The theatrical communic-action of science

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In the writer's opinion the frequently used expression "scientific theatre" is actually an ambiguous term, since it refers to a number of widely differing experiences. For this reason, the word "theatre" is preferred in this paper when referring to those events which take place in institutionalised settings, while the term "theatrical communic-action" is deemed more appropriate when referring to those taking place in settings devoted to scientific communication, such as museums. After a brief historical analysis of the various approaches of theatre to science and some examples of plays in Italy and abroad, the writer investigates how theatre can produce effective scientific communication in museums. Theatrical action can bring out the value of the exhibits of a museum, while creating a new way of experiencing the exhibitions. Theatrical actions link education and entertainment, consequently becoming a highly effective didactic instrument. The advantages of theatre are briefly outlined, considering it as an interpretative technique to communicate science from the point of view of the goals pursued by museums, of epistemology and of theatrical research. Hopefully, theatrical communic-action of science will become common practice in Italy, just like in Europe and the United States, where it has established itself for decades. In Italy this technique has been very seldom applied, thus hindering a thorough analysis of it. On the basis of various experiences abroad, however, the conclusion is drawn that there is probably no all-encompassing magical solution, and that the effectiveness of all different techniques of theatrical communic-action should be tested case by case.

Theatre and science: a stable marriage?

Science and theatre, two different human activities, each with their own historical background and specific features, began to interact in the past, and today they are "strangely" linked. There is a real interaction, starting from theatre and ending with science or, vice versa, starting in a scientific setting and developing theatrical features. Or, again, new relations are the fruit of meetings between researchers, actors, directors, philosophers and scientific communicators.

The phrase "scientific theatre" has been coined only recently, but it has immediately produced a lot of heated debate and questions. Providing a definition of *scientific theatre* is no easy task: the relationship between science and theatre is so variegated as to defy any precise expression. The definition would in any case remain ambiguous, as it indicates an extremely wide range of experiences. In consideration of the above, three different examples of situations which would lend themselves to such a definition can be listed:

- First, all theatrical events finding inspiration in the world of science (e.g. the staging of the lives of scientists), which then provide an opportunity to reflect upon science and/or technology;

- Secondly, events using high-tech instruments such as micro-cameras or multimedia equipment for the scenery and direction, where science is found "backstage". These first two situations refer above all to a theatrical context, in which science plays an ancillary role, it is "metabolised" and transformed into a component of the organism that comes to life on the stage. This type of approach might accordingly be defined *scientific Theatre* with a capital "T", even though a simple reference as *theatre* without further explanation would be even more suitable;

- Finally, the theatrical events organised outside theatre, in places expressly created for the dissemination of scientific knowledge: science museums, science centres, and exhibitions. For simplicity, this marriage between theatre and science may be defined *Scientific theatre* with a capital "S", even though a new definition would probably be advisable, given the controversy about it being actual theatre or a para-theatrical form of entertainment. Since the main objective of this third union between theatre and science is to communicate ideas and scientific facts, I would propose the definition "theatrical communic-action of science", a phrase clearly showing that science museums and other scientific institutions resort to forms of *theatrical action*.

The second part of this paper will analyse how scientific communication is carried out in this context, and evaluate the pros and cons of such an approach.

First of all, however, real theatre will be examined, through a brief historical analysis of the ways in which it approached science.

Science at theatre

Theatre, contemporary or not, has often drawn on the world of science and has often expressed its conceptions about it.

The first approach was branded by the "wonderful" aspects of science, which was seen as a source of new feelings and emotions. To mention but one example, the seventeenth century (the Baroque and New Science period) was marked by the metaphor of the telescope, recurring both in theatre and in literature. Venice's *Teatro Novissimo* was inaugurated in 1641 with *La Finta Pazza* (The Feigned Madwoman), a musical drama by Giulio Strozzi and Francesco Sacrati, with set-design and machinery by Giacomo Torelli, an extraordinary magician-engineer of the baroque period. The play, drama details, the set-design of *Teatro Novissimo*, and everything else, from the machinery used to the costumes, from the emotions to the astonishment of the spectators became the subject of *Il Cannocchiale per la Finta Pazza* (The Telescope for the Feigned Madwoman) [1].

