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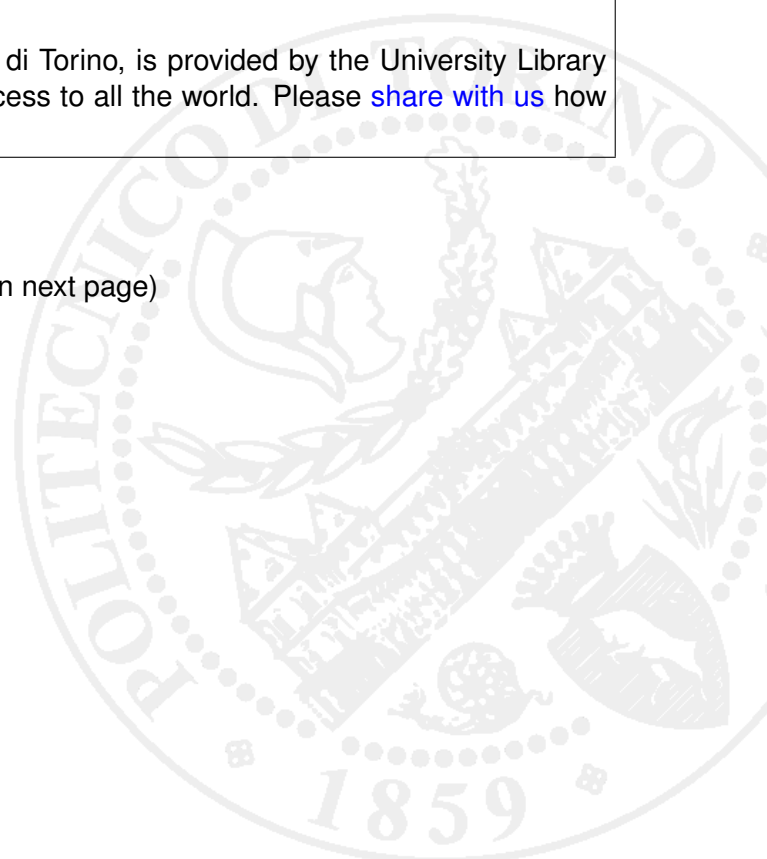
La Scuola di Pitagora

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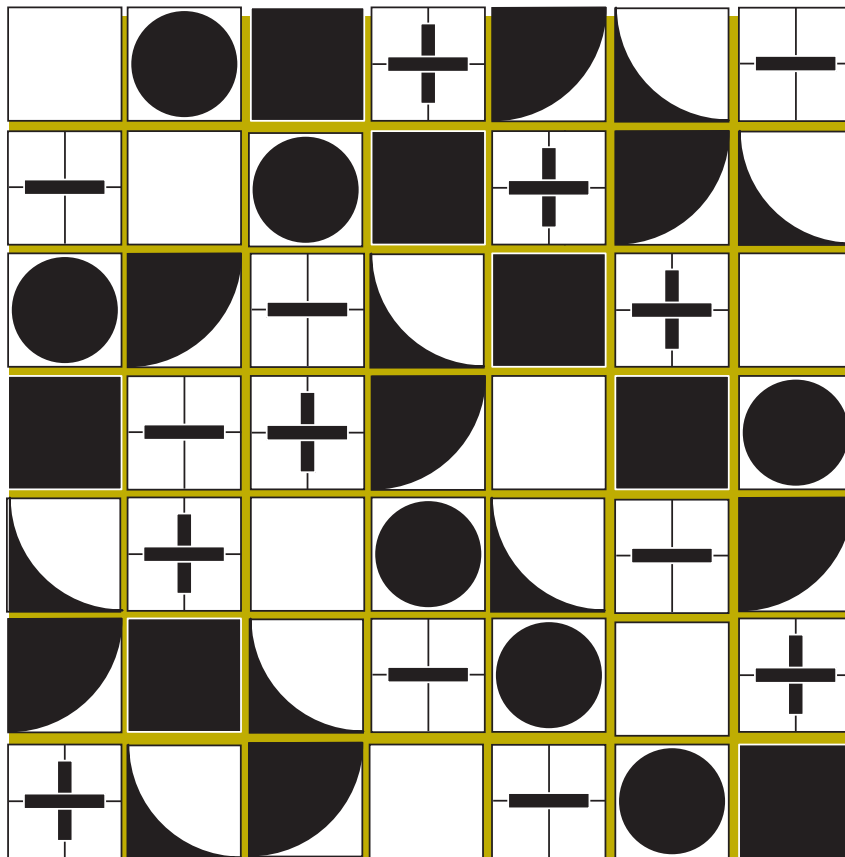


