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ABSTRACT
This interview with Ludovico, conducted by Franco in September 2016, explores the role of Neural in the critical analysis of media art and how the reporting of new media art in Neural has had an influence in the contemporary art field.

Francesca Franco: What are the aims of Neural and how did the idea of Neural come about?

Alessandro Ludovico: The idea of Neural as a magazine started in 1992, and it was the second major publication effort for me at that time. Back then, I was working for an Italian electronic music label with international audience and market called Minus Habens Records. Both the owner and myself were passionate about emerging technologies. During that time we started to learn about virtual reality, while Internet was just about to come. So in 1992 we published a slim book about virtual reality called “Virtual Reality Handbook” but in order to be published for an electronic music label it must have had a music CD attached to it, so we asked a few bands to compose music inspired by the topic. It was a handbook, so it was meant as a resource with lots of addresses, contacts and a few texts about the topic, and the 2000 copies we produced were sold out in less than 12 months. After this small success, I convinced him to continue to work on a regular publication, and proposed a magazine about new technologies and culture. Not that there was a shortage of magazines dealing with emerging technologies at that time. Not only internationally, but also in Italy there were at least four different magazines from the most radical to the more commercial ones, but they were mostly concerned with the social and economical impact of what were perceived as the most advanced technologies. Why producing a further one, then?

The main reason was that none of them was properly addressing the field in a way that was both cultural and social at the same time, so we had a kind of polarised magazine: very radical, but then almost ignoring the impact of music for example or mainly technical and missing most of the artistic expressions as well. We wanted to try our own synthesis. A classic motto for new magazines is ‘to publish a magazine that you would like to read’ and that’s what we did. The aim was really to globally track the use of technologies among artists and theorists, hackers, activists concerned with social issues.

We published the first issue in November 1993, just six months after the initial issue of Wired. Of course we didn’t know about Wired nor about any other magazine just coming out at that time; there was no way to know about other foreign publications except from periodically going to a newsstand or bookstores and check them out. We did not want to merely chronicle what was going on. We wanted to make interviews and commission articles about the ideas behind these brand new
technological developments with a potentially incredible impact. What we did was to establish our own network and also start to travel extensively in order to attend events, establishing contact with new people, and trying to let artists, theorists, and hacktivists talk about their own ideas, obviously expressed through their own projects. The main aim was to make a “magazine of ideas.”

Another aim for us was to graphically reflect the aesthetics of what we were talking about in the magazine. One trivial example is that for the first six issues we decided to apply the binary system to the page numbering. For us it was symbolic, but at one point the printer asked us to stop because it was driving him crazy. This somehow explains the spirit. We felt this holy fire and need of including in a printed page as much as possible the feeling of the medium and to expand the printed magazine with technological means towards what was happening in that specific moment. One thing that had a different impact was to use what used to be called “stereograms,” pictures apparently made by random black and white dots, but if you look at them while aligning your eyes in a certain way, you can see three-dimensional images almost literally popping out of the printed page. It is a kind of self-induced optical illusion, obtained with any very simple image through freely available software. For us this was another statement about using a technology looking at 360 degrees on the printed form and the technological aspects at the same time.

We were eventually invited in the 3-days symposium at the Venice Biennale that generated the net-time mailing list and it was the fundamental base for our upcoming network. Following that, it became equally important to document the earliest period of net art and software art. For example, we published an interview with the JODI duo: we sent the questions via email and they answered with black and white dithered images only. These were actually screenshots taken from some of their works. This was challenging our attitude of finding practices in between classic publishing and new forms of media art. We then had to decide what to do and in the end we just published the corresponding images next to the questions. After many years, I think that was a significant way for a magazine to deal with new media art and some of its documentation that otherwise would have been lost.

**FF:** How was the magazine received initially?

**AL:** The response was positive. We were quite successful in terms of sales and after the first three issues, and a quite exhausting ‘DIY effort,’ we decided to find a publisher, although with quite negative results. After almost one year I decided to start all over again, but this time on my own. We were distributed through a radical distributor who channelled it to the Italian bookstore chain Feltrinelli and plenty of other independent bookstores (this was in the second half of the 1990s). But as I mentioned earlier, we were also connected to an international network of readers, so because the content of the magazine was written in Italian, more than once I have been asked to produce an English version of the magazine. When I found the generous support from Roberto Orsini, who offered to translate a good part of the magazine, the further step could be done. Then after 10 years of publishing in Italian, in 2003 the first English magazine debuted.

