<u>MENEZES, M.;</u> VEIGA, M. R.; SANTOS, A. R. – Oral testimony of artisans as a source of knowledge for the safeguard of historical renders. Proceedings II International Conference on Oral Tradition: Orality and Cultural Heritage. Évora: 8- 10 de november 2012, pp. 117-127 (Disponível em: http://dnn.cm-evora.pt/oralities/Portals/0/livro\_oralidades\_ENG.pdf)

## ORAL TESTIMONY OF ARTISANS AS A SOURCE OF KNOWLEDGE FOR THE SAFEGUARD OF HISTORICAL RENDERS

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#### Abstract

The historical renders are one of the elements for the safeguard of heritage, contributing to the continuation and enhancement of the environments. Knowledge of the techniques, materials and tools used is crucial for architectural heritage conservation. The artisans'oral testimony helps to broaden the technical/scientific knowledge about these renders. It's necessary to record, describe, analyze and systematize this know-how while the sources (material/personal) that hold it still exist. Under the Project LIMECONTECH (Conservation of historical renders and durability, compatible materials and techniques-FCT), underway in LNEC, one of the goals concerns the study of techniques, materials and tools related to lime renders in Portugal. It discusses the role held by the collection of oral testimonies in the preservation of historical renders. We present and comment the results of the collected oral testimonies, in order to reveal the importance of technical craft knowledge for heritage safeguard.

#### O TESTEMUNHO ORAL DOS ARTESÃOS COMO FONTE DE CONHECIMENTO PARA A SALVAGUARDA DOS REVESTIMENTOS HISTÓRICOS

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#### Resumo

Os revestimentos históricos são um dos elementos do património a salvaguardar, pois contribuem para a continuidade e a valorização dos contextos. Aprofundar o conhecimento sobre as técnicas, materiais e ferramentas utilizados é fundamental para a conservação do património arquitetónico. O testemunho dos artesãos permite ampliar o conhecimento técnicocientífico a este respeito. Importa registar, descrever, analisar e sistematizar este saber-fazer artesanal enquanto ainda existem as fontes (materiais/pessoais). No Projeto LIMECONTECH (Conservation and durability of historical renders, compatible techniques and materials-FCT), em curso no LNEC, cujo um dos objetivos é estudar as técnicas, materiais e ferramentas dos revestimentos de cal em Portugal, discute-se sobre o papel que os testemunhos orais detêm na salvaguarda dos revestimentos. Apresentam-se e comentam-se os

relatos orais recolhidos, de modo a relevar a importância do saber-técnico artesanal para a salvaguarda do património.

#### 1. Introduction

In architectural heritage conservation is crucial a proper adoption of performance criteria, such as the appropriate use of materials and techniques. Looking at specific technologies and materials used in historic buildings, it's important to respect criteria of reversibility and compatibility with pre-existing materials before acting, among other aspects (Veiga et al, 2004). But, to meet these criteria, it's primarily important to know in detail the characteristics of the construction elements and techniques used in the composition of buildings. On the other hand, in a systematic and scientific point of view, a pair of recent advances (Tavares, 2009; Margalha, 1998.2009), much remains to learn about the materials and traditional technologies.

The LIMECONTECH Project (Conservation and durability of historical renders, compatible techniques and materials - FCT), underway in LNEC, has as one of its aims the study of the techniques, materials and tools related to historic exterior lime renders in Portugal.

Following this goal, one of the aspects that the study was interested was the development of the technical know-how related to traditional techniques of lime. For this, a interdisciplinary perspective between Construction Sciences and Social Sciences was pursued, in particular between engineering perspective and an anthropological approach for the analysis of the built environment.

The study stood on the assumption traditional-technical knowledge is an intangible heritage whose conservation is of urgent interest (cf. Convention for the Safeguarding of the Intangible Cultural Heritage, UNESCO, 2003). This traditional knowledge is also a dimension of knowledge relevant to the conservation of the material itself – in this case, the architectural heritage.

