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Information

AN ANALYSIS OF THE UTILISATION OF AUDIOVISUAL ARCHIVES IN HIGHER HUMANITIES AND ARTS EDUCATION

Michal Klodner - Lucia Udvardyová*

Abstract

Audiovisual archives with an advanced communication infrastructure are a rapidly developing tool whose unique potential in the realm of education has not been sufficiently explored yet. Archive system technologies already incorporate numerous collaborative functions. This paper aims to present quantitative and qualitative results of a research project undertaken at the Film and TV School at the Academy of Performing Arts. Through several focus groups - users of new media-oriented web portal Konvergence.info, professionals working with audiovisual archives and students of FAMU, usage of audiovisual material in the particular groups was examined. The research was based on selecting the best tools for scientific collaboration in terms of audiovisual content and in researching the utilisation of their certain groups, such as functions for annotating audiovisual content and personal knowledge organisation. These days the cooperation between education and research does not rest in transfer of completed knowledge but in the capability of their sharing in the process of their formation which enables a dialogue and translation between the various specializations. This leads to new knowledge and a more effective solution of problems.

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The objective thus was to find such a combination of technologies and a working methodology that would facilitate unique talent and interests as well as strengthen the sense of cooperation and communication in a heterogeneous collective.

Keywords: audiovisual archives; online collaboration; social networks; new media education; research environments

This article is an overview of the evaluation programme focused on establishing the tendencies and motivations in utilisation of audiovisual archives for the purposes of education and scientific cooperation. The research project "Methodology of Education and Forms of Scientific Collaboration Using Audio-Visual Archives in a Multi-Disciplinary Environment" was realised at the Centre of Audiovisual Studies of the Film and TV School at the Academy of Performing Arts.

Audiovisual archives with advanced communication infrastructure are a rapidly developing tool whose singular potential in the realm of education has not been sufficiently explored yet. Archive system technologies already incorporate numerous collaborative functions. Our research was based on selecting the best ones for scientific collaboration in terms of audiovisual content and in researching the utilisation of their particular groups, such as functions for annotating audiovisual content and personal knowledge organisation. These methods are usually not available and are in a developmental phase in special systems. The majority of scientific archives is developed in the form of databases and primarily serves for item searches, while our researched model was a shared field of research of students, pedagogues, curators, critics, scientists, programmers, etc in which the input material is constantly enriched with collectively created context.

These days the cooperation between education and research does not rest in transfer of completed knowledge but in the capability of their sharing in the process of their formation which enables a dialogue and translation between the various specializations. This leads to new knowledge and a more effective solution of problems. The objective thus was to find such a combination of technologies and a working methodology that would facilitate unique talent and interests as well as strengthen the sense of cooperation and communication in a heterogeneous collective.

This research was intended to verify several hypotheses with which we commenced this project with the intention to confirm them, elaborate on them, establish terms in which they are valid or refute them. On a general level it concerns the engagement of participants (students, those interested in higher standards of education, scientific work, fledgling scientists) into the educational process or on-line research with an objective to introduce the field to them, present information about its themes, examine the working mode and thus reduce the concerns about the risk of wrong choice of a subject field, its overt demandingness, and so forth.

Hypotheses:

- 1. Audiovisual material increases the interest in on-line information
- 2. Publishing results of research in an audiovisual form increases the interest in scientific work
- 3. Possibility to collaborate by means of online participation induces and intensifies interest in specialist activity
- 4. Availability of suitable audiovisual material increases the quality of learning and education
- 5. Possibility to collaborate online increases the quality of specialist activity and its results

It's obvious that our research concepts were based on the principles of network society with an emphasis on individualized networks, also known as "networked individualism". Sociologist Barry Wellman, from the 1970's studying and writing on communities, has argued that societies at any scale are best seen as networks (and "networks of networks") rather than as bounded groups in hierarchical structures [Craven, Wellman 1973; Wellman 1979, 1988]. Others, as Manuel Castells, contributed with the focus on electronic media in the center of social processes:

The definition, if you wish, in concrete terms of a network society is a society where the key social structures and activities are organized around electronically processed information networks. So it's not just about networks or social networks, because social networks have been very old forms of social organization. It's about social networks which process and manage information and are using micro-electronic based technologies. [Kleiner 2001]

Castells argues that it is not purely the technology that defines modern societies, but also cultural, economical and political factors that make up the network society. Influences such as religion, cultural upbringing, political organizations, and social status all shape the network society. Societies are shaped by these factors in many ways. For van Dijk, information forms the substance of contemporary society, while networks shape the organizational forms and (infra)structures of this society. In our concept of archives, information and networks meet at one place.

