Conversation with Francesco Antinucci about cognitive sciences and visitor-museum interactions

PERLA GIANNI FALVO, Art Perception International, Italy



Francesco Antinucci has been Research Director of the Cognitive Sciences and Technologies Institute of the Italian National Research Council (CNR). He has developed part of his researches in the United States, at the Department of Psychology of the University of California at Berkley, at the School of Information Studies of the same university, and at the Palo Alto Research Center (PARC) by Xerox. He has worked with new technologies from their earliest stages, developing several multimedia and virtual reality applications.

Key words:

Art perception, Art communication, Cognitive sciences, Museum interaction.

SDH Reference:

Perla Gianni Falvo. 2018. Conversation with Francesco Antinucci about cognitive sciences and visitor-museum interactions. SDH, 2, 1, XII-XXIX.

DOI: 10.14434/sdh.v2i1.27924

Perla Gianni Falvo: What do you remember about one of your last museum or exhibition experiences? Please tell us about a visit that in some way struck you in a positive or negative way.

Francesco Antinucci: One of the last things I saw was the new installation at the Modern Art Gallery of Rome. It struck me because it's something different from the usual. On this there is no doubt so much so that to soften the hardness of the break it has been called a "show." But a show that lasts more than two years is unlikely to be an exhibition and is really more an installation, isn't it?

PGF: Indeed ...

Authors' address: Perla Gianni Falvo, Art Perception International, Via Orcagna 53, 50121, Florence, Italy; email: perla@artperception.org.

^{© [2018]} by the author; licensee Studies in Digital Heritage, IU, Bloomington (IN), USA. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution License (CC BY-NC).

FA: However, they did not have the courage to call it an installation, precisely because it has characteristics that contradict the traditional installation set-up with which we're familiar, which is substantially that of a taxonomic organization by schools and by chronology, the one used by scholars to teach students. But we know very well that this method does not appeal to the general public. Indeed, it constitutes an obstacle both to enjoyment and to understanding. These long sequences of similar objects, taxonomically compared, are not interesting for a non-specialist visitor of the sector! Being forced to see dozens of finds of the same type, especially in archaeology, is really tiring.

We know this, and for years we have tried to change this form of exposition. The museum must be a place for the public, and serving the public is the fundamental purpose of the museum. Surely, leaving a collection of art objects open to the general public can sometimes presents risks and certainly costs, which we can minimize but not eliminate. Then, if the state takes responsibility for this, it is clear that it must believe that a visit to a museum fulfils a useful function of some kind, and that it is not merely a visit to a playground. The state does not give free financing and does not maintain such institutions as playgrounds, but does so because they implement a value recognition, a value that exists in the activity of visiting museums, and which justifies this support. In fact, we often use the school day, that is the teaching time, to bring the children to a museum, therefore we assume that it is a time of learning, that it has value and is used profitably.

If, then, through appropriate and established measures, we reveal that this does not happen, we have the obligation to ask ourselves why it does not happen and above all to begin to find solutions for this learning to take place, even if this is neither obvious nor easy.

PGF: In fact, that's what we want to work on. In this perspective, what is the best thing you expect to happen in front of a work of art?

FA: That it's able to communicate! The first thing to understand is that an artistic work - of any kind of artistic expression - is basically a message. Those who make a work of art do it because they have something to say and they are simply using a particular medium to say it: a code, which is different from the code used when we use words. For example, to communicate with you I am now using language and what interests me is that you come to an understanding of what I want to convey to you. When the artist, the painter the sculptor, makes a work it is clear that he wants to say something through an appropriate code. I believe this is incontestable and that people recognize it, so the artist is also interested that the work is seen by people and speaks to an audience. So, what is the simplest and most neutral thing we want? The simplest and most neutral thing we want is for this message be received, that's all.

Why is it not obvious that it is received? First of all, because we do not study the language that visual art uses - contrary to the verbal language that is native and which we learn when we are small - it is a bit like learning a second language. Not many of us make the effort to learn a second language, nor we are taught it, perhaps because it is not in the curriculum. The first thing is this: in order to get inside this message, we need to understand its code.

But even this is not enough, as we well know, many times these are messages that come from the past, a more or less remote past where the conditions in which these communicative objects were produced were very different. Now why is this a difficulty? Because when I talk to you or anyone, I

have to assume that we have common knowledge. It is easy to understand how it is not possible to communicate if there are no shared bases, because I have to explain every word I use, what it means and what it is connected to. But if you really don't know anything at all, it's impossible to communicate.

Therefore, by necessity we must start from a shared knowledge. Now the more we go back in time or far away in space, the more we distance ourselves from the conditions in which we grew up and live, the more difficult this becomes because these conditions tend to be different, and we don't know them. While those who produced the message at the time took them for granted and thought that anyone could understand them, with the passage of time this is no longer the case.

I can cite a very trivial example. Here in Rome we have many wonderful painted ceilings of a kind created all over Italy in the 16th and 17th centuries. But today, beyond being fascinated by their enormous number of figures and their obvious drama, people looking at them today have close to zero understanding about what they mean. And that's because we don't still use their code. If, instead, a normal person of the time entered one of these rooms, where by "normal" we mean a person not completely naive but with a decent degree of culture, this person would immediately recognize certain elements. Because they are things that are part of his cultural heritage of what is familiar to him. So, when we go to a museum to look at any work of art, sometimes we don't have the code to understand it, and above all, we don't have context sharing.