The marriage of Francesco Gonzaga and Margaret of Savoy, celebrated at the court of Mantua in 1608, provided an opportunity to represent *Idropica*, a play by Giovan Battista Guarini, with musical interludes by Monteverdi, and set-design and machinery by Antonio Maria Viani and Gabriele Bertazzolo. Spectators were astonished by the extraordinary natural phenomena presented on the stage, such as the rough sea or the fading of the sky. The public were intrigued by the techniques and the complex mechanism of the Mantua contraption and the incredible "show within the show" produced by its technicians [2].

As time went by, the "wonderful" aspect of science gave place (or rather, gave the floor) to other approaches, reflecting both positive and negative elements. The

[1] Cf. Carandini: *Teatro e spettacolo nel Seicento.* Laterza, 1990.
[2] Ibid.

former are the "anthems to Reason" or the "anthems to the wise" and highlight the victories of mankind over Nature. The latter levy criticism on the relationship between society and science, staging the conflicts between ethics and morals, on the one hand, and scientific practice on the other. In both cases, theatre provided an opportunity to reflect *upon* science and to express one's conception of the world.

In his essay *Theatre as ideological criticism. Reflections upon Ionesco* [3], Paul Feyerabend maintains that "in order to increase the tension between art and ideology", theatre may carry out real "artistic criticism of ideologies" thanks to the "removal of the ideological elements" (as in Ionesco). According to the philosopher, Ionesco's theatre of the absurd, to the purpose of dispelling any pattern of ideological thought, devised means that are "more effective than any abstract model of ideological criticism". Ionesco is seen, therefore, as a "critical rationalist" and his art as a "liberation […], as the enfranchisement of an intellectual freedom to which we are no longer used, a freedom that we have forgotten. But this lack causes suffering not only to those who believe they are free without being so (because of prejudices), but also to those who believe they are not free or cannot be" [4]. According to Feyerabend, "a critical rationalism aiming at examining our knowledge and our behaviour in order to improve them by criticism, cannot neglect the contribution of artists. […] Intellectuals such as Brecht and Ionesco did not limit themselves to an abstract analysis of the structure of ideologies, nor did they simply *resolve* to criticism; but they also carefully studied the way criticism could be led to produce positive effects *psychologically*. […] These kinds of practical questions have been completely neglected by philosophers so far. That is due to the excessive fragmentation of knowledge into different fields. Moreover, many philosophers would refuse to take radical criticism, as that of Ionesco, into consideration. […] In art, the continuous and conscious use of radical criticism has produced the dissipation of the simplest elements that characterize a representation and communication". The essay also states:

Ionesco detests all ideologies and tries to remove them from art. He therefore refuses didactic works since they "kill art" [5]; furthermore, they can be written only when *everything* has been learnt. Moreover, theatre is not the best means to transmit ideas; it can only "render them unrefined", simplify them in a dangerous manner,

[3] Feyerabend P.: *Il realismo e l'autorità della scienza*. Il Saggiatore, 1983.
[4] Tynan K.: *Argumente und Augumente*. Berlin, 1964.
[5] Ibid.

trivialise or even debase them. "A work of art that is sheer ideology is useless, tautological and inferior to the doctrine which generated it. Its teaching would find better expression in dialogue and discussion. An ideological drama is non other than the vulgarisation of an ideology".

The theatre of Ionesco is not based on ideologies: on the contrary, "a theatrical piece must use its own means to lead people to discover certain realities, certain fundamental truths". "Theatre speaks its own language, follows its own patterns and has its own life-form, which must be unleashed if the objective reality around us is to be achieved. These truths are more concrete, more stable and more dynamic than ideologies" [6].

The union between theatre and science exists also in other domains, pertaining neither to criticism nor to rational reflections: the universe of human passions. In *Le macchine pensanti* [7] (The Thinking Machines) Gianni Zanarini pointed out that "science, that particular way of making sense of the world that mankind has created, is not only a cognitive process. Every scientific activity is characterised by passion, it is a story of passions. So the main goal of *scientific theatre* is to come into contact with these passions, to understand those who have felt them and to put these passions on stage. In this way theatre proposes an original and riveting way to deal with the greatest questions about the sense of the world, life and science, questions which, on the contrary, would risk remaining abstract and vague". Take *Galileo* by Bertolt Brecht or *The Physicists* by Dürrenmatt, theatrical works which have skilfully represented the psychological and human aspects linked to "man's venture to make sense of the world" [8].

There are various possibilities to represent science in theatre, as explained, and sometimes these possibilities correspond to antithetical approaches.

The contemporary theatrical landscape, in Italy and abroad, is rich in projects and initiatives that take their inspiration from the world of science and have different aims, origins and characteristics.

