Papers of BAS Humanities and Social Sciences

Vol. 4, No 1, 2017

CONTENTS

ETHNOLOGY

- 1. Cultural Heritage on Foreign Territory: Bulgarian Monuments in Bucharest and Rome *Lina Gergova and Yana Gergova /* 3
- 2. The Festive Days of the Bulgarian Community in Chicago Models of Cultural Heritage in Migration Nikolai Vukov and Mariyanka Borisova / 18
- 3. Submission, Consumption and Consumerism among "Votserkovlennye" in post-Soviet Russia *Milena Benovska-Sabkova* / 38

ARCHITECTURE

- 4. Shota Bostanashvili, Architectural Discourse and the Foundation of Poetics of Architecture in Georgia *Lino Bianco* / 49
 - 5. Innovative Strategies in Hotel Architecture Veselina Penevska / 60

LEGAL SCIENCES

6. Critical Review of the Synergies between the European Union Strategy for the Danube Region and the International Legal Regime for the River Danube – Irena Ilieva / 70

LIBRARY SCIENCE

7. Machine-Readable Formats and the Problem of Conversion of Data between Systems for Bibliographic Information in the Field of Humanities (on Material from the Cyrillo-Methodian Bibliography) – Nelly Gancheva / 85

Papers of BAS Humanities and Social Sciences

Vol. 4, No 1, 2017

ARCHITECTURE

SHOTA BOSTANASHVILI, ARCHITECTURAL DISCOURSE AND THE FOUNDATION OF POETICS OF ARCHITECTURE IN GEORGIA

Lino Bianco*

Abstract: Twentieth century Georgia has produced several leading architects who contributed significantly to the development of the theory and practice of the profession. One such architect is Shota Bostanashvili (1948-2013). He was the pioneer in the study of poetics of architectural design at the Georgian Technical University, Tbilisi.

This paper addresses the setting up of the academic subject Poetics of Architecture at the Faculty of Architecture, Urbanism and Design and gives an overview of his architectural works. The early phase of his career is dominated by collaboration with one of the leading contemporary architects of the country, namely Vakhtang Davitaia who was head of the Design Bureau of the Georgian Polytechnic Institute, the forerunner of the said university. During this period Bostanashvili designed and oversaw the execution of memorials known as the Cube of Memory (Senaki), the Temple of Memory (Mukhrani) and Glory to Work (Kutaisi). The later phase is dominated by, now demolished, a private residence and the Palace of Poetry, both in Tbilisi, the latter being his magnum opus.

Bostanashvili's theory of architecture draws on the philosophy of language and play. For him, discourse on architecture is intrinsically linked with linguistic play and semiotics.

Key words: architectural design, poetics, Bostanashvili, Davitaia, Gegelia, Melikishvili, Georgia.

^{*} The author is a full-time resident academic at the University of Malta where he lectures and supervises postgraduate research in the history and theory of architecture at the Department of Architecture and Urban Design, Faculty for the Built Environment. He is a visiting professor at the Department of Urban Planning at the University of Architecture, Civil Engineering and Geodesy, Sofia, a professor of the International Academy of Architecture and honorary professor of architecture at the Georgian Technical University, Tbilisi.

Introduction

The tangible and intangible channels of architectural creativity were the themes of a 1990 publication on the poetics of architecture as a theory of design [Antoniades, 1990]. This work put forward an approach which transcends modern and postmodern theories of design, an approach which addresses the physical and the metaphysical holistically, an approach which includes geometry and material culture as well as metaphor and the paradoxical. For a brief compendium on metaphors, grammatical structure and architecture one may consult Wonoseputro [2006].

The year 1990 marked the end of Soviet architecture, a language which was imposed on the republics forming part of the former U.S.S.R. including Georgia. It was the year when Shota Bostanashvili, a Georgian architect, academic and poet, launched his manifesto for a poetics of architecture. His practice and philosophy of architecture reflect his early interests in poetry, linguistics and literature, most notably the works of Fyodor Dostoevsky and Albert Camus [Bostanashvili, 2013].

The aim of this paper is to put forward a brief outline of Bostanashvili's work. The chronological background to the setting up of his studio-workshop Poetics of Architecture is outlined along with his professional practice and academic career. Two phases of his architectural works, illustrated through reference to six of his projects, are noted. His architectural discourse can be traced through his publications. In this context two themes are discussed: (i) architecture and linguistic play and (ii) semiotics of architecture.

