Telepresence and Telematic Arts in *Le Radici del Nuovo* Archive. Interview with Maria Grazia Mattei*

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Abstract

This chapter contains an interview by the *ARTCHAE* team with Italian journalist, art critic, and curator Maria Grazia Mattei, founder and director of the MEET | Digital Culture Center in Milan, where the *Le Radici del Nuovo* archive is hosted.

Keywords: Telematic Art; Computer Art; Telepresence; The Roots of the New; Archaeology of Networks

Abstract

Questo capitolo contiene un'intervista a cura del gruppo *ARTCHAE* della giornalista, critica d'arte e curatrice italiana Maria Grazia Mattei, fondatrice e direttrice del MEET | Digital Culture Center di Milano, dove è conservato l'archivio *Le Radici del Nuovo*.

Parole chiave: Arte Telematica; Computer Art; Telepresenza; Le Radici del Nuovo; Archeologia delle Reti

BG: *ARTCHAE* has worked on the theme of telepresence, a concept that is now central in the media world. What does this term mean to you? To which aspects of your research and curatorial experience have you connected it?

MGM: Today, the theme of telepresence is relevant because people have understood that being online, being connected, being able to transfer thought in real time and exchange with others is something very important. It is also a possible way of working and collaborating. For me, telepresence has always meant this: the ability to dislocate one's own body without physically moving, but above all, the ability to circulate thought, to put it into dialogue with others and to create situations of exchange, even production and co-production. So telepresence can be understood as a technological issue, and certainly, compared to what I remember from the early days of the so-called "telematic age" in the 1980s, we now have many more possibilities. It has almost become a spontaneous, natural mode of communication, much like using the telephone, with all its visual, performative, and "dramaturgical" aspects of communication. Yet, these tools also allow us to think. When I think about telepresence, I think of all the technological development that was clearly moving in this direction since the late 1960s and 1970s, particularly with already existing tools such as satellites. There was no network yet—at least not one accessible to people—and no web, but those who truly emphasized this potential revolution in interpersonal communication were artists. As creative minds, they understood that telepresence is a special dimension of relationship, co-creation, transmission of thought, and exchange. Thus, I picked up on a tendency that was already evident in the 1970s,

particularly through those laboratories of artists and creatives that had sprung up practically all over the Western world, even in Australia.

BG: In your archive *Le Radici del Nuovo* ("The Roots of the New") you collected indeed many documents related to this dimension of mediality, and they have been extremely valuable for our project. They gave us important opportunities for reflection—through, for example, two-way transmission works of the 1970s and 1980s by Paul Sermon, Sherrie Rabinowitz, and Kit Galloway, or the often-hidden contribution of the Italian scene to telematic art, such as that of the Giovanotti Mondani Meccanici. Moreover, the name you gave to your archive, *Le Radici del Nuovo*, already aligns closely with our media archaeological perspective. Could you tell us about that title and the "archaeological spirit" of your archive"?

MGM: *Le Radici del Nuovo* is a title I gave it later, I didn't name it this way at the beginning. At first, for me, everything that concerned digital culture—all the expressions that came from research, laboratories, and developments in hardware but especially in software, and all the new directions in communication such as telepresence—were fields to explore. I didn't originally set out to create an archive. I followed trajectories, gathered documentation, and received a lot of material because I collaborated with various groups, particularly those working in telematic art. So, it was natural for me to collect documentation. I realized, however, that the process of digital culture, or of the advancement of digital transition in society, was going to be irreversible. I could see a future, a development, an impact on society. I saw the digital not only as a technical issue, but as a vast paradigm of transformation, one with cultural, creative, and economic consequences. And I simply began to study it, like you do at the university, but perhaps more as field research, firsthand and "unmediated." Of course, there was already literature written by people before me, but the scene at the end of the 1970s and especially during the 1980s was so vibrant that there wasn't even time for me to say, "now I stop, then I'll write a book" or "I reflect on this now." My reflection happened in real time. My synapses started to connect, to link ideas, and I began to glimpse a whole scenario. Thus, beginning in the late 1970s, I declared that the world would become digital, that it would have a future, and that I would collect its traces. I was more interested in the future than in the idea of building an archive, more interested in trajectories, scenes, and trends, as we would call them today. As I became more involved in this scene, this became more evident, as did the fact that there were no real boundaries between sectors, there was continuous interexchange and intersection, and you could perceive evolution taking shape. What was the biggest intuition I had? It was to understand the world of computing not as a technological one. That was the real turning point, and I believe it has proven right, because that's the approach we must take even today. Back in the 1980s, outside