Methodological note concerns the choice of respondents. The research was not undertaken exclusively on regular users of real archives, even though the topic of the research would imply such a predilection. Even though to examine such an action would be highly interesting and beneficial, it was not our objective, because it does not fall into a process that was the primary subject. This process is characterized by emergence and inciting interest in utilisation of film and other archives in people who are not yet experienced in this, or are using them sporadically, without any deeper knowledge. The focus was on uninformed participants and method

that they use when working with various types of information and tools. The primary benefits of this research rest herein, because it was possible to reveal the correlation between seemingly unrelated facts that can lead to a new perspective on connecting information and tools for cooperation and development of new, not yet established tools and ways of organization of knowledge in archives.

The online platform on which the researched archives are run, is an open and shared platform for extensive internet projects, inter-university and extra-university communication and collaboration. It is an implementation of free software into a complex system for content management.

Public, users konvergence.info social network AoMoA.net in new media archive of experimental film and videoart Convergence information Platform NGOs in cultural sector hyperkino.net iFAMU.cz multimedia portal of student films Other schools and educational programmes AMU, FAMU ČVUT, IIM, KU, AVU, UTB, ... Network of cooperating platforms, foreign subjects GAMA, ...

Image 1: Research platform with marked evaluation archives

For both researched groups, the tools of open publishing (specified in next chapters) and social networking were available. Archive was supposed to become an alternative focus group, because our objective was to encourage scientific collaboration based on audiovisual archives hence the discussion partly took place online.

Thus, the purpose of the research was to increase the interest in specialist activity and scientific profession and finding successful forms of collaboration. Our objective was to contribute to improving education through utilising online audiovisual archives, presentations of schools and educational programmes and researching possibilities of online portals as places of interdisciplinary and social communication and presentation. Some of the topics were pursued were: how does the accessibility of audiovisual material influence education, forms and types of annotations of audiovisual material, utilisation of annotated material in present and distant learning, aspects leading to increasing interest of students in working with archives, means of presenting film and scientific work of students and pedagogues, methods of increasing interest of public in said educational programmes, interdisciplinary collaboration and exchange of information between individuals, communities, archives, educational programmes or festivals.

In the analysis, information accrued from discussions and informal contacts was utilised. Also from discussions with users of konvergence. info and ifamu.cz as well among the coordinating team, many findings regarding functionality ensued voiced in the form of prompts. These findings, even though they concern many of the researched principles, are not evaluated here as it would be difficult to trace more general propensities in them. They were continuously applied in the development of evaluation archives, be it regarding their interface, content or setting of access rights. These experiences were, together with the original assumptions, were transformed into concrete utilised tools. Often, it was necessary to find understanding between various antithetic requirements.

1. Users of portal oriented at interdisciplinary and interuniversity communication and collaboration

Researching activities in this group was undertaken via utilisation of the portal konvergence.info, a portal offering collaboration tools in interdisciplinary environment of new media art and intermedia, a communication infrastructure and a cultural archive. The entire, or almost entire content of this portal can be created or edited by every freely registered user. It is possible to create folders, upload content and even - based on the wiki principle - edit texts of other users. Primarily, users can create their own profile with information, where it is possible to save personal file and blog. They can also use the website for publishing of text, videos and streams, share information about their activities and results of their work with other people. Every user contribution has a link to user's profile with more information about the said user. News and blog posts are aggregated on the homepage. Openess and possibility to participate are crucial. The examined group was composed of pedagogues and students, largely from the field of film studies and new media who use audiovisual archives for educational purposes; artists and IT programmers, students, scientists, pedagogues and individuals.

50% from the 85 respondents within the first phase were university bachelor students, 30% master students and the remaining 20% graduates are freelance or active in academic, scientific and other professions. The majority of respondents specified their field as humanities (44%), followed by Arts and creative professions (34%); Technical professions (23%); Culture (21%); Journalism and media (13%); Legal (2%) and natural sciences (1%). It is obvious that some of the respondents classify themselves into more fields which could be selected.

