

Guidelines for the conservation / restoration of monuments with glazed ceramics

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INTRODUCTION TO THE DRAFT GUIDELINES FOR THE CONSERVATION/RESTORATION
OF MONUMENTS WITH GLAZED CERAMICS

Glazed ceramics on architectural structures have been cultural expressions of human creation since their first appearance at least by 6th BCE¹. The tradition of making and using tiles for monuments continued and flourished in the Middle East, North Africa, Iran and Central Asia up to Indian sub-continent, in particular with Islamic architecture not only for decoration purpose, but also for their outer layer protection.

Each civilization elaborated its own regional recipe, making glazed ceramics extremely diverse and rich, for example from Damascus ceramics to the Mughal one passing by Iran and Central Asia, but also in Iznik under the Ottoman Empire. However, unfortunately, traditional knowledge to produce glazed ceramics has been lost over time.

UNESCO World Heritage Centre conducted a pilot project with the theme, “Sustainable Development and World Heritage for Local Communities”

Fig. 1. Ishtar Gate,
detail from the
Processional Way of
Babylon, Pergamon
Museum, Staatliche
Museen zu Berlin.
Ph: J. Han.



in Makli World Heritage site in Pakistan (2014-2017). Overall, the project aimed to revive local capacities and *to* improve the quality of glazed ceramics for the use in conservation of the Makli World Heritage property; in turn, it could generate substantial income for the communities in and around the property. The Project, on the other hand, was also an occasion to discuss and to revisit conservation practices on monuments with glazed ceramics, during which a crucial issue came up: there has been no guidance for the conservation/restoration of glazed ceramic surfaced monuments.

Indeed, ICOMOS has established a great number of charters/principles on conservation of specific areas, starting from the Venice Charter (1964) to the most recent one on the Principles for the conservation of wooden built heritage (2017). However, currently principles related on conservation on monuments surfaced with glazed ceramic are missing and there has been a great tailor-made guiding principle for conservation of monuments surfaced with glazed ceramics.

The draft Guiding principles presented in this Journal are an attempt to do so.

Its first drafting was elaborated by Prof. Dr. Michael Jansen, Junhi Han, Prof. Dr. Michael Petzet and Dipl. restorer-conservator Elena Agnini in Aachen at ACDC and was then presented and discussed in Makli in February 2016 during the Makli Workshop².

The draft presented in this Journal needs to be further elaborated. An International Scientific Committee on glazed ceramic, which is being initiated, would be crucial for such a purpose (fig. 1).

DRAFT GUIDELINES FOR THE CONSERVATION/RESTORATION OF MONUMENTS WITH GLAZED CERAMICS INTRODUCTION AND DEFINITION

Glazed ceramics on architectural structures have been cultural expressions of human creation since their first appearance. Their deterioration, accidental or intentional destruction constitutes a loss affecting a significant part of the cultural heritage.

The Venice Charter (1964) has provided general principles for the conservation and restoration of cultural heritage and the Nara Document on Authenticity (1994) has expanded these principles.

The aim of these guidelines for the conservation / restoration of monuments with glazed ceramics reflecting basic and universally applicable principles and practices is to provide more specific principles for the protection, preservation and the conservation / restoration of monuments with glazed ceramics.

The richness of glazed ceramics on architectural monuments is due on the variety of cultural expressions, aesthetic achievements, and the diversity of materials and techniques used from ancient until present times. Glazed ceramics with their historical, aesthetic and technical values have to be considered as important components of historic monuments.

Many of the problems affecting glazed ceramics are linked to the poor condition of the building or structure, its improper use, lack of maintenance,

improper repairs, alterations and vandalism. In addition, improper restorations and use of inappropriate methods and materials can result in irreparable damage.