In the field of artificers of traditional crafts related to construction, technical-traditional knowledge transmitted itself through generations and from continuing recreations and interactions with the socio-ecological context in which it manifests itself, with historical and cultural conditions of its manifestation is an element of social memory (Menezes, 1996; Menezes and Tavares, 2011). Recovering the memory elements that allow the reconstruction of the process of collection of materials, preparation and application of mortar, paintings, plasters and limewash, names and functions of tools, among other aspects, became thereby the study objective. Therefore, we adopted a study methodology focused in collecting oral testimonies of the artisans of lime. Using the idea that oral source is constituted as a "source-method-technique" that helps to create "sources" (Alberti, 2004), team members of the LIMECONTECH Project, more directly related to the study of the techniques of mortars, began a campaign of collecting oral testimony related to the technical-know, connected to the arts of building lime, especially in the context of historical exterior renderings.

This task is still on going, so it is not intended here to present conclusive and definitive data, as if the collection process had already ended. Through an exercise of punctual restitution of the voices of traditional-technical experience, the goal is to present and comment on certain aspects that justify an interest in continuing the collection and systematic and scientific study of the evidence related to traditional technical-know. Last but not least, it is our aim to stress the importance of crafted technical-know to safeguard the heritage.

#### 2. Between techniques and knowledge

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As considered by Chamoux (2010: 140), technical know-how is known as "the body of knowledge and conscious or unconscious human knowledge that allow the implementation of a technique. The know-how can be gestural and intellectual, collective and individual, depending also of the relations between men and the relationship between the laws of matter." Still following the reasoning of the author, the study of technical know-how is essential for the study of non-industrial technologies, broadly seen as simpler. If we just take into account means of work, it can be considered that they gradually became more complex, going from the simplest to the most elaborate. However, according to the author, it is not correct to consider that the human and more individualized tasks are necessarily simpler techniques. With the modern technical progress and industrial work, a process of simplification or impoverishment of the role of executors of tasks occurred in the "name of a disqualification of direct workers" (Chamoux, 2010: 141). Indeed, what is at issue here is that the nonindustrialized techniques should not be considered as being simpler. The logical reasoning of the author allows, for now, to highlight two central aspects in the study of technical knowhow related to traditional arts of lime. On one hand, the process of collection, registration, systematization and analysis of this know-how is time consuming and intensive, but it is - or should be - extensive (which requires more research time. On the other hand and for the case of historical rendering, the referred tendency to "direct disqualifying workers" generated a difficulty in reproducing this knowledge.

The renders based on lime mortars identify a plurality of technical solutions. There are plasters applied with more sophisticated techniques, such as *sgrafitti* simulating stone or brick. There are also simple plain plasters and renders and even the modest limewash. Each of these rendering have peculiarities in the materials used, the techniques of application solutions and aesthetic finishing, but also the level of interaction with the environment and local geography (Menezes and Tavares, 2012). Most of these lime renders are applied in old buildings, some of these buildings of erudite architecture, while others concern to a vernacular architecture.

With the extensive use of cement mortars, mainly from the second half of the twentieth century, the use of lime mortars fell into disuse. In parallel a process of loss of knowledge of old construction techniques occurred, reflecting on a loss of historical elements characterizing the image of many buildings. Thus, among the difficulties that currently exist for the conservation of these renders, we can verify how complicated it can be to find qualified artisans that know correctly the art of lime. On the other hand, techniques for preparing and applying strongly influence the artistic and technical quality and durability of such renders. This situation is further aggravated by the fact that much of this knowledge is in possession of retired and elderly artisans. A set of aspects that influence the transmission of artisan knowhow for new generations, along with the proper maintenance of these renders.

