off their intended straight route, as they were attracted by another exhibit every time.
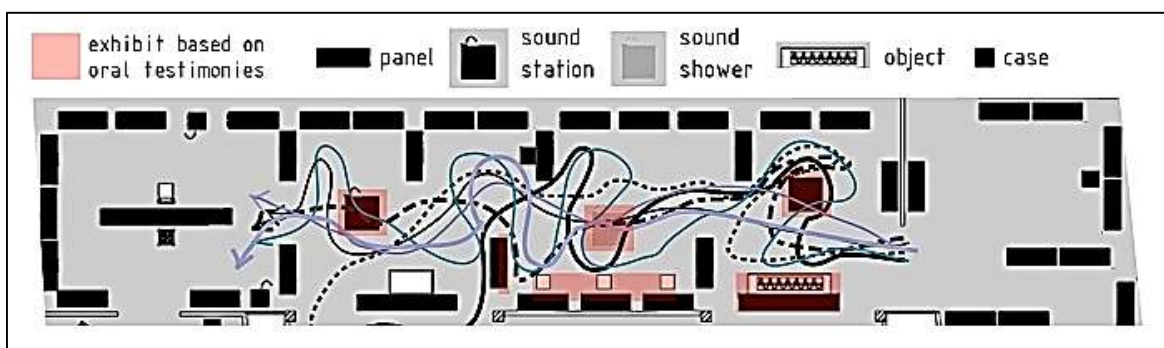

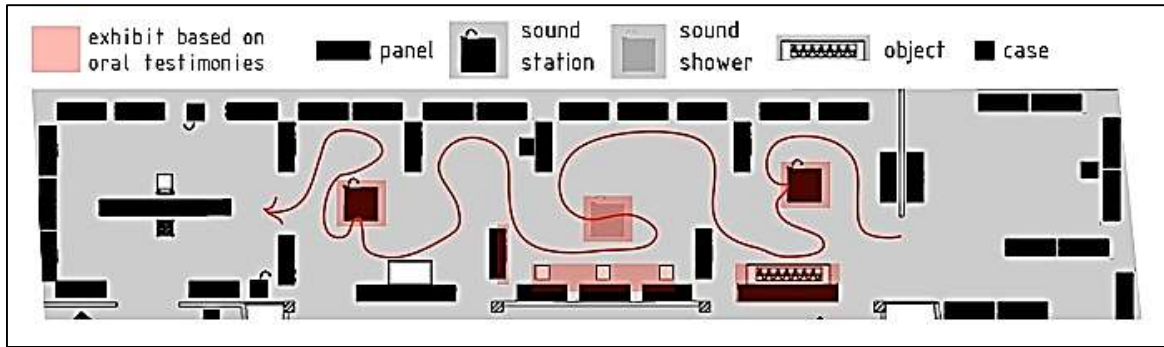**Diagram 5. Visitor movement-tracking diagram in thematic unit "Labour".**

Diagram 6. Proposed visitor route within thematic unit "Labour".

