

Leaving our comfort zone. A proposal to co-create appropriation in Media Art Archives for their sustainable future

Delma Rodriguez Morales

Pre-doctoral Fellow at the International University of La Rioja
Logroño, La Rioja, Spain
Director of Cultural Ring Uruguay & its global networks
anillacultural.directora@gmail.com

Abstract

This article presents ideas, proposals and strategies to renew in a sustainable way the creative involvement and appropriation of the contents of online digital archives dedicated to media art. Under the premise of multilingual open access repositories, with the interaction in collaborative and co-creative networks, a training programme is presented in the context of the Anilla Cultural Latinoamérica-Europa in Uruguay, aimed at future teachers of primary and secondary education at the local level and the Spanish-speaking region. This initiative proposes keys that allow for the collaborative and co-creative expansion of teaching and research based on media art archives with a global perspective.

The article also proposes two ideas to be developed by ISEA Archives. These are: 1) to present a project to UNESCO to declare the ISEA Archives as a Digital World Heritage of Humanity, and 2) to study how the concept of "digital vellum" can be used to preserve the contents of the Connecting Archives project.

The proposal and the two ideas presented in the article are a step forward in quality and quantity to ensure a sustainable future for media art archives. Co-creativity and collaboration will be the main tools to achieve these goals.

Keywords

media art, teachers training, sustainability, archives, co-creation, world digital heritage, digital vellum,

Introduction

The training of future teachers is not always directly linked to areas of innovation, let alone new media arts. In general, teacher training in the arts (for children and adolescents) focuses on traditional areas. Specific teacher training in art and technology is rare, and even less is it focused on transdisciplinary perspectives in art, science, technology and society.

Another asymmetry that makes it difficult to learn about new media art - and its history or legacy - is that most of the archives and repositories are in English, making it difficult for other audiences, such as Spanish-speaking people who are not so influenced by the English language, to easily get to know this type of content.

Therefore, in the context of Anilla Cultural UY Latin America-Europe in Uruguay and its global networks (<https://anillaculturaluruguay.net/>), the International Training Programme "New Media for Teachers" 2020-22 (<https://anillaculturaluruguay.net/programa-internacional-de-formacion-nuevos-medios-para-docentes-internacional-programa-new-media-for-teachers/>) was announced in mid-2019. Anilla Cultural, born in 2007-08 in Catalonia and expanded from 2010 to Latin America (<http://anillacultural.net/>), is a network of co-creation and collaboration in art, science, technology and society through advanced internet, conceived as such in its founding the technological infrastructure as it mainly worked through telecommunications systems such as H323 that required a robust internet (known as advanced internet) and specific equipment for transmissions. Until 2019, this technological deployment continued to function, while at the same time other forms of video conferencing in web environments were gaining ground in terms of the number of users and platforms available.

The founding objective of the Anilla Cultural was to facilitate access to quality cultural content with global, regional and local references of new media art and to encourage the co-creation of different audiences for a contemporary cultural transformation.

The main objective of the International Training Programme "New Media for Teachers" was to raise awareness among teachers in Uruguay and the Spanish-speaking Ibero-American region (online participant audiences) about the importance of new media for educational work, with an emphasis on new media art. New media art was considered because it is a field of study that enables endless transdisciplinary connections with other fields of knowledge and also because it is a purely creative area, a fundamental aspect for innovative educational work.

From Anilla Cultural UY there were important antecedents of approaching online new media in general, for instance the Uruguay node founded in 2012 the Online Congress of Education and New Media, a biannual event that shares trends and key issues in the convergence of

education, innovation and technology. It was always approached from a transdisciplinary point of view where art, science, technology, digital humanities, virtual reality, among others, were the object of exchange and enrichment at local and regional level (<https://anillaculturaluruguay.net/4o-congreso-internacional-de-educacion-y-nuevos-medios/>). Also in Uruguay, due to the CEIBAL Plan (<https://ceibal.edu.uy/en/>) inspired by Negroponte's *one laptop per child* at MIT, all primary and secondary schools and teacher training have undergone a technologically mediated educational revolution since 2007. Thousands of children, teenagers and teachers have participated in the Anilla Cultural in Uruguay from their educational institutions (with H323 equipment, or via the web) as shown in this example of the 2nd online congress, entitled "La Kamera en Red" (https://issuu.com/anillaculturaluruguay/docs/reporte_anilla_uy_-_2do_congreso_20).