Shota Bostanashvili

An Overview

Born into a Jewish family in the Georgian capital in 1948 during the Stalinist era, he graduated in 1972 from the Faculty of Architecture at the Georgian Polytechnic Institute. In 1990 it was renamed Institute of Architecture, Georgian Technical University and since 2005, it has been known as the Faculty of Architecture, Urbanism and Design, Georgian Technical University.

In the introduction to an unpublished portfolio of his work Bostanashvili states that he is an architect, a sculptor and a poet [Bostanashvili, 2009]. The cover page of this document includes the following quote: "My metapoetics of architecture and its practice is my response to the problems of our pragmatic time. This is the main message of the works presented here".

His architectural career dates back to the mid-1960s when he was engaged as an architect-technician with the Georgian State Institute of Design, Tbilisi. He worked as an architect at the design office of the Institute of Architecture, Georgian Technical University, Tbilisi, from 1970 until 1990.

Bostanashvili was appointed professor of the International Academy of Architecture, Moscow branch, in 1995 and two years later a professor of the International Academy of Architecture, Sofia. In 1999 he became a corresponding member of the International Academy of Architecture of Eastern Countries,

Baku. In 2001 he became a corresponding member of the International Academy of Architecture, Moscow branch, and in the following year he was appointed professor at the Institute of Architecture, Georgian Technical University, Tbilisi.

The setting up of the studio-workshop 'Poetics of Architecture'

From 1978 he held a teaching post at the Faculty of Architecture at the same institution where, in 1990, shortly after publishing his manifesto, he founded the studio-workshop 'Poetics of Architecture'. In the exhibition Architecture towards Architecture Bostanashvili laconically stated the mission of the studio, available in online video at [არქიტექტურა არქიტექტურისკენ]: "The main task of the studio is to awaken the abilities that lie dormant inside a child. To feel the joy and excitement of seeing things for the first time. This is the only path and this requires the spiritual 'exercise'".

The studio had introduced metacultural discourse at the Georgian Technical University and the designs produced were included in the catalogue of the Biennale of Venice held in 1991 (**Fig. 1**)¹. The initiative to set up the studio was initially supported by the Department of Introduction to Architecture. Later it secured the support of the Department of Architectural Design and the administration of the Faculty and, in 2007, Poetics of Architecture was an optional course offered at the Faculty. The studio was a "free listeners' auditorium", an alternative to the traditional tertiary education. Setting free the students from the

restraints of tradition was aimed for; this freedom Bostanashvili argued, allows performative interpretation of ideas: "... [the studio] looks more like a single actor's theatre rather than a design studio, with a conventional relation between professor and student. Breaking down this conservative relationship marks the beginning of overcoming the clichés" [არქიტექტურა არქიტექტურისკენ].

The course offered at the studio was granted full academic credentials by the university in 2008 following the defence of his doctoral thesis [Bostanashvili, 2008] which made an exposition of the issues relating to the semiotics of architecture. This theme was taken up by his son David in his



Fig. 1. Designs of the studio-workshop 'Poetics of Architecture' included in the catalogue of the Biennale of Venice, 1991. Source of photograph:

© Shota Bostanashvili Archive, Tbilisi

¹ Bostanashvili makes reference to this conceptual design entry nearly two decades later in a publication issued in 2010 [Bostanashvili, 2010].

doctoral thesis [Bostanashvili, 2011], a work which made Shota Bostanashvili confident that the way forward for architecture was critical discourse.

Bostanashvili's credo was "that culture drives progress, but it turns out to be a barrier. It creates a stereotype, a cliché of thought and this must be overcome" [არქიტექტურა არქიტექტურისკენ]. From 1990 until his death he had conducted more than 1,000 master classes [Studio Poetics of Architecture]. He taught courses in architectural design and poetics of architecture, a role which he held until his unexpected death in 2013 whilst delivering a talk at a conference dedicated to the Georgian poet and author Otar Chiladze at the Shota Rustaveli Institute of Literature.

Architectural Works

The two phases of his architectural and academic career are 1970 until 1990 and 1990 until 2013. The first phase marks his association with the Design Bureau of Georgian Polytechnic Institute led by Vakhtang Davitaia, a leading architect and academic of Georgia for the last half a century. Bostanashvili's early empirical work involved designing memorials. Three executed projects undertaken in the first half of this phase are the Cube of Memory, the Temple of Memory and the memorial Glory to Work [Kalandadze, 2015]. A project which marks the latter part of this phase is the Actor's House. The second phase, the post Soviet-era, is characterised by two realised projects, a residence in the Vake district and the Palace of Poetry, both in Tbilisi, which are now demolished. The first four projects were commissioned by the respective local authorities whilst the last two projects were private commissions.

