

# Bell Traditions: between the tangible and the intangible<sup>1</sup>

Ana Patrícia Gonçalves, Andréa Diogo, Joana Duarte e Marisa Santos

Faculdade de Letras da Universidade do Porto

Virtual Exhibition:



Bell Traditions: between the tangible and the intangible. Presentation of the virtual exhibition © Google Arts & Culture.

<http://bit.ly/2qgnTst>

Bell traditions bring together traditional practices of know-how and a striking ethnographic scenario from the point of view of labour regulation and the popular imaginary. For being an integral part of cultural landscape and soundscape of Portugal, it is presented in this paper from an intangible perspective. The artisanal character within the traditional techniques of foundry and manual bell ringing are scarcely preserved as these practices have been losing expression, presenting a high risk of disappearance due to its automation since the 1980s.

This article aims to reflect on the intangibility of the manual bell ringing, the resultant imaginary, means for its dissemination, public awareness and the safeguard of this heritage. In this sense, was developed the virtual exhibition «Bell Traditions: between the tangible and the intangible», in partnership with the Google Arts & Culture.

**Keywords:** Bells; Bell Traditions; Intangible Heritage; Virtual Exhibition.

<sup>1</sup> The present paper results from the project «Bell Traditions», made in the context of the curricular unit Heritage Management (Degree in Art History from FLUP, 2014/2015) oriented by Professor Maria Leonor Botelho.

### **Bell Traditions: between the tangible and the intangible**

The bell is an integral part of the cultural landscape and soundscape of the Western world. The Latin word «SIGNVM» was used, between the 6th and 7th centuries, with the double meaning of symbol and sign, being later referred to as *sino* (bell) in some neo-Latin languages such as Portuguese (Sebastian, 2008: 37). In spite of being a material asset, our investigation presents it under an intangible perspective. In fact, the Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003) along with the Declaration of Yamato (Japanese Agency for Cultural Affairs, 2004) regarded this interdependence between the tangible and the intangible in their integrated approaches to safeguarding Cultural Heritage.

The intangibility of bell traditions can be analyzed in Portugal through an outlook on the bell foundry techniques, often passed from generation to generation (Resende, 2006: 256), and by the manual bell ringing, recalled in this paper. Without disregarding its sacred and apotropaic character, it is important to remember the bell in the common mind as a regulator of customs and popular imagination (Almeida, 1996:343).

### **The art of know how: paths and meanings**

The art of bell foundry is an ancient practice. Despite the scarcity of archaeological remains in Portugal, there are specimens dating from the 10th century (Sebastian, 2008: 35-36).

However, there is evidence of the use of bronze in the foundry bell from the 3rd millennium B.C. in China and during the 2nd millennium B.C. in Egypt. In Europe, the oldest samples come from about 100 B. C. (id.ibidem: 35-36).

The first bells had quadrangular design, which had evolved into the circular shape from the 8th century onwards (Correia, 2005: 17). Alongside with the changes in the implementation modes and material designs would be developed two fundamental models: the bowl-shaped type (not very deep and without a jingle, impacted from the outside); and the deep type (conical shape or in hive-shaped, with a jingle inside) (id.ibidem: 17). These bells could be modeled according to three techniques: horizontal modelling with false bell in wax, practiced mostly in the medieval period; horizontal modelling with false bell in clay, which facilitated the manufacture of bells

of larger dimension; and vertical modeling with the bell in clay, used in Portugal from the 14th century (Sebastian, 2008: 66-71).

Each bell has a characteristic musical note, determined by the geometric configuration and thickness of the bulge, or curve, on which the clapper strikes (Correia, 2005: 34). In order to improve the sound produced, one could project silver or gold coins inside the furnace during the act of foundry, with the blessing of a priest (Sebastian, 2008: 96). According to popular belief, the baptism of the bell gave it its sacred properties. Also, the act of casting is seen as the moment of creation of its sound, which was believed to be full of prophylactic properties. During this ritual was frequent the presence of a priest and the access was interdicted to women (id.ibidem: 96).