PROTECTION POLICY

Laws and regulations for the protection of monuments and sites must prohibit the destruction, the degradation or alteration of glazed surfaces, including their surroundings. Protection policy should provide the protection of surfaces with glazed ceramics. Protection policy should make available resources for research, professional treatment and monitoring, and provide for the appreciation of their tangible and intangible values of society.

If interventions are required, these should be carried out with the full knowledge and the consent of the authorities responsible. Legal sanctions should be provided for any violation of such regulations.

INVESTIGATION

All conservation projects should begin with substantial scientific investigations. The aim of such investigations is to find out as much as possible about the fabric of the structure including historic repair and formal restorations. This calls for an interdisciplinary approach.

The methods of investigation should be as far as possible non-destructive. Prerequisites for any conservation program are the scientific investigation of decay mechanisms on macro and micro scale, the material analysis and the diagnosis of the condition.

DOCUMENTATION

In agreement with the Venice Charter, the conservation/restoration of glazed ceramics must be accompanied by a precise program of documentation in the form of an analytical and critical reports, illustrated with drawings, photographs, mapping, etc. The condition of the glazed ceramics, the technical and formal features pertaining to the process of the creation and the history of the object must be recorded. Furthermore, every stage of the conservation/restoration, materials and methodology used should be documented. This report should be placed in the archives of a public institution and made available to the interested public. Copies of such documentation should also be kept in situ or in the possession of those responsible for the monument. The results of the work should be published. Traditional methods of written and graphic documentation can be supplemented by digital methods. However, regardless of the technique, the permanence of the records and the future availability of the documentation are of utmost importance.

PREVENTIVE CONSERVATION, MAINTENANCE AND SITE MANAGEMENT

The aim of preventive conservation is to create favorable conditions minimizing decay, and to avoid unnecessary treatments, thus prolonging the life span of glazed ceramic surfaces. Appropriate monitoring of the environment is an essential component of preventive conservation. Climatic conditions and moisture problems can cause deterioration and biological attacks. Monitoring should be enforced in order to detect initial processes of decay, thus preventing further damage of tiles and supporting structure, in order that deformation and structural failure can be recognized at an early stage.

Also inappropriate and uncontrolled public use of monuments and sites with glazed ceramics can lead to damage. This may necessitate limiting visitors and, in certain cases, temporary closure to public access. It is important to incorporate into the site management careful planning of access and use, preserving, as far as possible, the authentic tangible and intangible values. Glazed ceramics can become victim of vandalism and theft. Therefore authorities should take special preventive measures.

CONSERVATION/RESTORATION TREATMENTS

Glazed ceramics are an integral part of monuments. Therefore, their conservation should be considered together with the fabric of the architectural entity. Any intervention in the monument must take into account the specific characteristics of glazed ceramics and the terms of their preservation. Interventions, such as consolidation, cleaning and reintegration, should avoid any loss of authentic material.

Natural ageing by chemical and physical transformation should be respected. Past interventions can be part of history and should be evaluated critically.

All methods and materials used in conservation/restoration of glazed ceramics should take into account the possibility of future treatment following the principles of reversibility. The use of proven traditional materials and methods is recommended. If new materials and methods are applied they should be based on comprehensive scientific data and long term positive experience and results.

The aim of restoration of glazed ceramics is to improve the legibility of form and content, respecting the original creation and its history. Aesthetic reintegration contributes to minimizing the impact of damage.

In some cases, well-documented, evidence based reconstruction of decorative systems with glazed ceramics can be part of the conservation / restoration program. A well documented and professionally executed reconstruction using traditional materials and techniques can bear witness to the historic appearances.

EMERGENCY MEASURES

In urgent cases, immediate emergency treatment is necessary for the safeguard of glazed ceramics, allowing later according treatments. Appropriate

conservation measures must follow as soon as possible with the permission of the relevant authorities. Detachment and transfer are drastic and irreversible operations that irretrievably affect the physical composition, material structure and aesthetic characteristics. Such operations are only justifiable in extreme cases when all options of in situ treatment are not viable. Detached glazed ceramics should be either replaced in their original location or safely stored accordingly. Special measures should be taken for protection against theft and dispersion.