The collecting and recording of this information is crucial in the preservation and restoration of the plasters, particularly with regard to the technologies of lime mortars, it is important to register, describe, analyze and systematize this artisanal *know-how*. Hence the importance of the oral testimony of artisans of lime, especially since it can be a contribution to extend the technical and scientific knowledge about the historical mortars based on lime (Menezes and Tavares, 2008, 2012).

#### 3. Study methodology

Interview guide

The collection of testimonies of artisans was based on an interview guide. The script was just a thematic guidance tool for the interviews that were, and should continue to be, collected in a relatively spontaneous way, letting the interviewee to talk casually about his activity. The questions that composed the script were organized on thematic topics, in order to highlight the main aspects on which to gather and detailed information. Almost all members of the team of the LIMECONTECH Project contributed to the definition of script themes.

The topics covered on the interview guide refer to the following aspects (Menezes and Tavares, 2012):

#### • Materials and mortar composition

For the conservation and restoration of old lime renders is important to know better the materials used in the composition of mortars and in the preparation of their (plain or decorated) finishings. It is also important to know the quantities used and the method of preparation of mortars and finishings.

• Locations of extraction and acquisition of materials

To identify the origin of the sites where the materials are extracted is important in order to meet its quality as well as the degree of difficulty in its access.

It is also important to know where the materials are acquired, seeking to identify the degree of difficulty in acquiring them. For example, it's important to identify if there are supply constraints, difficulties related with prices, or if the places of sale are few, and eventually, if the places of sale are distant from the places where the work is being done.

• Tools used in the preparation and application of lime

Many traditional techniques require specific tools, therefore, it is important to identify how the tools are known and their functions, regarding to the preparation of mortars, but also concerning the application, finishings, paintings and limewash.

It is also important to identify where the tools were purchased and if in nowadays it's easy to find them and to buy them. It's also necessary to know if there are contemporary tools that allow performing the same function of the traditional tools.

• Support for application of mortar, finishings, paintings and limewash

It's important to know how the support is prepared before application of mortar, finishings, paintings and limewash in order to identify the techniques and the duration of the times of the preparation.

• Application of mortar, finishings, paints and limewash

To meet and register in detail the application methods of lime is essential, including the types of mortars used in the various layers of renders, since the regularization mortars, to the protection (1<sup>st</sup> layer and 2<sup>nd</sup> layer) mortars, and to decorative finishings.

It is also important to know if the mortar is mixed before being applied, to know the waiting times for application and curing of the mortar, finishings, paintings and limewash, as well the number of layers that are applied, and also the reason for applying more than one layer.

Schedules and times of year when it is made the application of lime

The environmental and weather conditions influence the results of applying lime. In this regard, it is interesting to know the times of the day and year that result as being the best for this activity, seeking to know the reasons that still interfere with the choice of time periods and weather conditions.

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#### Maintenance

In addition to know the techniques of preparation and application of lime, to have information on the frequency with which the renders are usually repainted with a new layer of limewash, whether if it is usual to make repairs (eg., cracks) and who and which technical-artisan specialty usually perform these tasks.

• Technical-artisans specialities involved in the preparation and application of lime

Plastering, whitewashing and stucco workers are some of the handicrafts workers, whose art and effort to ensure the quality of the work were not limited to the choice and combination of materials, and to the knowledge of technical execution. Their art and effort was also often employed in conducting its own work tools. Knowing in detail how each of these technical and artisan specialties are organized to perform its function is important, as it has interest to understand if these functions continue to be performed.

#### • Diffusion of knowledge

As previously mentioned, one of the main problems of conserving ancient renders based on lime is related to the loss of technical artisan knowledge, that in many cases, is held by elderly artisans who are no longer active. Another difficulty in keeping these plasters is related to the negligence when repairs and renovations are made, that often sacrifice layers of oldest rendering replacing them with incompatible materials such as cement mortars, synthetic paints, ceramic tiling etc. Considering this situation, is important to know how was, and how is actually being made the transmission and diffusion of the artisanal technology, especially amongst those who are still at a working age.

