

A canon of technical theatre -a trial to create order in the chaos

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The CANON project aims to raise awareness of the history and heritage of technical theatre. It develops a Canon of technical theatre history, supported by an interactive timeline, tools and methodologies for teaching. By doing so, it develops a network of like-minded souls that support the goals of the project.

The group working on this Erasmus+strategic partnership project consists of schools and institutes from 7 different countries (Belgium, Czech Republic, Germany, Italy, Spain, Sweden, UK). This international cooperation means that we can take into account different (regional) points of view, and the different backgrounds of the participants (architects, scenographers, technicians, theatre practitioners, theatre historians) strengthens this wide view of theatre technical history.



In December 2019 the partners in the Canon project was gathered in Brussels for the first time. Standing to the left Chris van Goethem, author of this article. Photo: Anders Larsson

A canon is the “list of facts considered to be permanently established as being of the highest importance in a specific field”. It is the list that every practitioner in a field is expected to know and understand. We interpreted this definition in the project as “the hundred most important concepts one needs to know about technical theatre history.”

The CANON represents important practices, milestones and turning points in that history. You could say it is the hundred stories that need to be told to understand our technical theatre history.

Each of these stories contains facts, people, methods, equipment, manufacturers and the supporting sources that together form a coherent story about how we cre-

ated theatre, performances, events. For example the story about the movement towards a more abstract, projected scenery includes elements of Appia, Fortuny, the Linnebach projector, the Hellerau theatre...

Presenting information in different ways

This is where the interactive timeline comes in. It is the container for all the facts, people, methods, etc., but more importantly, it shows the relation between these elements. By splitting the information into small connected elements, it is possible to visualise them in different ways and see new relations.

The visualisation shows the information in different ways, such as a timeline, a word cloud, a map, an AR/VR-experience, in addition to more traditional ways of presenting like a list, a wiki article or just raw data.

Each item in the database creates its own visualisations, based on the content of the item and the “surrounding” items, visualising the items in their context. If you look up Drottningholm theatre for example, the timeline will also show you related people, theatre companies, plays, and so on.



It takes around eleven meters of paper to plot the time line from 2500 BC until today and in the same time give space to put in data and subjects of importance for the Canon project. Photo: Chris van Goethem



In an scale model of a Barock theatre it is possible to show diferent movements of a changement a vue during a perfomance.
Photo: Chris van Goethem

The map will include other theatres in the neighbourhood and timespan, the word cloud will give you an overview of related items. Clicking on one of the items you see, will bring you to this new item with its own visualisations. In this way, you can make a “wondering journey” through history.

If you click for example on Gustaf III of Sweden in the Drottningholm timeline, you will see that he was involved in the Gustavian Opera, and if you click on the Gustavian Opera, you will see there is a cue book for gas lighting connected to this opera house.

Information on three levels

The database will also lead you to other initiatives like the theatre database, the wikidata main database and different repositories and online archives. This means we can focus on the information we need to construct the technical theatre history but also connect with other information available.

The database software behind the system is Wikidata, so we can export our content or link in their database later on. It is a dynamic database, which means that not only the content grows by using it, but also that we can create properties on the go.

The information is organised on three levels. On the top level, there are grouping areas, for example “archi-

tecs”, “sound machines”, “sources” or “collections”. These give you an overview of what is available about a specific type of information. On a second level there are “generic types”, for example “sound machines” or “Fresnel spotlights”. This intermediate level is needed because we often want to describe a concept rather than a unique piece. On the lowest level, we describe unique occurrences. This can be an “architect”, “the clatter machine from the Royal theatre in Copenhagen” or a “REVOX B77 mark I”. These occurrences feed the generic level of information and show where examples can be found.

Tools for collaboration and teaching

At the moment the database is in an experimental phase, and is mainly used to create the output we need, but we see a lot of potential for a use as a collaborative tool, where different researchers, collectors and enthusiasts can bring information together and use each other’s information.

The Canon project also develops a series of tools for teaching and understanding. This is a series of “things” that support teaching the canon and the items of the timeline. The “things” range from more traditional, like pictures, drawings, audio recordings, videos showing the equipment in action, and translations of important texts, to more high tech, like 3D renderings, digital drawings for CNC and VR environments.



In a modern scale model of the principle for Barock machinery is it possible to teach and train both design and technical theatre students. Photo: Chris van Goethem

Lot of different tools

Some examples of the tools we are developing probably explain more where we are heading:

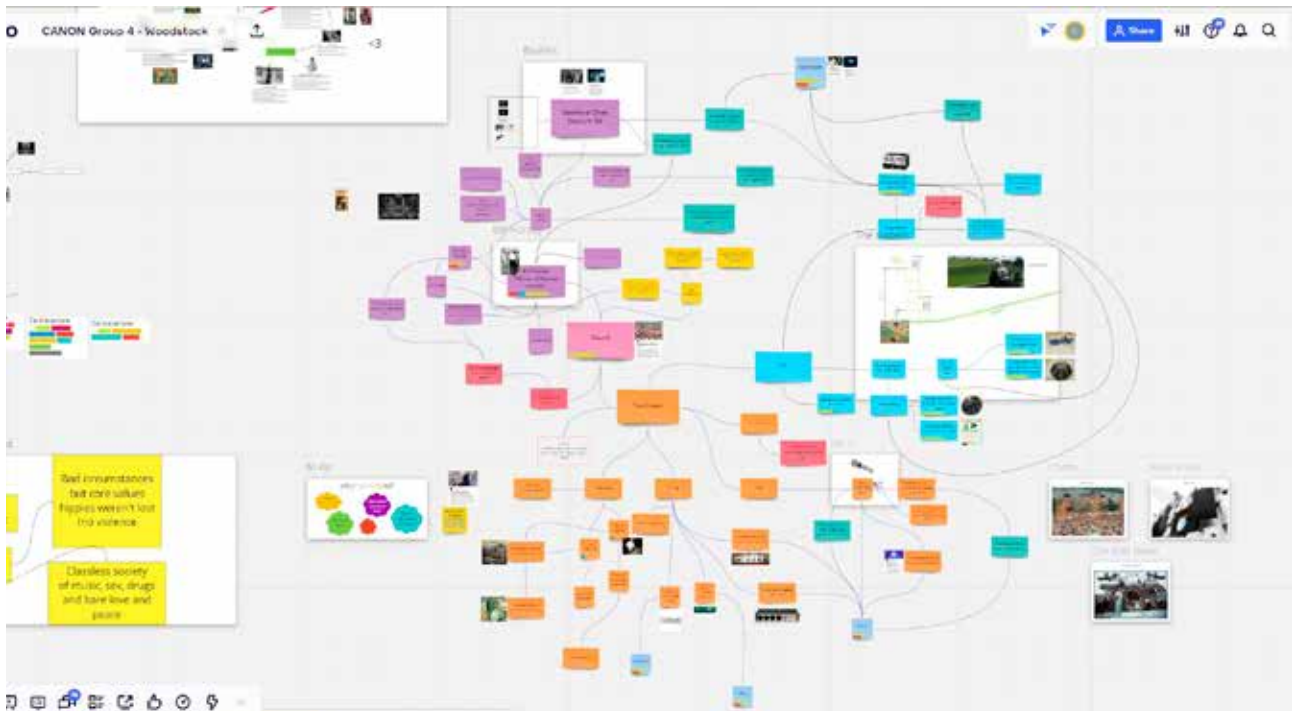
- A recording of the "Quattro dialoghi in materia di rappresentazioni sceniche" (Four Dialogues on Scenic Representation) of Leone de' Sommi, (played by
- Recordings of interviews with (old timer) practitioners about working practices during their career.
- A recording of the use of a DIT2 console (a complex preset board)
- Recordings of sound machines in action
- Scans and 3D representation of spotlights
- The development of historic fixtures for lighting visualisation software (candles, gas light...)
- 3D VR models of theatres
- A translation of "Pratica di fabricar scene e machine ne' teatri" by Nicola Sabbattini into English, and creating the theatre in a 3D model and drawings based on the instructions of the books.
- A software reconstruction of a Strand 'Grand Master' lighting control.
- Drawings of scale models, in order to laser cut, 3D print or CNC them.
- An annotated source base of "hard to find" online resources and books.

Why and how do we teach?

The final part of the project are the methodologies. In this part, we want to inspire teachers and educators. Without claiming we have (or there is) a "right method" to teach the history of technical theatre, we present good examples of how to teach, based on our own practice and that of colleagues.

Important questions are why we teach this, how we teach it and how we adapt to a specific target group like future technicians or designers. The starting point is the idea that history is more than dates and facts, but all about relations and developments, and that the understanding of history and heritage improves innovative practices in our daily work.

The project is mid-term now and we had to adapt it rather drastically to the Covid 19 reality. The idea was to meet once a year with the teachers and once a year with the students. We would meet, work together, visit theatres, develop and test content, discuss and enjoy each other's company. We would work on trade fairs in "heritage cafés", present our work and confront practitioners from the working field and manufacturers with our findings. Unfortunately, after the kick-off meeting with the teachers, the world of traveling stopped and we had to adapt our plans.



By using Miro boards it was possible for students from different countries to work together around special research assignments. Here is the result of the research of Woodstock. Photo: Chris van Goethem

Vital meetings for students and teachers

We transformed the first student meeting into a virtual one. Four groups, composed of students from all countries worked together on a Miro board, supported by the teachers that “travelled” from one board to another. Each group worked on a specific theme: “Drottningholm”, “Hellerau”, “Total theatre” and “Woodstock”. During a whole week they developed a “mood board” of the theme, gathering all information in a kind of mind map with pictures, sources, videos and so on.

The themes were the starting point to look into different directions and fields. They looked at the technology, the architecture, the safety, the scenography, the social environment, the costumes, the music, the plays... At the end they presented their work to each other. The long term result was a mass of information that can be fed into the database and reused by others.

After this meeting, the teachers met on a regular basis, discussing not only the planning of the project, but also working together on content. Based on this, we started working in smaller groups, with students, on different topics.

One group worked on the drawings of Sabbattini and the translation, another on the Di Somi dialogues, yet another on testing interviews with practitioners, one group worked on the development of the database and last but not least we worked together with the digital DTHG project on VR environments.

We broke in to each other’s classes, we discussed tools and methodologies. All in all, the cooperation was more intense and spread over a longer period of time than it would have been if we had only focussed on face to face meetings.

But on the other hand, we are looking forward desperately to meeting again in the real world; the virtual world showed its limits in Zoom fatigue, less concentration, difficult communication between languages...

Nothing can replace the hand-language when talking, the physical touch of a machine that is 300 years old, an unexpected remark at a trade fair giving an new lead, the visit of a building where our professional ancestors have worked, the discussion at a table, scribbling notes.

So for the next, and closing, year of the project we plan field trips again, working together as we like to do. You will see us presenting in the places we are all so familiar with. You will be able to visit our heritage cafés and see and discuss our results in real life!



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