In conclusion, the first thing a museum needs to do is provide these things, code and context. Then, how to do it and what putting it into practice implies is another matter, because, unfortunately, it is not just a question of adding something, otherwise it would be easy.

Fortunately for everyone, there is a margin of absolutely personal and private experiences, in the sense that they are different from one another, and any person can experience the contents in one way or another. The question is: are we interested in whether there is a level of objective understanding or not? Because according to the answer we give to this question, very different things may be implemented.

PGF: Any person can experience content by empathizing with the work of art, and this resonance can have different effects on each individual. This is part of the magic of art. But if, with the support of a multidisciplinary work group dedicated to the study of aesthetic enjoyment, we can trigger / foster contact between people and art, then it should be easier to add and supply all the other elements that are connected to the understanding of the work in the most appropriate way.

FA: Ok, it's true. You raise a real problem which is an example of the famous question of the chicken and the egg. Part of the difficulty of what I said remains how to do it, and this is not obvious. Some might even say, "But we already do it!" For example, in the galleries there are signs, you read them and there is written everything the visitor needs to know: who is the artist, what he wanted to say, in what period he lived, and so on. Yes, but it is a pity that this is an absolutely ineffective mode of communication. There are many studies and well-established cognitive reasons that show us why they do not work. We have written about it many times. Reading a sign in the room or having a guide is not the right way to provide the knowledge we need. This type of knowledge must be provided in a suitable way, within the very particular museum environment, it is a matter of experiences and visual knowledge, it is a position and an attitude that have specific characteristics.

In this regard I reconnect with what you said: there is a fundamental mechanism that we all know, that is, that there is no—and does not even begin to be—a passage of knowledge if there is no interest. Motivation and cognition are closely linked. This is true in all fields. At school we learn, and what we learn must not only be cognitively comprehensible (this is the task of the teacher when he teaches), but it must also have a motivational connection. This is why schools often fail and produce bad results, even though the contents are apparently correct. Because the interest lever is not activated. If the spring of interest does not move, the cognitive interest does not move. Then we need to combine these two aspects. And here, obviously, there is a big space to make different interventions of any kind, also of an extrinsic type to the work itself.

So, in this area, yes, it's true that you can operate in a way that captures attention. I would call it capturing attention and interest. And here there is a huge creative space. You know that I do a lot of visitor studies. For example, we have found that everything that represents narration is definitely superior to what is expressed in a descriptive form. We don't like description, we like narration. Narration is a structured discourse, there is a beginning, a development, and an end. You can make it exciting; you create a bond with something through some premises and then we want to know its development, this is a story. There is no story in a description like a museum label. The description is a list that can be interrupted at any point: nothing depends on the previous point. And after a while, as is known, lists become boring. Or they are indispensable and must be memorized for some purpose, otherwise in themselves they become boring. This is one of the main reasons why all these aids do not work: they merely formulate descriptions.

PGF: From which the famous "museum fatigue" derives...

FA: Which, it must be said, also concerns another series of things and above all, how exhibitions are constructed. I repeat the taxonomic exposition is an impossible proposition. The comparison of the similar examples illustrates the genesis and evolution of the objects. It's a subject of interest to the scholar, but for those who simply want to appreciate the art and to know a bit to appreciate it is deadly dull. Another capital error is to offer information in written form. The visual attention required in this case enters into competition with the graphic type of attention required to observe the work. An almost incurable opposition is generated that occurs at the level of the cerebral hemispheres. When the visual input is linguistic, the projection that takes place on the occipital lobe of the brain of sight must be directed towards a part of the brain that is the one that processes the language. Instead in the other case, that of graphic processing, it must be sorted on the other side. Now, when you give people a written brochure and a visual work of art, you ask them to read and look at the work. You ask them, therefore, to make a continuous switch between these two modes, and this switch is not good. It is tiring and annoying. In fact, even if you use the ear, as happens when the information is provided by an audio guide, this is never a good choice, but at least you avoid the first intersection.

PGF: We need to review the artwork/user paradigm.

FA: But of course. Let's think of the painter who made the work. Did he/she do it to keep it in a museum and be compared to others? Certainly not. He/she did it because it contains a message and he/she wants to communicate it.

If we go to the Sala Grande of Palazzo Barberini we see the glory of the Barberini who triumph with Urban VIII. This is the message, and how is it expressed? Through the talents of the artist, with the

story that is told in the universe represented on the ceiling (Fig. 1). What the painter wants is for this message to be received, whether it be the great Barberini fresco or even a simple portrait. If we blur it, putting the work together with all the other similar works, we are doing violence to him and his work.



Figure 1. Pietro da Cortona: The Triumph of Divine Providence, ceiling fresco (1633-1639), Barberini Palace, Rome, Italy. Photo by Wikimedia (https://commons.wikimedia.org/wiki/File:Ceiling_of_Palazzo_Barberini.jpg).