The second phase encompassed 130 respondents 70% were bachelor students, 10% of students were master students and 20% were employed or unemployed graduates, pedagogues, scientific workers and others. The

most frequently mentioned professional fields were Humanities (43 %), Arts and creative professions (37 %); Journalism and media (21 %); Culture (17 %); Technical professions (13 %); Legal (1 %) and Natural sciences (1 %).

Image 2: Screenshot of Shared Desktops section from the portal Konvergence.info

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In both phases, that correspond to Winter and Summer academic school year terms, we had a similar composition of respondents – only in the second phase, the ratio of bachelor students to master students was higher. Thus, some of the questions will be analysed via merging of these two groups in case the questions were the same.

The most popular tools on the portal are personal profiles with blogs and shared desktops. What is more, functions such as tagging, commenting and annotating content, indexes and comments to video – even more than fulltext searching or user-generated content – were deemed as benefitial.

Among the objectives of the portal that were most highly regarded was Cooperation between universities, archives, educational programmes and individuals. It is apparent that such an interlinking is something that is visibly missing in the educational system of the Czech Republic. Further, answers such as Information about happenings in the field of new media and Social communication were mentioned. These answers were only given by those respondents who had already known the portal konvergence.info, therefore we are not stating the percentage ratio here.

Frequency and purpose of usage of internet applications. The first analysed question tried to establish the general usage of certain types of internet applications. Partly so that we could ascertain certain pattern of online user behaviour and also because the function of these most frequently utilised applications could be appreciated by users in an audiovisual archive interface. For instance, previously, on evaluation websites, we had an idea to have the possibility of instant phone calls – the personal profile of a user would incorporate a Skype status that would be visible whenever the particular user contribute – as an author of an article or annotation. In any context, it would be possible to make a phone call with just a click of a mouse and discuss or consult a particular topic. In the first evaluation phase, we asked the respondents about frequency of use (every day, week, occasionally, never), in second phase – concerning the same 15

types of applications – purpose of use (special-interest, study, work). What were the results stated by 85 respondents?

Every day respondents use Making phone calls and sending short messages (32 %); followed by Image and video portals (such as Flickr, Youtube, 26 %); and Social networks (such as MySpace, Facebook 25 %). When asked about weekly usage, same activities were most frequently stated, only in different order.

Overall, the frequency of usage was following: Image and video portals (59 points), followed by Making phone calls and sending short messages, Discussion forums and Social networks (each 57 points); Searching texts in academic databases (50 points), Searching in audiovisual archives (48 points) and Sharing of video (42 points). Discussion forums were not among of the most frequently used, even though they had the highest share of occassional usage, same as Searching texts in academic databases, followed by Webcam streaming (32 points), RSS feeds (32 points). Active pursuits such as Blogging and User-generated creation of websites such as Wiki (both 24 points); Contributing to mailing lists (23 points); Bookmarking and tagging (22 points). Among the least mentioned were Podcasts (20 points) and Videoblogging (14 points).

It is evident that websites that offer visual content are overall the most utilised types of applications, followed by tools for instant voice and text communication and social contact. Let us examine the usage of 130 respondents in the second phase.

For personal and interest use the most used type of internet application are Image and video portals such as Flickr or Youtube (91 %), second most used channel was Making phone calls and sending short messages such as Skype or ICQ (85 %), Social networks such as MySpace or Facebook (75 %) came third; followed by Discussion forums (66 %), Sharing of video (62 %); Searching in audiovisual archives (51 %), Webcam streaming (42 %); Blogging (24 %); Open Publishing (24 %); Searching texts in academic databases (19 %).

What concerns learning and educational activities the most frequently used method is Searching texts in academic databases (80 %), followed by Searching in audiovisual archives (44 %). Discussion forums (38 %) came third; furthermore it was Open publishing, user-generated websites (35 %); Image and video portals (31 %); Making phone calls and sending text messages (30 %); Contributing to mailing lists (21 %); Social networks (15 %); RSS feeds (13 %); Sharing videos (12 %); Webcam streaming (10 %); Blogging (8 %); Video blogging and podcasts (8 %). The least utilised is Bookmarking and tagging (7 %).

As for work and professional activities, most respondents use Making phone calls and sending text messages such as Skype and ICQ (31 %), followed by Discussion forums (24%) and Social networks (21%); Searching texts in academic databases (19%); Contributing to mailing lists (14%); Searching in audiovisual archives; Image and video portals; Open publishing (14% each). Other activities were mentioned by 8–13% respondents.