#### • Characterization of the interviewee

It is crucial to identify some data characterization of the interviewee, such as name, sex, age, technical expertise, from whom he learned the artisan and the age that he began to develop the craft.

#### Registration of other information

Parallel to the written record and, whenever possible, the recording of oral testimony, the aim was to make a compilation of all written and photographic information of interest to the study (photography of the interview zone, the interviewee artisan, tools and materials used, work performed, etc.).

#### 4. Characterization of the first campaign of gathering information

#### Location and period where the interviews took place

The first campaign of interviews with artisans was carried out in February 2012, in the Alentejo region, district of Beja, more specifically in the city of Beja and parishes of Albernôa, Beringel, Mombeja and Salvada (Fig. 1).

The Alentejo region was selected as one of the places where lime is commonly used, and Beja district was chosen because a member of this project had already initiated studies on this topic in this district (cf. Margalha, 1998, 2009).

#### Recognition of artisans to be interviewed

The identification of artisans and locals for the interviews was conducted by technicians linked to the Municipality of Beja, under the guidance of engineer Goreti Margalha and architect Margarida Duarte.











Fig. 1 – Places where the interviews took place: *a*) city of Beja; *b*) the parish of Albernôa; *c*) the parish of Beringel; *d*) the parish of Monbeja and *e*) the parish of Salvada

#### **Inquiry process**

The interviews, with an average duration of one hour each, were performed *in situ*. Beyond the written record, most of the interviews were recorded and supported by a photographic compilation of all information relevant to the project.

This first campaign allowed knowing and registering a set of information that should be developed further during the next visit.

With exception of interviews performed in the parishes of Beringel and Mombeja, the interviews were followed by visits to the villages or the building site (in the city of Beja) of

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each artisan. Such visits allowed visual contact with buildings in which lime was being applied and knowledge about the specificities of these buildings (texture, colour, brightness, pathology, etc.). Besides, it was an opportunity to discuss the particularities and methods of lime application.

#### Characterization of interviewees

We performed nine interviews with artisans of different specialties: 3 artisans in the city of Beja, 3 in the parish of Albernôa and 1 in each of the parishes of Beringel, Mombeja and Salvada.

Of the 9 interviewees, four were males, among whom three were identified as masons and one as a plasterer although he considered that he could perform other tasks.

The remaining 5 interviewees were female. However, one of the interviewees did not recognize herself as an artisan, justifying her activity as part of her cultural background, since she was a child, and as practice of maintenance of their homes that was transmitted by family members. The other four identified themselves as limewashers.

The average age of interviewees is 61 years, ranging between 44-74 years of age. All the interviewees were permanent residents in the visited villages and worked in the parish or in nearby towns.

#### 5. Measures, measurements, materials, tools: narrated knowledge

The technical *know-how* that emerged from the fieldwork focuses on materials and composition of mortar, sites of extraction and acquisition of materials, tools, and methods of preparation and application of lime. The table below reports a summary version of the collected information. It on focuses what was done on the past. Through such reports we can observe that narrated experience was always made by reference to the "before", the "old days" and the "present" (Menezes *et al.* 2012).

Table 1. Collected technical information regarding to the "formerly" art of making

## Materials and the mortar composition Mortar - The limestone and sand were the only materials used in the

- The limestone and sand were the only materials used in the composition of mortars. It was not usual the use of any addition. But along the coast, it was common the use of shells as aggregate, in addition to the sand itself.
- The volumetric dosage used depending on the mason (1 of limestone: 2 to 3 of sand). The majority uses in all layers a volumetric dosage of 1:3, with a granulometry variable between layers of sand.
- When the sand content varied from layer to layer, the following dosages were pursued:
  - First layer (spatterdash) 1 of lime: 2 of sand.
  - Second layer (render) 1 of lime: 2.5 to 3 of sand.
  - The last layer (with at most 2 mm thickness) is performed with lime and fine white sand with a volumetric dosage of 1 of lime: 2.5 to 3 of passed sand.
- It wasn't applied any kind of spatterdash, instead the first layer was applied with a spoon pressing it against the support.
- Each layer dried for about three days before applying the following one.