We find references to the beneficial properties of the sound of the bell already in Classical Antiquity (Braga, 1936:40): Ovid (43 B.C. – 17 A.C.) and Pliny (23/4 A.C. – 79 A.C.) report on the prophylactic virtues of the sound of bronze, used in *Antestérias* («Jonica» festivals in honor of Bacchus) and in the roman Lemuria (feast dedicated to the dead) (id.ibidem: 40).

The apotropaic properties of the bell extend, in the same manner, to the imprinted elements, either from the incision directly in the metal after the casting, or from the placement of removable characters made of wax, reproduced on wood stamps and applied to the outer face of the false bell (mold of a bell in clay) (id.ibidem: 117).

Most of the bells had decorative elements, such as laced bands. They also frequently presented symbolic elements that could evoke Jesus Christ, Our Lady, God and the patron saints of the localities, as well as pious phrases, psalms fragments, evangelical verses or Marian invocations (Correia, 2005: 26).

In representations, of apotropaic nature that served amuletic purposes, we highlight the religious figures, the pentagram, and the *signo-saimão* (the sign and the star of Solomon). According to Luis Sebastian, the pentagram is one of the elements preferred by the medieval founder and is associated with the cross since the 13th century (Sebastian, 2008: 61). Likewise, the author pinpoints the invocations to Saint Agatha, patroness of the bell-makers, adopted in Portugal between the 9th and 15th centuries and fell into disuse in the 16th century, being gradually replaced by

Santa Barbara's invocation, patroness of the crafts linked to metallurgy, convened as an entity to advert from storm (Id.ibidem: 62-64). From the 17th century onwards, the year of the casting imprinted on the bell becomes almost a mandatory subscription, and the founder's name might appear in an oval shape (Id.ibidem: 61).

This millennial activity became industrialized and induced the loss of its artisanal craftsmanship. The limitation of the internal market and the change of mentalities, established after the end of the fascist regime of Estado Novo (1933-1974) in Portugal, have led to the breakdown of a regular production and the extinction of many foundry workshops (Id.ibidem: 17). Consequently, we observe the loss of an ethnographic milieu encompassing the bells (Id.ibidem: 17).



Picture 1 - Santa Barbara: detail of bell. Colour digital proof by Joana Duarte. Braga, April 28th, 2015. © Google Arts & Culture

### The manual ringing and its automatization

Once, the bell was the main regulator of life in the community. It was recognizable by its sound the three stages of the day: at dawn, the ringing of the «Hail Mary's»; the middle of the day, the «Angelus»; and, at sunset, the «Trinities» (Almeida, 1996: 342). Other rings were still identified to remember liturgical acts, such as masses, rosaries, processions, weddings, funerals and death-knells (Correia, 2005:39). At the time of a birth or a baptism, one could distinguish the sex of the child through the amount of chimes: the boy

would receive an odd number and the girl an even number (Sebastian, 2008: 99). In the same way, the number of strokes in a birth, marriage or death varied according to the amount paid to the bell ringers (Id.ibidem: 99).

There are numerous Portuguese expressions associated with the audio execution of bells, such as *badalar* (peal of bells), *bamboar* (swing), *bandear*, *bater* (beat), *bombear* (pump), *cantar* (sing), *chorar* (cry), *dobrar* (toll), *tanger* (play), *picar* (play) ou *repicar* (replay) (Correia, 2005: 34). Depending on the ringer's



movements and the type of sound intended, the bell could be rung in several ways: either with the bell static, percussed on the inside by a clapper (*badalado*), or on the outside by a hammer (*martelado* or *matranqueado*); and, with the bell moving back and forth (*balanceado*, *dobrado* or *bamboado*) or full rotation (*volteado*) (Id.ibidem: 34).

There are still the functional rings, such as invitations to civil events or notices of the occurrence of fires,

shipwrecks, wolf attacks, thieves' chases and other threats to the community (Sebastian, 2008: 88).

The manual ring has lost expression due to the progressive mechanization of the bells since the 1980's (Augusto, 2014: 20). It has become a fragile intangible heritage, in consequence of the disappearance of a large part of the manual bell activity.



