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## **Building a Digital Archive for Cross- -national Historical Research**

An Interview with creators of the research project European Cinema Audiences;<sup>1)</sup> Daniela Treveri Gennari (DTG), Lies Van de Vijver (LVV) and Pierluigi Ercole (PE)

European Cinema Audiences (ECA) is a cross-national comparative research project funded by the Arts & Humanities Research Council (2018–2021) and led by Oxford Brookes University, Ghent University and De Montfort University. The research focus of the project is set in seven European cities, Ghent (Belgium), Bari (Italy), Leicester (Great Britain), Rotterdam (The Netherlands), Brno (Czech Republic), Magdeburg (Germany), and Gothenburg (Sweden) in the 1950s. Through analyzing and comparing the film distribution, exhibition and reception, the project aspires to explore the patterns of local film cultures from a comparative perspective. To do so, an extensive digital archive encompassing data on cinema venues and their exhibition practices and digitized visual and audio-visual material on the film reception was built. The first part of the project, the data collection, took place from 2018–2021. After the first outputs, such as Defining a typology of cinemas across 1950s Europe, the research team continues to estimate the methodological challenges in comparative research and prepares case studies analyzing the oral history, film exhibition and film consumption

In this interview, I had a chance to discuss the development of the project from a technological perspective with the lead researchers, Daniela Treveri Gennari, Lies Van de Vijver, and Pierluigi Ercole. Daniela Treveri Gennari is a Professor in Cinema Studies. She works on post-war popular cinema, and her particular interests are audiences, film exhibition and programming, as well as issues of censorship, Catholic influence on cinema history in general and more specifically on the development of Italian film industry between 1945 and 1960. She has been working on spectatorship in post-war Italy, *Italian Cinema* 

European Cinema Audiences, accessed October 4, 2022, https://www.europeancinemaaudiences.org/re-search/

Daniela Treveri Gennari, Liesbeth Van de Vijver, and Pierluigi Ercole, "Defining a Typology of Cinemas across 1950s Europe," *Participations* 18, no 2 (2021), 395–418.

Audiences<sup>3)</sup> and led the comparative project Mapping European Cinema: A Comparative Project on Cinema-Going Experiences in the 1950s in collaboration with Ghent University and De Montfort University. The latest additions to her publications is Italian Cinema Audiences. Histories and Memories of Cinema-going in Post-war Italy<sup>4)</sup> and Five Italian Cities: Comparative Analysis of Cinema Types, Film Circulation and Relative Popularity in the Mid-1950s.<sup>5)</sup> Lies Van de Vijver is a research coordinator in The European Universities Alliance for Film and Media Arts (FILMEU) at LUCA School of Arts. She works on historical and contemporary screen culture, film programming and cinema experience, and her work has been published in edited volumes and international journals. She is the editor of Mapping Movie Magazines<sup>6)</sup> and Gent Filmstad. Cinema's en filmaffiches. 1938–1961.<sup>7)</sup> She has been a professor at Antwerp University, VUB, KU Leuven and Ghent University on film studies, media studies and film historiography. Pierluigi Ercole is an Associate Professor in Film Studies at De Montfort University (Leicester, UK). His research is grounded in film history, audience and reception studies, transnational cinema and the diaspora and his work focuses, in particular, on cinema-going in Italy and Britain, Anglo-Italian film culture and the distribution and reception Italian films in the UK. His latest works, among others, include Mapping Cinema Memories: Emotional Geographies of Cinema-going in Rome in the 1950s<sup>8)</sup> and Cinema Heritage in Europe: preserving and sharing culture by engaging with film exhibition and audiences.<sup>9)</sup>

European Cinema Audiences (ECA) project focuses on the early 1950s. This period was also chosen for the pilot project Mapping European Cinema (MEC), in which you compared the film culture of three cities, Bari, Ghent and Leicester. In the ECA project, you broadened the research scope by adding more European cities, some of them positioned in a considerably different political and social context, behind the Iron Curtain. How did this decision change your perspective on the chosen period and the approach to comparative analysis?