Fabbrica della Conoscenza

Le Vie dei Mercanti | X Forum Internazionale di Studi

+ less
more
architecture
design
landscape

Carmine Gambardella



La scuola di Pitagora editrice

Fabbrica della Conoscenza numero 16
Collana fondata e diretta da Carmine Gambardella

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Less More Architecture Design Landscape
Le vie dei Mercanti _ X Forum Internazionale di Studi

Carmine GAMBARDELLA



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Carminé Gambardella (a cura di)
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X Forum Internazionale di Studi

editing:
Caterina Cristina Fiorentino
Manuela Piscitelli

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Le vie dei Mercanti
X Forum Internazionale di Studi**

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Peer review Scholars has been invited to submit researches on theoretical and methodological aspects related to Architecture, Industrial Design and Landscape, and show real applications and experiences carried out on this themes. Based on blind peer review, abstracts has been accepted, conditionally accepted, or rejected. Authors of accepted and conditionally accepted papers has been invited to submit full papers. These has been again peer-reviewed and selected for the oral session and publication, or only for the publication in the conference proceedings.

Conference report 220 abstracts received from:

Algeria, Brazil, Bulgaria, China, Cuba, Denmark, Egypt, Estonia, France, Germany, Greece, Holland, India, Indonesia, Iran, Italy, Japan, Jordan, Kosovo, Malaysia, Malta, Mexico, Netherlands, New Zeland, Poland, Portugal, Puerto Rico, Russia, Saudi Arabia, Spain, Taiwan, Turkey, United Arab Emirates, United Kingdom, USA

More than 350 authors involved.

163 papers published.

Preface

Less, often leads us to reducing considerations and its linguistic application, generally, characterizes a condition of inferiority, decay or deprivation. If we make reference to the scope of our researchers, Architecture, Industrial Design, Landscape and to their deeper meanings, and if we use “less” before them we might involve a critic situation, or homologate a century.

An example is from the historical period we are living in, where Western economies are generically dealing with their budgets by cutting down on expenses rather than investing on their own heritage in order to create richness and workplaces.

On the contrary, our Researchers, Scholars, Businessmen and Civil Services Representatives want to use less to promote a shareable cultural reflection about the reduction of the waste of goods (raw materials, human resources, assets). That's why we are going to arrange the X International Forum “Le Vie dei Mercanti”. In this perspective Less does not mean less investments or cuts, but to identify a hierarchy of relevant sustainable investment funds based on the search for the know-how.

Less in Architecture, Less in Industrial Design, Less in Landscape subsumes more if we are able to supply regenerative models based on integrated system visions.

Consequently, More research in Architecture, More research in Industrial Design, More research in

Landscape if Local Human Resources are set up to create an efficient training education to be involved in the management, protection and regeneration of raw materials and human needs.

All along the past editions of the Forum I have drawn people's attention on our heritage as expression of "actual developing" (modernity).

Modernity, in fact, is an integrating part of history, an inexhaustible mine supplying raw materials to the Factory of Know-how which, as mentioned above, must get the same local physical geometric connotation as the generative humus about the production of fascinating items for Architecture, Industrial production, Landscape.

The projects our Faculty has dealt with, "Pompei Fabbrica della Conoscenza 0079/2013" or "l'Atlante del Cilento", witness as by sizing tangible and intangible heritage we can give rise to a productive factory aiming at art works and competitive Cultivated products and services.

So, scientific contributions aiming at collecting and spreading out the best practices and paradigmatic sustainable projects about system activities and elaborated in an assembly International dimension, are expected. Such contributions must be useful at enhancing an increasing Research process characterized by a constant learning and a great Know-how passion.

Carmine Gambardella

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Imagination applied to European norms in “humanized” hospitals. More research, less cost.