Denis Guedj, professor of History of Science at Paris III University and author

[6] Ibid.
[7] Preface to Longo, G. O.: *Il cervello nudo.* Prospero S.r.l., Area Science Park Trieste, 1999.
[8] Ibid.

of numerous novels (e.g. the recent *The Parrot's Theorem*), studied cinema and theatre with the strong belief that "even concepts can produce emotions: that is why I talk about them, I put them on stage". Consequently, Guedj uses theatre as a means to transmit scientific ideas, as a pedagogical and didactic instrument, and not just for the purpose of making science accessible and to initiate debate.

Also Carl Djerassi, professor of Chemistry at Stanford University since 1959, has engaged in a trilogy of works that he defines as "science within theatre". He intends to "explain science through a theatre in which science plays a protagonist not an ancillary role, and where it is impeccably correct". His first show, *An Immaculate Misconception*, contains a *live* video describing the ICSI technique, which consists in injecting one spermatozoon into an ovum. The main theme is the conflict in modern society between the progress made by technology and the ethical quandaries it produces. Djerassi also cooperated with Ronald Hoffman, Nobel Prize winner for chemistry, to produce a theatrical work entitled *Oxygen*. Two preliminary versions have already been staged in London and San Francisco, and the definitive one is likely to be ready for the ceremony of the 2001 Nobel Prize awards. The comedy is set in Stockholm and it narrates the "adventures" of a Nobel commission, which has to award a Nobel Prize to the memory of the discoverer of oxygen. The commission calls to mind all the events in the mid 1700s that led to contention over the discoverer, who was finally recognised as being Lavoisier.

Daniel Raichvarg, professor at Créteil's University Institute of *Formation des Maîtres* and author of a Ph.D. thesis entitled *400 années de diffusion de la science par le spectacle (1580-1980)*, has contributed for years to the "union of science and entertainment". He has composed scripts like *Felicité ou le Merveilleux Théâtre de Science et d'Art du Docteur De Groningue* (staged in Paris in 1992-93) and has been an actor of the French theatre company "Les baladeurs de la science". He is also participating in the four-year research programme on theatre and science carried out by the *Centre de Recherches Jacques-Petit* (EREA 117) and by the *Théâtre Universitaire de Franche-Comté*, which entails (as of 1998) an yearly Multidisciplinary International Conference at Besançon's IUFM.

Moving on to the world of authors who live and work in theatre, plenty of events inspired by science can be recorded. A few examples may be cited. Strasbourg's theatre company *Articulations-Théâtre* has aimed, since 1983, at "staging the world of science: enacting scientific disputes, giving new life to renowned or little known scientists,

exploring scientific subjects such as Astronomy and Biology". London's Evening Standard nominated the famous *Copenhagen* by Michael Frayn "best play" in 1998. Equally noteworthy is the unforgettable show by director Peter Brook, inspired by Oliver Sacks' book *The Man Who Mistook His Wife for a Hat*. Finally, the *Klara Soppteater*, founded in 1989 in Stockholm and directed by Helge Skoog, promoted a European Festival of Scientific Theatre, in December 1998.

Italy is no poorer in initiatives: starting from the academic and scientific world, Giorgio Celli, professor at the Entomology Institute of the University of Bologna, has been an amateur of dramaturgy for years. His latest work, *Darwin*, is conceived as "a multimedia show with educational purposes, a popular work with the slogan *learn while smiling*". Giulio Giorello, professor of Philosophy of Science at the University of Milan, and some of his colleagues have been (already for a few years now) actor-readers of works by director Luca Scarlini–such as *I cinque di Cambridge* (The Five from Cambridge) and *Gli spinaci sono ricchi di ferro* (Spinach is Rich in Iron)–staged at Mantua's *Festivaletteratura*. Giorello points out that the etymological origin of the word *theatre* is the same as *theory*, and that scientific knowledge in western tradition is deeply connected to "seeing". He is undoubtedly in favour of *scientific theatre*, and he is convinced that "the connection between theatre and scientific theory is far more intimate than one may suspect on the basis of the common linguistic origin only". Giuseppe O. Longo, professor of Information Theory at the Faculty of Engineering of Trieste and a playwright, detaches himself from the most accredited opinions of university settings (like Celli's), and maintains that "theatre does not need science, but man's soul-body. If a man happens to be a scientist, it is the same, because also a scientist can be the protagonist of a (metascientific) drama. The link between theatre and science is created through the man-scientist, not through the ideas or concepts of science. A theatre aiming at staging the concepts of science would be extremely boring and ineffective. That is why in *Il cervello nudo* (The Naked Brain) I have tried to spotlight the tragedy of the characters, their troubled existence, their dreams: I wanted these tragedies and dreams to be connected with the scientific adventure". Tomaso Aste, of the Group for Scientific Communication of Genova's I.N.F.M. (National Institute for the Physics of Matter) wrote in one of his articles: "the direct contact between actors and the public makes theatre a perfect means to provide the general public with an idea of science as the dynamic and creative work of men and women living through research and discoveries with enormous enthusiasm". Genova's I.N.F.M. has produced over the