I know some will criticize me, but in my opinion, there is nothing worse, for example, than the removal of the altarpieces from various Venetian churches and their relocation in the Galleria dell'Accademia. These altarpieces placed side by side do not even have the space to be seen. You can't put yourself at a point where you see only one: either you see a piece of it, or you see two or three together. It is an absurdity: an altarpiece is designed to be the focal point of a long perspective - as can be seen in the churches of Venice whose altarpieces are still in situ. In the Accademia, however, they have no effect. They may please the scholar who goes to the museum to make comparisons between them. But this is not the primary purpose of a museum. We want the message intended by the artist to be expressed and retain sometime of its original impact on the viewer, because this is the fundamental point. There is no way to go around it, you have to modify the criteria of the set-up. I wish to point out that these rules are not, as we often say, of the nineteenth century, they are eighteenth-century criteria and this way of exhibiting is directly dependent on the theories of the Enlightenment, which is to say that it is pre-historicist.

PGF: Maybe it's the right time.

FA: Maybe it's the right time to change, but unfortunately it is not enough to just take something away. And I worry about what replaces it, because what you begin to see is not entirely comforting.

PGF: Reading your book "Word and Image" I thought that we should build our projects by directing the sensorimotor cognitive ability - which you define as the most ancient, pre-reflexive and prelinguistic – toward aesthetic enjoyment in order to arouse the kind of initial contact you mentioned earlier, the capture of attention and interest on which to build everything else.

FA: You're right, surely that kind of immediate response should be used. It must be something that strikes, unexpected but potentially understandable, new but in continuity with the old, so that it can be appreciated. Surely, it must not take place on a symbolic-reconstructive level, you must not think about it to know what it is, it must strike you, and that's it!

We tried to do something like that in a museum dedicated to a musician. As you know, this kind of museum has no great objects to exhibit. It is usually situated in the musician's birthplace. One thinks of the Mozart Residence in Salzburg, where the only great fascination is represented by the fact that he lived there, but everything it contains could very well disappear and not much would change.

So how to recount a subject like that? In this case, too, you have to talk of the art and the person. In Bellini's case we started by going through his life and his music as an opera. So the first contact of the visitor is not with him and with his baton, but he finds himself in a theatre that represents one of his works, immersed among the characters and revisits the initial structure in which they were born, such as the San Carlo or the old Scala theatres. It does not say anything notional but predisposes the visitor to see on the same set the staging not of Norma but of Bellini's entire life. And here I refer to what you were saying about the awakening of attention to trigger the motivation to know. This should give you an example of what "capture of attention" with the setting might mean. You are simply in a theatre, you are on an opera night, you are watching an historic staging of a well-known opera, and this triggers your interest. Meanwhile, since you surely know something about Bellini if you go to visit his museum, you already know what Norma is, but you don't expect this museum to be a theatre, and you're literally on the stage in the first scene, and then the exhibit continues in this manner. But of course, this means - it is very clear - that the idea of the traditional museum has been

destroyed. In the case of the musician, it is not very important because, I repeat, frankly we can do very well without looking at the original scores, the baton or the clothes of the composer, or the photographs of his relatives. We can put them in a room, and whoever wants can go and see them.

But in the case where there are objects, whose value is actually in the objects, you have to find ways to integrate them so that the transmission of their content works. This is not obvious and still requires some revolutionary changes compared to the current state.

PGF: And it also requires special skills. Because we want to calibrate a story that involves the set-up, with a physical part often integrated with a multimedia that must support the goals we share. We have to carefully plan the user experience, namely the actions and the movement of the people moving in it, understand which sensory motor perceptions we can solicit. To do this we need the contribution of cognitive sciences to explore how to enhance the perception of individuals and activate contact with a specific type of content, in turn developed with other experts.

FA: Sure. You have just touched on the topic of competences. I think they should be expanded when reorganizing a museum or an exhibition in this communicative way. In practice I am convinced, as you say, that we always need more. It is not enough to have a team, we certainly need a creative team, we need all the necessary knowledge—historical-artistic, and so on. In this last example that I cited, for example, the set-design competences are fundamental - and they are more and more so. The multimedia ones are not enough. There is a limit to what you can do with multimedia, because multimedia alone at some point saturates.

PGF: However, multimedia is contained in the set design. The work of the set designer consists in designing the perceptive state of the user through the set-up declined in all its aspects: the use of space, the awakening of attention, the visitors' approach to the art works, the type of narration, the music integration... obviously orchestrating it with other experts.

FA: Yes, set design is essential along with physical devices that you can use to modify real spaces and fictitious superimposed spaces with projections. We can call them representative chimeras, grafts of elements that belong to different universes. It is very useful to mix them, so you can better express things, and perhaps they are sometimes projected for a moment and then when the projection disappears there is the reality again.

PGF: So, the proposed experience is a narration, acted out, lived. This is the real goal of the set design project that should be integrated into the script and content editing.

FA: Yes, certainly. Thus, at this point, what is the hierarchy of all this? We must start from the general concept that guides the path, there is no doubt. It must be a path that leads to a spiritual itinerary, not just a physical one. The itinerary is a story that becomes your story.

PGF: Because then you are part of it, because you find the connection between yourself and the work of art.

FA: So, if you want, you can get closer and closer to the production logic of a film, since here you can mix filming and reality. You need a subject which is scripted, made physical by the set design. It must contain the fundamental aspects that create the story and articulate it. This is perhaps the way in which it is possible to supply the information we were talking about before. What the visitor lacks,

you can make up for through the representations, the stories, and thus make them understand the meaning of the objects they see.