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Abstract

The architect M. Tedeschi worked to an update project for the Department of Medical Oncology at the San Carlo Hospital in Milan (1994). It was part of a larger Humanization Project for that hospital. He compared the concept of humanization to that of *Heimlichkeit*, that means the comfort feeling, quiet, peace sensations and home warmth that everyone yearns for.

In 2001, U. Veronesi - with R. Piano - presented a preliminary *Preparatory Metaproject for guidelines definition in hospitals design* in the Italian Regions, in which patients and their needs play a major role in the humanization project. This is a theme of topical interests, characterized by a lot of researches and applications.

This paper aims to verify the colour role in the hospitals humanization process and will show, with general scientific criteria, an interesting colour restyling experiment conducted (as voluntary work) by the author for the San Lazzaro Hospital in Turin, in collaboration with ANDOS, Sikkens and Politecnico of Turin.

Thus, by combining hospital voluntary work, technical and scientific research (public and private) and creativity, an important objective for the care and comfort of patients and hospital has been achieved. It has been conducted a “pilot project”, with procedures based on norms, (without costs for the public institution) replicable in other similar situations.

Keywords: humanization, comfort, design, colour, research

1. Introduction

The architect M. Tedeschi worked to an update project for the Department of Medical Oncology at the San Carlo Hospital in Milan (1994). It was part of a larger Humanization Project for that hospital. He compared the concept of humanization to that of *Heimlichkeit*, that means the comfort feeling, quiet, peace sensations and home warmth that everyone yearns for.

Unfortunately, often the formal language - and not only - of hospital architecture, informs residents, workers and visitors who stay in the hospital does not mean “dwell in the hospital,” but live in another world: clean rooms, neutral colours, cold materials, furnishings anonymous, shared bathrooms and sometimes without a mirror, impersonal and depressive waiting [2].

The problems of the disease seems to add the “punishment” of a harsh environment, if not hostile, in any case not communicative and non-interactive.

In 2001, U. Veronesi - with R. Piano - presented a preliminary *Preparatory Metaproject for guidelines definition in hospitals design* in the Italian Regions, in which patients and their needs play a major role in the humanization project. This is a theme of topical interests, characterized by a lot of researches and applications.

This paper aims to verify the colour role in the hospitals humanization process and will show, with general scientific criteria, an interesting colour restyling experiment conducted (as voluntary work) by the author for the San Lazzaro Hospital in Turin, in collaboration with A.N.D.O.S. (Turin), Sikkens (who donated paints and materials produced in observance to the European norms) and Politecnico of Turin (who has granted his patronage).

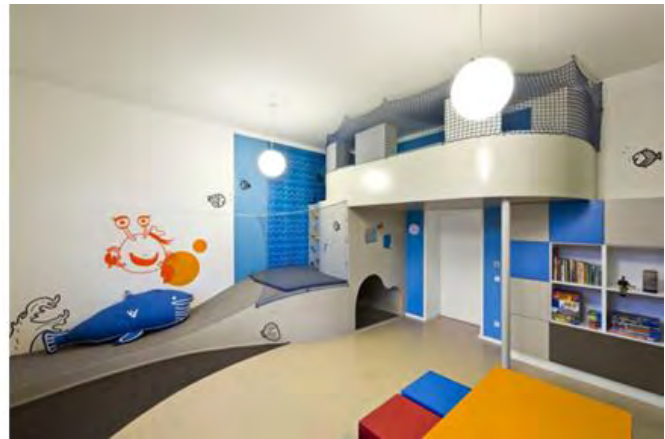


Fig. 1: Visual examples: environmental comfort can determine the quality of life in place of care, influencing the therapeutic response.

An important goal for the comfort and the cure of the patients and the hospital workers has been reached through volunteer, scientific-technological researches (public and private) and creativity: a “pilot project”, with no costs for the public institutions, started with the possibility to reapply it in similar contexts. The results of such experiments are being analyzed through psychological tests by the Clinic of Psychology and Oncology of the University of Turin.

The term “humanization”, in its broad meaning, implies, in the design and managing of the sanitary structures, the need to use other than functional criteria, also integrative approaches sensible to the psychology and the relationship system of the patient, to avoid maladjustment and improve the recovery. Particular attentions have to go on the hospital operators, doctors and paramedics, since the conditions of their job has a double outcome: on them, as workers, and on the users.