The methodological tool of direction changes (Tzortzi 2007) of visitor movement was taken into consideration, in order to try to identify the "attractor" points of the "Labour" thematic unit which drew visitors from one point to another. From in situ observation (Diagram 7), it was made clear that the individual visitor movement stops in relation to the change of direction towards an oral history-based exhibit revealed the exhibit's strength of attraction. The average rate of visitor direction changes in the "Labour" unit was almost five and a half (5.57), with half of tracked visitors' changes of direction being above average (maximum recorded direction changes: 12). This means that more than six "attractors" caught half the visitors' attention and resulted in their change of direction. In order to justify this result, the stop diagram is introduced (Diagram 8) to present the stops of each visitor in relation to the stop's duration (each visitors' stops are coloured in a single colour e.g. one visitor's stops are marked in cyan). The density of stops proposes possible points of attraction within the unit. So, the combination of changes of visitor movement direction and visitor stops reveals the points of attraction within the "Labour" thematic unit. From a general point of view, oral history-based exhibits seem to attract visitors, since the patterns overlap in the oral history-based exhibit areas. As can be seen in Diagram 8, most visitors, instead of walking straight, following the circulation pattern of "inertia", made some deviations and stops on several oral history-based exhibit spots. As Tzortzi introduced in her research in 2007, a high rate of direction changes and visitors' own path intersections indicate an 'active' visitor-exhibit engagement.
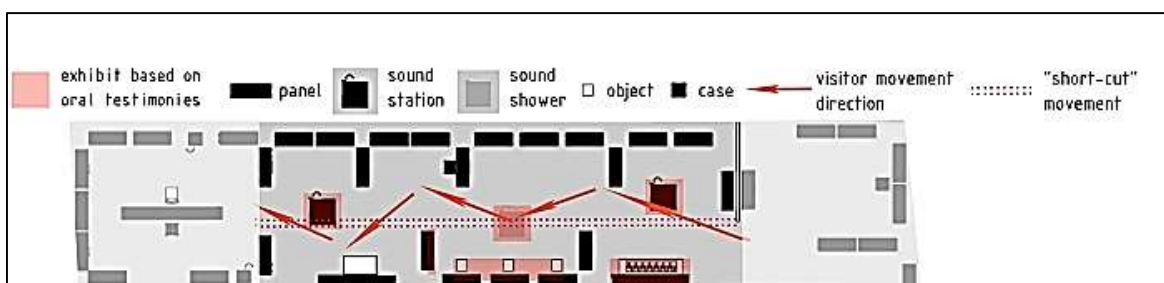

Diagram 7. Visitor movement tracks: Direction changes of single visitor movement.
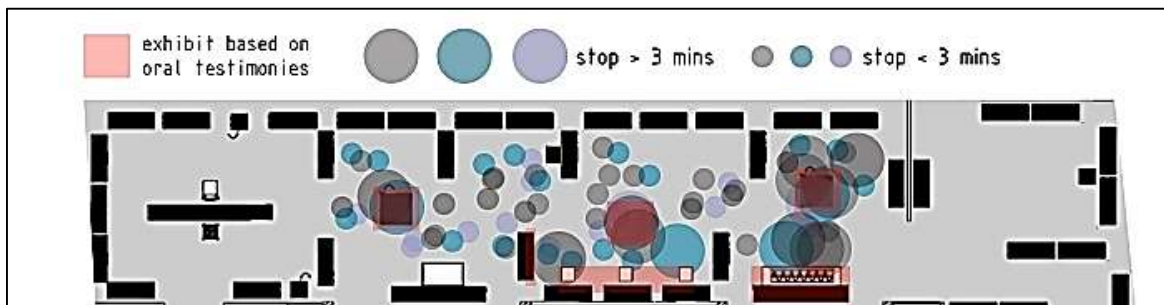
Diagram 8. Timed stops

This assumption was also confirmed from the questionnaire replies. As stated, 20 out of 22 visitors were attracted by an oral history-based exhibit or an oral history-related theme as soon as they entered the "Labour" thematic unit. For example, almost half the visitors entering this thematic unit, first moved towards the chickpea separator (Image 4). In situ observation revealed that these visitors were firstly attracted by the exhibit's size and irregular look. Questionnaires revealed that 27% of the visitors entering this same thematic unit remembered that they were firstly attracted by the machine that separated chickpeas. As many commented, they had never seen something similar before. As soon as they looked at the accompanying panels they were also engaged by the graphic representation of the chickpea separation procedure, the images of the machine in its original place, and of images of a traveling salesman selling roasted nuts with his selling cart. One interviewee commented:

> I noticed the chickpea separator as soon as I entered the room. It was
> interesting because I wanted to see how it worked and I started to try
> to understand how the bigger chickpeas fall etc.