Of course, you can do it only for objects on which you can coherently build a story of this kind. So, it will not be the museum tour that we have become used to. It will be a journey inspired by something that holds together, links the things that you present in a functional way to a speech. Paradoxically, doing the opposite with respect to the traditional museum itinerary means returning to the original function, that is the one we were talking about earlier about Palazzo Barberini. The artwork must be inserted into a greater communicative context, so that it can speak. And that's exactly what you say should be created today. You have to create a bigger context for the work to start speaking again by updating the context to today's sensitivity and knowledge.

PGF: In fact, it would be desirable that a section devoted to this type of experience be progressively set up in many museums, so as to favor this imprinting in the visitor. An imprint that also allows us to go and see the other works with another type of disposition and attention. This cognitive process emerged from a series of feedbacks in workshops dedicated to aesthetic perception, where on the first day we created the context of the narration, then progressively came into contact with the artwork on the second day, the Chapel of Benozzo Gozzoli, where we spent eight hours on a sensorimotor, phenomenological experience actively guided. We did group concentration exercises to enhance attention. We alternated between vision of the fresco, and augmented reality which showed details that were difficult to see at first contact, to then returned to see the fresco exploring the various levels of the work with the vision of the whole and the details. At the end of the experience - documented by a video shot by two operators - the participants expressed in various ways how they had savored their ability to have a contact with art. A few years later we had some feedback. Some of them told us that they had gone to the Uffizi but were unable to see too many works because at this point, they were trying to establish a deeper relationship with the work of art they had in front of them.

FA: Correct. In the Benozzo Gozzoli chapel it's also possible to talk about Benozzo Gozzoli and his era, but this is not the point. The point is that you have an extraordinary visual spectacle that this man created for a purpose, he did it for certain recipients, with a certain intent. This is what you have to communicate, what you have to bring the visitors to reexperience. First to live, as we said before, and then to understand. In other words, the effect of this work is the primary aspect, the fact that he created it at a certain time, with certain models, are accessories, as you understood. They are accessories that are fine. You can know them, you can take an exam on them, but they are not essential in any way to the understanding of this extraordinary message, which visually strikes you as you are immersed in this virtual reality in itself. The first 360 degrees in history.

PGF: Indeed! It's wonderful. But many people feel inadequate in their relationship with art and need to be made feel comfortable. The Chapel is wonderful from the point of view of conception because, in the hall of the worshippers there are three walls with the ride of the Magi that forces you to turn your body clockwise, evoking the temporal dimension. A lesson in psychophysiology and guided sensorimotor perception that comes from afar... while in the sacellum you are immersed in angelic choirs and find synchronicity.

FA: The fact is that by now, you went to heaven.

PGF: You are in another dimension and you experience it physically.

FA: This is the point.

PGF: And it's wonderful.

FA: This is the point... and it doesn't come from the author's biography or anything like that. Until we get rid of this stuff, we won't be able to have a real appreciation...

Instead in big museums anything and more happens, and it seems that the only thing that matters in the end is the visitor count.

PGF: Instead the important thing is what you bring home! The fundamental point is that art can contribute to people's growth, enhance their lives.

FA: You know that there is a very large number of people going to the Vatican Museums. I am in contact with almost all the guides and guards to understand what the public is doing, and they tell me that after passing through the Sistine Chapel many ask the guards where the Sistine Chapel is!

PGF: Really!? I missed this one.

FA: Precisely, me too, in fact it is crazy.

PGF: I know the data of your research done at the Vatican Museum's exit, which documents that visitors remember little or nothing of their visit.

FA: These data are even worse. Visitors pass through it, of course as usual, they go with the herd. However, they go rather slowly, because the museum is packed. After a while they no longer see the sign indicating the direction for the Sistine Chapel and ask: - Excuse me, where is the Sistine Chapel? And the attendant replies: - look, you just passed through it.

I tried to understand why, and it's not obvious. Why do they never notice where they are? For me there is an explanation that I am trying to substantiate, and I believe is the right one. The fact is that people have already seen the Sistine Chapel, have seen it endless times, but have seen it in publications on a different scale with enlarged details. When they enter the real one and see the fresco in the proportions given by the distance in which they are, they do not recognize it and therefore do not stop to look. People expect to see the huge finger of God that touches Adam, and since they do not immediately find it, they no longer look, it becomes a room like any other.

PGF: It is an interesting phenomenon. I believe that in these cases, where one is stimulated by a great deal of information - continually offered by the magnificence of the places and the collection - a sort of protective information selection is also implemented where the cognitive system knows that it will not be able to process them all. Probably the visitors would like to lower this defence for the famous masterpiece that attracted them to the Sistine Chappel, but they do not recognize the place and move on ...

I observed something similar with Luca Giordano, whom you know well. In the Gallery the wonderful painting offers an information overload for a user who is not prepared for this contact. Too much information stuns. Precisely for this reason we should do a work of preparation for contact with the work of art, where selected information can be easily processed by people.

FA: First, you need to trigger interest and then through this component you have information absorption. You know, I wrote a book on communication in the museum that has been reprinted in various editions and has become somewhat the basic text for courses on this subject. For all these years the fundamental antagonist in the book was the classical structure of the museum, a functional preparation for use by the curators interested in the historical critical method and their specialized studies. Then the idea was: when will they decide to change, to understand that this doesn't work for the public? Now the problem is that someone has begun to make some changes, precisely by eliminating taxonomy. But the question is: with what is it replaced?