Our first distributor for this new version was American. We also dealt personally with bookstores in Europe. It was clear at this point that the international version was going to last longer than the Italian one. Since we introduced the English version, the Italian version lasted for only three more issues and then we had to stop because we couldn’t break even anymore. The English one on the contrary started to take off, we hired an English copyeditor to check all the content, and then refined
and expanded the work thanks to the precious assistant editor Aurelio Cianciotta, the always strategic support of managing editor Chiara Ciociola, the advertisement management of Benedetta Sabatini, and the beautiful titles from our “title poet” Nat Muller, stealing time from her international curatorial work. Now we have a number of distributors in the US, Canada, Brazil, Europe, Japan, South East Asia, Australia and New Zealand.

**FF:** Can you tell me more about your readership?

**AL:** The magazine is printed in 4000 copies, which is not a big figure, but its distribution is very focused. The magazine is mainly present in museums, bookstores and shops dealing with art magazines and independent magazines at large. We count approximately 500 subscribers, among them 150 are academic libraries and this is very important, because in 23 years of activity we did not received any kind of public funding, so the magazine has always been sustainable only through subscriptions and advertisement. University libraries are therefore an important part of it, even if *Neural* is quite cheap for them, as its cost is slightly more than street price. Our aim was to have it in as many libraries as possible in order to be accessible both to teachers and students.

**FF:** How does *Neural* connect to its readership?

**AL:** We have different types of readership. We tend to have direct contact via email with our subscribers, which is a good excuse to start conversations. Furthermore we have a constant presence in the major social media. The exchange with the readership always starts with some messages. So on one side there is the topical moment when a new issue is announced, which usually generates a wave of interest. Then usually artists get in contact with us to let us know about their work, which for us is absolutely essential. But we get also various kinds of messages from readers. We consider these an essential part in the development of the magazine because they can give us some essential feedback, or ideas to cover certain topics, festivals or events, and to evolve in a fruitful direction, generally speaking.

**FF:** Is your readership formed mainly by media artists, scholars, and teachers?

**AL:** It’s an interesting mix. Since the beginning, we covered three main areas: new media art, sound art and hacktivism. But after the first 10 issues, we started to have more politically engaged issues, and issues more strictly connected to art and sound. In the past few years this distinction doesn’t apply anymore, with the various areas overlapping all the time. Sometimes we get feedback from pure activists (who hate to be called artists), or from people who are not directly involved in this field, like designers, architects, theorists, or people dealing with quite different disciplines in humanities. But we mainly get feedback from scholars, people involved in education, artists, and from people just passionate about media art and not necessarily directly involved in it.

**FF:** I noticed that *Neural*’s website address still retains a national link. Has neural reflected on Italian political changes, or has it been affected or influenced by the Italian political and cultural context? Or is it more of an international platform?

**AL:** Thankfully no, we haven’t been influenced by all the changes in Italy. Since the very first issue, the aim was to be as international as possible, which does not mean that we ignored or
undervalued Italian artists, musicians, hacktivists or net artists. On the contrary, we have been and are still quite attentive to Italian productions. But at the same time we did not want to privilege it in any respect. Nevertheless we registered an ‘.it’ domain and we kept it for two reasons. One is historical and the other is economical. The historical reason is that in the early 1990s, we were quite strongly connected to the net art international scene and similar platforms had registered their domains with their national top domain, mainly as a statement of not being ‘neutral.’ One of the discussions at the time was about having global impact but being locally rooted— not just as abstract entities with some ‘.org’, or ‘.net’, neutral domains but reclaiming your own specific territory. Simultaneously it was important to take part in a medium that was born to connect remote places and facilitate an international network. The economical reason is that when we started to think of using a different top level domain for Neural, what we wanted was already way too expensive. Neural as a term has mostly been internationally connected with the scientific field of neural networks so it has always been an appealing domain. I personally have no big interest in acquiring any international specific domain. And now after so many years, there’s no reason for us to acquire new ones.

As for the Italian-specific mediascape, under Berlusconi Italy has gone through some political and media “juxtapositions,” to use a euphemism, and I wasn’t keen to explore them further because there were already plenty of other sources for that. What we did instead was to look for artists or hacktivists using specific technologies or media strategies dealing with those issues. In some cases, we were happy to offer some printed space or document and report what was going on, and we did it.

FF: Can you mention some examples?