the circles of artists, intellectuals, and the curious who worked on these issues, computing was regarded purely as a technical matter. To recognize instead the potential for creative and communicative use in the hands of those who could develop new expressive trajectories meant entering into a cultural relationship with this transformation and understanding that it would eventually involve everyone. I can assure you, in Italy it was seen as something for IT specialists, engineers, technicians, and trade fairs. I remember working at SMAU [Salone Macchine e Attrezzature per l'Ufficio, "the Office Machinery and Equipment Fair"] in the late 1990s and especially early 2000s, when we created the first cultural initiatives there. It was a technology fair that no one initially saw as culturally relevant. We took a space in the old Milan fairgrounds and turned it into exhibitions and events, to show that "technology is taking us in these directions." That's why I've always seen it as a matter of the future—a future you glimpse—and for me, it became a work of discovery, but also of dissemination. I did this through initiatives, events, and opportunities for encounter and dialogue, constantly making this material available. And meanwhile, the archive grew. The importance of this archive lies, on one hand, in having documentation—certainly not exhaustive, but broad enough—to touch on all the various evolutions of how computing and information technology have impacted our lives since the 1960s. From a historical point of view, it documents how this evolution affected different sectors, from cinema, to television, to media, in its relationship also with culture, museums, and the development of the virtual. On the other hand, I isolated a chapter I called "telematic art" or "art of communication"—which is what we're interested in now. Telematic art was, for me, the clearest example of what I meant earlier. Art has always been central to my research—art understood as a mode of inquiry and expression, a way of creating new languages and new communicative possibilities. Not art as a market commodity—the art market has never interested me. What interested me was the impact that certain research practices had on people, the way they influenced society and sensibilities in that direction. I have always placed creativity at the center, a kind of creativity that found ways to express itself through technologies that seemed destined for entirely different purposes, initiating processes that made one intuit what was to come. The kind of art I called telematic art or art of communication was emblematic because, starting from the 1970s, numerous laboratories had formed to experiment with available technologies. In the 1970s, computers were still cumbersome and personal computers had not yet developed, but satellites, radios, and other technologies could be combined in ways that showed you could break into the field of communication in new ways. These were real laboratories—you can see it in photos from the time—what today we might call "fab labs": very technical but also exploratory from a theoretical viewpoint.

BG: Were the Bell Labs in the United States a model for this?

MGM: In a sense, but I am talking of different experiences. The Bell Labs were part of a company, like Boeing or other corporations that, in the early years especially in the 1960s, had access to computers and understood that these machines could also be used to visualize images. The whole push toward computer graphics came from scientific research, from data visualization as we would call it today. These big companies had computers that filled entire walls, and they made them available by creating dedicated teams that included their in-house engineers and invited artists like Vera Molnár and Lillian Schwartz to collaborate on experiments. In the 1960s these people had to write their own software using programming languages, since there was no commercial software at that time. The first languages for data visualization were born then. That was a truly pioneering stage, another great chapter. Rebecca Allen, for example, already in the 1970s began creating the first simulated three-dimensional images, and the 1970s were not exactly the years of 3D imagery. She taught at the New York Institute of Technology's Computer Graphics Laboratory. So, you had clusters of creative researchers breaking boundaries and finding new ones—that's what creativity is. And at the same time, these groups were supported by companies that provided the resources to do this. It was an extraordinary model of research. But there were also spontaneous laboratories, groups that included computer scientists and theorists such as Roy Ascott, who began to experiment with new modes of communicative interaction that went beyond the use of the telephone. The telephone already connected people, but these experiments aimed to involve space, time, and the body. That was the key. Similar laboratories existed in Bristol, Austria, and Australia, and of course in the United States. The Electronic Café was one of the most exemplary cases. These labs connected through different media, including radio, and what did they explore? They explored the possibilities of technological connection, yes, but above all new modes of communication in which *space*, *time*, and *body* became fundamental parameters of their research and experimentation. They created a network among themselves, and through this network began what I used to call "telematic happenings," because they were actual happenings in which participation itself was part of the work. Projects like *Hole in Space* (Galloway and Rabinowitz, 1980) connected New York and Los Angeles through storefront windows, sparking a process of participatory communication made possible by television and satellite. It was still broadcast communication, but it brought to the forefront the concepts of interconnection, interaction, and interactivity, centered on the person as an integral part of the happening, and therefore of the work itself. Why is this theme important? Because telematic art experiments were not just isolated events but became almost a movement, with its own spaces, networks, experts, and a continuous, lively program of activity during those years. What I find most interesting is that these artists fit perfectly into a much broader cultural context, not necessarily a technological one, that