We already said previously that it is not easy, but in short, before dismantling an apparatus we must understand what to do. No doubt, I am pleased if the traditional layout is destroyed. But it must be replaced by something that does what the taxonomic set-up didn't do. If, instead, it becomes pure chaos, pure randomness, well then, let's stop for a moment.

Currently I see a series of attempts applied - without naming any names - that do not have a strong concept behind them. We are looking for a change in this system that we no longer want because we have understood that it does not work, that it bores people. But the one with which it is replaced, I would say that it has neither head nor tail most of the time, and certainly does not perform the function we were talking about, namely that of increasing or carrying out the cultural transmission.

They range from the free association of works of art based on purely formal or assonant features, which is fine and perhaps pleases as well, but the confusion I would say increases rather than decreases, because if you are not an expert you no longer even know what we are speaking about ... then I have also seen extreme interventions aimed, for example, at celebrating Valentine's Day in museums or even worse.

In Paestum there is a fabulous tomb fresco that is called "The Diver." It's beautiful because it's of a different style from the other funerary paintings from that epoch. The Diver is actually the soul of the deceased who disappears, crosses the Pillars of Hercules. It represents a ritual, a purely funerary theme which is a mythological and spiritual expression of an event, the individual's passing. In fact, it is designed so that the dead person sees it above him while surrounded by his loved ones in the scenes of a marvelous otherworldly symposium. Now! Personifying the Diver, as if he were a living person and making him become the Paestum brand, is not, in my opinion, a culturally advanced and legitimate operation. In fact, I would say that it does not work. If, then, this induces the public to go and look for the Diver's house in the excavations, as if he had been a real person, it leads to a misunderstanding about who was buried in the tomb. In short, I don't like it at all. It looks too much like commercial marketing invented at the last minute. In other words, that something attractive should be done is by now understood, as you said before, because if you don't do it, not only do people not remember anything, but they don't even come into the museum. But frankly doing these sort of things... it's not really what I would like to see.

PGF: We need a general strategy, based on different disciplines that guides the exhibition project, where the attractive element leads to enjoyment in order to accompany people in the narrative that is suited to that particular context.

FA: Instead, many times, only superficial aspects are presented, such as Leonardo's room in the Uffizi. There are four huge empty walls an enormous empty space to capitalize on Leonardo's name, with

everything the Uffizi has, with everything they could do. Why? Because Leonardo is a brand. Unfortunately, I fear that the abandonment of the consolidated tradition of the exhibition with standard layout turns into a sideshow, or a little more. Now the brand that attracts the most people is displayed, be it Leonardo or the Diver. In this way art is reduced to attraction, independently of everything else, and nothing is offered that serves to promote understanding whether of Leonardo or the Diver. This is not renewing and enhancing but simply perverse.

In the installation of the Modern Art Gallery in Rome chronology has been completely eliminated, which is fine by me. But I say let's do something that explains, that makes us understand what these art works are. Instead, what we find is pure assonance: we put together Burri with de Chirico, because there are some formal features that recur. There is no path, there is nothing, we also find interesting things but, in the meantime, these formal links are not perceived.

The size of the collection exhibited in the museum has been greatly reduced, and this also works. We knew this, as you said earlier, that less stress is good, and this again confirms it. I like the layout in the external sense, in the sense of light and spaces.

Unlike taxonomic collections - and this is the most interesting thing - there is an increase in visual recognition, which means that from the perceptual point of view, it has an effect. We have collected data showing that people stop for quite a long time in front of the artworks as long as there is no path, there is no fatigue effect.

PGF: A performance is not required?

FA: No performance is required, you understood correctly, so no rooms are privileged. In fact, all art historians are furious because they can no longer bring students to see the rooms of the nineteenth century. But this is of little interest to me. The terrifying thing, however, is that the visitors learn nothing, nothing at all. That's it, everything they didn't know when they entered, they still don't know when they exit. So, visitors recognize that they saw the paintings, but they don't know who made them, they don't know what they are, in short, they know nothing. They only know what they already knew before entering.

PGF: Perhaps an implicit knowledge is activated...

FA: From an explicit knowledge point of view, the outcome is zero, including errors. That is, a Carrà is mistaken for a de Chirico, and this continues even after the visit.

PGF: As in the Sistine Chapel...

FA: Exactly as in the Sistine Chapel. In reality, it seems that we arrive at a purely perceptive experience.

PGF: Which can be fine, if it becomes the basis for building knowledge.

FA: In fact, there are things that work, but if the visitors come out without having acquired anything it means that their experiences are not brought to completion because there is no plan beyond the modification of the layout.

PGF: Which must be realized at the service of the people. We return to the question of a multidisciplinary design that produces a unified vision of the process that must be implemented each time.

FA: Indeed. Consider that when you leave a large museum, you don't even remember what you saw, while you remember it here, which already makes a noticeable difference. But only that, nothing else, to any other question the answer is zero before and zero after. There is external appreciation for everyone. Instead the actual set-up, especially the absence of a path, splits the audience in two. Half of the audience says they don't like it because this is chaos, and they want to know where they need to go, while the other half says they like it. This in my opinion indicates that there is no proper consequence of the experience: people perceive that there is something different that attracts them, but the experience has no follow-through and yields nothing.