PROFESSIONAL QUALIFICATIONS AND TRAINING

Conservation/restoration of glazed ceramics is a specialized discipline. As this work requires specific knowledge, skills, experience and responsibility, conservators/restorers of this kind of cultural property must be professionally experts in this field, as recommended by the Code of Ethics of the ICOM-Committee of Conservation (1984) and by associations such as E.C.C.O. (European Confederation of Conservator-Restorers' Organisations), ENCoRE (European Network for Conservation-Restoration Education) and other similar internationally recognized organizations.

Government institutions like ISTECCNR (Istituto di Scienza e Tecnologia dei Materiali Ceramici – Consiglio Nazionale delle Ricerche, Faenza, Italy) and other specialized centers can be very useful for scientific support.

TRADITIONS OF RENEWAL

In many regions of the world, the authentic practices of artists and specialized craftsmen are continued by repeating historic decorative and iconographic programs using traditional materials and techniques. These traditions, satisfying religious-cultural needs and keeping to the Nara principles, should be sustained. It is important to preserve the special knowledge of manufacturing glazed ceramics still existing in some regions and transmitted from generation to generation.

Ceramic production needs high standards and scientific research. Interdisciplinary and international cooperation in this special field is necessary.

The integration of missing ceramic surfaces and the conservation/restoration treatment of ceramics tiles is a task for specialized craftsmen in cooperation with conservators and restorers.

INTERNATIONAL CO-OPERATION

Sharing the care for common heritage is nationally and internationally an accepted concept. It is therefore necessary to encourage the exchange of knowledge and to disseminate information at every level. In the spirit of interdisciplinary collaboration, conservators / restorers of glazed ceramics

should liaise with their colleagues in other countries and with relevant institutions and specialists around the world.

KEYWORDS

Guidelines for glazed ceramics, conservation, restoration, protection policy, investigation, maintenance, treatments, training, tradition of renewal.

ABSTRACT

Le ceramiche smaltate sulle strutture architettoniche sono state espressioni culturali della creazione umana fin dalla loro prima apparizione, almeno dal VI secolo a.C. La tradizione di fare e usare piastrelle per i monumenti è continuata e fiorita in Medio Oriente, Nord Africa, Iran e Asia centrale fino al subcontinente indiano, in particolare con l'architettura islamica e ciò non solo quale elemento decorativo, ma anche come agente di protezione.

Ogni civiltà elaborò la propria 'ricetta' regionale, rendendo la ceramica smaltata estremamente varia e ricca, con diversificazione del linguaggio espressivo ma con un unico 'filo' conduttore che è dato dalla tecnica cioè quello della terracotta con rivestimento a smalto. Infatti, per esempio, si va dalla ceramica di Damasco a quella Mughal, passando per l'Iran e l'Asia centrale, ma anche a Iznik sotto l'impero ottomano. Tuttavia, purtroppo, le conoscenze tradizionali per produrre la ceramica smaltata si sono perse nel tempo.

L'*UNESCO World Heritage Centre* ha condotto un progetto pilota con il tema "Sviluppo sostenibile e patrimonio mondiale per le comunità locali" nel sito del patrimonio mondiale Makli in Pakistan (2014-2017). Nel complesso, il progetto mirava a rilanciare le capacità locali e a migliorare la qualità della ceramica smaltata per l'uso nella conservazione del patrimonio mondiale Makli, che a sua volta potrebbe generare un reddito sostanziale per le comunità all'interno e intorno alla proprietà. Il progetto, d'altra parte, è stato anche un'occasione per discutere e rivisitare le pratiche di conservazione dei monumenti con ceramica smaltata. Durante questi sopralluoghi è emersa una questione cruciale: non esiste una guida per la conservazione/restauro dei monumenti con superficie in ceramica smaltata.