DTG: WE should perhaps start from where the project started from. ECA gradually evolved from the national project Italian Cinema Audiences with the desire to investigate some of the areas explored in this project at comparative level. So, we decided to move on

- 3) Italian Cinema Audiences, accessed October 4, 2022, https://italiancinemaaudiences.org/.
- Daniela Treveri Gennari, Catherine O'Rawe, Danielle Hipkins, Silvia Dibeltulo, and Sarah Culhane, Italian Cinema Audiences: Histories and Memories of Cinema-going in Post-war Italy (New York: Bloomsbury, 2020).
- 5) Daniela Treveri Gennari and John Sedgwick, "Five Italian Cities: Comparative Analysis of Cinema Types, Film Circulation and Relative Popularity in the Mid-1950s," in *Towards a Comparative Economic History of Cinema*, 1930–1970, ed. John Sedgwick (New York: Springer, 2022), 249–279.
- 6) Daniel Biltereyst and Liesbet Van de Vijver, Mapping movie magazines: digitalization, periodicals and cinema history (London: Palgrave Macmillan, 2020).
- Liesbet Van de Vijver, Guy Dupont, and Roel Vande Winkel, Gent Filmstad: Cinema's En Filmaffiches 1938–1961 (Antwerpen: Houtekiet, 2021).
- 8) Pierluigi Ercole, Daniela Treveri-Gennari, and Catherine O'Rawe, "Mapping Cinema Memories: Emotional Geographies of Cinema-going in Rome in the1950s," *Memory Studies* 10, no. 1 (2017), 63–77.
- Pierluigi Ercole and Daniela Treveri-Gennari, "Cinema Heritage in Europe: preserving and sharing culture by engaging with film exhibition and audiences," *Alphaville: Journal of Film and Screen Media*, no. 11 (2016), 1–12.

to a small comparative project, which was the Mapping European Cinema, funded by the British Academy/Leverhulme. It only included three Western European countries, where we could test some of the ideas and the methodology that we wanted to investigate further. Later on, we decided to add two Eastern European countries which complicated the analysis of the data. But that is really the journey that took us to the choice of gradually enlarging the scope of the project and adding layers and different aspects of comparison.

LVV: You ask how that changes our perspective on the chosen period, and the approach to the comparative analysis. I think what Daniela says is quite essential — we started by keeping it close to our home, so to speak (as we all had the national expertise of the UK, Belgium and Italy), and trying to find comparative analysis within the Western European context that allowed us to test some of the tools that we wanted to develop while having the background in the contextual historical aspect of these case studies. And then, for the European Cinema Audiences, we just wanted to level up and see if you find these analytical tools, and in some cases develop them into digital tools. So, you apply them to a specific case where we do not have the backgrounds and choose more challenging case studies within a European context. We're not historians specifically on Eastern Europe, but we do know a little bit about their history. So that was the case, and it didn't really affect the way we looked at the early 1950s, because that was still our basic period of analysis that we all have a background in.

DTG: Perhaps we can provide a couple of examples where that complexity was increased. If you think that during that period Czech cinemas were stately owned, we didn't have in our previous dataset an example of a film exhibition of this kind. So, stately or city owned/run cinemas was an added variable that we needed to take into account. And when we were doing the analysis of these spaces, we needed to take into consideration this new exhibition practice in order to compare it with the others. So, it was a different perspective to that exhibition analysis.

PE: Yes, I think it was interesting for us also to decide to go behind or beyond the Iron curtain. It was important to understand what the dynamics were in terms of film circulation, film exhibition and how these dynamics could help us to develop a comparative model to investigate differences and similarities within cinema exhibition in Italy, in Belgium or in the UK with East Germany, or Brno. But also, in terms of oral history and the process of interviewing people, we needed to understand whether those different practices had an effect in the way people remembered the experience of going to the cinema across all of our countries. And one last point — a practical one — which is very important: we were lucky enough to work with a group of academics that were already experts in the film cultures in these countries, and therefore we were fortunate enough to get them involved. You, Terezia and Pavel and the others from the researcher's team to the National Validation Panel provided great support in the development of the project.

DTG: You also said, Pier, that the other interesting thing was that the comparison offered a snapshot of the popularity of cinema-going in different countries. So, we were investigating the experience and practice of cinema-going in Italy, where film consumption was still at its height, with the UK, where this popularity was already in decline. So, yes, the increasing number of cities added complexity, but it also added new findings which obviously were interesting.