past few years two plays: *Il raggio chiaro della verità. I Curie tra vita e scienza* (The Light Ray of Truth. The Curies between Life and Science), directed by Lea Landi, and *Il tempo al di là del mare* (Time beyond the Sea), written by Annalisa Bianco and taken from Dava Sobel's *Longitude*.

Moving on, finally, to the world of Italian theatre, the list of shows and initiatives that do not ignore the world of science and technology is found to be a long one, thus debunking the so-called "division between the two cultures". Mentioning a few names may be enough to that effect. Luca Ronconi organized the *Sigma-Tau Project* at Milan's Piccolo Teatro, which in 2002, foresees to stage a show about the infinite written by John Barrow. Cesena's *Societas Raffaello Sanzio* won the U.B.U. 2000 Prize with its show *Genesis*, which has its opening scene in Marie Curie's study room. Naples' company *Rossotiziano* staged *Variazioni Majorana* (Majorana Variations) and *Gli apprendisti stregoni* (The Sorcerer's Apprentices). Bologna's *Teatrino Clandestino* presented the show *L'idealista magico* (The Magical Idealist), an "electrostatic evening" of the late nineteenth century. Bertinoro's (Forlì) *Gruppo di Lavoro Masque Teatro* has been experimenting several forms of theatre for years, managing to unite theatre and science, as in the play *Eva Futura* (Future Eve), which takes its inspiration from Gödel's Theorem, or in *V=RxI*, in honour of Nikola Tesla. Rimini's theatre company *Giardini Pensili* staged *Il cartografo* (The Cartographer). Cusano Milanino's company *Aia Taumastica* staged *Calibania*. Mention is also deserved by Turin's *Teatro Settimo*, Cosenza's *Kripton*, Rimini's *Motus* and, last but not least, *Progetto Itaca*, regarding an "electronic stage" open on the Internet, an idea Mario Martone had when working at Rome's theatre *L'Argentina*. Italy is also active in presenting off-stage theatrical and scientific events: currently, the Naples' yearly festival, organised by *Teatro Le Nuvole* together with *Città della Scienza*, and Milan's "*Scena-Scienza*" (Scene-Science), organised by the C.R.T. (Centre for Theatrical Research).

Communicating science through theatrical action

Theatre was first used as an interpretive technique for communicating science in 1971, at the Science Museum of St Paul, Minnesota. The museum subsequently integrated it with the other components of its programme for the popularisation of

science. The technique was then adopted by numerous museums, both in the United States and in Europe. London's Science Museum, for instance, engaged an actor in 1987, and has now an entire theatre company with a repertoire of more than forty performances (ranging from real plays on stage to character monologues presented in the halls of the museum).

Theatrical performances vary: there may be single actors presenting themselves as renowned scientists of the past, or even groups of actors representing hydrogen atoms or biological cells, not to mention that actors may also guide the public through the museum, involving them in a game that is both educational and entertaining (even more so for children). The duration of "theatrical actions" varies from twenty minutes, in the case of a simple monologue in a hall of the museum, to an hour or more in the case of a complete play.

"Contact" between the museum's exhibits and the public is the main objective of the technique: disguised actors attract the attention of passers-by and, just like in street theatre, interact with them by resorting to improvisation. The plays are based on the historical aspects of science, or they disseminate scientific knowledge by demonstrating scientific procedures (what is known as "demonstration style") or, again, they deal with the ethical aspects of the impact of science and technology on our daily lives.

In Amsterdam, to cite one more example, the actors of the *Pandemonium Theatre* are engaged by universities and museums to render expositions "lively": there are usually one or two actors playing informal, interactive, short and flexible performances entailing moments of comic entertainment as well. The spectators are asked several questions during the performances, so as to rouse reflections or whet their curiosity on issues related to physics, biology, etc. The history of science is the favourite topic.