Early phase: 1970 until 1990

The memorial Cube of Memory (1976-81) (**Fig. 2**) was undertaken by Bostanashvili together with architects Davitaia and Giuli Gegelia and sculptor Vazha Melikishvili.² It was inaugurated in the town of Senaki in 1975 to commemorate the youth of the town who never made it back from the Second World War. The cube has a vertical crack in the middle, breaking it into two and leaving a gap small enough for a single person to pass through, a scar which reveals a chaotic interior space. The tension between the Platonic exterior form and the seemingly confused sculpture on the interior lends itself to several poetical interpretations. The Temple of Memory (1975) (**Fig. 3**) at Mukhrani, a project which he also undertook with Davitaia, suggests the design of a classroom: each arch resembles a blackboard with stone benches facing it. A gap is cut through the arch, wide enough to allow a person to get through. The arches have a small overhang above the middle part; when hit by the sun it casts a horizontal dark shadow on the surface. The vertical gap is also dark from the shade. The horizontal and vertical shades form the sign of the cross.³ The brief for Glory to

 $^{^{\}rm 2}$ Architect Giuli Gegelia was the teacher of Bostanashvili at the Georgian Polytechnic Institute.

³ This monument, erected at the peak of Brezhnev's era, has a strong and explicit metaphysical reference to the Christian memory of the Georgian nation.



Fig. 2. The Cube of Memory, Senaki, 1975 (Bostanashvili, Davitaia, Gegelia, Melikishvili). Source of photograph: © Shota Bostanashvili Archive, Tbilisi

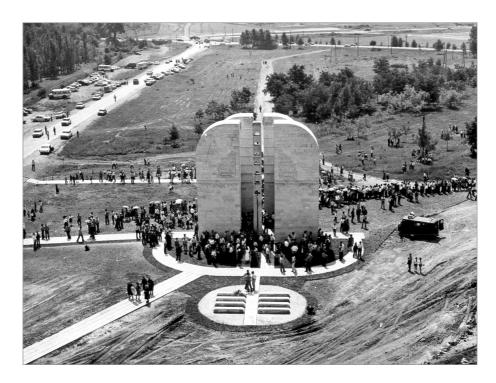


Fig. 3. The Temple of Memory, Makhrani, 1975 (Bostanashvili, Davitaia). Source of photograph: © Shota Bostanashvili Archive, Tbilisi

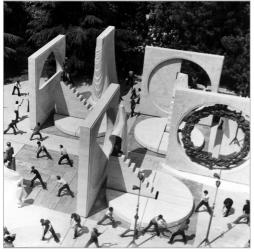


Fig. 4. The Glory to Work Memorial, Kutaisi, 1979 (Bostanashvili, Davitaia). Source of photograph: © Shota Bostanashvili Archive, Tbilisi

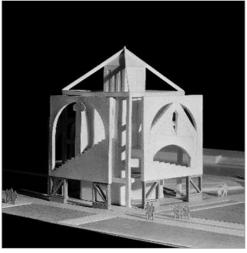


Fig. 5. The Actor's House, Senaki, 1985. Source of photograph: © Shota Bostanashvili Archive, Tbilisi



Fig. 6. Private residence, Vake district, Tbilisi (1994-2001). Source of photograph: © Shota Bostanashvili Archive, Tbilisi



Fig. 7. The Palace of Poetry, Tbilisi (1999-2003). Source of photograph: ⊚ Shota Bostanashvili Archive, Tbilisi

Work (**Fig. 4**), also undertaken with Davitaia, called for a memorial board to list the names of over-achieving citizens of Kutaisi. The design, executed in 1979, was a breakthrough for the architectural thought process of the period ending in what nowadays can be termed as an installation in the city. This place hosts temporary exhibitions as the displayed art pieces are changed every few years.⁴

⁴ When removed, the works of art are set up either inside the nearby gallery or moved to other venues within the city.

The Actor's House in Senaki (1985) (**Fig. 5**) was intended as a house-museum dedicated to the distinguished Georgian actor Akaki Khorava.⁵ It is a square-planned, cube-shaped, detached house with each elevation serving as a mask.