The online digital archive you created consists of unprecedented scale in terms of data as well as audio-visual material. The project website states that you used innovative digital tools to build this archive. Can you tell us more about the specific tools that have been used and their role in the process of creating this database?

DTG: I think the most innovative aspect is the fact that we've brought together the three aspects of new cinema history, which is exhibition programming and reception. This, perhaps, had not been done previously in other digital projects and this is a big innovation for us. It means that you can look at a specific cinema, its geographical location, its programming, the relation to other cinemas and the distribution patterns across the city. And you could compare it across other countries, but also you could see what people remembered of that specific space.

LVV: I think it's important to acknowledge that we did build on existing models, and we stand on the shoulders of giants. So, some of these things have been developed before. We have used the Cinema Context data model, or other very specific methods circulating in the new cinema history, for example the POPSTAT method to calculate the film popularity. What we did try to do is combine them and make sure that they were comparative across our case studies. So, we tried to stay as close as to the model of the Cinema Context of the Netherlands for the programming and exhibition sector and then build on top of that. And the things that have been built on top of that most innovatively had to deal with the oral history, and its connection with the rest of the digital archive. What I believe is most interesting about the way the digital archive works now is that it can help you, with the digital tools installed in it, to come up with new kinds of results for your data, like for example the cinema typology.

PE: Yes, the interesting thing was that it was a real challenge for us to develop a methodology that would allow you to do comparisons. That has always been the biggest point of this project, that is a comparative project. So, we came up with a tool, let's say, when we developed the cinema typology, that moves away from the national dimension and it is truly cross-national. We are now working to achieve a similar result with the analysis of the film programming and also develop a film typology. These are for us, again, instruments that allow us to do that comparative work. I think that using digital tools is what allows us to do that through our database and also through the visualisations that we developed based on all the data that we had for the seven cities. It was very important for us to move from working on spreadsheets to more of a digital humanities approach, which allows us to have digital tools for a comparative analysis.

DTG: I would like to add that obviously, in order to get there, there was a lot of preparation that perhaps we hadn't foreseen, which was about harmonising the data across the seven cities. So aspects like censorship, cinema spaces, or even films' characteristics were quite complex to categorise and harmonise. So, for example, how catholic or non- catholic countries decided to rate films was different across all of our dataset and we needed to find a way to both keep the original raw data, but also create broader categories that would allow a cross-national comparison. In order to do that, we worked really closely with the digital humanities specialists at the DH Institute at the University of Sheffield - partners in the project - so that we could develop those functionalities we would need in the analysis of the data and in the creation of the digital archive.

LVV: We chose to work with open access in the sense that all of our data is downloadable. So in case you don't like the visualisations or you want to work with other software programs you can download a certain amount of data or even the entire dataset, and go at it on your own. And I think that's important for us definitely in the current debate around open access data.

We are currently in the process of writing our glossaries and indexes and explanations to the website, to allow researchers to fully understand the way we developed the digital archive, the sources we used and the methodologies we created.

Based on your experiences, does the number of chosen case studies affect the decision-making process of building the database structure, designing the online archive and selecting the analytical tools? Did the size affect the choice of data storage?

DTG: Obviously, it did. It is very much linked to what I said before. We had a wide range of data to harmonise. Obviously, if you've got three cities, especially in the case of Ghent, Bari and Leicester, I think we already saw that there are some differences, but they weren't as extreme as the ones that we had across the seven cities. We found great differences in the cinema types and cinema status. Some countries talked about first, second, and third run, and some countries talked about the district and the outskirts of the city in the classification. There was also a case of lack of data accessibility for some cinemas that were in the outskirts of Brno, for example, for which we didn't have the programming data because they were not available in the newspapers. Obviously, that had an effect on how we were going to define the cities, the space, the exhibition, and at times also the films, because even in the analysis of the film we found ourselves with films that were more difficult to identify. We had to make some decisions on what, for us, was a feature, what would constitute a short, and how we could distinguish them. Sometimes they were bold decisions that we had to make, but they were needed to be able to analyse the various aspects of the project.