AL: Well, I remember some news we published in the 1990s about initiatives that sarcastically mocked some of Berlusconi’s political strategies. An event we were very close to was the “Hackmeeting,” an Italian hacker meeting that happens once a year. We attended it since the first one in 1998. The Hackmeeting is a very specific and political meeting: every year it is held in a different city and often it starts by looking for an abandoned space and squatting it before the event. Then during the week before the event there is a call to the whole national community to join forces and help to refurbish the space making it functional and usable, particularly in terms of wiring it. Then the event, which is self-organised through a mailing list, starts and lasts throughout one long weekend. Most of the participants fit with the cliché of the hackers’ community, but there are plenty of people familiar with technologies who have an altogether different background. To me the idea of a squatted place that is renovated and becomes a functional and new resource for the territory after going through a relevant and intense social process is extraordinary. Hacking culture to me has been one of the most interesting spaces for media analysis and action, and Neural has documented it through reports, for example. So this is probably the best example of how we related to national political and social issues. One of the strength of the magazine is to deal with specific topics while being informed and investigating them deeply.

FF: How do you see Neural? Is it for example a site of intervention, a distribution method or an alternative platform for media art to share new works and ideas?

AL: Well, despite the fact that there are plenty of academic libraries subscribed to it, Neural is a magazine, not a journal. So it works like a classic magazine, with an editorial team that discusses
its topics and contents. We’ve been focusing on monothematic issues for more than 10 years, and we also have internal rules on how we pick up specific content. But at the same time we also started to host artists’ interventions, almost since the beginning. We initially did it without even being fully aware of what we were doing. So for example, during one of the Hackmeetings, we hosted fake stickers to mock the Italian Authors and Editors Copyright Society (SIAE). Until recently, every single book or music product officially released should have had a sticker released exclusively by SIAE on it, stating that it was an original work and not a pirated, fake one. So the ‘hacklabs’ within the Hackmeeting community produced fake stickers that looked like the real ones, but instead of the original printed statement “reproduction is forbidden,” they would state, “reproduction is encouraged and supported.”

So what we did was print a series of master copies in the centrefold and encouraged people to photocopy them on adhesive paper and stick them all over the place in bookstores and music stores. That was one of the first artist interventions we hosted. Since then we hosted quite a few more interventions, around 20 so far. We also started to think about the magazine as a distribution platform because we have subscribers and libraries. In particular, libraries have to catalogue everything they receive, so when we ship magazines to them it means that the artworks included are indexed within their catalogues, too, so they are preserved. In this sense the magazine becomes also an indirect distribution and preservation platform.

We started to ask artists to use this platform, including limited edition artworks with the magazine, but we also asked them to intervene in the magazine, giving them a page or a specific space for their artistic purposes. This is what we are doing now. One of the most sophisticated interventions we had so far has been in issue #53, where we hosted a work by French artist Nicolas Maigret and Maria Roszkowska. They produced an artist’s book called The Pirate Book, which is a very interesting book documenting various media piracy practices in various parts of the world, from China to Europe to US to Africa, involving various media. They produced this book and we started a conversation on how to give space in Neural to an intervention based on the book itself. They mentioned there was another institution involved in this project, Aksioma. Based in Ljubljana, Aksioma offered to cover the production of USB sticks that will include the pdf file of the book and to host the final outcome in their exhibition space; we wanted to go further than that, so we started to have a conversation of what to include on the usb stick beyond the pdf file.

The two artists had the idea of including the original files that they used for the book, which were quite controversial. For example, there was a Led Zeppelin bootleg distributed through BitTorrent which generated a trial that the band initiated at some point. I was happy to have these controversial materials with the book PDF, but we needed to question ourselves on how to formally express this option even more. Nicolas and Maria consulted a law studio in Paris, who produced a dossier about the content of the USB stick, so the final form for this intervention was the reproduction in the magazine of one (crucial) page of the dossier, formulating a legal opinion specifically about the “original material”; and the USB stick was then enclosed in a small plastic bag, like those classic clear bags used for crime evidence, and stapled on that same page. This whole intervention was then distributed to subscribers and libraries, and again libraries had to catalogue the magazine, including the USB stick.

**FF:** From which perspective has Neural looked at media art over the years?
**AL:** Our perspective is quite defined. We deal with media art that has recognisable critical qualities. And we are interested in how the whole media art field evolves. One crucial aspect, which was clear since we started, is that the magazine has to evolve in every single issue. A magazine has to change constantly in order to reflect what is going on around it at that time. Using a rough translation from an Italian way of saying it: we want to be the “children of our time,” picking up the most interesting signals we receive from our different networks and reflecting them in the magazine. But again we are mostly interested in critical perspectives: poetics, approaches, theories, artworks, strategies, performances— which address media and art critically, possibly opening new perspectives and opportunities. One of the major factors we consider is that these ideas and strategies would be able – potentially at least – to generate social changes, even on a very small scale. This potential has been present through all the critical uses that media artists have included in their own artworks since we can date media, more or less.