From these data, it is obvious that the popularity of image and video portals is given by their primarily special interest use. In another question regarding types of content, which we will not analyse here, Music markedly won. Concerning study activities, it was different – text searches and electronic publications and specialist and popular articles among types of content appeared at the forefront.

How do respondents use audiovisual archives? Firstly, it is necessary to add that the offered answers to the question did not cover the whole spectrum of possibilities of archive usage but only those pertinent to the objectives of the research and understanding of the group. Provided that entertaining and leisure use was mentioned among the answers, it would probably end up at the first place. Respondents marked more options.

-	For searching information for self-education:	73 %
-	As part of education or research:	46%
_	For a communication and collaboration purposes:	28%

- For presenting one's own work or research results: 23 %

- During curatorial work: 4%

The most frequently stated answer can be ascribed to ordinary information searches for unspecified purposes. Utilisation of archives for expert collaboration is stated by half of the respondents, according to almost one third of respondents communication and social function is important. We should note that the answers in the first two places denote a passive usage without one's own contribution; the remaining answers preempt active participation and content creation. Expressed as a ratio – 70 % of answers imply a passive use, 30 % active use.

Most preferred types of organisation of online archives. This enquiry was presented in all of the aforementioned research groups and established the basic complexity of received information; complexity of their interconnection, capability to comprehend in context and more or less ordinary ways of ordering. The answers were scaled from simplest form to more complex ones. Simple database organisation rests in isolated units of information and line lists of these items, information are tied only by the external structure of attributes that leads to a certain item or items by means of Cartesian intersection point, in between which there is solely relation preceding – following and catalogue-style navigation. Hypertextual interconnection is the latest form made popular by the world wide web. Alongside database attributes, the information is interlinked through permanent links between each other and it is possible to move from a single item to many others independently on their categorisation.

Even more sophisticated is the conception of current tendencies of semantic web. From meanings given by designation with key words the context of every information unit is determined by default – a context offering relevant information without necessarily interlinking them hypertextually. Thus it replaces the somehow blind wandering with much more valuable semantic context. The last option stated unspecified personal

organisation. In general, this is understood as advanced technology that in addition to previous forms also respects the needs of the user, granting him the choice how to present certain information. However, on the other hand this means that the user actively arrives with a particular concept and dedicates time and effort to this mode of organisation.

-	Information interconnected via context	
	and key words:	53 %
-	Hypertextually interconnected information:	39 %
-	Simple database organisation:	28 %
_	Personal organisation of information:	18 %

The answers relatively closely copy the forms of organisation according to their level of sophistication and thus contribution for respondents, with the exception of the personal organisation of information, which was least rated. The group was composed of individuals who are receptive and interested in new media. The reason why is the share of aforementioned approaches in such an order is given by easy adaptation to thought and technological environment and the fact that more advanced approaches lead to easier searches of quality information. Personal organisation came last probably because of the necessity of active approach – with better results in a long-term horizon rather than accidental searching for information that is the most frequent need of respondents.

Alternative approaches to audiovisual archives. This section tried to establish which other options would the respondent appreciate when accessing archive content (other than catalogue list, category, search). This section was intended to find suitable forms of popularisation. The selection of the best from an archive was marked by 49% of respondents – a choice either defined by web administrator or user evaluation. Options such as Newly added content (29%), Most viewed content (27%), Random selection from archive (17%) follow. The choice of the best has unequivocally the

highest added value for users who ascribe certain quality to it. Another significant value is recency – new content is regarded better than the most viewed. Furthermore, we let respondents write their own suggestions, resulting in options such as Individual (3), Targeted choice (2) even though it is difficult to assess a more detailed characterization of such options. Eventually, there were suggestions clearly inspired by current trends of semantic web: By key words (4), Recommended by friends (2), Recommended for me in particular (1), Most visited by a group with similar interest (1). Once again a strong influence by social networks is apparent.

Subsequently, we analyzed the advantages and best motivations of active participation online. Here the social function of participation websites, expressed through the answer Contribute where people I know do, possibility of contact, was stated by 47% of respondents of the second phase. Participating on a good thing (42%) was the second most popular community motivation. Friends and collaboration with people they know is thus the most significant factor in participation. It is obvious that hypotheses employing this principle in research and education in the realm of archives as participatory areas are based on correct assumptions. These options were followed by motivations concerning user interface. Easy usage and intuitiveness (36%), Interesting or creative functions for working with content (28%). The possibility to publish content was attractive for 17% of respondents, presumably because it is, as a matter of course, offered by internet providers in abundance and as such does not influence the decision in favour of a particular website.