Later phase: 1990 until 2013

The residence in Tbilisi (**Fig. 6**), the realisation of which commenced in 1994, had a floor area of circa 2,000 m². It was an upmarket, spacious residential unit. The Palace of Poetry (**Fig. 7**) was erected over the period 1999-2003. The site, covering circa 4,000 m², is located at the foot of a range of mountains on the south-west border of the city. The sculptural compositions of this building were carved by the architect himself. The brief was for a convention/cultural centre to host venues for presentations and concerts. Whilst in an advanced stage of construction, the site was sold and the building was bulldozed to make room for a high-rise, upper market residential complex. At the time, the real estate market was responding to the aggressive campaign of the Saakashvili administration (2008-2013) which aimed to attract foreign investment to Georgia. While the building was being demolished, Bostanashvili was outside the fence of the construction site together with his students, reading poems, videos of which are available online at [პოეზიის სასახლის პრეზენტაცია; არქიტექტურა არქიტექტურისკენ].

Discourse on Architecture

Architecture and Linguistic Play

Bostanashvili constructed a theory of architecture through the Georgian language. One of his publications intended to nominate the court building designed by Gegelia in Poti for a State award, illustrates not only his thinking but also his style of writing [Bostanashvili, 2003]. The Georgian words for 'image', 'house' and 'name', namely 'sakh'e', 'sakh'eli', 'sakh'eli' ['სახე', 'სახელо', 'სახელо'], sound similar. He makes use of this fact and argues that this building manages to become free from ideology (the court system) and to perform like a piece of an architectural art-work. Hence the name (courthouse) never translates automatically into an architectural image. This implies that forms and functions have a rather conventional relationship to put it in oversimplified terms. The image disobeys the name; architecture returns home to architecture proper. He concludes that, nowadays, when everyone is obsessed with 'smart' houses, it is difficult to make beautiful ones.

In his obituary for Jacques Derrida [**Bostanashvili**, **2006**], Bostanashvili takes on Derrida with his (Derrida's) own language. 'Ride' ['რοდე'] in Georgian

⁵ This project was never realised.

⁶ This building was demolished two decades later when it was purchased by a new investor.

⁷ Foreign investment was a main priority of the government of President Mikheil Saakashvili. Full-page adverts in *The Economist* were paid by the administration marketing Georgia as "The world's number one reformer 2005-2010", and as a country with the ripe climate for investments due to low tax incentives and ease of regulations [Wheeler, 2015].

means 'veil'. 'U-Ridod' ['ŋ'რοდოდ'] means 'without veil' but it also means without reverence, a reference to the urban chaos of Tbilisi where buildings were being erected next to one other without 'reverence' to the memory of the place. The theme of veil(ing) became central to his philosophy. The veils mark the beginning of a new architecture; instead of solid sign/architecture one is faced with a veil, a surface of signifiers pointing to each other, a text. This concept of text was named 'nasheni' ['ნაშენი'] in later publications authored with his son David with whom he developed constructum, a notion based on the concepts of the sign and the built [Bostanashvili & Bostanashvili, 2008]. These neologisms deal with the problems of semiotics of architecture by inscribing them into the Georgian language. The linguistic play is a conceptual part of the theory. In Georgian the word 'sign' is 'nishani' ['508560']; the word for 'constructrum', in Georgian the literal translation of something already built, is 'nasheni' ['ຽວປີໆຽວ'] which sounds similar to 'nishani' ['ຽວປີງຽວ']. This deconstruction of one morpheme becomes the starting point into critical discourse on architecture. The Bostanashvilis use the concept of 'nasheni' to supplant architecture; 'nasheni' is to architecture what text is to literature, a concept rooted in the work of Roland **Barthes** [1979].

His ideas in **Bostanashvili & Bostanashvili** [2008] are far from the concept of nasheni-text. Yet, it presents Bostanashvili's major philosophical concepts that belong to his understanding of the poetics of architecture. The following is the underlying logic: architecture, being discourse on space and belonging to space, is at the same time discourse of the interesting, in Georgian translated as 'sa'interes'o' ['საინტერესო']. The word 'interest' is made up of two morphemes: 'inter/esse' – implying a state of being in between. This leads to the notion of border; blurring the borders becomes a practice of discourse, a practice permitted by writing in the Georgian language. This publication also introduced, but did not elaborate on, the concept of ruins ('destructum'). The sign of ruins is hereby introduced as the state of pragmatism in contemporary architecture. The final problem is the cycle of deconstruction-reconstruction. To bring architecture into the realm of metaculture, two paths are proposed namely metapoetics and semiotics.