**FF:** Does *Neural* have an influence on the way practitioners in media art work?

**AL:** I hope so, even if indirectly. The aim for each issue is to make the best possible selection of content we can afford. Lately, we’ve been experimenting with content relating to a specific initiative, like a festival, or an exhibition. But what we find important there is not to reflect these initiatives but to relate to them only externally— in a way expanding them while maintaining an independent perspective. That’s why the influence is not direct, but is rather a kind of consequence of, hopefully, a properly-done job. If we are able to make a significant selection and to have fruitful dialogues with the people interviewed, and our readers find interesting materials in what we produce, then the issue becomes influential on its own. But it is not a specific concern of ours when we work on it.

**FF:** Is there a specific issue of *Neural* you are particularly fond or proud of?

**AL:** Well, there are obviously some issues I feel closer to. It’s weird because when you produce a regular publication you never have time to look back. We produce an issue every four months. Even with this decent interval of time once we’re done with one issue, we already need to start to think about the next one, how to produce it, what content needs to be included, and so on.

But all of sudden when we produced the issue celebrating 20 years of publishing, three years ago: it was obviously the time to look back. We wanted to make a special issue, and it was a special one, in which we picked up historical content originally published only in Italian and then translated into English for the first time. We also included very recent content. So this issue was trying to curate a selection that would have combined what we’ve done in the first 10 years, with what was going on after 20 years of publishing.

Looking back one realises that there were some issues which were more special than others. I think I should mention the first issue where we published the first Italian translation of William Gibson’s short novel *Agrippa (A Book of the Dead).* In print, the original version was produced as an expensive limited edition on photographic paper, so that the more you read it the more it disappeared. The electronic version was even worse, as it was initially produced on a floppy disk containing a software that would delete the book content after a single use, so that the very moment you flipped the electronic page, that page would be physically erased from the floppy disk, and
when you finished reading the book, its content was completely gone. At that time, we were in contact with some hackers in the US and they offered to give us the whole text, which they had videotaped, transcribed and made available for free. We had it translated into Italian and we published it. It was a kind of opening statement for us, and it remains in my memory as one of the issues I personally feel more attached to.

**FF:** So how and in which way have you seen Neural evolving over these past 20 years?

**AL:** Technically, there have been quite a lot of changes. Neural started as a printed magazine only, while now we have the printed magazine plus its digital edition and the blog. Announcements about blog content, new issues, special gifts and various other collaborations are now distributed via various social media, which makes the pathway quite articulated. These changes were essential to reflect the changes we have experienced over the years.

The role of the magazine has evolved in a similar way. In the beginning, one of the main concerns was about making accessible what was not to everybody if not being part or being in close contact with some restricted circles. It definitely takes more work than in the beginning, but it’s a compelling challenge to find or produce sophisticated content and compile it in a way that you wouldn’t find online.

**FF:** From what you say, I gather that the aspect of documenting and archiving media art is quite important for Neural.

**AL:** Yes, at one point it became unavoidable. Especially when you publish a magazine for over 20 years at some point you realise that what you have produced has also archived one piece of a specific scene history. We also have an active project about that, the Neural Archive. Because of the magazine, we’ve received many publications over the years, usually submitted for a review, so what we’ve started now is to make an online catalogue of all these print publications/material, which is available at http://archive.neural.it. It’s based on a minimal library catalogue system, but it is strictly focused on media art and on publications that we physically host, so it reflects our own archive and it’s searchable in many possible ways.

Why have we done it? Mostly because we thought that we had to give something back to the community that supported us during all these years. It reflects the production of over 20 years of new media art and is searchable. The whole project is based on open access technologies. The software has been written using free software; you can even download the entire platform and start to fill it with your own content. For me it goes even further into the theoretical concept that I’m now engaging with through my academic job at the Winchester School of Art. I call it the “distributed archive”. The aim is not to create the best possible archive but to create a significant archive that would then connect to other similar archives established by other small independent institutions during the last decades and then create a distributed and shared bibliography about media art, representing books which are physically preserved.