PGF: The process is triggered but is not developed.

FA: So, whoever looks at the glass at the start sees it as half full. Whoever looks at it at the end feels it is half empty. This is what is happening, and it is not very comforting, rather it is a bit alarming, and these effects are proven since we have numerical data.

Then there are always hawks, previously known as the conservatives, - everything must remain as it is - now they see nothing but the increase in the number of tickets sold, but the real deal is to lend museums to other uses. It is now understood that there is a large economic and image return. So, other interests are taking shape, and the museum structure will soon be designed according to external factors where the museum performs the function of a backdrop.

This is the risk I see, but this is how things are. Our cultural affairs ministers and museum directors have embarked on the path of experience, which pleased me very much, because I have been arguing for it for thirty years, and they didn't listen to me. They told me that first comes conservation, reconstruction and then, lastly, yes, we can do something for the public, maybe a little guide. I was, therefore, very pleased with the admission that experience is the central point, but I note that the concept of experience has been distorted into something that is primarily concerned with many people as possible, and it doesn't matter to do what, it doesn't matter for what purpose.

PGF: In this case the museum experience becomes a means for different purposes than cultural transmission, which together with the aesthetic enjoyment, is its natural purpose.

FA: This is my current vision.

PGF: So the way to proceed on a healthy road is to focus on what is the museum's primary function. The only way to make an effective project is to create work groups with different disciplines: cognitive sciences, exhibition designer, museum directors, art historians ... where everyone brings their expertise.

FA: I can cite for you the specific example of Bellini, we were seven people. Our team included a set designer, a technician for the multimedia effects, an expert for the equipment, a music historian expert on Bellini, I served as the cognitive expert and therefore of communication, and, finally there was a director for all the multimedia resources as well as an exhibition architect. Every time we had

to do something, the seven of us met. The project is the result of these competences and is a coherent narrative approached from all these various points of view.

PGF: This seems the only sensible way to face the task.

FA: If this is not done then the desired result is not obtained. The point is that it takes the will to do something that is well done, that is done according to appropriate criteria. In my opinion it will become an attraction center frequented by many people, while today literally nobody goes to the Bellini museum unless he is a fanatic of the composer and happens to be in Catania.

PGF: And so, the two types of results can be combined.

FA: Those who manage these things should demand that there be success in terms of the public presence but not at the expense of the cultural content, by simply selling the container. Working for a cultural transmission that is also interesting and attractive, as in fact it is! Art is first and foremost attraction, for millennia it has been and for this reason it has also been opposed.

But, for example, you have to be ready to clear most of the museum. This does not mean eliminating the works or putting them in an inaccessible place, it only means creating a partition with a section, a deposit that can be visited by anyone who wants to see it, instead of a rigidly organized exhibition to celebrate the vastness of the collection. You cannot convey more than two or three ideas to the general public. You are presumptuous if you think you can do it and in reality, you do nothing.

PGF: To the contrary, we head towards the opposite result.

FA: Indeed. Look at the Broad Museum in Los Angeles. Eli Broad is one of the great American philanthropists and lives in Los Angeles. He financed a new wing of the County Museum of Los Angeles. He paid and carried out the project - half of which done by Renzo Piano - after which he quarrelled with the Museum executives about the exhibition criteria. Broad wanted to exhibit his collection, five or six thousand pieces of art from the post-war period, but they did not allow this. So, he gave them the building, kept his collection and built his museum in downtown Los Angeles. I went to see it, and it is beautiful. I was surprised and interested. The first floor of the whole museum, huge because of its double height, resembles a warehouse. It is equipped with sliding panels which can be manipulated so that you can pull out all its 7,000 paintings. Those who want to see them can search for the one they want taxonomically. Then, above the warehouse there are two floors where temporary set-ups are arranged. This collector has grasped a fundamental aspect and has devoted almost half of the available space to storage, a facility that can be visited but which remains warehouse. He has understood that one cannot exhibit the works in an infinite sequence of rooms. So, he calculated the necessary space to contain his thousands of works of art, so they can be all there together. Anyone can go there, and you make moot the question of having everything exhibited, as happens in many state museums.

PGF: working to foster the contact with the work of art.

FA: Yes, how you come into contact with that specific art. People do not understand the immense difference between the ceiling of the Sistine Chapel and the Last Judgment. This is epochal. One part is still narrated with the panels and the other is a unique scene. Whatever the bad-tempered

Michelangelo would have said, in reality the idea was Leonardo's, it is he who said one moment, one scene, one view.

PGF: Aristotelian!

FA: This is an extraordinary path to understand, an enormous passage that Leonardo makes Western painting follow, and which determines not only subsequent Western painting, but also the birth of photography, of cinema, it is the basis of all this7. Think about how you could tell this magnificent story that goes to the present days!

We get lost instead in disquisitions that should be reserved for the experts, and are asked to consider that Pietro da Cortona, who is the first to follow him, perhaps wanted to represent in the ceiling of Palazzo Barberini, this or that detail ... mere minutiae. On the other hand, the most important point is not captured, the entire colossal representation is a single scene captured and suspended in a single grandiose moment of time, the apotheosis of the power of the Barberini family.

PGF: A moment where you can be immersed.

FA: That's right, and this is the painter's intention.

PGF: And so, we should lead people towards that moment ...