We also placed a question is complementary to the previous one and it concerns the same subject even though it is conceived negatively – enquiring about inhibitors, not motivations and the answers thus constitute a problematisation of the same principles. Theoretically, it should confirm the results of the motivation question, ie. given that the option *Contribute where people I know do, possibility of contact* turned out to be the most frequently stated motivation, the answer *Few contributors, unknown com-*

munity should have been the most frequent inhibitor, which was not the case. At the forefront were answers concerning individual and personal attitudes towards participation websites.

Regularly visited online participation-type archives. The only archive with distinctive predominance was Youtube (stated by 45% of respondents), followed by – albeit only 8–3% of respondents – Vimeo, Česká televize, Ubu web, Archive.org. stream.cz. Expert text-based databases EBSCo and JSTOR had similar percentages even though these are not archives holding audiovisual content. Other archives were mentioned in 2–1% of cases: Myspace.com, Google video, Docalliancefilms.com, NFA, Artyčok, IMDB, ČSFD, iFamu, Mediaartnet, Facebook, Flickr, Ted.com, Netzspannung, Electronic Arts Intermix, Nyx.cz, Kyberia.sk, Rajče. We have omitted archives only stated once as well as professional databases, library websites and filesharing services mentioned by one or two respondents.

The distinctive prevalence of Youtube reaffirms the popularity of this service, however, it does not reveal anything about its type of utilization, i.e. for entertainment or educational purposes. This has been implied by the preceding question. Focus on audiovisual studies among the most popular online archives can be ascribed to archives such as Archive.org and Ubu web.

2. Archive professionals

Within this group, we asked 14 professionals working in the field of archives, digital preservation and librarianship – approximately half of them were foreign. We wanted to verify whether the mindset of advanced users differed or not to those of the beginners.

Most preferred types of organisation of online archives. The majority of respondents (85%) mentioned *Information interconnected via context* and key words. This corresponds to general tendencies even though the ratio is even higher than in the previous group. One third of respondents

stated the answer *Personal organisation of information*, which came second. We can assume that the experience and technical prowess in the field of archiving leads to a propensity towards more sophisticated ways of information organisation and a necessity to structure it according to ones own needs. Simple forms of hypertextual and database organisation was preferred by 20% of respondents respectively.

Ways of utilisation of online audiovisual archives The most frequent method of utilisation of online audiovisual archives is For a communication and collaboration purposes (50 %), followed by For searching information for self-education (43 %); As part of education or research (34 %); For presenting one's own work or research results (21 %).

Considering the small number of participants in this group we cannot make definite conclusions but it is plausible that a more long-term-based work in the archive environment leads to accentuation of their communication function in a group that often tends to be heterogeneous and international in more advanced archives rather than the function of impulsive unrepeated searching for information.

Advantages and best motivations for active online participation. Mostly it is the answer Contribute where people I know or people with similar interest contribute, possibility of contact (11), Participating on a good thing – website has an idea that I like (6). The community aspect was even more prominent in this group. For the purposes of verification, it would be interesting to include an option whether the content itself would lead to the same level of interest because people with similar interest and shared idea certainly implicate a certain type of content. This was followed by rest of the answers chosen by 4–3 respondents.

3. Users of student short film portal

Researching through direct usage of student film portal entitled ifamu.cz – by means of creating profiles, uploading information about filmmakers'

own films and discussions with students and pedagogues about improving the functionality of the portal. We were able to adjust the portal to the needs of the research and students because in the course of the research it was influenced by the administration of the faculty in any organisational way; it was not included in the mandatory school information system. The questions arise from a specific situation and conditions on the faculty in the course of qualitative change in educational and public communications processes.