Therefore, when designing the training proposal for teachers (2020-22) focused on new media art, all these characteristic factors were taken into account as opportunities for educational and cultural improvement, for an audience (teachers) who are permanently actively participating in the activities and projects that are proposed online, where new media are interrelated with new media art. In this way, an open character of new media and inclusive at the same time with new media art was provided. One of the specific objectives of the training programme was to strengthen the Spanish language (because of the Spanish-speaking target audience) in interrelation with a broad multilingual approach, which allows access to a large amount of content that is in the English language. At the same time, the training programme showcased examples of new media art from Spanish-speaking creators as a platform for local, regional and global dissemination.

The pandemic period was out of the forecast in the initial planning for 2019, but this global drama, however, raised more interest than expected in these issues due to the massive immersion into the digital world and the consumption of all kinds of online content.

In May 2020, the training programme was launched to coincide with the 5th International Congress on Education and New Media, under the theme "New Media Heritage" (<https://anillaculturaluruguay.net/5-congreso-internacional-online-de-educacion-y-nuevos-medios/>). It aimed to "This base could be mentioned as its heritage such as the creative approach and its educational legacy. A heritage in transit, as its own transformation enables it to be a permanent novelty". (<https://anillaculturaluruguay.net/wp-content/uploads/2020/05/ProgramaENG.pdf>)

Therefore, new media art was considered as the main constituent of new media in its creative perspective and permanent novelty. Thanks to an initiative of expanded collaboration, it was possible to count on international referents who enriched the programme, the exchange and

the reflection of the two days of the congress with online attendees from the Latin American region, Europe and the United States. The list of institutions and individuals who participated in the two-year training programme is included at the end of this article.

The start of the training programme coinciding with the 5th edition of the online congress was stellar (with content in Spanish, English and Portuguese for simultaneous interpretation and for the dossier, programme and agenda) and was accompanied by significant online attendance on the video conference platform (more than 500 attendees over the two days of the congress) and more than three thousand views in total on the social networks where it was simultaneously broadcast, on YouTube and Facebook Live.

As well as showcasing the creations of leading figures in the media arts, the media itself allowed participants to perceive themselves as part of a global community and experience firsthand how online works as free and open access, sharing quality information, collaboration distributed online in real time, and local and global integration at the same time, among other positive perceptions that both attendees and speakers expressed during the event.

Development of Actions

The training programme, in its first edition 2020-22, was clearly divided by year, which in turn coincides with the academic years of the southern region of South America. And in each of them, specific actions were worked on for the target audience of local teacher training (specialising in Visual Communication), aimed at the primary and secondary educational stages in public education within the CFE, the Spanish acronym for the Council for Training in Education in Uruguay.

Throughout the three years, more than 250 teacher training students have participated (synchronously and asynchronously), actively and directly producing theoretical content and creative projects. At the same time, more than 350 students of the Visual Communication speciality have participated -from different parts of the country- in extension activities, either by attending online lectures or specific proposals. And more than 500 attendees (students and teachers from higher education institutions in different areas) from the Spanish-speaking region have participated in online activities synchronously. The total number of online attendees from the region was +500 and specifically +600 were teacher education students.

On the other hand, Figure 1 depicts the stages corresponding to each year, in terms of actions and main content guidelines that were focused on. In the year 2020, after the start, open classes produced from the curricular courses were continued.

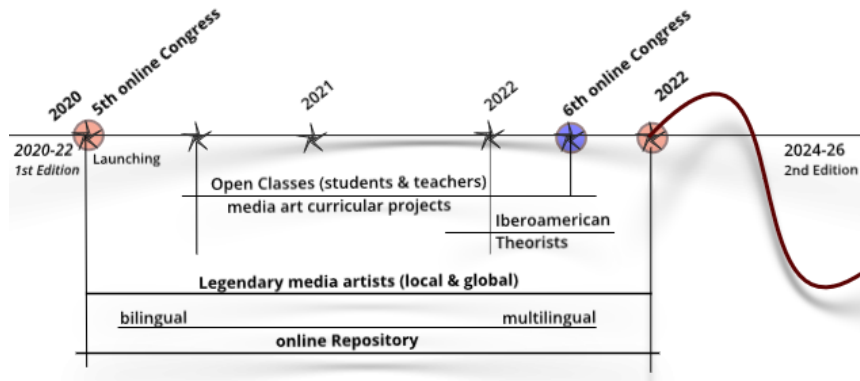


Figure 1. Contents Agenda 2020-22. ©CC BY 4.0

From there the students generated content creatively, produced theoretical essays linking the authors of the course and the contents of the congress together with theoretical materials related to the lectures. Thus, after the online congress, a master class was held by Prof. Shanken, giving a historical overview of the art of new media and its main current trends. Disseminating his digital book in Spanish (Shanken, 2014) and repository of digital archives of artists. In this activity the audience was already beginning to identify the contents and perceive that an online repository was being created (within the YouTube channel of Anilla Cultural UY) bilingual (Spanish and English) with the video conferences that were open access and free of charge with previous registration.