LVV: Maybe we can just add to that as a small remark that it does seem a little bit like we're over-emphasizing the programming and the exhibition data. But a big part of the digital archives is the oral history as well. And it is easier in a way to harmonise data coming from newspapers — the film titles and venues — than to harmonise the spoken word. What I mean is that you can impose structures on the exhibition and programming data but that is a lot more difficult with oral histories. That is why the digital archive is very careful with the data in the oral histories. For instance, if something is being said, then we are able to find the entire passage to give this specific statement context. We were also very careful with the translations of use of dialects. We had a very long and exhaustive discussion, debate and conceptualization of the codebook, especially for that as well. So, it is a little bit of a different approach. If you want to put it bluntly, it is the difference between quantitative and qualitative data. So, in that case, the digital archive was an extra challenge as well to design.

PE: Just to answer the final part of your question about size. I think size wasn't an issue in terms of the size of the amount of data we collected. As Daniela said, we worked very closely with the Digital Humanities Institute. The amount of data that we were collecting and that had to be cleaned and processed It's never been an issue. I think what also makes

this project challenging, but at the same time very interesting is the fact that we are now able to work with all the data from the oral interviews. They have been all analysed using the NVivo software and then added to the data regarding the film circulation. That perhaps added an extra layer of difficulty in terms of putting together two sets of data. But I think it is extremely exciting to see what the results are, and also starting to make correlations between these two datasets.

In your article "Defining a typology of cinemas across 1950s Europe", 10) you describe the issue of missing typology of cinema venues on a European level that complicated the comparative analysis. Were there any similarly complex issues that prevented further analysis, and how did you approach them?

DTG: Perhaps they are related to programming. The first step that we're taking now is analysing the films that were most popular in each city. And we thought we would do that in order to try and identify patterns across those films. Obviously, the first pattern was that in countries from Western Europe that were strong film producers, you would have both the success of American films and national films. So that was quite obvious and it's a simple thing that emerges from the data. The situation is different for countries that didn't produce very much, like Belgium or the Netherlands. So, we want to understand what the situation was there, but also look at cities like Brno and Magdeburg, where the presence of American film was very limited and replaced by national and Russian films. We will have to conduct an investigation at national level and then move to a more comparative and cross-national analysis of the popular films, to determine if there are specific characteristics that run through the entire dataset. We are hoping to find that out by looking at those films that travelled not just in one or two countries, but across more countries in our dataset. This will allow us to identify what were the most transnational films, and why, perhaps, they were so popular across different countries. But also, it will allow us to explore the contextual aspects in each city (whether it was state intervention, censorship) that promoted or hindered the circulation of certain films in certain cities. We will also compare this aspect of the programming analysis with the oral history. And we will investigate the films that were the most remembered by our audiences. This will provide a new classification of films, one that we will need to compare with the results coming from the program-

LVV: I fully agree, and I specifically think it's important within the oral histories. We have the opportunity to analyse not only how many times a film is mentioned in an interview, but also how they are remembered. We can start to look at mentioning film titles because our interviewees felt obliged to do so, or look at the very personal memories of plots, scenes or emotions they have with certain films and compare that to the actual screenings. This is where the two data sets — the programming and the oral history data sets — can mean a lot more for each other than if they were being analysed separately.

PE: I would add that at the very beginning of the project we had endless meetings about defining the questions used for the oral interviews; questions that needed to be

<sup>10)</sup> Daniela Treveri Gennari, Lies Van de Vijver, and Pierluigi Ercole, "Defining a typology of cinemas across 1950s Europe," *Participations: journal of audience and reception studies* 18, no. 2 (2021), 396–418.

meaningful to people that lived in seven different countries. Similarly, the entire team worked very closely to define the codebook used to analyse the interviews. The codes that we used needed to be applied and make sense in each different social, cultural and political context. I think that was again another challenge of creating data that could be analysed on a comparative level.

The visual dimension of the project plays a substantial role in understanding the content of the database. The project's website offers a wide variety of graph and map representations of the data as well as an audio-visual material in the oral history section. To what extent are users able to manage the visual content on the website for their own analysis?