Semiotics of Architecture

By presenting the neologism 'nash/eni' ['ნაშ/ენი'] through the insertion of the '/' sign,⁸ this publication gives an insight into his notion of the specific nature of the semiotics of architecture [**Bostanashvili & Bostanashvili, 2009**]. 'Nasheni' ['ნაშენი'] is a linguistic invention; it is a word play. It represents something, that is material, the built, and at the same time it is a language, a sign; it is both and none at the same time, something other, a signifier with

⁸ In the Georgian language, 'nash' has no meaning, thus meaningless, whilst 'eni(s)' means '(of) language'. In the nominative declension, 'nash/eni' ['ნაშ/ენი'] is nonsense, without any meaning. It is only in the genitive case that it becomes 'nash/enis' ['ნაშ/ენის']. The word 'ena' ['ენა'] is in the nominative whilst in the genitive case it becomes 'enis'. Thus, the sentence has to be in the genitive for this neologism to work as in 'presentation of constructum' – 'nash/enis prezentatsia' ['ნაშ/ენის პრეზენტაცია']. The wordplay works only in the genitive case.

two intangible signifieds. It confirms its being between presence and absence, inter/esse; that it is interesting; its simultaneous polysemantics/dissemination. In this regard one can make reference to Derrida's comment with respect to Plato's concept of 'chora' [' $\chi \acute{\omega} \rho \alpha$ ']: "Chora belongs neither to Eidos nor Mimesis" [**Derrida**, **1998**]. For Bostanashvili, it is the language itself that works; language about the language that already took hold of the built (history, theory and poetics of architecture); it is not only about the creation of language but also an example of such a practice. This thesis introduces metapoetics of architecture – rewriting the history of architecture where the stylistically and historically different become closer thematically (mass, wall, column, stair, frame, blob/surface/veil).9

Final Comments

Bostanashvili was the pioneer in the study of the poetics of architectural design in Georgia. His professional practice, theoretical research and academic work are integrated together thus providing a reflection upon the cultural problems of architecture. This had set in motion his studio-workshop Poetics of Architecture and the initial cycle of conceptual drawings. The studio was a new subject matter in the system of architectural teaching [Bostanashvili, 2013].

A comprehensive understanding of Bostanasvhili's notion of the poetics of architecture is obtained through his publication *Butza: Architect Victor Jorbenadze* [Bostanashvili & Bostanashvili, 2012]. This book is about the work of Jorbenadze, known to the local intelligentsia of Tbilisi as Butza, the subject of a recent postgraduate research [Wheeler, 2016]. It covers several themes on architectural discourse; it is a critical discussion of Jorbenadze's works. It is a book on how he read and interpreted the architectural language of Butza, his version of Butza [Bianco, 2016]. Critical writing is a form of creation rather than rationalization and thus this text is not just about Jorbenadze but it is a book on architecture.

Bostanashvili's son David, who followed him to the chair of Poetics of Architecture at Georgian Technical University, sums up the vocational role of his father's legacy thus: "As a poet Shota Bostanashvili made the Georgian language speak in a revolutionary way in the cycle of poems *Four Discourses* [Bostanashvili, 2012]. As a sculptor who worked for three years (1999-2002) on the site of the Palace of Poetry, he shaped every single curve. As an artist, who in the face of brutal demolition ([in] 2013) of [the] Palace of Poetry, did poetic performances not as a sign of protest, but rather as a part of [the] life of the building" [Bostanashvili, 2014].

⁹ [Bostanashvili & Bostanashvili, 2009]: This text includes the 1995 manifesto of the Poetics of Architecture.