was moving in many directions, including theirs. To explain: the 1960s were years of counter-information. Television was seen as a medium of conformity—broadcasting messages that left viewers hypnotized, absorbing everything uncritically. In response, many artistic movements emerged that sought to rediscover new modes of communication, the centrality of the individual, and the concept, already present then, of the artwork as a collective work rather than the product of a single artist. It broke away from the romantic model of the solitary artist creating alone. There was much more of a collective working scene—think of The Kitchen in New York, a highly experimental environment that went against the normalized structures of official culture at the time. If you don't understand that cultural background, you can't understand why these experiments were happening. That was my intuition, and I saw it as a crucial key for connecting everything that was going on, the computer art movement, telematic art, the rise of virtual art. All these movements, which I studied because I experienced them, belonged to a continuum in art history—or rather, in a kind of art that I find extraordinary: an art closer to society and to people, a sort of social art, because artists were working with the idea of changing society or awakening awareness and personality, a utopia that has also conducted us to the excesses of today's individualism. It was utopian, yes, but not only utopian. Because today we also have the power to express ourselves, to break free from the model of passively sitting in front of a TV and thinking only what it tells you. Telematic art, which represents an original and new chapter in the experimentation with new languages and relationships with technology, also connects to a longer lineage within art history, that of the relationship between art and technology, which has deep roots. That's why the idea of the "roots of the new" is central: by rediscovering these early experiences, we can better understand current processes.

RG: From about the mid-1980s to the mid-1990s, art nourished a utopian vision of technology. It imagined it would have a decisive role in shaping the human relationship with it—as in *Good Morning, Mr. Orwell* (Nam June Paik, 1984) or *Piazza Virtuale* (Van Gogh TV, 1992). Today, where our lives are symbiotic with digital media and that relationship is no longer perceived as utopian, what kinds of imaginaries, operations, or interventions can emerge from the encounter between artists and technology?

MGM: The most anti-utopistic question today is that of big data, but art is still elaborating this creatively, in continuity with early programmed art and kinetic art. Today, when technology has advanced so far—what Jean-Michel Jarre calls "the golden age of artificial intelligences"—there are many creative people experimenting. But only a few truly give us flashes of insight into how we are evolving. If you look in that direction, connecting to a historical flow of thought developed through many cases over the years, you'll see that even today