From the point of view of museum objectives, the potential of theatre for the dissemination of scientific knowledge is (no exaggeration) huge. An undeniable strength is the opportunity to attract and interest a diverse audience: first of all, the shows are flexible, and can address not only children and families but also a generic audience; secondly, visitors can be directly involved (for example, they may participate in experiments and have first-hand experience of scientific research and the history of discoveries). Theatre is conceived as a didactic means to achieve more complete and direct communication, as well as to arouse interest in science in an informal but above

all entertaining way. The latter aspect has been amply debated to determine whether entertainment predominates over the cultural message, thus giving theatre a role of little educational value and, consequently, rendering it marginal with respect to the other forms of communication presented in museums. St Paul's Science Museum investigated the question and interviewed its visitors, reaching the conclusion that "education and entertainment do not exclude each other: scientific theatre teaches scientific facts and concepts at the same time as it entertains the public" [9]. London's Science Museum, to mention just one more example, has been presenting daily plays of scientific theatre in several of its halls for ten years, thus attracting and interesting plenty of visitors.

Experience from outside Italy seems to prove, therefore, that theatre can bring out the value of the exhibits of a museum while creating a new way of experiencing the exhibitions. Thus the museum's desire to bring people closer to the world of science is materialised, and education is enhanced by entertainment, building an extraordinary didactic instrument. Finally, a further strength of scientific theatre must be underlined. Such performances are an essential part of museum exhibitions, because the public know that their visits will certainly entail at least one show.

When using theatre as a means to communicate science and ideas, epistemological problems immediately arise, since a debate on science cannot be conducted without giving (and having, more or less consciously) an image of it. So what is the image of science emerging from such shows?

Museums outside Italy have successfully resorted to theatre to influence the way scientific processes are perceived and science and scientists are seen. Theatre is not considered a superior form of communication with respect to the others present in the museum, but rather a different method, one that can unite education and sheer "entertainment". The perception of science must therefore be determined in accordance with the decisions of each and every museum, which must (or should) take care not only of the scientific content of the exhibitions and the communicative effectiveness of theatre, but also the epistemological aspect of it. Undoubtedly, one of the risks to be taken into account is that of disregarding this point of view in favour of practical and imminent purposes. Unfortunately, most performances follow the latter tendency and expand neither on the themes nor on the problems related to the different conceptions of

[9] Quinn S., Bedworth J.: *Science theatre: an effective interpretive technique in museums*, in "Communicating science to the public". Wiley, Chichester (Ciba Foundation Conference), p. 161-174, 1987.

science, which may be detrimental, and lead to disappointment in terms of its civic and educational function (above all for the young). Consequently, the two major conceptions of science are the "positivistic" one associated with publicity, which aims at attracting the public towards the wonders of science (thus focussing on the explanation of concepts and theories, or managing to raise awareness about the impact of technology on our daily lives), and a more critical conception, more concerned with the possible dangers of technology and science, seen in any case as a sure and rational method of exploring the world. Perceiving science as an activity that is utterly human, not impersonal and independent from the historical context, is one of the challenges that a museum could pursue by resorting to theatre, an expressive means well-suited for this purpose through its very nature. Short plays, classical stage performances or the lives of scientists: the best narrative form for the above mentioned epistemological purposes has not been identified yet, and gives rise to controversy. The same holds true for the performances in museums: should scripts be committed to individual actors (even more so in the case of improvised short performances) and then reviewed by scientists? Or should a museum explain the scientific content and guidelines to the playwright and the director it engages? There is probably no all-encompassing magical solution, and the effectiveness of all different techniques should be tested case by case.

The elaboration and production of "ideal" scientific theatre performances seems to require, however, a close cooperation between scientists, researchers, scientific philosophers, playwrights, directors, actors, scientific communicators and animators: only in this way can service quality be guaranteed, with regard to the educational content, the communicative effectiveness and the epistemological awareness.