So, at first the visitor approached the exhibit due to its appearance, but then the accompanying material engaged her and helped her understand the procedure and reflect upon it. As far as object meanings are concerned, Nakou (2005: 2) argues that,
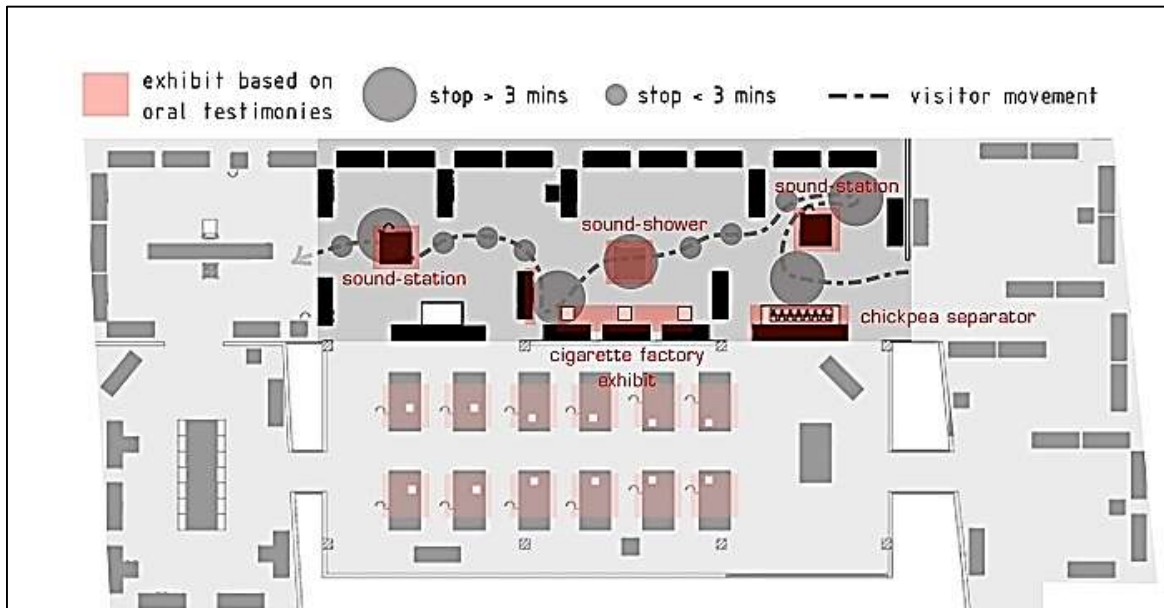
> the interrelation of oral history with objects, especially within the
> museum space, can serve both as content and as a two-way process,
> which both contextualizes objects and provokes new thoughts and
> ongoing memories.

**Image 4. Engaging with the chickpea separator in the thematic unit "Labour".
(E. Boumpari archive)**

As far as sound stations in the thematic unit "Labour" are concerned, these exhibits seemed to attract and engage almost half the visitors (Diagram 9).

Diagram 9. Diagram of thematic unit "Labour"
indicating the movement of a single visitor and the stops during the movement
in relation to the exhibits that are based on oral testimonies.

In situ observation revealed that after the chickpea separator, visitors moved towards the nearby sound-station but only half of them stopped to listen to it. On the contrary, according to the questionnaires eight out of ten visitors used at least one of the sound-stations, half of which sat down to listen. One visitor commented about the sound-station: "The fact that there was something I could leave my stuff on or lean on for a while, it was more comfortable." Visitors seem to feel more comfortable to use the sound-stations due to the fact that next to every sound-station there are also some sitting cubes, which make the particular exhibits more inviting. According to Achiam, May and Marandino (2014: 475),

> the way an exhibit attracts and holds a visitor's attention due to its
> characteristics (physical, geometric or symbolic) in combination with
> the visitor's ability of perception results in certain interactions or
> constraints.

This visitor-friendly situation is called affordance. In the case of sound stations it is implied by the sitting cubes nearby, which invite visitors to feel more comfortable and use them.