Then, in 2020, there was a very active participation of the students, which was facilitated by the pandemic and the partial or total confinement. The curricular courses ended with an "Online Party of Technologically Mediated Art Education" (<https://bit.ly/3LdInLo>), where teacher training students presented their theoretical projects and practical creations on new media art, for instance the DENMA Project, which is the acronym in Spanish of Aesthetic Drift for New Media Art. It is worth highlighting some students' proposals that interrelated specific languages such as net art, or other links with video art and media installations, etc. and theoretical and educational reflections. Generating authentic learning processes and appropriation of the contents of the online repository that was being built within the training programme, as well as the use of other local, regional and international platforms, repositories and archives dedicated to new media art. In this way, students began to make their first explorations of new media archives and to perceive the importance of their existence as a source of knowledge for preparing their own classes. In addition, as an outstanding contribution, several of the artists and theorists involved were online during the students' presentation - Roy Ascott, Vuk Cosic, Diana Domingues, Maurice Benayoun, Monika Fleischmann & Wolfgang Strauss, Graciela Taquini, Edward A. Shanken, among others - who made comments, criticisms, contributions and congratulations on the work they had done.

The training programme (in Spanish) was beginning to be perceived as the gateway and the way to move through content that until now was unfamiliar to them or that was not within the canon of content on what a future teacher "should know". Exploring between synchronous online digital archives of the training programme itself and other reference archives of new media art.

In 2021, the proposal continued with guest speakers (local and international) who, maintaining the specific theme of new media art, added other topics, such as first, second and third order cybernetics. For instance, topics such as cybernetics in Uruguay with the case of URUCIB (Ganón, 2019) and the Latin America region with David Maulen's contribution (<https://shorturl.at/r0357>) were also addressed. The format of open classes was maintained (in 2020 there were nine events) and the production of content by the students, which were mainly theoretical essays on the nature and creation of new media art.

Two highly symbolic events took place in the middle of the year when classes were running half face-to-face and half online. One of the events was the video conference from Japan with Yoichiro Kawaguchi entitled "His artistic life for a sustainable future" (<https://bit.ly/313In62>) and the other was the Declaration of educational and cultural institutional interest of the International Training Programme "New Media for Teachers" 2020-22, the latter issued by the Education Training Council of Uruguay. The declaration does not imply any special funding or support, but it meant for students and teachers a legitimisation of the contents of the programme. Although the participants of the training programme were very clear that the contents were of high quality and that they had had unique opportunities to dialogue directly with legendary new media artists on a global and local level, this declaration provided the symbolic endorsement that it is institutionally valued for their training and not only as experimental or innovative events.

The conference with Kawaguchi was in Japanese and, as in other instances, simultaneous interpretation into Spanish and English was provided. Kawaguchi's figure and proposal attracted a significant number of 120 online attendees, which brought together not only the Spanish-speaking world, but also the Japanese and English-speaking world, who participated very actively in the video conference platform.

In this multilingual symbiosis, the audience highlighted one aspect that was the interrelationship between art, science, technology and society, brought together in one artist. Adding to an ulterior aim of sustainability in life, which Kawaguchi's artistic legacy promotes. Usually, when a video conference is over, the attendees immediately disconnect, with very few remaining to continue talking or exchanging. In this case, once the event was over, a little more than a hundred people remained connected to comment on their impressions of the artist, the experience of the union between different cultures, and the value of the links between art, science and technology for teacher training. Even 40 minutes after the end of the talk, more than 60 attendees were still online, sharing and exchanging their perceptions.

For 2022, the emphasis was on offering the audience lectures by Ibero-American theorists and artists. The new media line was also continued with a series of three lectures on "McLuhan's Legacy" and the 6th edition of the international online congress "Education and New Media" was held with the theme "What have we learned since 2020?" focusing on a comprehensive look at new media and the art of new media in our academic lives after the pandemic.

At the end of the training programme in 2022, the highlight was the video lecture by Penesta Dika on "The Art of Herbert W. Franke", the figure of Franke as a pioneer in different fields and the realisation of multilingual interrelationships, the content of which is available with subtitles (non-automatic) in more than 20 languages.