Social-cultural changes, like for example migration flows, have to be taken into account for the design part to adapt to the continuously changing reality, in order to have hospitals adjusting to the patients and not vice versa.

Many recent studies on environmental psychology show that the environment can strongly influence the behaviours and relationships of people, being fundamental for the quality of the structures. Colours and visual components can be taken as examples for what concerns the creativity.

S. Marsicano [3] highlights that in the Anglo-Saxon clinical language exist two different ways to call a treatment. Cure, more technical and used for a clinical-scientific therapy, and care, more global, which take into account all the patient’s needs and requests. In the Italian sanitary structures the cure is usually excellent, but part of the effort is vanished because of the lack of care.

F. Spinelli, E. Bellini, P. Bocci and R. Fossati [4] are the authors of “Lo Spazio Terapeutico”. They show how “in the public construction industry the spaces, mostly the interior parts, are considered apart from the people and the activities than later will take place in them. This general project approach generated “stranger” spaces, hard to live and costly to maintain, causing environmental discomfort, lack of participation in the activities and dissatisfaction in the public services, identified in the environment itself”.

1.1 The characters

Many are the characters involved in this ambitious project: A.N.D.O.S. Onlus Foundation in Turin (President Dott. F. Pedani), the research team Policroma from the Polytechnic of Turin (Scientific coordinator Prof. A. Marotta), Hospital University San Giovanni Battista in Turin (pursuer Dott. E. Iodice), the Oncology Department of Medicine 2 San Lazzaro Hospital (Head Physician Dott. M. Airoidi and Day Hospital coordinator Dott. F. Pedani), the Director of the Psychological Oncology Clinic from the University of Turin (Prof. R. Torta and Dott. A. Varetto), the Technical Office from the Hospital S. Giovanni Battista in Turin (Geom. M. Regis), AKZONOBEL through the Sikkens sign (A. Fagotto - national coordinator for commission relationships with his team PSC arch. F. Pezzo and eng. B. Moretti).

The research team Policroma, coordinated by myself, gathers many architects – professors, researchers and



professionals - all involved in different activities, as publications and thesis, which produces a solid background to face the considered problematic. Some of them are: Serena Abello, Chiara Cannavicci, Marta Balzarro, Gaetano De Simone, Ilaria Matta, Raffaella Ricchi e Eliana Milani.

2. Chromatic restyling project

The collaboration between the research team Policroma, coordinated by myself with the Politecnico di Torino, the Fondazione A.N.D.O.S. Onlus in Turin and Sikkens, starts from the need to modify the perception of the common areas in the Oncology department of the San Lazzaro Hospital in Turin.

In the intervention of humanization the picking of the colour is never neutral and cannot be linked at automatism: it has to be ruled by scientific-disciplinary methods.

The project is born from disciplinary and specific experiences and knowledge grew in several years. Many publications and specific studies on the colour in architecture have been made, the results of those are systematically shown in the publication from the title *Policroma. Dalle teorie comparate al progetto del colore* [5].

The original approach of the comparative theories of colour for the analysis and design are confirmed : too many times authors and general public mention a general colour theory without anchoring it to the respective cultural matrices and to identifying parameters.

The research is inserted in a wider field of humanization of the public spaces, through interventions able to find or recover the “humanity” of places. The main goal of the group “Policroma” is to study the effects that the interior and exterior environment creates on the human perception. One of the key role of the study is the colour since it is one of the important factor which characterize the spaces. Policroma aims to find a guide line to humanize the public spaces throughout the analysis and application in the Turin area. The effort of the group, that concretely operates decorating through volunteering, add affective quality to the meaning of the project and the message to the patients.

For a complete explanation of the project see the attached report made by S. Abello, C. Cannavicci, M. Balzarro.

3. Themes and goals of the project

The project took inspiration from the metaphor of Ettore Sottsass (how to forget the rhetoric triad of the flores, lumina, colores) for which the architectonic language should be used in the research of an authentic relation between life and architecture. This in order to create spaces like metaphors and not only “buildings” to watch and coldly live. The project links the general meaning of the metaphor to the specific one of the floral metaphor. The thought is instead related to the garden therapy, which got many results either in the prevention and the therapy.