DTG: The website can work at several levels. It will work at a very basic informative level — you need to know how many times a certain film was screened in Ghent, or you want to look at patterns of programming in a specific city. That is the very basic level of analysis that it can do. But what for us is more exciting is some of the more complex visualisation. So first of all, the analysis of the circulation of films, and how that specific film circulates within a city, in a geographical manner, or in a timely manner, and compare that. There is an important button that we requested to be in the digital archive: the 'compare with' button. That's the one that allows you to look at Samson and Delilah, for example, and explore how differently it was screened in different cities, both in terms of number of screenings and temporal dimension, but also geographically on the map. We have tested these functionalities with students both at Oxford Brookes University and at De Montfort University. And it's been a very successful tool for analysis because students have been able to be given a task, and then, within a couple of hours, they were able to get results and to present them through some of these visualisations in front of the rest of the class. I think that that's why we wanted something that was quite intuitive. There's a lot of information at the basic level that you can understand on your own. But even the more complex one can be accessed with some basic information and descriptions.

LVV: As a digital tool, the website isn't perfect yet. We are developing all the metadata for this digital tool. To make it more concrete, if you move over a certain concept on the website, it'll give you a question mark with a link and that will explain exactly what is meant by this concept. And this is basically unwrapping the black box that is now online. This is a gain in the spirit of open access for the data as well as the data model. So, we are fully developing a glossary and making sure that each of the concepts that we use and that have more complicated calculations behind them, that they are being explained. They will have references that we link to either explanations or articles where we have a bigger platform to explain some of these concepts. This is very necessary if the website itself, as a digital tool would be evaluated as academic output.

TP: Yeah, I really like, and it never occurred to me before, that you also think about the platform as a teaching tool to teach about the history, but also to teach how to use the digital tool itself. And I think that's a really great addition to the project. I also think that making the data available for download to allow additional work and analyses for one's own research is also a great advantage of the project.

PE: Yes, this is something we talked about also at the HOMER conference in Rome. It works really well. I am very interested in delving even more into how to use these tools in

teaching. I think they have great potential, not only to understand some aspects of film history, but to understand what the questions are that students are able to ask and not ask using these tools. What are potentially the answers that they get. As we discussed in Rome, it would be fantastic to have a group of academics and discuss how many of the analytical tools that they developed can be used for teaching purposes. That is something I'm very much interested in.

The European Cinema Audiences digital archive stores hard data collected from several countries. Together with its predecessors, such as Italian Cinema Audiences, several other projects focused on collecting data on cinemagoing and cinema culture exist.<sup>11)</sup> To what extent did you consider the database interoperability that could facilitate future comparative research using several online archives?

DTG: I think we went beyond that because rather than facilitate future comparative research using several online archives, we are developing a platform, the *Cinema Histories* platform<sup>12)</sup> that allows data to be integrated, and all the functionalities that are now available only for the ECA data sets to be used for any other project in terms of programming, exhibition and oral history. So, this can work whether you already have an online platform of your own, and you want to integrate it with the data in ECA and do more comparative work or simply use the data functionalities. Also, if you got a very small data set, an excel spreadsheet, and you haven't got the funding to develop what ECA has developed but you still want to use those functionalities, you can do that through *Cinema Histories*.

LVV: Developing data sets or digital tools needs financial support. So, we wanted to create *Cinema Histories* to make sure that we did not stay in our ivory tower and present our digital archive as an inaccessible tool. We wanted to make sure it would be open access and usable by everybody. So, anybody can contact DHI<sup>13)</sup> to learn how to upload this data and access tools that are expensive to develop.

DTG: We have some funding that we want to use for researchers that haven't got the possibility of developing their own space and we will send out a call for it in the next few months. What *Cinema Histories* also does is that it gives you your own web presence. You will have a very simple web-based space for yourself, if you are unable to source it independently. So, you can access your data, analyse it using the ECA functionalities, but also interact and compare your data with data in other projects.

PE: *Cinema Histories* will contain all the data from ECA plus all the data that other researchers want to upload and share. Researchers can continuously add to the "original datasets" of ECA.

DTG: Obviously each individual project will retain independence and — most importantly - the ownership of their data.

TP: So, let me understand it. It's not just making available the tools that this project offers, but also the storage, is that correct?

<sup>11)</sup> See for example similar projects listed on the HOMER website *HOMERNetwork*, accessed October 4, 2022, https://homernetwork.org/homer-projects/.

<sup>12)</sup> Cinema Histories, accessed October 4, 2022, https://www.cinemahistories.org/.