The result is an online repository on new media art, multilingual and, as a first experience, balanced between artists, theorists and managers of new media art, at local level in Uruguay, in the Latin American region and with global referents. Much remains to be completed and improved, but the result is of high quality. Among the pending issues for 2023 are the pending invitations to leading figures in the field of new media art. And to complete a series of publications (multilingual) that accompany the contents of the online repository and that will complete a methodology of usability for future teachers. For instance, the "Pedagogical Notes" on open classes, the proceedings of the online congress and the "Guide handbook" of all the contents of the online repository are to be published on the Anilla Cultural UY and other contents on the YouTube platform as an e-Culture multilingual channel. (<https://www.youtube.com/@AnillaCulturalUruguay>)

A new design of the "New Media for Teachers 2024-26" training programme will also be disseminated, aligned with the digital skills for the 21st century such as: Communication, Creativity and Imagination, Collaboration, Information and data literacy, Digital content creation, Safety and Solving problems, Critical Thinking, Citizen consciousness, etc., (OECD, 2021), deep learning (Fullan & Langworthy, 2013) and the profile of the digital humanist (Fiormonte et al, 2015). Therefore, as a sustainability strategy, this training programme proposal (in its first edition) aims to bridge the English language gap, raise awareness and train audiences (future teachers)

who will teach future generations in primary and secondary schools, who are the formative matrix of society. Because the "human factor" (Ronchi, 2022) is essential to keep in sight for e-Culture, e-Services, e-Government, etc., for a proper balance between multiple stakeholders, where social sciences and humanities must be in close cooperation and co-creation in the design of cyber-technologies. Within this electronic and digital ecosystem, the archives of media art are intimately connected.

Last but not least, in the analysis of the sustainable future archives and to contribute ideas and proposals to help the Connecting Archives project, it needs to remark the human factor related the appropriation factor as well, the Flusser thought and specially his quote "We shall survive in the memory of others" (Peternák, 2010), expressing the otherness and the technological mediation and its irreversible new things that it generates.

In this way, with this strategy presented on the training programme in cultural education and educational culture, the artistic, scientific and technological areas are positioned in a creative key in the classroom. And it provides transmedia artistic languages to future and current teachers in higher, secondary and primary education.

It establishes the New Media Art legacy contents in the main core for the formation of the future human skills. Considering that the legacy of New Media Art has much to contribute to the current digital skills (<https://digital-skills-jobs.europa.eu/>), so coveted as a fundamental requirement for the future working life. And therefore this legacy needs to be included in the primary and secondary educational stages in order to promote basic digital skills in people, indispensable for the so-called productive sector of society.

Future work on Media Art Archives

Although there were some examples during the training programme, we consider it an educational strategy to take advantage of and include in the training the legacy of "the process of constructing an innovative content management system containing 30 year's worth of data" (Mitchell & van der Plas, 2019). Therefore, we consider that the online repository of the training programme should interact with ISEA Archives.

The online repository of the training programme is a platform that helps to raise awareness of the knowledge of new media art for the training of future teachers. However, in order to continue to deepen access to quality media art content, it is essential to encourage appropriation with the media art archives.

As stated at the beginning of the article, we agree with the Liverpool Declaration that "Media Art research is still marginal...We face losing an art form that is a central part of our post-industrial digital culture". (<https://www.mediaarthistory.org/declaration>) And also that the International Media Art research needs a crusade of global organisation and collaboration to develop

collective projects.

For this reason, we propose to ISEA Archives a collaborative partnership to include in the next edition of the International Training Programme "New Media for Teachers 2024-26", a series of online lectures to train future teachers on the basis of two questions: what is a media art archives, and how to use media art archives? From the perspective of ISEA Archives (Mitchell et al, 2022). Therefore, in addition to knowing and being able to use media art archives, whether they are ADA or SIGGRAPH archives, as mentioned above, or even delving into the legacy of other archives such as CAS (Clark & Carroll, 2022), which were also presented in the training programme in 2020, this type of strategic alliance between Anilla Cultural UY and ISEA Archives makes it possible to link with other proposals that enrich didactic tools in STEAM, such as HYBRID, promoting critical and creative thinking (Lopes et al, 2022).

In relation to this initiative, another proposal to be launched at the same training conferences is to include a category in the e-Culture awards organised since 2018 by Anilla Cultural UY, with an Award for Pedagogical Innovation in e-Culture using the contents of ISEA Archives based on collaboration and co-creation, aimed at primary and secondary educational stages as the target audience. This e-Culture Award, which is a symbolic recognition granted by Anilla Cultural UY, will be open to global participation.