This is the main theme of the restyling project since the beginning, called “Rifiorisce la Vita!”. The idea shaped around the awareness that nature helps and improve the recovery but cannot substitute the conventional cures; in this way gardening helps the dejected patients to smile again and the anxious ones to dissolve the urgency to do things. From this way it is possible to face the recovery constructively and to improve it.

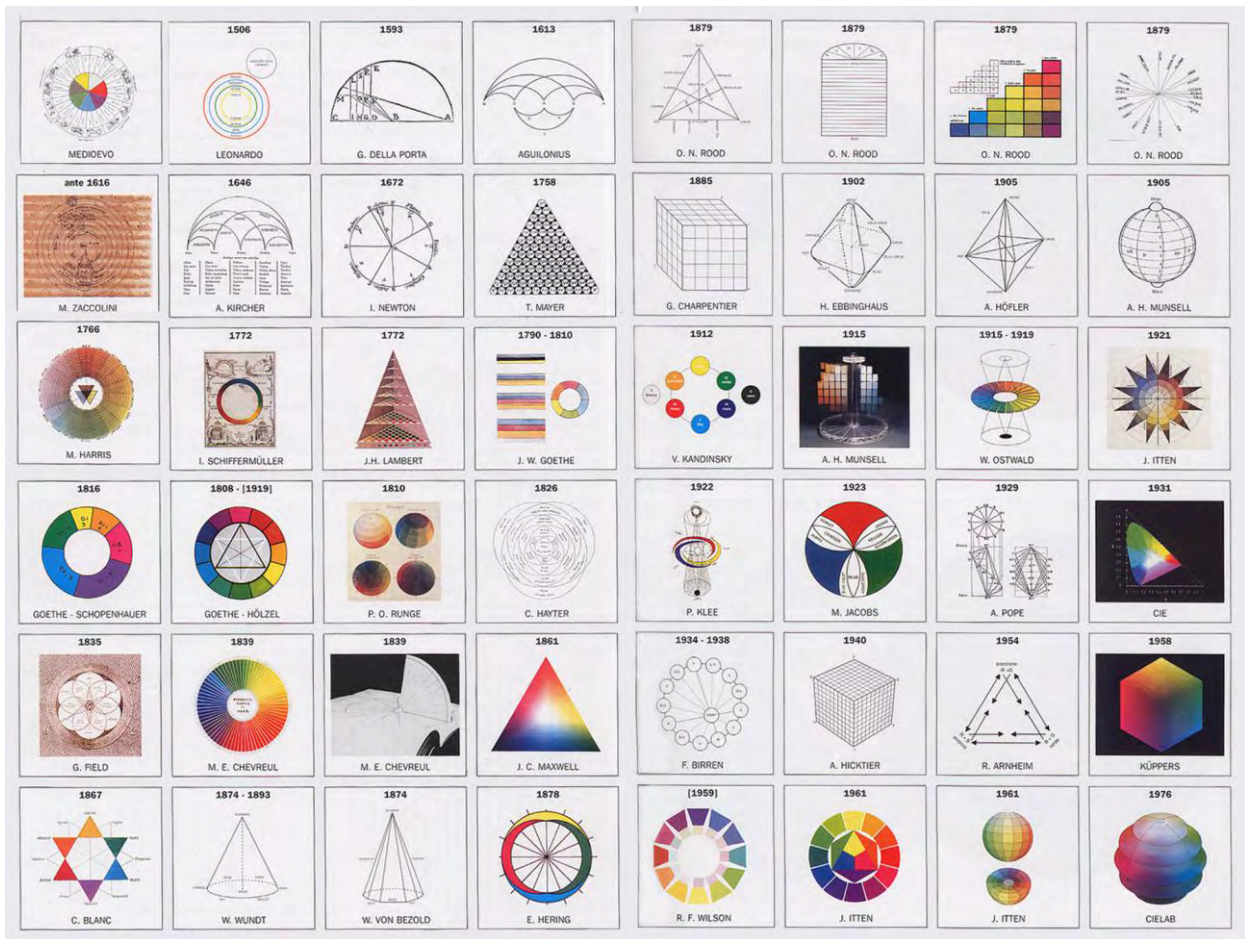


Fig. 2: Policroma: the icon of a historical-critical method. Systematic overview of the theories compared with the respective models. In: MAROTTA, Anna. *Policroma. Dalle teorie comparate al progetto del colore*, Torino: Celid, 1999, p. 54. Only a disciplinary warning and critical approach can lead to analysis and conscious design. Unfortunately there is often a "project of colour" without the necessary process of knowledge, capable of embodying the choices to the most suitable matrices cultural, and theoretical aspects associated with its authors.