So far, thanks to our Neural ‘virtual’ librarian (Cristina Piga) we’ve indexed almost 1000 publications. We purposefully didn’t want to break any copyright, as we wanted to respect the production of all these works so there is no pdf attached. But the second layer of this project is to approach small institutions and publishers who have their catalogues already sold out and to tell
them: maybe we can scan this catalogue and make it available again and distribute it in digital form. But it is only when we make a deal of reciprocal mutual support with the publisher that we can help with digitising it and having it available in our archive.

**FF:** From your perspective, how has media art as a field been influenced by news and reportage as a primary disciplinary component in the work of dissemination, critique, and knowledge construction?

**AL:** Media art has been partially, but sometimes significantly influenced by news and reportage. I published a book called *Post-digital Print* a few years ago. In it I looked at how media artists react to and confront with these topics. Unfortunately the media art field is at the margins of the contemporary art field. But there have been important examples of artworks that have challenged the classic news and traditional media paradigms. I think that in a way or another they have influenced them back. I mean, if you know these works you can’t look at what you do as a publisher anymore in the same way. Since this is quite a major topic for my research I usually deal with both media artists on one side and students in experimental publishing on the other. However, these two worlds are not in touch yet— they still have to enter a proper dialogue, but I feel that it’s going to happen in the next few years.

**FF:** From your experience, what is your vision on how we will write about art and technology in the future, given new and emerging publishing platforms?

**AL:** This is a big question, and since I still work on a printed magazine I could be the worst person to ask… Of course I can’t predict the future, but from what I’m actively researching, there are two directions to consider. One is, as usual, the fact that we can’t invent our future if we don’t know our past, so we need to take a look at our past and see how ideas and practices – sometimes very innovative -were produced only to be abandoned. The other way is to look at the future. Not as a person from the 1950s, thinking about it as a territory where there would be something completely new to invent from scratch, but instead as a result of what we have now in a different way.

What I’m trying to formulate is this concept of “hybrid publications,” which are publications neither fully physical nor digital. In these circumstances, writing itself would also have to change radically. What I consider crucial at the moment is that in the classic publication approach, which obviously directly affects writing, we always consider the writer, i.e. the producer of content, and the audience. Once the writer has produced a text, then the biggest outcome we get is feedback. I think that there are two components that are totally missed in this process, and which we’ve had around for more than 20 years now: software and networks.

What happens when we use software and networks in an active way within publications? I am not able to propose a practical solution to answer this question nor can I formulate a credible prototype to solve this problem. Yet, theoretically, I believe software networks have an active part in the publication process. They change its nature completely and contribute to evolve the very concept of publication for the future. A hybrid publication would be able not only to communicate and be distributed in far away places, but also to use software to enable processes to generate feedback back into a (dynamic) publication itself.
Of course writing would be tremendously affected because it wouldn’t be anymore a finished practice that at some point is concluded. Even online, even if you answer a post/article comments, the article is almost static (yes of course it can be updated but at some point it’s not updated anymore). And that happens also in other journalistic platforms – there are updates and you can track them – but after a while it becomes fixed, as is the nature of this kind of cultural production.

What I’m thinking of is texts that would embed some software components, generating processes. These texts would not be aimed only to communicate ideas but also to instigate processes that would benefit from a networked structure, being possibly spread like agents generating process, and then integrating the results in their own text structure. This connects back to the distributed archive notion, and the idea of having distributed entities that could collaborate and create something that is under a single umbrella, recognisable as a single one, with a few who take the responsibility of running it and of sustaining it as a resource. These concepts are just trying to implement what we have had for a long time, an open distributed and collaborative production of knowledge. But it’s important to note that these same processes would eventually aim at the highest possible quality of outcome. All of the above is a subject of obsession at Neural, indeed.

AUTHOR BIO

Alessandro Ludovico is Associate Professor in Art, Design and Media at the Winchester School of Art. He is a media theorist, editor and artist, and completed a PhD at the Anglia Ruskin University in Cambridge. His publications include the monographs Post-Digital Print, The Mutation of Publishing Since 1894 (2012) and Suoni Futuri Digitali (Future Digital Sounds), (2000). He has co-edited the three volumes of The Mag.net Reader series (2005, 2007, 2008), and published articles and book chapters on new media art, experimental publishing and virtual identities. Since 1993, he has been chief editor of Neural, a critical digital culture magazine, and served as an advisor for the Documenta 12’s Magazine Project. His research focuses on the relationship between traditional and digital publishing, on developing new forms of collaborative libraries and archives, on media art history and archaeology, and on the evolution of software-driven portraiture. http://neural.it

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