Il loro deterioramento, la distruzione accidentale (o anche intenzionale) costituisce una perdita che colpisce una parte significativa del patrimonio culturale del Paese.

In questo contesto, la presente bozza è stata prodotta da un piccolo gruppo di esperti. In questo documento, infatti, si presentano i seguenti capitoli delle linee guida specifiche ed enunciati nel progetto pilota UNESCO e che sono: introduzione e definizione; politica di tutela; indagini; documentazione; conservazione preventiva, manutenzione e gestione del sito; trattamenti di conservazione/ripristino; misure di emergenza; qualifiche professionali e formazione; sostituzione secondo tradizione; cooperazione internazionale.



Fig. 2. Gawhar Shad Mausoleum Herat, Afghanistan. Ph: E. Agnini.



Fig. 3. Minaret of Sultan Baiqara Madrasa, Herat, Afghanistan. Ph: E. Agnini.



Fig. 4. Friday mosque, Herat, Afghanistan. Ph: E. Agnini.

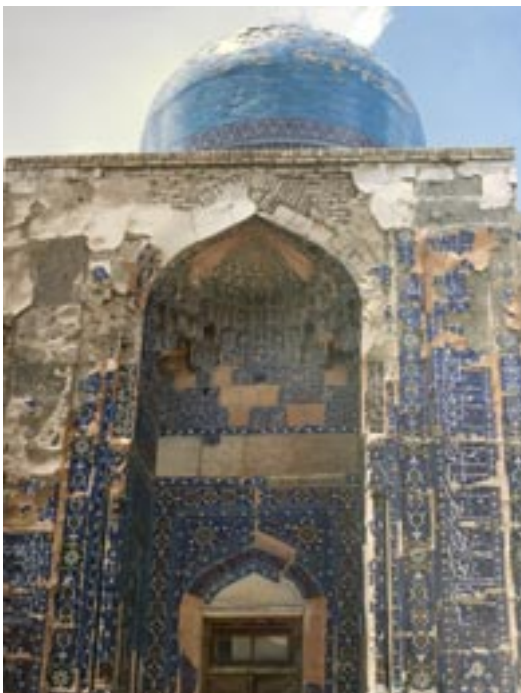


Fig. 5. Shāb-I Zinda, Mausoleum Tuman Aqa, Samarcand (*Le arti in Asia centrale*, Garzanti, Milano 2002, p. 407).



Fig. 6. Āq Sarāy
Shahr-i Sabz (*Le arti
in Asia centrale,
op. cit.*, p. 401).

Fig. 7. Bastam, Bayazid
Mausoleum, Iran (*Ceramica
nell'architettura in Persia,
Cantini. Firenze 1992, p. 51*).





Fig. 8. Palacio do Marques do Pombal, Lisboa, Portugal (*Azulejos, piastrelle decorative e architettura*, Silvana, Cinisello Balsamo 1998, p. 170).

Fig. 9. Palacio de Mitra, Lisboa, Portugal (*Azulejos, piastrelle decorative e architettura*, *op. cit.*, p. 142).



Fig. 10. Mosque, Lahore, Pakistan.
Ph: E. Agnini.



Fig. 11. Detail Mosque, Lahore, Pakistan. *Ph:* E. Agnini.

NOTE

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¹ The late Prof. Dr. Michael Petzet studied art history and archaeology in Munich and Paris. In 1974, he was appointed Bavarian Conservator General, an office he held until 1999. From 1988 to 2012, he was President of the German National Committee of ICOMOS and from 1999 to 2008 President of ICOMOS international. He dedicated his life to the protection and conservation of the world's cultural heritage – for which he always advocated with strong opinions and clear purpose. He strongly acknowledged a need to have such guiding principle also about the conservation/restoration of monuments with glazed ceramics and supported the officialization of the guidelines presented in this Journal.

² Participants of the workshop in Makli in February 2016:

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