



### The Heritage Alliance and British Council Global Travel Grant Scheme 2018-19

### Part 1:

Organisation: COTAC (Council on Training in Architectural Conservation)

Name: Peter Lakin

Job title: Senior Lecturer (BIM for Heritage)

Country travelled to: Russia

Specific region or cities travelled to: Kazan, Tatarstan

Organisation(s) visited:

**Kazan State University of Architecture and Engineering** 

Ministry of Culture of Tatarstan

**Tatarstan Special Scientific and Restorative Administration** 

Committee for cultural heritage preservation

Dates of visit: 9th - 15th June 2019

#### Part 2:

### 1. Original purpose of the visit:

Guided visits to conservation/heritage sites in Tatarstan to investigate the processes, methods of conservation and finances involved and thus identify training needs and methods. To investigate the possibilities of introducing BIM for Conservation. To see how 3d point clouds are being used for heritage work by TSSRA. To present the work of BIM4Conservation to TSSRA and KSUAE through a series of lectures.

# 2. People, organisations, projects of relevance to your organisation/ project that you encountered during your visit:

Svetlana Persova, the Deputy Minister of Culture / Deputy Chairman of Committee for Cultural Heritage Preservation — a personal guided tour of Sviyazhsk, including the Archaeological Timber Museum (conservation project of lost village preserved in the mud), and the recently restored Cathedrals/Monasteries on this UNESCO site; a site visit to Kazanskiy Cathedral, currently being reconstructed (having been destroyed by the Soviets).

Olga Poroshenko, the Head of International Office, KSUAE – a personal guided tour of conservation projects in Kazan, including the old characteristic wooden buildings.

Lilia Gilmeeva, the Head of Department, KSUAE – a personal guided tour of Pobedy Park, where conservation of old military aircraft is continuing

Mikel, Tatarstan Special Scientific and Restorative Administration – operation of the laser-scanner during the demonstration and provision of the data collected

Prof Olga Bakhareva, Professor at the Institute of Construction Management, KSUAE – discussion about conservation student projects (MSc level).

Hanifa Nadyrova, Head and Saifullina Lyaila, Assistant Professor, of Department of Reconstruction, Restoration of Architectural Heritage, KSUAE – presentation of students' work from the conservation/heritage courses

Students of the Dual Degree (KSUAE/UEL) – an audience for my presentations

KSUAE = Kazan State University of Architecture and Engineering

This university is one of only three offering Heritage programmes across all of Russia.

### 3. Summary of the visit, including what went well and what was challenging:

An excellent week, the mornings presenting lectures about BIM and especially BIM for Heritage and Conservation to the students from the Dual Degree programme (between KSUAE and University of East London, thus the initial link). Members of teaching staff also attended. The highlight was a site visit with the students to give them a demonstration on how a laser scanner is being used for conservation work. As the TSSRA had already sent me the data from a previous scanning session, I was able to create the 3D model prior to the visit, and show the students the finished item, including walkthrough videos.

This left the afternoons for site visits and discussions with the relevant people (see 2 above). I was lucky that the Deputy Minister of Culture for Tatarstan, Svetlana Persova, became involved and provided me with valuable answers to my questions, as well as personal guidance of the island of Sviyazhsk (UNESCO site) which has recently been restored, and a separate visit to Kazan Cathedral, which is currently being reconstructed after demolition during the Soviet period.

In addition, I had meetings with various staff in the university to look at the final year projects by their students who are studying on their Conservation programmes. I also had a consultation with one of the students and provided her with guidance as to how to submit her project in a forthcoming competition.

The only challenge I faced was not knowing the language, although the university did supply a translator for me.

### 4. Experience and knowledge gained, with particular focus on how this experience and knowledge will benefit your organisation:

COTAC is currently researching the provision of conservation courses in the UK, looking at the content and standards required for accreditation by the institutions. This trip allowed me to draw comparisons between the education systems, and how both countries use the ICOMOS Guidelines and Venice Charter. Conservation training in Russia is very sparse with only 3 universities and 3 colleges offering education and training in conservation. The size of the country opens up the necessity for on-line training, another idea being developed by COTAC for the UK.

One difference is that the Russians have to reconstruct many of their buildings rather than conserve them, due to demolition in past times. This has an impact on the training of those working in

them, due to demolition in past times. This has an impact on the training of those working in conservation as the emphasis is on rebuilding rather than conserving. Studies in heritage construction techniques, materials and architectural history are the key elements of all the courses. Building Crafts College (where COTAC is based and where I work) run a Degree in Historic Building Conservation and the student projects I saw have given me ideas on how to adjust the teaching and assessment of our students' work, especially their final projects, making them far more professional and work-ready.

# 5. Top tips for other heritage professionals working internationally, based on the learning gained during your visit:

They must have a good host who can arrange contacts, introductions, and site visits. Offer something in exchange for their help, for example, I gave a set of lectures to their students, on which they were able to build a short course. Arrange for a translator if the language is unfamiliar.