<sup>13)</sup> Digital Humanities Institute at the Sheffield University.

DTG: Yes, it is. And also, maintenance. Because, at the moment, for example, I am really struggling with other projects (like the Italian project<sup>14)</sup>) to ensure they are properly maintained. While DHI, which will hold the *Cinema Histories*, have agreed to keep it alive and offer indefinite storage.

PE: There is also no limitation in the amount of data that you will be able to upload.

The main asset of a cross-national project, such as the ECA, is the possibility of comparing data from different backgrounds. What was the main challenge in applying a comparative method to seven different cultural, societal and political historical contexts and which digital tools appeared most efficient for this purpose?

DTG: I think the first thing we thought was that for this amount of data the only way to actually do a proper systematic analysis was to develop the digital archive. Because anything else would have been very, very difficult. I mean, if we left the data in excel spreadsheet, or any other format, it would have been impossible to do any proper analysis. I think that's the first thing.

PE: As mentioned before, comparison was at the core of this project. Often, we've seen approaches to comparison in which two or more case studies are discussed and commonalities and differences are highlighted. What we feel is needed are theoretical approaches and tools that allow us to analyse large sets of data that, in our case, reflect economic and cultural diversities. The article on the cinema typology is our first attempt at defining a comparative approach to the analysis of the exhibition data. Regarding the interviews one of the challenges that a comparative analysis brings to an international project like ECA is that of losing some of the cultural specificities that became apparent in the interviews. In order to compare you need to find common denominators and the risk is that of having to ignore some cultural or national specificities. We are very much aware of that.

The process of collecting cinema memories consisted of making an audio and video recording of the interview. Subsequently, transcription and translation were created to allow searchability and content analysis. Generally, there is not much emphasis placed on the visual dimension in interview analysis. What led you to the decision to record video interviews, and how did the visual part affect the narrative analysis of the respondents' memories?

LVV: I think, in general, visual material is highly underestimated within an academic context. We very specifically chose the digital archive to be visual for several reasons. For instance, there are about two hundred film posters from the 1950s on the website. There are a lot of images of the venues which we geolocated on maps. In my case, as the researcher for the Ghent case study, I use these illustrated maps in the interviews. When people were talking about their neighbourhood I used this digital tool, and I showed them the pictures or other contextual material. So, we never thought of the website as purely a nonvisual tool. The second aspect for me, is that we use this visual material for very specific methodological reasons as well, for instance to look at the body language in the interviews. We learned a lot from the experience that Daniela had in the Italian Cinema Audiences. And lastly, we also understood that visual material is extremely important for sci-

ence communication. The interviews are not only being analysed by us, but they are also being used to make a documentary for instance. We wanted to make sure that we could communicate what we were trying to do with our research results to a broader audience, to the public. For that, visual material is very important. We don't just talk about the venues, the programming, or the interviews, we can show this as well.

DTG: Maybe I can just add that there is emphasis on the visual dimension in oral history, and on how the story is narrated not just with words, but also with body language, eye contact, the poses, the sound, the laugh. If you have just an audio interview, you risk missing out on that. So, within the coding book, we developed a section that is called body language, because we really felt that especially across the seven different countries, we might identify some features that were specific to a certain group of people compared to others. And this was an important aspect of the analysis as well.

The oral history represents a vital part of the digital archive and facilitates a somewhat intimate connection with the cinema history through the personal memories of the respondents. In the comparative analysis, did you find any analytical tools that were able to retain the personal dimension of the audio-visual material and yet bring valuable results?

Lies Van de Vijver: As we said, we want to stress the importance of visual material when analysing oral histories. This is a peripheral remark, but we live in a rather accessible digital age; making video interviews today is a lot easier than it used to be for researchers a couple of years ago. Part of our budget was calculated for professional recordings, but I would highly recommend to young researchers to start doing this with their smartphones, just to capture the way people talk with their body.

PE: What we need to remember is that we were working with seven different languages. Hence every single interview had to be translated into English, apart from the ones from Leicester, in order to be analysed using NVivo. Therefore, the visual element was very important. Often these interviews have been analysed, based on the transcription or the translation by one of us that perhaps didn't know that language. So that was very important, and we knew that it was a massive challenge. I think the visual, the recording of the interviews really helped in at least understanding sometimes the emphasis that was given to a particular word that they were using, something that the translation, despite being correct, could not "translate".

