

Name of the research	TROMPA: Towards Richer Online Music Public-domain Archives
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Duration of the project	May 1st 2018 - 30 April 2020
Local ethics approval date	

Researcher Details

Name	Emilia Gomez
Institution	University Pompeu Fabra
Address	Roc Boronat, 138 08018 Barcelona
Email	emilia.gomez@upf.edu

TROMPA Objectives

Our European **cultural heritage** enjoys considerable public interest. For example, in the first half of 2017, the collective Europeana collections enjoyed around **1.2 million** page views per month and 11 million views per month through Wikimedia projects.

Moreover, for **classical music** we observe both considerable availability and engagement at large scale. Large volumes of scanned out-of-copyright **scores** and **audio clips** are reachable through online portals such as the IMSLP Petrucci Music Library, Europeana Music, CDR. Moreover, a wealth of musical interpretations, in the form of performance recordings, can be encountered through music services such as YouTube, Musopen, and the IMSLP. These resources are not only played, shared and contributed by **professional experts**, but also by **amateur enthusiasts**.

However, **mass availability** does not automatically imply **mass accessibility**. Resources in various modalities, such as scores and performances, may relate to the same musical object, but are rarely presented in linked ways, and always ‘as is’, just presenting the digital files.

TROMPA’s general goal is to broaden and deepen the enrichment of online public-domain classical music resources. This will be done by engaging a **broad audience** of music-loving citizens, who will strategically cooperate with novel ICT technologies. Our target is to have unprecedented volumes of musical resources being **enriched**, explicitly including aspects of human interpretation at various skill levels. The TROMPA project aim is to have a very strong component related to community involvement. Following a philosophy of co-creation and citizen science, TROMPA employs **crowdsourcing** mechanisms to connect the large audience of music-loving citizens more deeply with our public-domain music resources.

TROMPA will create various technologies for collaborative annotation of music material including:

- ❖ A tool for score editing
- ❖ A tool for annotating pieces of audio
- ❖ A tool for aligning and visualizing score performances with audio tracks

- ❖ A tool for searching data and metadata

All these tools will be integrated in five different **use cases**, targeting to different audience. One of these cases is targeted to **music enthusiasts**.

For this use case TROMPA project needs to **recruit participants** in order to collaborate in many music related tasks including the tagging of music pieces, exchange and/or contribution of music material, collaborative annotation of music excerpts and music performance ranking.

Experiment Details	
Duration	From:
	To:
Expected time needed	
Motivation and duration of the research: <i>To improve choir singing rehearsals practices.</i>	We are conducting research to enrich European musical heritage with data provided by citizens. We would like to gather data about you, to figure out whether these data can be used to design new ways to interact with music. The duration of the research is for 2 years.
Research objectives: <i>To contribute to research supporting online music public-domain archives.</i>	The research contributes to the fields of music, European heritage, culture, music processing technology.
Methodology and procedures: <i>We would like to use data from your participation in the TROMPA activities to support our research..</i>	Data will be collected from activities in and related to your participation in the TROMPA project which includes prototypes testing. You have the option of making the data from the activities available for research or not. We are not researching whether you individually do well or badly. Instead, we are interested in the beliefs and behaviours of all participants; and whether the supporting technological tools and materials work well for different kinds of music enthusiasts.
Collected Data <i>The data we collect includes the data indicated here</i>	Data to be gathered is described in the table below. Anonymized data from the experiment will be collected, analysed and shared under restricted access (only for research purposes - using a data sharing agreement) in open repositories in support of Open Science. The sharing of data will extend the benefits derived from the time and data contributed. The Music Technology Group (MTG) and the Interactive and Distributed Technologies for Education (TIDE) of the Department of Information and Communication