The Russians are passionate for all things heritage at the moment with a lot of restoration work progressing, looking at the structures damaged or destroyed by the Soviets. Thus, there is money available for consultants from the UK to help guide them. Look away from the main centres like Moscow and St Petersburg, as they are well supported (in addition to Kazan, interest has been forthcoming from Sebastopol (Crimea) and Bishkek (Kyrgyzstan)).

Link up with local branches of international companies (through the university I have links with the Kazan offices of TopCon, through Leica I have contacts in their Moscow office).

Research is needed before travelling, on-line, through UK contacts etc. Be prepared. Knowledge about projects in their home town goes down well with the people out there – it shows you are interested in them, not just going along to take photographs, thus they tend to be more helpful.

# 6. What are the next steps you are going to take following the visit, and what resources/ support might you need in order to successfully realise your ideas?

- Present findings to COTAC and Building Crafts College (staff and students)
- Possible paper for presentation at the COTAC Conference in November.
- Report to BIM4Heritage Task Group.
- Introduce some new teaching and assessment ideas for the BSc Historic Building Conservation.
- Arrange for the Rector from KSUAE to meet with the principal of Building Crafts College during his visit in July.
- Look into arranging a student visit to Kazan for the Heritage and fine craft (woodwork) students.
   Consider setting up student exchange trips.
- Resources... nothing really, although some incentive to help the students visit would be good
- Contact links between KSUAE and Ministry of Culture of Tatarstan with Historic England (Paul Bryan) following the recent 'BIM for Heritage' publication translated into Russian.
- Possibility of further similar visits to Crimea and Bishkek (financed by them).
- Possibility of further visits to KSUAE to teach on the Dual Programme and other short courses.
   They are also looking to set up a BIM training centre and will need guidance.

# 7. In one sentence, please summarise the impact the visit has had on your organisation and the organisation(s) you visited:

For COTAC, as we progress with our on-line conservation awareness programme, many of the ideas and examples gathered during the visit will be of great benefit in the development.

For KSUAE, they will be making more use of BIM in the teaching of their conservation studies, with an increase in the use of laser-scanning (through co-operation with TSSRA) to support student projects.

- 8. In one sentence, please summarise the impact the visit has had on you personally:

  I have made many personal links within the heritage sectors of both Kazan and the UK as a direct result of this visit, which will hopefully provide more opportunities for similar future projects.
- 9. Quote from your Director / Trustee / senior staff member on the benefit and impact of your international visit on your organisation:

Undertaking effective architectural conservation requires relevant knowledge, skills and materials whilst also being appreciative of how the emergence of new digital technologies and techniques can positively impact on integrating the outcomes. Achieving international 'read-across' experiences can also contribute greatly to mutually beneficial programmes whilst, at the same time, establishing personal links and connections that enhance the participating parties' abilities to further develop and flourish. In this regard, COTAC looks forward to emerging collaborative engagements as a result of the completed Kazan agenda.

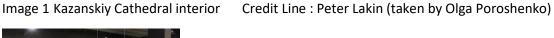
- 10. Following this international experience, how likely is it that your organisation will fund another international visit in the next 12 months from 1 to 5 (1 = very unlikely, 5 = very likely)?
  Depends on how well my report to them is accepted and how healthy the finances are. As far as Building Crafts College is concerned, then it might be possible to arrange a study trip to Kazan for the students.
- 11. Will there be any follow up to this visit (e.g. jointly paper writing, online community building, future project applications, formal partnership formed, etc.)? (max. 150 words)
  - Possible student study trips (both directions)
  - Possible student exchange visits
  - KSUAE Rector to meet with Principal of Building Crafts College to discuss possible joint projects in Conservation training.
  - Possibility of similar trips to Bishkek and Crimea, funded by the universities there, both who
    wish to invest in BIM for the maintenance of their Heritage and Conservation programmes.
  - Application to the next ERASMUS Plus session as a joint venture between KSUAE and other European universities.

### **Images**

Please supply at least three images from the visit. Please send high resolution images as jpeg files (recommended size: 300 dpi, min. 21 cm wide).



Title: Personal Guided tour of Kazanskiy Cathedral Rebuilding Project by Deputy Minister for Culture





Title: Personal Guided tour of Sviyazhsk (UNESCO site) by Deputy Minister for Culture

Image 2 Sviyazhsk Timber Museum Credit Line : Peter Lakin (taken by Olga Poroshenko)



Title: Lecture to Dual Degree students at Kazan State University for Architecture and Engineering

Image 3 Lecture 1 Credit Line: Peter Lakin (taken by Zarina Mukusovina)



Title: Demonstration of laser-scanning to Dual Degree students

Image 3 scanning demo Credit Line: Peter Lakin (taken by Prof Olga Bakhareva)

Image files (at full resolution) are in their separate files.

(all photos taken using my camera in order to maintain high resolution)