DGi: It is also interesting as an exercise, and I just did it as a mistake when I was trying to listen to one of the interviews without the subtitles. It wasn't on purpose. But I realised that you can, without knowing the language, make a little bit of sense of the response by body language, the movement of the eyes, the smiles and the pauses in the respondents' speech. It was quite illuminating because you realise that the visuals are a really important part of the data. And you can't really detach that from the rest of the interview.

LVV: I think we're going to have some very interesting results from analysing body language. Even, for instance, the difference between the way people are at ease or not in an interview, and how that affects the questioning. I've noticed that as well when coding interviews from other cities of languages I did not understand. And we can add an extra layer of interpretation based on the visual of the interview.

Based on your experiences, what is your take on implementing digital tools in the humanities and, specifically, in cinema history research? What is (or should) be the position of a quantitative and qualitative analysis conducted automatically by a machine instead of a human researcher?

Lies Van de Vijver: I think that the first remark is that we never considered the 'instead of'. Within digital humanities it's very much an interaction. And the most perfect example of that is, if you look at the programming data, it can grow into such a massive data set that it is simply not possible — or it would take a lot more time — to analyse. That is the basic essence of digital humanities, to have these big data sets and make sure that through digital tools you can start analysing them on a bigger scale, or, in our case, a comparative one, instead of just remaining on the micro level. The other aspect is that you as a researcher have the responsibility to use the results that come out of these digital tools to interpret or reinterpret, or even tweak the digital tool itself if you, as a researcher, consciously know that mistakes have been made. So, it's always an interaction, and I would never suggest it to be the 'instead of'.

PE: I would like to go back to the educational purposes or potential purposes of the digital repositories. The first step is to understand what potential answers the source can provide and therefore what questions can you ask. What are the limitations? We need to understand what that source is telling us and what kind of data is producing. And that data needs to be questioned. Therefore, please don't go to our website and look at our data without questioning. Digital tools are very useful to us in order to provide visualizations and highlight patterns. For example, using our data repository in one click you can see how many films were screened on the first of January in seven European cities, and how many films were screened in seven European cities at the same time. That is something that you can do. But then you need to be able to develop appropriate questions in order to investigate what the data tells you.

DTG: It's very quantitative in many ways, and you can get numbers that you can describe. But the next step, which is the analysis, must be done by the researcher. And I think that there's no digital tool that can do the analysis for you. Because you have to read and interpret that data, or the visualisation. So, you need to be able to add the contextual aspect that we talked about, the economic, political, social dimension that will help you to read and interpret what that chart is trying to tell you. And if you haven't got the contextual aspects, you're just going to be very descriptive.

PE: It is not that you just have a set of data, you upload it and here we go, click a button, and it shows you an analysis. The amount of data cleaning that you have to do in order to operate that analysis is extraordinary. Therefore, it's so important to keep asking questions about sources and about the data itself.

DTG: I am thinking about your question about implementing digital tools in cinema history research. Obviously, we're getting there in a sense that more and more projects are doing precisely that. I think the challenge is getting these projects to talk to each other, share the good practice, and avoid repeating similar mistakes. There's a lot that can be done through conferences and workshops, where we can share our experience of using and implementing digital tools. You could really advance the research of cinema history. An issue that I would like to raise is the geographical limitation of the data, as there are en-

tire areas across the world where this kind of research hasn't been done. And so digital tools are not able to be used. It would be really interesting to compare what were the experiences of going to the cinema in South America to what is happening in Europe, for example, or in other parts of the world. And you can only do that if you do get funding to bring all these projects together and have time to then do an analysis of the results.

LVV: I also think, what's important about comparative research is that it is a collaborative effort. We are trying to make sure that the word gets out. We want to build a network of people understanding the methodological and the digital tools and start to use them as well. We want to work more like a network that enhances itself. It doesn't just come from us anymore; we have put the digital tool out there to use, and preferably it starts growing within the cinema histories network. The idea of collaborative work for me is extremely important, and we would like to take this opportunity to thank our researchers from the European Cinema Audiences research team and the members of the invaluable National Validation Panel.