- The joint mortars were richer in aggregate.
- It was usual the use of "dark lime" for plasters. But some craftsmen preferred the use of white lime for plasters.
- The sand didn't have to be dry, since the quick lime would be slaked together with wet sand (hot lime method).
- The filler was needed to fill in the voids. Generally, it was applied 1 part of filler to four parts of sand.
- The sand was the element that allowed to vary the colour of the mortars.
- The mortars were prepared in a "big hole" done in the ground, where the limestone were watered with water; they were left to "act" until a paste was formed, and subsequently the sand was added.
- The pile of mortar that was formed was designated as "amassado" (*mix*). The mortar was made at the same time it was used.
- The mortar before being applied had to wait a few days (3-5 days).

#### **Finishes**

- For carrying out the limewash, stones of quick lime were used, which were slaked in water inside a pot, for at least one day; in order to have a textured paste instead of a granular one, water was being added to the paste, mixing the hole set constantly. After this process was necessary to let the paste cool down before application.
- The limestone took about two weeks to completely cool down.
- The lime consistency was checked swiping up the finger and making sure if it was visible or not.
- When painting with colours was necessary, powder pigments were applied ochre, almagra (red ochre) and "shoe powder" (gray colour) that were mixed with water, and then were added to the lime water.
- The colour was used in panelling, not only for a decorative effect, but also to ward off the bugs, due to a higher heat absorption
- Lamb tallow was used as an additive "melted" in lime, allowing to avoid the development of fungus (probably due to its function as a water repellent). Three applications were made (or more) with this lime with sebum.

#### Locals for extraction and acquisition of materials

### Places of origin

- The limestones came from the stone quarry of Trigaches (very white lime, widely used in limewash) and was sold in stone through the "hills".
- Later, limestone from Vera Cruz started to be used (darker lime, therefore more used in renders), which was calcined in a wood oven and bagged.
- The applied sands were from riverside areas near villages.
- The pigments were acquired in drugstores.

#### Tools used in the preparation and application of lime

# For the preparation of mortar

- The preparation of mortars was carried out in a "hole in the ground" where it was placed the lime and the sand.
- For the application of renders it was only required to use a trowel. The plaster was finished with the back of a trowel (when the mortar was "thicker") and a grout float for the application of finer sands.

# For the preparation of limewash

- To prepare the lime a tank (or pot) was used where lime was mixed with water. To limewash a palm broom was used. It was a round brush, tied up with a wire in the middle in order to achieve a more homogeneous application.
- The elderly say that the lime was applied with cloths.

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Support		
Characteristics of the support	<ul> <li>The walls of visited villages were mostly of rammed earth.</li> <li>There are rammed earth supports where it is only applied a splash in order to consolidate the soils, before taking the direct limewash (without renders)</li> </ul>	
	- For the application of a new mortar it is first necessary to take off ("escarnar") the old mortar.	
	- Before applying the new render, the support should be brushed (to remove loose material) and then washed.	
	- Application of the first layer (spatterdash) in order to cover all the wall imperfections.	
	- In the cases where the plaster has already a synthetic paint, this has to be completely removed in order to be possible to limewash the wall again.	
	- The application of limewashing can be done directly on the limewashing previously.	
	- Before the application of the limewash, the smaller "holes" that exist in the wall have to be fulfilled with rags or paper mixed up with lime.	
	- When the surface presents biological colonization it is necessary to wash it with bleach before limewash it again.	
Application of mortar, finishes, paints and whitewashes		
Mortars	- Three layers of mortars (spatterdash, renders and finishing) are always applied; between layers, it is necessary to wait at least 3 days before applying the following layer.	
Limewash	- Lime can only be applied when it has cooled down completely.	
	- The consistency of lime depends from artisans to artisans. Some people prefer a "thicker" lime (more consistent) (best to adhere to the wall), others prefer a "thinner" lime (so that the cracking is minimized).	
	- To check the consistency, normally the "finger method" was used: when "the finger was covered" it meant that the lime was too thick; when "the finger was visible" it meant that the lime was good to be applied.	
	- Usually are used 2 or 3 layers, but the next layer is only applied when the previous layer is completely dry ( $\approx$ 24 hours).	
	- The layers are applied in different ways: 1st layer from left to right and 2nd layer from bottom to top.	
	- During the application of lime, water will be added in order to prevent the lime to get thicker, but also to prevent the risk of cracking.	
	- When lamb tallow was used, this was used in all layers except the last one.	
Other specifici	Other specificities related to the technical-traditional know	
Schedules and application periods	The application of mortars is preferably carried out in the spring because the plaster tends to crack with a very hot weather; with high humidity the mortars applied between layers may not dry completely.	
	The limewash should be performed in dry periods, so that the lime hardens and is not washed by rain, so it's usually applied from May until the end of August, during periods of early morning to avoid the excessive heat.	