	Technologies (DTIC), may also use the anonymized data in scientific publications and data models in support of the fields of research stated above.
Overview of data collected	We will gather different kinds of data including (1) your opinion about the subject 'choir singers rehearsal practices'. (2) Your opinion (questionnaires, interviews) about the classroom activities. (3) Observations (notes, pictures, audio) of what happens in the laboratory. (4) Data related to the activities which includes log files collected from the online software applications. (5) voice audios -SEE TABLE AT THE END OF THIS DOCUMENT.
Risks and Privacy <i>Any data that may be used to directly identify you such as your name and email address will not be shared nor made public.</i>	<p>Anytime personal data is shared a risk exists that unauthorized persons may access and identify you from the data. Security measures will be taken to minimize this risk. To protect your data and your privacy, collected data will be anonymized using an ID number. If your name or email are used when completing activities, your name and email will be taken out of the data used for analysis. No names or emails will be used in research reports, analyses, or in any part of the research.</p> <p>Any pictures and audio used to illustrate aspects of the designed activities that might contain images of you, will only be used in research contexts or to train educators in the designing of activities.</p> <p>Further, your data will be stored in a secure place under key or digitally with safe access control mechanisms so that these can only be consulted by UPF researchers of the current project. No one outside the UPF research teams will have access to the original data, except it is possible that Ethical Review Boards (ERB) may view this study's collected data for auditing purposes. The ERBs are responsible for the oversight of the protection of human subjects involved in research. The security of the data will be maintained in accordance with the guidelines set by the National Data Protection Commissioners and will destroy the non-anonymized data in 5 years.</p>
Benefits: <i>You will be contributing to research that hopes to benefit European musical heritage by enriching musical resources with contextual information</i>	<p>You will benefit from receiving more innovative and better supported rehearsal activities with the use of technological solutions. You will also be contributing to research that hopes to benefit European musical heritage by enriching musical resources with contextual information (e.g. emotions, memories of citizens associated to music, opinions...).</p>

<p>Voluntary Participation:</p> <p><i>You may stop or opt-out of sharing your data at any time. No reason needs to be given.</i></p>	<p>Your participation in this research is voluntary. You may stop or opt-out of sharing your data at any time. No reason needs to be given. Your participation or withdrawal will have no effect on your academic, professional or personal standings. You may revoke your consent at any time by writing to emilia.gomez@upf.edu.</p>
<p>Data Subject Rights</p> <p><i>If you have feel that your rights are violated, you may contact the agency set out here</i></p>	<p>You have the right to limit the processing of your personal data, to access a copy of your personal data that has been collected, and to require the correction and/or to deletion of your personal data, or object to any or all further processing, in conformity with applicable legislation. You may exercise your rights by either sending an email to gerencia@upf.edu, or by requesting it in writing, while adding a photocopy of your identity document (DNI) or an equivalent document to the address: Gerent. Pompeu Fabra University. Pl. de la Mercè, 12. 08002 Barcelona.</p>

TABLE	Data Collection	Type of Data	Use of Data	Methodology
Questionnaires (all participants)	Online or paper-based forms, given prior to, during, and after the set of laboratory experiments.	Written responses about opinions or practices related to the use of given mockups.	To understand the current situation with regard to choir members and music enthusiasts practices (e.g. annotating musical resources) and any changes during and after the set of experiments.	Quantitative & Qualitative (Ethnography, Case-study);
Interviews (some volunteers)	Semi-structured interviews of individuals and/or small groups conducted prior to, during, and after the set of experiments.	Spoken responses about beliefs and approaches related to annotation of musical resources.	To understand the current situation with regard to participants practices (e.g. annotating musical resources) and any changes during and after the set of experiments.	Qualitative (Ethnography, Case-study);
Log Data (all participants)	Online activities completed during and after the set of experiments.	Interactions with functionalities from mockups, annotation of musical resources, written data included in the system.	To understand the current situation with regard to participant practices (e.g. annotating musical resources) and any changes during and after the set of experiments.	Quantitative and Qualitative

Voices (only Choir singer case)	Recordings of rehearsals	Audio	To be transformed as synthetic version of audio rehearsals. The synthetic version will be integrated in the system to support other participants doing rehearsals.	Quantitative and Qualitative
Observations (all participants)	Researchers observations of participants during the set of experiments.	Notes, audio, video, photos to document participants engagement, comfort-level, and understanding.	To understand what worked and what needs to be improved in the experiments and technological tools.	Instrumental case study: Qualitative (case study)