Sound-stations seemed to be inviting for visitors, but also to augment visitors' experiences. This is possibly a matter of design, as Beghetto (2014:1) points out "a well-designed exhibition creates an immersive experience for visitors –engaging the

senses, stimulating the intellect, and freeing the imagination". In fact, the sound stations not only attracted a large amount of visitors, they engaged some of them in such a level that they were immersed into the content. Characteristically one interviewee commented:

> You listen and you immerse totally. I think that I would have liked it (the exhibition) more if it had been more like this (if there were more sound exhibits to augment the visit). The sound and these voices, they touch you and they can also be like a background … and for this reason I think I wanted more. They (the sound-stations) were very helpful in the beginning.

According to Nakou (2005: 3), "the environment in which we listen to oral narratives will have an effect on what we feel, think and understand", so if the environment is inviting the effect will possibly be bigger. This immersive environment is also experienced when a visitor moves nearby a sound-shower.

As far as the sound-shower in thematic unit "Labour" is concerned, it seems to highly affect visitor movement as both the interviews and in situ observation (Diagram 9) revealed. The sound-shower caused visitor stops at the spot or slow movement around the sound-shower hearable area. Nine out of ten questioned visitors had paid attention to the sound-shower oral testimonies; with 17 (out of 29) of them combining audio and visual input while wandering within the nearby area where the sound-shower was still hearable, while the rest 12 visitors stood still, under it, in order to listen. To quote an interviewee whose movement was highly affected by the sound-shower: "Yes, it (the effect on movement) was so obvious that it was funny! I was moving on the verge of hearing and not hearing." This example of visitor movement within the "Labour" thematic unit unveiled the dynamics of oral history-based exhibits such as sound-showers, which have the ability of engaging visitors into moving close to them in order to be able to listen while observing the panels and other exhibits. These exhibits are augmenting visitors' experience by combining listening and viewing and thus create memorable experiences.

More specifically, seven (32%) of those visitors who remembered what attracted their attention as soon as they entered the "Labour" thematic unit mentioned the thematic sub-unit presenting the Matsagos tobacco industry, which was presented in the middle of the "Labour" exhibition space. The combination of large photos of the workers along with physical exhibits (the worker's wooden chairs) created a memorable image of that subject. The addition of the audio fragments of previous workers, reproduced by the sound-shower exactly above that area, accentuates the strength of that image.

Conclusions

The way an oral history-based exhibit may or may not influence visitor movement within an exhibition depends on the exhibition design and museum narration, but also relates to each visitor's interests, knowledge etc. Visitor apparent deviations of movement in relation to oral history-based exhibits are highly linked to a multifactorial environment in which the characteristics of each single oral history-based exhibit are vital. As a result, the effect of oral history-based exhibits on visitor movement reveals certain visiting patterns in each unit. In "Labour," while most visitors tend to move in the centre of exhibition areas they seem to deviate, since they are attracted by oral history-based exhibits. Attractor points are revealed by the number of stops around oral history-based exhibits and direction changes of movement towards these exhibits. While entering the unit, most visitors were first attracted by oral history-based exhibits. As far as sound exhibits are concerned, sound stations seem to be used by most visitors due to their design, since the affordance of the sitting cubes creates an inviting environment, while the sound creates an immersive environment. Sound-showers on the other hand have high effect on visitor movement, because they engage visitors and make them either stop and listen or walk around within hearing range. Thus, the combination of listening and viewing simultaneously results in the creation of memorable experiences.

Apart from the attracting power of oral history-based exhibits that formed visitors' patterns, the "holding power"[7] of these exhibits affected the duration of visits. Most long lasting stops were made near oral history-based exhibits. As far as the sound stations are concerned, the visitors that stopped to listen were generally interested in oral history-based exhibits and, thus, invested time to augment their experience through listening. An important assumption, as far as oral history-based exhibit holding-power is concerned, is their placement in relation to the duration of visit.