FA: We should do something that makes them try it. We both know that it is not easy and cannot be theorized too much because every intervention must be adapted to the theme and to the particular context. But the guidelines are clear, namely, that people must enter, they must be captured, but they must also go out having understood and appreciated something.

My experience is that the fundamental determinant is not where you are in the world, but concerns the size and importance of the institutions. Starting from the great traditional institutions that have the most famous works in the world and have inevitably become international centers of attraction, descending towards cultural institutions considered less important, down to the local ones. This progression in my experience is inversely proportional to the willingness to do interesting things, it seems a paradox to say it, but it is so. The director of the Metropolitan Museum probably has no interest in doing any of the things we talked about. Instead, I found some directors of Finnish museums lost in the countryside who would have been willing to do anything. And this seems to me to be the most common feature today.

Unfortunately, there is a further hindrance, another obstacle: it is the role of technologies. In some ways they have contributed a lot but have also deviated a lot from the transmission of cultural heritage. Because they were involved in operations whose justification was exploitation, the advancement of technologies and not communication.

I see institutions that, not being close to the top in the scale of so-called importance, are much more available and open, as they go up instead ... at the Tate Gallery they were able to destroy installations made by the artists themselves: Rothko had conceded his works made for the Four Seasons only "on condition" that they would not be separated and constituted a whole, as they should have been in the original destination, in a permanent installation conceived by him. He had worked a lot on it, even

making a physical model. Now all this is gone. That was a crucial installation case. Rothko quarreled all his life for the placement of his works and has never achieved what he wanted, except in the de Menil chapel.

In this case, there is not even the intrinsic respect that should be given to the message of the artist, instead it is declared that in the museum is above all the curator's way of exhibiting shall prevail. Putting Rothko together with a bit of an author and a bit of another is really an indignity, the paintings cease to have the meaning and the effect they had and that he wanted.

So, at the Tate Gallery the visitors do not stop in front of this, while the Uffizi sets up Leonardo with the four big bare walls in a museum gallery. These are not encouraging signs from this point of view. Probably, it's better for us to work at an intermediate-sized museum.

Certainly, at the European level, there is no progress, but it is not as if in the United States I find better things than the ones I find here. Quite the contrary. The same hierarchy is also valid there, perhaps the least prestigious museum that exhibits four pieces of the Civil War is able to juggle them so as to make you enter into the story. They know how to do this job much better than we do because they have the cinema industry, which is not a trivial matter, they have a successful storytelling industry. There is no doubt that if you go to Philadelphia and go to see the historical places where America was born, the experience you have is certainly not the one you have when you visit the Turin Parliament.

In Philadelphia, the room where the American representatives of the thirteen states met is a wooden building with even a low ceiling, that is it, something that one would not even want to live in, and apart from the freedom bell, there is nothing else. But from these elements originates the story of America lived on site, lived in theaters in which you are immersed in various ways and you are told this epic story, but centred on what you see from the window. So, it has a huge number of visitors, which for a place that has only three pieces to show, a room and two pieces is far from negligible. But the point is the idea, the idea is dominant, the idea of America, the idea of the birth of the United States, there is nothing left because at the time they were not used to preservation, only these things remained. Let's do with what we have. And in this, no doubt, they are good.

PGF: Even in this case they put themselves on the visitor's side.

FA: And in this I repeat myself, some contexts are needed where people like us who wish to make museums truly places of cultural transmission can implement it. Not places where you go to study, but places where the transmission of culture takes place through the beauty of the artefacts and what is around them. It must be done so that these artefacts can be understood. This is a very simple message. Then for those who have this vision, perhaps the best ground for work today are intermediate-size institutions, which are more sensitive and flexible. A little because they have been stimulated by this race for public experience and partly because they are not yet in the limelight and have not yet been distorted by a conception purely, to use an old term, mercantilist.

PGF: Which I have to say makes it very clear. The other point you raised concerns multimedia which, if well designed, can amplify the messages - as you mentioned in the example of Bellini - and be part of the narrative in an organic and functional way.

FA: So, there are two things to keep in mind. First of all, the message has often been misunderstood because the medium has been misused. Programs have been implemented that deal with technologies linking them to cultural heritage, but instead they were substantially aimed at increasing the development of the technologies in themselves and therefore, not to a development that was functional to the purposes of the cultural institution. This was one of the problems we had with the European projects, and we still have some of them today. We can see, for example, that the number of prototypes that are developed and that have no follow-up is abnormal compared to the four things that would be needed and which are not there.

So, we prefer to use an augmented reality contraption that we understand very well. It means problems with management, as it is a complicated dedicated apparatus, affected by external light and the light conditions, of an alignment that is not always perfect, etc. So, why use AR and not any other system that gives information in an equivalent and more functional way?

At the Ara Pacis in Rome they had done a wonderful thing. And since it was wonderful, it is no longer there. A banal video projection had been prepared, tidy and well done, with which they projected the colors that were originally painted on the real Ara Pacis. And for two summers there was this installation, it was spectacular, and it had a huge success, since finally you could understand that there were some painted figures, it had a completely different effect. They lit it up only in the evening during the summer, but it was fine. Then they dismantled it, I don't know if for financial reasons, I don't want to go in to it. At any rate, someone took the models that had been made and put them in a so-called augmented reality (AR) system. So now they give you this viewer, where you see more or less the real object and where the colours should appear. It is difficult to use, you can use it only in certain light conditions, often there is a floating effect, because despite the coordination there is a certain delay when you move, the quality is certainly infinitely inferior to that which you had with the video projector. The cost is naturally much higher because you have to maintain some augmented reality systems that cost a lot more and because the device is one per viewer. All of this to do it in a restricted environment. Now, was there a reason for this? In my opinion there wasn't, except that they did not want to use the old system because the video projector is not innovative and is not the state of the art. But the fact remains that the old system was the best of all.