REFERENCES

- **Antoniades, Anthony. 1990.** Poetics of Architecture: Theory of Design. New York: Van Nostrand Reinhold.
- **Barthes, Roland. 1979.** "From Work to Text". Reproduced in Josué V. Harari (Ed.). *Textual Strategies: Perspectives in Poststructuralist Criticism*. Ithaca, New York: Cornell University Press, 73-81.
- **Bianco, Lino. 2016.** Butza: Architect Victor Jorbenadze. *The Journal of Architecture*. 21/3: 459-464.
- **Bostanashvili, David. 2014.** Freedom Square and Palace of Poetry, LISTE Art Fair, Basel. Available from: www.facebook.com/Poeticsofarchitecture/photos/a.747030328672 399.1073741829.111202232255215/747030432005722/?type=3&size=960%2C720 &fbid=747030432005722 [accessed: 12 March 2016]).
- **Bostanashvili, Shota. 2009.** *Design Portfolio: Shota Bostanashvili* [Unpublished]. Available at Shota Bostanashvili Archive, Tbilisi.
- **Derrida, Jacques. 1998.** Essay on Name. Translated from Russian by Natalya Anatolevna Shmatko. *Эссе об имени* [Esse ob imeni].
- Kalandadze Elene. (Ed.). 2015. Vakhtang Davitaia: Architecture, Painting, Graphics. Tbilisi, Magticom, 318-327.
- **Studio Poetics of Architecture.** Available from: gtu.ge/Arch/Poetics/index.html [accessed: 4 November 2015].
- Wheeler, Angela. 2015. New Look for Old Tbilisi: Preservation Planning in Tbilisi Historic District. *Identity Studies in the Caucasus and Black Sea Region*. 6: 70-85.
- Wheeler, Angela. 2016. Socialist in Form, National in Content: Preserving Late Soviet Culture at Tbilisi Palace of Rituals., M.Sc. dissertation, Columbia University, New York. Available from: academiccommons.columbia.edu/catalog/ac:200324 [accessed: 20 June 2016].
- Wonoseputro, Christine. 2006. Metaphors: A Creative Design Approach or Theory, The Reflective Studio: A research studio that focuses on play, collaboration & self-reflection, 1 November. Available from: transmaterialasia.wordpress.com/2006/11/01/hadidsmetaphors-reading-her-biography-from-the-way-of-thinking/ [accessed: 5 July 2016].
- **Bostanashvili, David. 2011.** *ნດປັ່ງຣັດ და ნაປັ່ງຣັດ* [Nishani da nasheni]. Unpublished Ph.D. Thesis, Georgian Technical University, Tbilisi.
- **Bostanashvili, David. 2013.** არქიტექტორის საკუთარი დრო. [Arkitektoris sakutari dro]. *Stili*. 46: 60-63.
- **Bostanashvili, Shota. 2003.** სახე, სახლი, სახელი [Sakh'e, sakh'li, sakh'eli]. ლიტერატურული საქართველო. [Literaturuli sakartvelo].
- **Bostanashvili, Shota. 2006.** ურიდოდ და უდერიდოდ [Uridod da uderidod]. *Sdjani*. 7: 128-136.
- **Bostanashvili, Shota. 2008.** სივრცის პოეტიკა: სინაგოგებისა და ებრაული სასაფლაოების არქიტექტურა საქართველოში [Sivrcis poetika: sinagogebisa da ebrauli sasaflaoebis arkitektura sakartveloshi]. Unpublished Ph.D. Thesis, Georgian Technical University, Tbilisi.
- **Bostanashvili, Shota. 2010.** ზღვაოსანი პილიგრიმები: (ბ) არტისტული წარმოდგენა [Zghvaosani piligrimebi: (b) artistuli tsarmodgena]. *Semiotika*. 8: 335.
- Bostanashvili, Shota. 2012. ຕວງbo ຕາວວັວຕົວລຸດ [Otkhi laparaki]. Tbilisi: Ltd 'Universal'.
- Bostanashvili, Shota & David Bostanashvili. 2008. ნიშანი და ნაშენი [Nishani da nasheni]. *Semiotika*. 4: 76-86.

- **Bostanashvili, Shota & David Bostanashvili. 2009.** "ნაშ/ენის პრეზენტაცია [Nash/enis prezentatsia]. *Semiotika*. 5: 117-123.
- პოეზიის სასახლის განადგურება. **2013.** arpoTV, 1 March. Available from: youtu.be/pS4Ysb9HmmY [accessed: 5 November 2016].
- პოეზიის სასახლის პრეზენტაცია. **2013.** arpoTV, 21 February. Available from: youtu. be/oCdSIT4DKWs [accessed: 5 November 2016].
- არქიტექტურა არქიტექტურისკენ. **2015.** arpoTV, 20 July. Available from: youtu.be/vTUiH56NsQQ [accessed: 16 April 2016].

Acknowledgements

The author would like to thank Architect Tina Sirbiladze for granting him access to Shota Bostanashvili Archive located at his former residence in Tbilisi. She made available, and granted him permission to reproduce, some of them in this publication. Thanks are also due to Prof. Dr Architect David Bostanashvili for the translations of the Georgian publications and his valuable comments on earlier drafts of this paper.

This research was financially supported by the Academic Work Resources Fund of the University of Malta.

Correspondence address:

Lino Bianco, PhD
Department of Architecture and Urban Design
Faculty for the Built Environment
University of Malta
Msida MSD 2080, Malta
Tel.: (+356) 99422727

E-mail: lino.bianco@um.edu.mt