Maintenance	The walls need to be limewashed every year because the lime begins to lose adherence and because of the arising of biological colonization. This activity is done by limewasher.
	Sometimes there is a need of small repairs in the plaster; these repairs are also made by limewasher before the limewash.
	The plaster does not require any kind of maintenance.
Envolved specialities	The specialties of the handicrafts workers are especially two: the masters and the masons, usually male, who perform the work on a larger scale (masonry, renders, etc.); and the limewasher and painters are usually female that, apart from the works of paintings, conduct spot repairs on the supports. There is a third category, the plasterers, who applied the finishing of renders and the stuccos
Diffusion	The knowledge was transmitted from parents to children, from the older to the younger ones.

#### 6. About the know-how of the lime arts: "having the opinion"

"The narrator tells what he draws from experience - his own or the one told by others. And, back, he renders into experience for those who hear his story".

(Walter Benjamin, 1986)

Who knows how to do it "has opinion"!

"To have opinion" was an expression repeatedly used by majority of interviewed artisans. Who "has an opinion" domains lime art and experience:

"The most experienced mason stayed on the outside, because the wall had to be pretty. That mason already "had opinion". The masons with less experience stayed on the inside" (Master Joaquim, 78 years, mason and retired) (Fig. 2).



Fig. 2 – Master Joaquim

"To have opinion" is not something that is achieved quickly, requiring learning over the years since childhood. Girls learned with their mothers and boys learned more often with local masters who could or not to be close relatives. It could be older artisans that lived or worked on the village where they lived:

"I was born into this and I continue with it. It has been my life. I have fun with it and I started making a living with it" (D. Filomena, limewasher, 44 years) (Fig. 3).

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"I learned with life to make lime (...) my mother used to make lime" (D. Barbara, limewasher, 52 years) (Fig. 4).

The technical expertise emerges, little by little, through the reference to the measurements, materials, tools, drawings, knowledge and ways to express through speech and gestures that report experience, bringing us back again to Walter Benjamin (1986) said:

"In true narrative, the hand intervenes decisively with gestures learned on the job that sustain the hundred ways that flow of what is said. The old coordination of soul, of the look and the hand, transpires in the words of Valery, it is typical of the craftsman, and it is always found wherever the art of narrating is practiced. We can go further and ask whether the relationship between the narrator and his subject - human life - would not be itself a craft relationship. Would it not be worth it to work the raw material of experience - yours and the one from others - turning it into a solid, useful and unique product?"

Men's are more concerned with the mortars application and women center their attention on painting and limewash works. Nevertheless, masons reveal a more diversified knowledge of tasks and specialities around building construction. Knowledge on the broad field of the arts of building construction usually gives them the master's condition – "Master Inácio", "Master Joaquim" transmitters of knowledge by excellence.