So how does the technologist, the technology company you rely on, make money? What do you sell to newspapers? Now then, golden rule number one: the technology should be used as little as possible, compatibly with the purpose you want to achieve. The easier it is, the better. Because the museum, with some rare exceptions previously set up, is not a sophisticated technological environment and is not even friendly. There are some staff members who can't even turn off a computer: they unplug it by pulling the plug out of the wall, as happened to me. I had to program the shutdown system a quarter of an hour before the closing, because some of the guards when leaving were unplugging instead of doing the banal exit function. Then we had to go there and reset it. This is not a friendly environment, not at all, you have to act at the minimum level, naturally compatible with the objectives you want.

I jumped when I first saw the Google viewer in the United States. The Cardboard by Google is nothing more and nothing less than the old nineteenth-century stereoscopic viewer. The simple and banal separation of the visual fields, so if you transmit two slightly different images on the two eyes the

retina is deceived because it is as if you were seeing a deep object even if it's actually flat. This is extraordinary and it is so simple, Google still has the model on its website with which you can make the cardboard cut-outs and build it yourself. The software to create the stereographic image is provided by Google to you for free, it is not subject to licenses, which eliminates another complication and the implementation takes place on a normal smartphone. The immersive effect of this object is extraordinary. It does what you want it to do, it's very cheap, sturdy and sustainable even in a museum. The museum is toxic for technology, it kills it. And this is the story, technology must be let me use a fashionable word- sustainable. If you want to use complex equipment like the one we have for Bellini, you must have a technical department with a permanent technical staff. Its operation must be guaranteed from the start by someone who participates in the installation and development, knows how to keep it working, and is always available for emergency repairs. You can also do sophisticated things, but you need to maintain them, if you don't want to have this cost which I understand, many museums can't afford - then don't do them. Use technologies that can be managed by someone a little more civilized than the unplugging quard!

PGF: Which is equivalent to the golden rule you were saying earlier.

FA: Exactly, it must be sustainable. Then there are other specific considerations for the use of technologies, for example, if you do a long interactive show you block the visitors' flow. Things we have already experienced and that we know how to solve but are often not applied.

Now the Lazio Region around Rome presented a big project, the cultural heritage technological district financed I don't know with how many millions of Euros. The call for tenders explicitly asked for technological innovation. Yet, in a fairly contradictory manner they have it managed by the cultural heritage superintendence, which notoriously does not have competence in this area: we will see how it ends. But it is an improper invitation to invent new things. If you want to create start-ups, then you should directly finance the start-ups in the technological field, whatever the application they develop as long as it has a market.

Do not associate technological innovation, technological research in itself with cultural heritage, saying that they are in the service of cultural heritage.

At the presentation conference I got up and said: I am very pleased that these millions are being spent, unfortunately they will be spent in a thousand trickles for applications that will almost all be unrepeatable prototypes and that will only work for a while when, for example, there is a gigantic thing in Rome that cries out for vengeance. There is no guide, neither visual nor auditory, of any kind, of the Roman Forum. There is not! People go to the Roman Forum, perhaps the most important archaeological area in the world, and understand nothing. There is no physical reconstruction, there is nothing, only things that are sold in the stalls. So, if you wanted to finance cultural heritage, with this money you could rectify this deplorable state of affairs. Let's take the simplest system there is, let's do a reconstruction for at least three periods, the Archaic period, the Republican period and the Imperial period. We make these three reconstructions that put order in that chaos of stones and allow people to understand what the center of Rome was through the centuries. However, for this, alas, there is no money.

PGF: That is sector research. But if it is an applied research it must be applied to something.

Conversation with Francesco Antinucci 2:XXIX

FA: Exactly, so find the money to make this enhancement for its own sake and not as an improper appendage of something else. The result is that I cannot even present a project, because there is nothing innovative about what I would propose. But in this case, there must be nothing innovative. Something "innovative" is something that, almost by definition, has not been tested long enough. With thousands of visitors projected to use it every day, the result would simply be chaos.

PGF: The question is that it's more important to obtain results rather than to innovate, the museum performance improvement does not happen only because there is an innovation. Or at least innovation is a methodological museological innovation, which is what we were saying before, made up of precise objectives, protocols derived from experiential systems and working techniques experimentation. Then if you want, this is "innovation". Of course, it is also an inversion of the usual paradigm with everything that comes down from it.

We could make a sort of manifesto, with all those who see this as a commonsense action, an international manifesto in the manner of the avant-gardes, which can be signed by all the people who work in different sectors of this area.

FA: Perhaps it would also serve a visibility purpose. For those who must make the decisions and who usually know very little.

PGF: It could be the sequel to this publication, presenting in a very synthetic way the themes that emerge in the various contributions.

FA: I think you're right. It would be useful.

Received December 2018.