Fig. 3: The corridor of the department of Medical Oncology 2 San Lazzaro University Hospital San Giovanni Battista in Turin before the restyling of colour.

4. A sustainable Design

A big ally that the restyling project have found is the Sikkens company [6] – world polishes producer and seller, which always pay attention and respect the environment and the people. The company's policy immediately merged very good with the project. Sikkens vision contemplate the sustainable develop and trade social liability. One of the best answer for the today market since all the products are passion made to guarantee high quality results and low impact on the environment.

This contribution has been of great importance, underlining how in a multidisciplinary project is fundamental to calculate working methods "safe" for all the practitioners. Methods close to the design demands of an hygienically controlled place, which also have to be easy to clean, with low environmental impact and enjoyable. Sikkens introduced a new product specific for the medical-sanitary market following the latest European norms. The range of produces is based on the everyday needs and problems of the related sector. Specifically for the Oncology department of the San Lazzaro Hospital in Turin these following products have been adopted:

- *Alpha Sanoprotex*, water painting useful to inhibit the proliferation of bacteria(*Staphylococcus Aureus* *Meticillino-Resistente* – MRSA, *Escherichia Coli*, *Pseudomonas Aeruginosa*, *Acinetobacter Baumannii*, *Enterococcus Hirae* e *Streptococcus pneumonia*). The secret is in the silver ions acting on the bacteria with the addition of a particular washable and resistant film. (Classe 1 EN 13300). The efficacy increases when washed and rub, it isolates the Isobetadine and other sanitizers;
- *Wapex 660*: water epoxy product bi-composed for floors and walls. Covering suggested for locales in where the use of solvent products is not permitted. Low odour and low COV content(less than 15g/l), it has been approved by the norm ISO 8690, also applicable in locales with the presence of food (UNI 11021).



Fig. 4: 2012, Anna Marotta with Policroma group. Each function is characterized by a flower and its colour. Flowers and colours become the elements that help the Hospital users not to experience feelings of alienation from space and places of care. In this picture, the hallway of the Department of Medical Oncology 2 San Lazzaro, University Hospital San Giovanni Battista in Turin after the restyling project.



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Fig. 5: 2012, Anna Marotta with Policroma group. Illustrative examples of abstraction that led to the creation of the stencil.



5. Colour and emotional comfort

The multidisciplinary of the project also enclose a phase of analysis and check. It is scientifically tested by psychologists from the S. C. D. U. Department directed by the professor R. Torta and from the A. O. U. Team from the S. Giovanni Battista Hospital in Turin.

The assumption is, as said, the existence of hidden messages contained in the environment that the workers and patients can interpret in different ways, consequently this can influence the final result of the cures. So, the goal is to plot the colour perception in sanitary locales related to the psychophysics wellbeing of people. The challenge is to unify the objective measurements of the emotional changes related to personal perception and codification of colour and visual field in general. The tools used are psychological tests composed by a semi-structured interview on contexts/colour. All the results are going to be statistically organized.

Rowlands, in 2008, referring to this subject wrote about three important topics: the direct view on nature and its colours can mend the stress and reduce the pain: improve the locales allocated to social purposes accommodates the psycho and physical recovery; finally sticking to the cures reduces anxiety in the patient and in the patient's family.

The research's expectations can be summarized in: a reduction in the anxiety symptoms, a correlated reduction linked to the picking of colours, an improvement in satisfaction for the cures received. The goal the will be anyway achieved is a higher attention to the humanization of the medical field and more colour in the everyday work in the hospitals.

Alcuni esempi di test: particolari

da riferirsi a immagini ambientali

HADS – Hospital Anxiety and Depression Scale

Legga ciascuna domanda e barri con una croce la risposta che più si avvicina a come Lei sentito/a nel corso dell'ultima settimana.