What do you think of the archive iFAMU? 70% from approximately 100 respondents expressed their opinion through marking the answer that they do not know much about it yet. This group of one hundred respondents encompassed students from all the departments and 7 staff members. The research was undertaken at a time when people only started to get familiar with the archive – albeit they had been able to work with it for six months and during the questionnaire disposal printed instructions had been available. The remaining 30 % had worked with the archive; approximately 5% actively, ie by creating a profile and managing their own films. It is necessary to add that the total number of students of the faculty was around 400, out of which some are inactive students (with study breaks, study abroad, etc). From total number of students, 40 created their own profiles during a course of one year (that we are able to analyze), some used the portal in its early stages without having any information and while the school login had not been working. We can assume that the number of individuals who actively adopt new online tools in the form of archive with author profiles amounts to 5–10%.

Input of information about films and authors proceed on the iFAMU portal. This key question was focused on the principle of open publishing, which had been questioned by certain pedagogues initially, ie distrust towards the fact that students would input information directly onto the web without the usual paper forms as files sent via email. Below are the answers with numbers.

Almost half of the students selected a purely open system – personal approach to inputting information into the archive. Even a higher number opted for a combination of an open and bureaucratic system, i.e. publishing with a subsequent management by school's staff. The original "established" method flunked, except of the staff member of the FAMU Studio, only one student selected this option. These answers indicate that respondents understand the principle of personal publishing and are open to it wherein half of them tend towards a variant of parallel professional management.

What should be the objective of the portal iFAMU in general? Respondents also marked more answers, almost all selected For a presentation of films created within the school, 60% were For educational purposes (it should also include online educational materials) and 40% For the purposes of digital distribution. The objective of the archive as presentation tool is thus obvious. Expectations of its educational function is also significant. In another questions, which we will not analyze here, and which tried to establish the concrete functions and content of the portal, half of respondents expressed interest in both options pointing at educational content – Live streams from events (lectures, seminars, workshops, meetings of

academic administration) and *More educational materials*. This only reaffirms that the environment of an archive is a natural and suitable place for education; the first option concerned the long-discussed academic television or, in general, that students tend to miss more coherent electronic educational materials.

What organisation of information in archives do you prefer? This question was mentioned in previous focus groups as well. Hence we can compare how the answers differed in a film school environment.

_	Simple database organisation:	43
-	Information interconnected via context and	
	key words:	35
-	Hypertextually interconnected information:	28
_	Personal organisation of information:	10

The results have shown that database organisation gained prevalence. Filmmakers are logically thanks to their education oriented in other way than at advanced technologies. They remain often related to terminology focused on aesthetics and philosophy rather than informatics. More than one third, however, chose navigation between information on an advanced level.

This was followed by a question about user interface of the portal with two options that had an equal number of respondents – half marked simplicity, basic information, whereas the second half opted for more functions of a multimedia portal. The answers have thus not contributed to the development of the portal, perhaps only in connection with previous question – reaffirming the necessity to retain simplicity when adding usual and expected function cannot lead to incomprehensiveness that would discourage users who prefer easy orientation.

Among direct suggestions of respondents written into the questionnaire were (apart from suggestions to technical functioning) topics such as feedback, sharing of information, opinions, presentation of projects; dating, promotion of filmmakers, notification about extra-curricular activities of students; deepening of communication between departments and FAMU and the FAMU Studio, promotion of FAMU; school's social network; discussion area with each title, the greatest openness towards outside; all films viewable in palatable online quality; possibility to present scripts and photographs; possibility to attach files to films as image script and so froth; links to other websites and interconnection with festivals; space where students will find out about the works of others, meet their professors and where people from outside will learn about happenings at FAMU; public check of the school's output.

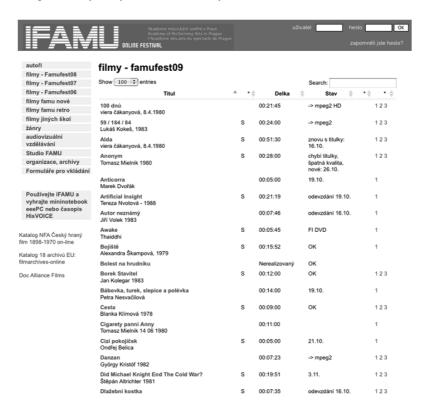
Through analysis of these answers, we arrive at confirmation of thesis that archives amplify the possibility to communicate outside of the school but also inside and have thus a strong social significance. More precisely, students expect these features from archives. Among characteristic expressions are communication, openness, presentation and promotion.