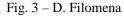




Fig. 4 – D. Bárbara

The women that make the limewashers emphasise perfection, hygiene and the importance of limewash for hygiene maintenance and aesthetics of the buildings, many of which are their own homes, or of relatives, or from the village where they grew up or went to live once married:

"I like the things to be well done. I like doing it on my way" (D. Bárbara, limewashers, 52 years).

"If it's necessary men can do it, but they won't do it with the perfection that I make it" (D. Rosinda, limewashers, 47 years) (Fig. 5).

"The whitewash is a work of women, they do it better they do it with more detail; men are to sweep" (D. Filomena).

"The lime when is good "eats" the green; however, because the quality of the lime is not as good as before, we have to clean the wall first, using bleach, which also "eats" lime. We use a brush as if it was a broo. If it is needed we give 2 or 3 layers, it depends, if the wall is in good condition, one layer is enough" (D. Filomena).

"I apply lime because is cheaper than paints, but elderly women say that lime is disinfectant and maintains the walls. But younger people apply paints because they last longer than lime. (...) However, paints leave a bad smell when they are applied, they're not like lime that when it's applied leaves a god smell. It is more disinfectant" (D. Bárbara).

"To have the opinion" is not a scientific recipe. It comes from experience, reminding us of the popular expression "to be made by look" ("feito a olho")

"It has a condiment that is the finger: we cover the finger with lime in order to feel if it's too thick or if it's in the right point to be used" (Sr. Paixão, limewasher 52 years) (Fig. 6).

"At that time, the mortars were made by look" ("feito a olho") (Master Joaquim).



Fig. 5 – D. Rosinda

But the art becomes lost. On the one hand, it lacks someone who can transmit the knowledge. On the other hand, there is a tendency to apply new materials: cement, synthetic paints. But we should not lose hope:

"Today's lime is no longer good, because the quicklime stones "are already burnt" (...). Today's lime doesn't hold up in the wall. We have to use a product in order to fix it. Burned lime has a poor quality. In old days, panelling were made with yellow lime, using ochre or shoe powder. (...) Pigments for the panelling were mixed on lime (yellow, grey, pink). Presently, people buy paints and mix them..." (Sr. Paixão).

Today's lime is no longer good: you erase the wall and it looks like cement. Today's lime looks like cement. (...) If lime mortars/plasters had a little quantity of cement it would be better" (Mr. Manuel, mason, in work since age 18, learned with a master in France) (Fig. 7).

"Currently cement is more applied. Lime is less applied because it doesn't haves the security that had before. It fells. (...) Usually I don't apply paints, or pigments, the yellow bars in my house were painted with paint. Houses on my village that have coloured bars, normally they use plastic paint. (...) But, slowly, this is returning as it was before..." (D. Filomena).

Render that is made today is nothing (...). The younger ones that learned (with Master Joaquim) no longer use lime. It's almost always cement even if it's to apply in old houses, they use cement. Especially because cement lasts longer. If someone offered lime and cement to work today, I would prefer to continue working with the lime: (...)

<u>MENEZES, M.;</u> VEIGA, M. R.; SANTOS, A. R. – Oral testimony of artisans as a source of knowledge for the safeguard of historical renders. Proceedings II International Conference on Oral Tradition: Orality and Cultural Heritage. Évora: 8- 10 de november 2012, pp. 117-127 (Disponível em: http://dnn.cm-evora.pt/oralities/Portals/0/livro\_oralidades\_ENG.pdf)

because it is smoother, cement is always more rough. (...) But, we will return and do it as it was done in the past" (Master Joaquim).

#### 7. Final Notes: recover knowledge to conserve

The idea that "all beginnings contain an element of memory" (Connerton, 1993:7) is particularly interesting to introduce the importance of recovery of measurements, materials, tools and knowledge through gestures and words. Since, ultimately, this is a way of granting meaning, value and power of action to lived experience.