Finally, even more controversy exists in the sector of theatre research. Scientific theatre in museums may be considered a new method of expression, combining the values of street theatre, youth theatre and educational theatre (as if it were a renaissance of the didactic Greek theatre). But there is always a high risk of falling into the trap of superficiality (theatre as a mere "rhetorical" way of popularising science), thus creating poor (badly written and badly acted) works. There are experiments being carried out on the subject. In Sweden, for example, Stockholm's *Klara Soppteater* has adopted two ways of presenting the scientific content without losing sight of the artistic aspect. Firstly, the scientific concepts are incorporated in the play, and secondly, a particular technique has been applied (certainly thanks to the flexibility of Swedish scientists!):

actors and professors alternate one another on the stage, so that there are moments in which the experts explain and answer the questions asked by the public and the actors (somehow comparable to a lecture). Two actors and one expert play most performances.

"Scientific communic-action" has long been applied outside Italy (the most recent case in this context is known as *café de science*: theatrical performances which take place in public cafeterias and coffee-rooms on precise schedules, to rouse debate on current and controversial scientific issues, e.g. bioethics) but there are at least two Italian cases that deserve mention.

The first project was created by the theatre company *Le Nuvole* and supported by the I.D.I.S. institute: *I Galilei, una storia, una mostra, uno spettacolo* (The Galileis, a Story, an Exhibition, a Show), performed in 1997 in the Naples *Città della Scienza*. The project entailed an exhibition entitled "Chamber of Galilean Wonders", Bertolt Brecht's "Galileo's Life" directed by Michele del Grosso, a seminar and the publication of a book by CUEN. "The project", wrote Luigi Amodio, assistant director of the *Museo Vivo della Scienza* in Naples, "aimed at providing schoolchildren and the young with an all-round view of Galileo's figure, exploring its several facets through a cleverly devised mixture of communicative techniques. […] The interesting play included an interactive exhibition in a kind of specially equipped foyer to place the theatrical action in context. A large model of the solar system, an inclined plane, reconstructions of the tools used, invented or perfected by Galileo, computer simulations of the models of various solar systems devised before and after Galileo's time and of the fall of weights, an Internet workstation for searching the resources dedicated to Galileo and Brecht: these and other devises were used to "put in context" the visitors-spectators, giving them back the whole inventive creativity of a scientist" [10]. The *Padiglione Galileo*, a huge area of 500 square metres with a particular architectural structure, a trussed roof and travertine walls, hosted the whole initiative, as well as scenery by Gae Aulenti. There were also projections of films dedicated to Galileo, in particular those by directors Losey, Cavani and Maggi, and a short, silent black-and-white film of 1907. To quote *I Galilei* (Tessere, CUEN, 1998): "the actors' costumes will also be part of the exhibition and they will be like planets in space, just like the stage machinery (exhibited as pieces of modern art), while a group of musicians will accompany the visit and the show with percussion. All this, together with the little puppet show in the entrance yard

[10] Amodio L.: *Lo spettacolo del sapere*. Scienza Nuova, September 1998.

of *Città della Scienza*, will contribute to the effect of "immersion" into the Galilean dimension […]. *I Galilei* is art, science and entertainment. It is a complex project with one objective only: to educate; therefore, teach through games and experiments, through the poetics and drama of theatrical texts".

The second major theatrical episode was staged during the first *Scientific Week for the Young* (25 November-10 December 2000) at the Teatro Testoni in Bologna. The project was conducted thanks to the cooperation of Bologna's C.N.R. (National Research Council), Teatro Testoni-ragazzi, Raisat, and Telecom Italia, as well as the contribution of the E.S.A. (European Space Agency) and the A.S.I. (Italian Space Agency). The main theme of the week was *space*, and schoolchildren were provided with a four-stage visit within the theatre, envisaging an exhibition, the projection of E.S.A. and A.S.I. films, an interactive videogame and a performance by Sara Nanni, an actress from Bologna, impersonating the Canadian astronaut Julie Payette. The children could thus take part in a real "visit" to the International Space Station, reproduced on a scale of 1:10, with the guide of this likeable astronaut, who summarised the most fascinating aspects of the space enterprise in about forty minutes. She ranged from experiments in micro-gravity to daily life on board, with light effects and images shown on a screen,

According to the organizers of the project, "the union between a research institution like the C.N.R. and one dedicated to theatre, art and, more generally, culture for youth, like the Teatro Testoni, provided an opportunity to communicate scientific knowledge about space to the young. We are aiming at establishing a yearly appointment, with the goal of approaching schoolchildren on subjects related to science and research, by resorting to multimedia technology, to art, and to an approach that includes both education and entertainment".

Hopefully, events of this kind will be repeated and become common practice in Italy as well, just like in Europe and the United States, where they have established themselves for decades.

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