Picture 2 – Bell Ringer the belfry. Colour digital proof by Andrea Diogo. Braga, November 1st, 2015. © Google Arts & Culture

### For whom the bell tolls

From Pagan origins, bells gained sacred attributes in religious and popular culture, continuously through Judaism and Christianity (Almeida, 1996: 341-342) and were vested with exorcising powers and prophylactic properties (Sebastian, 2008: 85). The benedictine rule and the expansion of the monastic phenomenon were fundamental in the process of affirmation of the bell in Europe, becoming a defining element of the Christian world, and both european landscape and soundscape (Sebastian, 2008: 37).

The linkage of the bell with legends and literature is sustained throughout Portugal. The bell either appears as the helper of a good birth, or lies buried in lakes or rivers, ringing through the bowels of the earth, denouncing the *mouras encantadas* (enchanted Moors) (Almeida, 1996: 346). It is also noteworthy its power to advert against the malicious entities such as witches, dead souls and demons (Id.ibidem: 341-342). According to popular belief during the death-knell, the more the bell tolled, the further the Devil fled (Sebastian, 2008: 83).

It was also believed that the sound of the bell could cure diseases «of the head» and of hearing, being common for a godfather to ring the bell, so that the godchild would not become deaf (Id. *ibidem*: 85).

The bells appeared as matter of pride, becoming the object of envy by parishes that did not possess them. In this sense, theft or attempt to its destruction was an assault upon the honour and integrity of the community (Sebastian, 2008: 92). Additionally, the documentation of the North of Portugal and Galicia demonstrates the use of *sub-sino* (sub-bell) as a synonym for parish (Almeida, 1981: 207), a term that attests to the appreciation of this object.

In fact, the ringing of bells had a wide presence in the habits and customs of Portuguese culture. In terms of collective memory, the bell states as the voice of the

community and a sign of their identity (Sebastian, 2008: 88), providing a sense of belonging.

The bells are characteristic elements of popular culture and represent a repository of technical know-how. We can still speak of a «language of the bells» (Pelicano, 2013), as the ancestral communicator of good and bad news (Almeida, 1996: 348).

Historically, there is in fact a sense of heritage and legacy to pass on (Sebastian, 2008:92). The safeguard of the craft in the foundry techniques and in the manual ringing imposes itself as a way of asserting the role of bells in the rural, sonorous and ethnographic landscapes. The age of the industrialized bell must undergo the appreciation of the intangible significance of this object, so its meaning will never be lost.



Picture 3 – Clérigos' tower. Colour digital proof by Patrícia Gonçalves. Porto, October 15th, 2015. © Google Arts & Culture.

## Bell Traditions: the virtual exhibition



Picture 4 –Bell Traditions: between the tangible and the intangible. Presentation of the virtual exhibition © Google Arts & Culture

Safeguard actions applied to bell traditions may involve recourse to technological means. Indeed, the international doctrine includes the use of new technologies in the context of heritage communication (Denard, 2009). Virtual exhibitions form a presentation format used since the late 1990s, having gained greater visibility in the 21st century (Botelho, 2017: 132). The potential of using digital displays for the registration and transmission of knowledge about cultural assets constituted a motivation for the adaptation of the present research to the Google platform for Arts & Culture, under the title of «Bell Traditions: between the Tangible and the Intangible».

The objectives were the theoretical framework of the asset as Intangible Heritage and its possibilities for dissemination and awareness. Therefore, was prepared the virtual exhibition «Bell Traditions: between the tangible and the intangible», consisting of audio-visual and textual records. The imagery selected for this purpose concerned the artistic and documentary qualities of photography and video, which must be understood in relation to the texts and captions as guiding principles of the exhibition.

By raising awareness about for the safeguard and preservation of the cultural asset, the exhibition acquires a pedagogical and didactic character, drawing on this platform through the characteristics of this mean of dissemination. In fact, the communication of Cultural Heritage, while making use of a digital tool, provides a new dynamism and becomes «more attractive and contributive to the creation of newer 'maps'» (Id. ibidem: 138).