<p>1. Mi sono sentito teso o molto nervoso:</p> <p><input type="checkbox"/> Per la maggior parte del tempo</p> <p><input type="checkbox"/> Per molto tempo</p> <p><input type="checkbox"/> A volte</p> <p><input type="checkbox"/> Mai</p>	<p>8. Mi sono sentito rallentato:</p> <p><input type="checkbox"/> Quasi sempre</p> <p><input type="checkbox"/> Molto spesso</p> <p><input type="checkbox"/> A volte</p> <p><input type="checkbox"/> Mai</p>
<p>2. Sono riuscito ancora a provare piacere per le cose che ho sempre fatto volentieri:</p> <p><input type="checkbox"/> Proprio come una volta</p> <p><input type="checkbox"/> Non proprio come una volta</p> <p><input type="checkbox"/> Solo in parte</p> <p><input type="checkbox"/> Per niente</p>	<p>9. Mi sono sentito nervoso, come tensione allo stomaco:</p> <p><input type="checkbox"/> Mai</p> <p><input type="checkbox"/> A volte</p> <p><input type="checkbox"/> Piuttosto spesso</p> <p><input type="checkbox"/> Molto spesso</p>

GSQ General Satisfaction Questionnaire

12. I servizi che ha ricevuto l'hanno aiutata a affrontare con maggiore efficacia i suoi problemi?			
4	3	2	1
si, mi hanno aiutato molto	si, mi hanno aiutato un po'	no, non mi hanno aiutato	no, mi sembra che abbiano peggiorato le cose

13. Se avesse ancora bisogno di aiuto, si rivolgerebbe di nuovo a questo servizio?			
4	3	2	1
no, certamente no	no, penso di no	si, penso di si	certamente si

14. In che misura è soddisfatto dell'insieme delle attività offerte da questo servizio?			
4	3	2	1
molto soddisfatto	soddisfatto	insoddisfatto	molto insoddisfatto

DISTRESS TERMOMETRO - SCREENING PER LA MISURAZIONE DEL DISAGIO (STRESS)

Istruzioni: La preghiamo di cerchiare il numero (da 0 a 10) che meglio descrive la quantità di disagio emotivo che ha provato nell'ultima settimana oggi compreso.

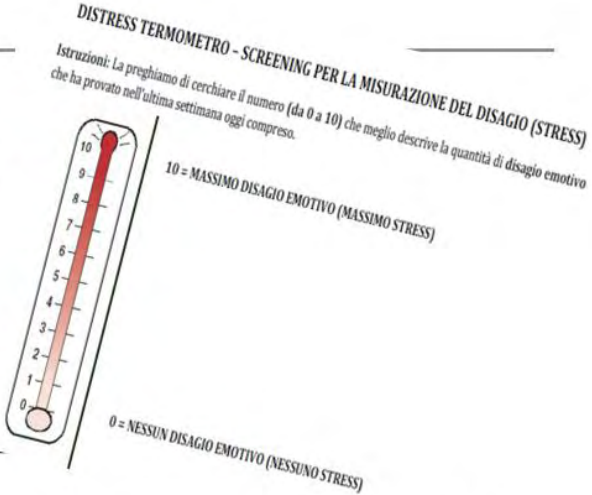


Fig. 6: Extract from the presentation of the work with some examples of psychological tests. taken from the study proposed by Director of the Psychological Oncology Clinic from the University of Turin (Prof. R. Torta and Dott. A. Varetto).

6. Conclusions

Architects and builders cannot of course “donate” therapy, but they can for sure give quality to the hospitals: this is what our project is about.

Considering the preset goals the following are the one achieved: a concrete example to show and use for future applications, derived from a accurate research on the lowering of prices and a careful picking of chromatic aspects. This to avoid the wasting of money, mostly public, on dispersive actions not profitable for the patients, visitors and medical operators.

At San Lazzaro Hospital in Turin “Rifiorisce la Vita”

The life flowers in the sanitary system, in the prevention, in the efficiency of the therapy, in the effort, competence and passion of doctors and their helpers. In the fight of the single patient and its family and friends. In volunteering, in generosity of private companies, in everywhere, but especially in the hospital!

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LE ATTIVITÀ
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dei
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