During the time when the research was undertaken, 500 films were uploaded into the FAMU archive that are directly viewable within the whole Academy, open to amendments by students and staff with publicly accessible catalogues and images. Thus, a singular cultural value has arisen for this institution, markedly profiling it in comparison with similar schools – most of the audiovisual material of documentary character with social, cultural, political and natural science topics. A space that bridges and interconnects the individual departments and parts of faculty has thus emerged.

Certain hostility towards the web can be noted among some students and pedagogues because they prefer primary personal contact when obtaining information as opposed to sitting at the computer, which they consider a dead layer that formalizes and creates distance between people, does not mediate immediate opinions, reactions, emotions, voice. That is an important feature of filmmaking education and humanities education

in general. This attitude represents values and art that should no doubt be developed and not replaced by technological solutions.

Image 3: Interface of the collaborative film archive iFamu



4. Conclusion

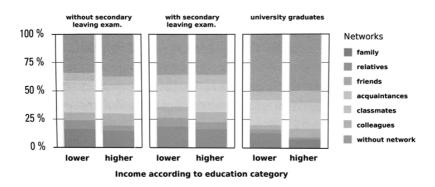
We have presented the rudimentary researched facts from our evaluation "Petri scales". Each archive arises from concrete conditions and does not evolve separately, its development is influenced by the development of other related processes of organisation or environment. We succeeded to confirm the principles of our hypotheses, which rest on principles of creating bonds in social networks. However, we cannot quantify how this contributes to improving education or scientific work. It is a fact that these processes, nevertheless, enable successful adaptation on the difficult conditions of professional growth in a field where educational and scientific work coalesce.

According to sociologists Jan Keller and Lubor Tvrdý [2008] we are experiencing a transition from organisations to networks. While previously, education and degree guaranteed a workplace, nowadays informal contacts which help adjusting to increasingly changing environment, are gaining momentum. Therewith changes the importance of education society. During the decades in the latter part of twentieth century, education served as an elevator to higher structures of large formal organisations of manufacturing and nonmanufacturing segment which subsequently secured their employees. Gradually, education started to introduce adepts into the world of networks where they utilize their personal contacts and connections in order to align and make the best of their situation.

The importance of social capital in the form of a network composed of relatives, friends and acquaintances for being successful on the job market has been a long-standing topic of the sociologist Mark Granovetter. Aided with the network concept, he strived to bring sociological reasoning closer to reality, give them an empirical background already in the 1960's. The analysis of relations that evolves within the networks of the involved, was supposed to be less abstract and psychology-oriented than other theories and was intended to overcome the gap between explication of happenings in macro-structures of institutions and explication of happenings of a micro-social nature taking place in smaller-scale groups [Granovetter 2000].

Jan Keller and Lubor Tvrdý in the book Education Society: Cathedral, Elevator and Insurance [2008] mention research results conducted among 3,000 respondents composed of three groups according to education in three areas of the Czech Republic.

Image 4: Type of network that helped find current position according to education and salary. Source: VŠB TUO, SC&C



For the purposes of the research that we have been undertaking in order to establish the premises leading towards a choice of a scientific profession or continuation in specialized activity in higher education, we are including a graph denoting types of social networks – according to Keller and Tvrdý – that graduates choose during their job search. A shift from networks of strong links towards weaker links is apparent as well as choice of formal instruments (advertisements, etc) based on higher level of education. Types of networks represented in the graph, however, rest mostly in networks of strong links and the related physical interpersonal contact and contact with strong emotional intensity. These play the major role in school leavers without secondary education.

Concerning the university graduates, half of them remain in the socalled grey zone "without a network". What takes place within this zone is a question. Keller and Tvrdý's results are too general to be able to give us a clue regarding what role do formal social networks (on-line platforms of the major communication medium today) play. What is more, they do not differentiate between the subject field of respondents. Substantial differences exist between the various educational fields. Social bonds possess a completely different structure and dynamics in technical and humanities fields or even arts. The study of, let us say, electrical engineering and informatics takes place en mass - in a single year, at some lectures there are hundreds of students together in a relatively impersonal environment - whereas in arts education, there are about 5–10 students in one year or department with very close bonds with other students and pedagogues as well as a media attention oriented at some persons already during study. We have tried to research this kind of environment and unveil what is taking place in the aforementioned grey zone.

Audiovisual archives constitute a significant instrument in creating interest, trust and security during collaboration between scientists, pedagogues and students or those interested in expert activities. An instrument with high potential provided that expected openness, communication and social function is respected.

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