some artists are able to capture those "weak signals" destined to become stronger, or to offer a representation, perhaps utopian, of what the next present, the future, might look like. I'm thinking of artists—truly great artists—working on the theme of data. In the 1970s, data meant visualization—the simulated display of calculation, the visual representation of certain mathematical or engineering processes. I remember Boeing's computerized image of two pilots in a cockpit—it was striking because it emerged from computation, representing an engineering project. Engineers could read the formulas, but those without that training couldn't, so simulation helped make those processes understandable. Today, those who know how to work with the DNA of our memory, with what we call data and datasets, are using them to extract our past, read and reinterpret it in a contemporary and future-oriented way. They're showing us a powerful evolution toward hybridization between human and machine, where technology is no longer merely an extension of our abilities but also a kind of *facilitator*. Jarre speaks of "augmented imagination", a faculty that lets us see beyond the visible, to make things emerge, to organize thought, and to set knowledge processes in motion that transcend human senses. Another development now unfolding—something that was already discussed in the early twentieth century by the avant-garde—is the multisensoriality of the artwork as a total work. On one level, this is about restoring the completeness of human experience, engaging all senses. Yes, this has to do with entertainment, and the entertainment industry will surely grow, but it also allows us to identify weak signals of powerful cognitive and learning processes. These modes of interaction act powerfully on the neurological level, they affect cognitive learning. Will technology give us greater learning capacity? These technologies can, but only if *people* learn to use them consciously. And who shows us these processes in action? Artists. By looking at their work, we can see where other sectors might go. That's why here at MEET I've placed art, creativity, and people at the center: a creativity based on using and experimenting with technologies that were often born for entirely different purposes. Think of Bruno Munari, who took the copy machine. I involved him in a telematic art experience; it was thrilling because he didn't see the photocopier as a mere machine but as a tool with communicative and linguistic potential. He began creating distortions with it, working on the theme of error and imperfection, even turning it into an aesthetic issue. I brought him to participate in events we organized in Italy and at the Venice Biennale. He was thrilled! He had grasped the enormous potential and enthusiastically collaborated with other creatives around the world, with that free, unbounded gaze that defines creativity—that ability to think outside the box.

MTS: Munari wasn't the only Italian artist with whom you collaborated. Between the 1980s and 1990s, you intensified your collaboration with the Italians interested in experimenting with tools that were new at the time, including the telefax. Could you tell us something about those experiences?

MGM: In the early 1980s, the telefax appeared in Italy. I didn't follow its technological development directly, but I encountered it through contact with the Berlin scene, which was in touch with Robert Adrian X in Austria. He said, "Let's do it here too." This device had just arrived in Italy—the telefax—which until then had been a business tool used in offices and companies, previously transmitting via technologies like slow-scan TV. I discovered that as soon as the telefax arrived, some creatives in Berlin and Robert Adrian X began organizing events exchanging images via telefax. Thinking about it now, it was truly the first "democratic" tool after the telephone, something that entered workplaces everywhere. Almost everyone adopted it at first because it simplified internal communication. The telefax fascinated me because it was an example of a tool designed for a completely different purpose that, when placed in artists' hands, became a kind of proto-web, a means to experiment with new interactive forms of communication, unlike those already being explored through radio or other media. Thus, we seized that opportunity. In 1984, I had the chance to organize *ARTE E NUOVE TECNOLOGIE* ("Art and New Technologies") in Pavia, and I created a laboratory I called "Telefax Art." Later—just as I always do—I looked back and realized there was already an entire movement of art of communication/telematic art with its own theorists. I got in touch with them. Already in Pavia, we connected with Toronto and Sydney, and I invited artists—Munari among the first. That same year, 1984, *Good Morning, Mr. Orwell* came out—though I wasn't directly involved with it—it used not the telefax but video, employing the same tools as television to create a kind of telematic happening across the four corners of the world, with authorial graphics developed by Paik in post-production—these were electronic rather than digital images. But with the telefax, there were many labs and, in Italy, a whole story of experiments. My first work in Pavia was followed by a series of fascinating projects. *Machina* was a major cultural event in Turin, organized with the Teatro Regio of Ivrea and the Castello del Valentino in 1985. At the Castello del Valentino, I invited Giovanotti Mondani Meccanici to use the telefax (*Paesaggi della memoria*, "Landscapes of Memory"), because it had become the "web page" of the event. But it wasn't just a page presenting content—you could interact. The messages, images, and collective, co-creative imagination that arrived through the telefax were then used within a theatrical set. That was its power: a machine like the fax had become a generator of hybridizations and new languages.

RG: Telefax art as a genealogy of the telematics is certainly intriguing, and your further experiences in what will be called net.art proved it. I am particularly interested in the 1986 Venice Biennale, where you worked on *Planetary Network* together with Roy Ascott, Don Foresta, Tom Sherman, Tommaso Trini, Robert Adrian, and Jean René Bader. What kind of idea of network, communication, and "being connected" emerged from that network of artists during those days?