The user can access the exhibition, though multiple multimedia devices. It is also permitted, the handling of images, sounds and videos, constituents of the exhibition apparatus, through the existing technical tools. As a result of this interaction, the viewer understands the foundry's route and the repercussion of the peal of bells on the community. Hence, a multimedia narrative builds itself to transport the user to a reality on the verge of disappearing. According to Maurizio Forte, «experience is the new way of storytelling» (Strong, 2005: 79-80), and in this sense it is intended to trigger through this interactive and empathic relationship a greater awareness of the risks and also the possibilities of protection of this intangible heritage.

## References

- ALMEIDA, Carlos Alberto Ferreira de (1966). «Carácter mágico do toque das campainhas: apotropaicidade do som». *Revista de Etnografia*, volume VI, tomo II. Porto: Museu de Etnografia e História. pp.339-370
- ALMEIDA, Carlos Alberto Ferreira de (1981). «Território Paroquial Entre-Douro-e-Minho: Sua sacralização». *Nova Renascença*, volume I, número 2. pp. 202-212
- AUGUSTO, Carlos Alberto (2014). Sons e silêncios da paisagem sonora. Lisboa: Fundação Francisco Manuel dos Santos.
- BOTELHO, Maria Leonor; ROSAS, Lúcia Cardoso; BARREIRA, Hugo (2017). «Designing exhibitions at Google Cultural Institute. Between pedagogical experiences and the creation of heritage diffusion products». *Actas do V Congresso Internacional Cidades Criativas* (25 a 27 de janeiro de 2017). Porto: CITCEM/Faculdade de Letras da Universidade do Porto. pp.128-138.
- BRAGA, Alberto Vieira (1936). As Vozes dos Sinos na Interpretação Popular e a Indústria Sineira em Guimarães. Porto: Imprensa Portuguesa.
- CORREIA, Mário (2005). Toques de sinos na terra tradicional Sons da Terra. Sendim: Centro de música tradicional Sons da Terra.
- Declaração de Yamato sobre a abordagem integrada para a salvaguarda do Património Cultural, Material e Imaterial (2004, 20-23 de outubro). Conferência Internacional sobre a salvaguarda do Património Cultural, Material e Imaterial. Nara: Bunkacho/UNESCO.
- DENARD, Hugh (2009, 7 de fevereiro). Carta de Londres. Para a visualização computadorizada do Património Cultural. Versão 2.1. Tradução de Maria Leonor Botelho e Ricardo Dias [2014]. Disponível em <[http://www.londoncharter.org/fileadmin/templates/main/docs/london\\_charter\\_2\\_1\\_pt.pdf](http://www.londoncharter.org/fileadmin/templates/main/docs/london_charter_2_1_pt.pdf)>.
- FORTE, Maurizio (2005). Communicating the «Virtual». In ROSSI, M. & SALONIA, P. (Eds.). MIDECH '05. Multimedia. Information @ Design for Cultural Heritage (pp.74-84). Roma, Aracne.
- PELICANO, Sara (2013, 22 de julho). Os Sinos e a sua sonoridade têm estado esquecidos [artigo em linha]. Café Portugal. Disponível em <[http://www.cafeportugal.pt/pages/dossier\\_artigo.aspx?id=6483](http://www.cafeportugal.pt/pages/dossier_artigo.aspx?id=6483)> [Acedido a 21/02/2015].
- RESENDE, Nuno (Coord.). (2006). O Compasso da Terra. A arte enquanto caminho para Deus. Volume I: Lamego. Lamego: Diocese de Lamego.
- SEBASTIAN, Luís (2008). História da Fundição Sineira em Portugal. Coruche: Câmara Municipal de Coruche.
- Tradição sineira: entre o tangível e o intangível (2015, 21 de janeiro). Google Arts & Culture. Exposição virtual. Disponível em <<http://bit.ly/2qgnTst>>.
- UNESCO, (2003), Convenção para a Salvaguarda do Património Cultural Imaterial.
- UNESCO/Agência Japonesa para os Assuntos Culturais, (2004), Declaração de Yamato sobre a abordagem integrada para a salvaguarda do património cultural, material e imaterial.