Fig. 7 – Mr. Manuel

As noted by Bosi (1979), here "the memory is so vivid, so present, that in becomes in desire of repeating the gesture and teach the art to those who listen".

#### 8. Referências Bibliográficas

ALBERTI, Verona

2004. Manual de História Oral. 2.ª ed., FG.: Rio de Janeiro.

BENJAMIN, Walter

1986. O Narrador. Considerações sobre a Obra de Nikolai Leskov. In Magia e Técnica, Arte e Política. Ed. Brasiliense: São Paulo, pp. 197-221.

BOSI, Ecléa

1979. Memória & Sociedade: Lembrança de Velhos. 1.ª Ed. Companhia de Letras: São Paulo.

CHAMOUX, Marie-Noëlle

2010. La transmission des savoir-faire. Un objet pour l'ethonologie des techiniques? Techniques & Culture, 54-55 volume 1, pp. 139-161.

CONNERTON, Paul

1993. Como as Sociedades Recordam. Celta Editora: Oeiras.

MARGALHA, M. Goreti

1998 "O uso da cal nas argamassas no Alentejo": Dissertação apresentada para a obtenção do grau académico de Mestre em Recuperação do Património Arquitetónico e Paisagístico pela Universidade de Évora.

#### MARGALHA, M. Goreti

2009 "Ligantes aéreos minerais. Processo de extinção e o fator tempo na sua qualidade": Dissertação apresentada para a obtenção do grau académico de Doutor em Engenharia Civil pelo Instituto Superior Técnico da Universidade Técnica de Lisboa.

#### MENEZES, Marluci

1996. Património, Memória Social e Saber. Revista Mediterrâneo (Arquitetura em Terra), n.ºs 8-9, Universidade Nova de Lisboa: Lisboa, pp.271-288.

MENEZES, Marluci; TAVARES, Martha L.

2008. Social and Sustainable development of the architectural heritage. Proceedings 1° Historical Mortars Conference - HMC 08, LNEC, Lisboa (vide em: http://conservarcal.lnec.pt/).

MENEZES, M.; TAVARES, Martha L.

2011. O contributo do testemunho oral do artesão na conservação dos revestimentos históricos com base em cal. Atas do Simpósio Património em Construção – Contextos para a sua Preservação, Série RNI: 84, LNEC: Lisboa, pp. 41-48.

MENEZES, M.; TAVARES, Martha L.

2012. Técnicas Tradicionais de Revestimentos Históricos Exteriores - Guião das entrevistas com artífices sobre as técnicas tradicionais de revestimento de cal. Relatório 31/2012 - DED/NESO, LNEC: Lisboa.

MENEZES, M.; VEIGA, M. Rosário; SANTOS, A. Rita

2012. Técnicas Tradicionais de Revestimentos Históricos Exteriores - Relato de entrevistas com artífices sobre as técnicas tradicionais de revestimentos de cal. Relatório 223/2012 - DED/NESO - NRI, LNEC: Lisboa.

TAVARES. Martha L.

2009 "A conservação e o restauro de revestimentos exteriores de edifícios antigos – uma metodologia de estudo e reparação": Dissertação apresentada para a obtenção do grau académico de Doutora em Arquitetura pela Faculdade de Arquitetura da Universidade Técnica de Lisboa.

TAVARES, Martha L.

2011 "A conservação e o restauro de revestimentos por pinturas exteriores de edifícios antigos – uma metodologia de estudo e reparação". Teses e Programas de Investigação, TPI 67, LNEC: Lisboa.

#### **UNESCO**

2003 "Convenção para a Salvaguarda do Património Cultural Imaterial" (trad. portuguesa).

VEIGA, M. Rosário; AGUIAR, José; SANTOS SILVA, A.; CARVALHO, Fernanda

2004. Conservação e renovação de revestimentos de paredes de edifícios antigos. Coleção Edifícios, (CED 9) LNEC: Lisboa.