MGM: There were two levels. We were four curators and we revisited the theme of the "planetary network." These were the insights coming from the research of that time—a "system of communication," as Edgar Morin would call it—a planetary nervous system. We called it *Planetary Network* because it consisted of many nodes in a network of communication and creation, emphasizing a strong theme of co-creation, not just communication. So, we created this laboratory at the Corderie, connecting through fax but also through other means, establishing a real-time "planetary network" event. The first level was a productive one: it was perhaps one of the first exhibitions in Italy to use telecommunication and computer technologies to organize the show itself. We used a SHARP server, exchanging messages through plotters that printed meters and meters of paper rolls. There was a server in Canada, and here in Milan we had an antenna in a space provided to us. That initiated an operational, collaborative mode that now seems completely natural to us. We anticipated what would later become a standard way of working—organizing events and staying connected with others. In the 1980s, creating an exhibition was a much slower process: there was the curator, postal correspondence, or at most a phone call—it took a long time. We, instead, saw an entire creative process unfold at great speed. The second level was about sharing a vision: offering a laboratory—more than an exhibition—an open, real-time space that lasted throughout the Biennale, where anyone could connect and experiment. Fittingly, it was an edition dedicated to art, science, and technology. Once again, approaching these themes not from the standpoint of technological novelty but from that of creative processes proved to be a winning choice, because there was truly a freedom of imagination and invention that was extraordinary.

MTS: Speaking of creative processes, in your events you also gave space to Tommaso Tozzi and Strano Network. What role did they play in this landscape?

MGM: Those were project-based experiments, often guided by both theoretical and practical goals. They explored what it meant to be a collective author, what it meant to break spatial and temporal frameworks. They investigated these dimensions, and they did it like computer scientists, theorists, and tinkerers. When I said earlier that today we might call them fab labs, I meant those environments where one worked directly with technology but always followed a shared line of thought, a research trajectory. Someone called them "amateur", but they were not. The results were happenings—creative acts that reflected the aesthetics and sensibility of their time. Of course, there was also a tangible, material production, but the real creative process was communicative: the activation and staging of a practice aimed at exploring certain parameters, communicating in a co-creative, participatory way. It wasn't just about the telephone or voice, but also about sight, images, and above all—space, time, and the body.

MRDP: Ultimately, your archive documents decades of creative processes that have connected arts, culture, and technologies. It is also interesting that many of those documents came from research centers of schools and universities worldwide. So, *Le Radici del Nuovo* today can offer original perspectives to students, professionals, and citizens from which to foster an aware use of digital media, becoming relevant for both research and educational purposes. How are you rethinking educational formats to ensure that "digital culture" is not only about technical literacy but also about critical thinking? Could you explain this perspective, perhaps through an activity organized at MEET? Because it is clear that, for MEET, "digital culture" is not merely about technical literacy—it's a broader kind of education, one that is cultural in nature.

MGM: Honestly, I think of all the activities I organized since the foundation of the center as critical thinking. I'm truly convinced that approaching digital transformation in an innovative way—understanding this process—is first and foremost a matter of cultural awareness, even before it's a technological one. There are already plenty of courses in digital literacy. So, what does MEET do? It offers different kinds of events, contents, and opportunities for exchange. We organize digital events where schools come and students understand what it means to live immersive experiences—grasping the future relevance of this new cultural paradigm of immersivity. Or they come to connect with an artist in the "MEET the Media Guru" program, where artists share their stories and knowledge. For me, all these moments serve the same purpose: to bring people into this world with a different kind of attention and sensitivity, to train sensitivity itself.

LL: How will MEET bring the *Le Radici del Nuovo* archive into dialogue with the programs it offers for young digital artists and designers?

MGM: *Le Radici del Nuovo* exists precisely to help us understand that we must emerge from a kind of daze. The first daze was technological—the "wow" effect of technology. Now that hype has faded, and what we have is a more existential kind of disorientation, a sense of unease: what has happened, what is happening? But you can't understand what's happening if you lack your references—if you haven't absorbed and metabolized the process. I believe you become stronger and more aware once you understand; once you no longer fear it, you can face the present differently. That's my safe harbor. So yes, young artists should know this history. That doesn't mean they'll all take the same direction—no. You absorb, and then you rework it; if you are creative, you can move forward. But it's essential to have that foundation of knowledge. We can do this in collaboration with universities, too—what's needed is an ecosystem.

LL: Is it possible to imagine exhibition formats, within the field of electronic and digital arts, in which conservation and production aspects meet?