Ideas to help the Connecting Archives project

This section focuses on contributing two ideas to be developed by ISEA Archives: 1) to present a project to UNESCO to declare the ISEA Archives as a Digital World Heritage of Humanity, and 2) to study how the concept of "digital vellum" coined by Vinton Cerf, can be used to preserve the contents of the Connecting Archives project.

The first idea is then developed, that as mentioned by the ADA archives (<https://mediaartresearch.org/index.php?id=165>) there are in its archive "international artists of approx. 5.000 evaluated artists", which represents an immense number of artists around the world as digital cultural heritage. This enormous dimension can be seen in the SIGGRAPH world map (<https://digitalartarchive.siggraph.org/map-view/>) or in their list of SIGGRAPH Data Archives (<https://digitalartarchive.siggraph.org/view-export-data/>), to mention just some of the archives that make up Connecting Archives project.

According to UNESCO's postulates on the Digital Heritage Charter (<https://unesdoc.unesco.org/ark:/48223/pf0000179529.page=2>), the concepts of heritage and preservation appear for those digital objects that constitute the world's digital

culture. Both in the concepts of "digital heritage" (<https://en.unesco.org/themes/information-preservation/digital-heritage/concept-digital-heritage>) as well as in the concept of "digital preservation" (<https://en.unesco.org/themes/information-preservation/digital-heritage/concept-digital-preservation>), ISEA Archives has a profound basis for being considered as the world's digital cultural heritage of humanity. There are no mentions in the proceedings of the ISEA Archives Summit that UNESCO has recognised media art archives in this category or issued any distinction, as the numbers of artists and the quality of their productions are worth distinguishing. This deserved recognition could help to bridge the gap of "the problem remains that the ISEA archives are separate and unconnected to other affiliated organisations data collection" (Mitchell & van der Plas, 2019).

It is also necessary to add that it is a global digital cultural heritage at risk. To this end, reference is made to the words of Vinton Cerf, "If we don't move now, we risk losing all the data we've created in the 21st century". (<https://www.businessinsider.com/vint-cerf-father-of-the-internet-warns-of-a-digital-dark-age-2015-2>) Focusing on the problem of preserving digital archives in the future, Cerf proposes the solution through the concept of "digital vellum", capturing the digital environment of "the files we created are interpreted as music or images or text or video games or anything else can be reproduced in the distant future". In the technical presentation (<https://nitrd.gov/nitrdgroups/images/4/48/DigitalVellumAndArchives.pdf>) and explanatory video (<https://youtu.be/0fabXOLdbAQ>) made in 2016 at The Networking and Information Technology Research and Development (NITRD) Program of the US government, Cerf especially details the contribution of the "digital vellum" concept for archives and how to work with them from a technical point of view and the human challenges for research and collaborative and cooperative networking.

Conclusions

A proposal and two ideas were put forward as a contribution to ISEA Archives. The proposal consists of a collaborative and co-creative strategy to raise awareness among future teachers about the nature and use of ISEA archives in alliance with the International Training Programme "New Media for Teachers" for its second edition 2024-26. And on the other hand, two ideas are shared, one of them is to present to UNESCO a project to declare ISEA Archives as a World Digital Cultural Heritage of Humankind. And the other idea, linked to this, is to study and apply the concept of "digital vellum" to the Connecting Archives project as a way to preserve this digital cultural heritage of humanity.

In this way, preserving, researching and disseminating digital media art archives is positioned in a sustainable circuit between past, present and future.

It is also hoped that this presentation will give rise to other co-creation initiatives between the archives and the training programme for its future second edition.

This proposal is presented as an inclusive strategy without trying to invent the wheel, but rather serves and empowers an audience without access to the field and channels possibilities in different directions towards the multiple stakeholders of New Media Art Archives, whose interactions are based on academic and cultural collaboration.

At the same time, every archive has the task of conservation, research and should position the dissemination and appropriation of its archives on the same level of importance. In this way, the marginality of the field of new media art would take a step forward in the social value assigned to this vast field of creation.

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Author(s) Biography(ies)

Delma Rodríguez Morales is an experienced educator and e-cultural manager. She founded the InfoArt project (2002) about art and technology connecting teachers, students with cultural environments on transdisciplinary approach, and also the node in Uruguay (2011) of the Cultural Ring (Anilla Cultural UY) Latin America-Europe well-known as co-creation network in art, science, technology and society. Extended biography: <https://anillaculturaluruguay.net/bioDelma.pdf>