Some issues that have risen within this article have not been analysed but can provoke future discussion. For example, the matter of the physical or lingual restraint of certain audiences to use sound exhibits, which constitute a basic pylon in this particular museum, has not been discussed and is fundamental to the Museum's need to promote social equality. More specifically, audiences with hearing impairments were totally unable to access the content of sound exhibits, both sound-stations and sound-showers. Visitors with a lower level of hearing impairments had difficulty in listening to the oral stories reproduced by the sound-shower and for that reason they kept overseeing it. The language barrier of non-Greek-speakers created the same restraint to access the Greek content of sound-based, oral history-based exhibits.

To conclude, oral history-based exhibits can act as attractors of interest, affect visitor movement within the exhibition, and prolong the duration of their visit. It is very

important to take into consideration the different needs of multiple audiences and try to eliminate the possible barriers that might exist to content access, otherwise these exhibits affect only a part of the visitors.

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Notes

[1] In USA, Allan Nevins at the University of Columbia USA decided to record memories "great men" (Chew 2002). In England, George Ewart Evans, pioneered in collecting memories of life and work in Suffolk villages, and his work was published online in 1956 (East Midlands Oral History Archive).

[2] An exhibition that was launched at Dundee Museum, Scotland in the summer of 1981 was based on the interviews Veronica Hartwich conducted as part of her research on a public house and a grocer's shop. In the resulting display no taped interviews were incorporated, but it was largely "constructed from the oral evidence of local people" (Schweitzer 1983:7).

[3] As was published in Oral History (Spring 1983:7): "Stephen Harrison, Keeper of Folk Life has sent an account of oral history material in the (Castle museum of York) museum. He mentions that as early as the 1950's in a barn setting reconstructed inside the museum a loop-tape played examples of Yorkshire dialect on farming themes. He thinks that this was the first use of the spoken word as part of a display in any folk museum in Britain."

[4] Oral history is a part of intangible heritage according to its definition (UNESCO official website): "Cultural heritage does not end at monuments and collections of objects. It also includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts."

[5] This principle suggests that visitor movement is a result of the interrelation of visitor benefits (satisfying curiosity, learning etc.) and costs (time and effort consumption) (Bitgood 2006). Bitgood's basic assumptions of the general value principle as applied to visitor circulation are: a) the choice of viewing each exhibit is depended on the "value", b) costs and benefits are subjective and do not have to be actual, c) few exhibits have the power to provoke physical visitor approach. Most exhibits are just viewed because it's effortless, since they are placed in the visitor circulation pathway, d) the exhibit attractiveness needs to overplay cost (time, effort) by far in order to guarantee focused attention, e) the value of the exhibit experience is not static, it is interrelated with constantly readjusting benefits and costs. The value principle is based on costs and benefits, and benefits remain stable since visitors cannot change the quality of exhibits.

[6] The checklist proposes seven different criteria groups. The criteria that are relevant to the present research and were taken into consideration after visitor observation are: a) Understanding the exhibition space: giving the visitor the opportunity to create a mental visit plan as soon as he/she enters an exhibition space (open layout and visual cues for other sections are helpful). b) Checking the visitor circulation area: in case the passages are narrow, or viewing and circulation zones overlap, circulation will be problematic and some exhibits will not be seen from the right distance (viewing distance is relevant to exhibit size and complexity). c) Checking the visitor circulation continuity: there should be balanced distance between exhibit elements but also enough closeness so that their connectedness and continuity would be preserved. The most interesting elements should not be placed on the main circulation path in order to support multiple routes. d) Checking visitors' time limitations: "Depending on the type of exhibit element and visitor's interest, the time spent viewing an exhibit element may range between 10 seconds and 6 minutes" (Guler 2015: 68). Visitors get tired after 30-45 minutes "due to museum-fatigue and object satiation" (Bitgood 2010: 10).

[7] The length of time spent looking at an exhibit reveals its "holding power" (Hooper-Greenhill 2006:366). During the research, "holding power" was used as a tool in order to identify which exhibits were more beneficial for the visitors. In other words, we examined which oral history-based exhibits were the most attractive and what effects they had on visit duration.