MGM: Definitely, and that's what we're looking for here. At MEET we also try to be a bit creative ourselves, even a bit artistic. The first thing I decided was to make them coexist: I don't keep the archive locked away in a small room, the contents are spread throughout the space. First, because MEET was founded on the concept of immersivity—bringing you into the story. You can make that story more three-dimensional, of course, but the models come from observing the works and proposals that have emerged over the years. For example, I created the immersive room for two reasons. One: the main parameter with which we designed MEET as a communicative device was immersivity, both in terms of content and sensory experience. These are the same parameters that artists, in one way or another, have always experimented with, and I wanted to make them tangible here. But that immersive room was also conceived as a space—a "node," as we would have said back then—for telematic happenings. I equipped it with invisible technologies that allow you to carry out live, real-time telematic happenings. To be clear, it's not just a Zoom connection, it's the MEET device itself that becomes a node. And, as I'm discovering, there are still other nodes like this around the world, allowing me to reconnect with the idea of a network—a network of experiential exchange.

MDR: Working on reorganizing *Le Radici del Nuovo* archive has revealed several interesting genealogies of contemporary digital forms, which, despite their differences, can be integrated with works preserved in other archives. Do you think dialogue between these institutions is important? And do you believe it's possible to communicate this shared richness in ways that build bridges between people and institutions committed to the same challenges of preservation and dissemination of knowledge around media and technology?

MGM: Absolutely, yes. In fact, we should be doing much more to inform people in this direction, if we could design even a minimal ecosystem that offered reference points. I always start from a metaphor, that of the compass. You need reference points, but you have to know them and know how to use the instrument. When navigating innovation—looking toward the future, trying to understand what's happening, as I always say, to avoid being passive users of technology—you need that compass. It has certain elements: the needle, the cardinal points—and there are more than just four. There's the university, centers like MEET, the artists—all together helping to reconstruct this territory, which is what I do each time with *ATLAS*. At the same time, when we talk about "networking," beyond the buzzword, it really means finding collaborative ways of working—like what you're doing now: studying something together. Otherwise, there's the risk—especially with archives—that they die, remain silent, or disappear with the person who created them. We could truly start from even a small nucleus, even by simply awakening attention to this theme.

BG: To conclude, our final question can only be: what about the media of the future—what do you see? Is there a work that made you think, "That's the new direction; that's where something is going to happen"? Or are there many?

MGM: The future comes through many signals, there isn't one single work that says it all. You have to look at the great artists who are truly active, those who both think and do—not just those who think without doing. If you want to understand the signals, you must look at those who get their hands dirty in the act of creation—but who also think deeply. When you meet someone like Jarre, your mind opens, and you begin to understand certain things. The same happens with other artists. So, my job is to seek them out, to bring them together, and then a picture emerges. I see traces—not the whole picture, of course, because many things elude us—but, for example, I see an increasingly strong direction toward *real time* development, even in the use of artificial intelligence and tools that allow for real-time, collaborative co-creation. This is not far from what telematic art was aiming for. What those artists envisioned with the technologies of their time can now be realized at an exponential level. And this idea of real time—people think they understand it, but in truth, we still don't grasp its full scope. Just think of its implications in design production: when you start a design process, you hold meetings with this and that collaborator—you can now work internationally, collaboratively, and co-creatively with visualization and communication systems in real time. But it's not about simply connecting people who talk: it's about people who create together, who work simultaneously on elaborating and simulating ideas as they take form. If I've managed to sense something about this world, I owe it to art—to art history, to what I studied in art—and that's what has guided me to focus on certain aspects. If it had only been about technology, it wouldn't have interested me. What I saw in the early 1980s was not technological evolution per se—the arrival of computers in offices and homes, the change in the domestic and work landscape—but the sociological impact of this transformation. That's what fascinated me, that's what I saw as evolution. The fact that the computer, once huge, became small was important, but only to a certain extent. Everyone saw it as a development of tools for science, engineering, simulation—the computer, after all, had its roots in warfare. Therefore, when someone realized that an instrument created for calculation and control could become the "immobile engine"—a kind of God that sets everything in motion—I found that extraordinary. And it was the artists who saw it first.