# **Colour and Colorimetry Multidisciplinary Contributions**

## Vol. XI B

Edited by Maurizio Rossi and Daria Casciani



www.gruppodelcolore.it

Regular Member AIC Association Internationale de la Couleur

Colour and Colorimetry. Multidisciplinary Contributions. Vol. XI B Edited by Maurizio Rossi and Daria Casciani – Dip. Design – Politecnico di Milano

Layout by Daria Casciani

ISBN 978-88-99513-01-6

© Copyright 2015 by Gruppo del Colore – Associazione Italiana Colore Via Boscovich, 31 20124 Milano C.F. 97619430156 P.IVA: 09003610962 www.gruppodelcolore.it e-mail: redazione@gruppodelcolore.it

Translation rights, electronic storage, reproduction and total or partial adaptation with any means reserved for all countries.

Printed in the month of October 2015

# Colour and Colorimetry. Multidisciplinary Contributions Vol. XI B

# Proceedings of the 11<sup>th</sup> Conferenza del Colore.

GdC-Associazione Italiana Colore Centre Français de la Couleur Groupe Français de l'Imagerie Numérique Couleur Colour Group (GB)

Politecnico di Milano Milan, Italy, 10-11 September 2015

#### **Organizing Committee**

Arturo Dell'Acqua Bellavitis Silvia Piardi Maurizio Rossi Michela Rossi

#### **Program Committee**

Giulio Bertagna Osvaldo Da Pos Veronica Marchiafava Giampiero Mele Michele Russo Christine de Fernandez-Maloigne Laurence Pauliac Katia Ripamonti

#### **Organizing Secretariat**

Veronica Marchiafava – GdC-Associazione Italiana Colore Michele Russo – Politecnico di Milano

#### Scientific committee - Peer review

Fabrizio Apollonio | Università di Bologna, Italy John Barbur | City University London, UK Cristiana Bedoni I Università degli Studi Roma Tre. Italy Giordano Beretta I HP. USA Berit Bergstrom | NCS Colour AB, SE Giulio Bertagna | B&B Colordesign, Italy Janet Best | Colour consultant. UK Fabio Bisegna I Sapienza Università di Roma. Italy Barbara Blin-Barrois | OKHRA, Roussillon, FR Aldo Bottoli | B&B Colordesign, Italy Patrick Callet | École Centrale Paris, FR Jean-Luc Capron I Université Catholique de Louvain. Belgigue Antonella Casoli | Università di Parma, Italy Céline Caumon | Université Toulouse2, FR Phillippe Chaudré I Université Paris-8. FR Vien Cheung | University of Leeds, UK Michel Cler | Atelier Cler Études chromatiques, FR Osvaldo Da Pos | Università degli Studi di Padova, Italy Arturo Dell'Acqua Bellavitis | Politecnico di Milano, Italy Hélène De Clermont-Gallernade | Chanel Parfum beauté, FR Julia De Lancey | Truman State University, Kirsville -Missouri, USA Reiner Eschbach | Xerox, USA Maria Linda Falcidieno | Università degli Studi di Genova, Italy Patrizia Falzone | Università degli Studi di Genova. Italy Renato Figini | Konica-Minolta, Italy Agnès Foiret-Collet | Université Paris1 Panthéon-Sorbonne, FR Davide Gadia | Università degli Studi di Milano, Italy Marco Gaiani | Università di Bologna, Italy Anna Gueli | Università di Catania, Italy Robert Hirschler | Servico Nacional de Aprendizagem Industrial. Brazil Francisco Imai | Canon, USA Muriel Jacquot | ENSAIA Nancy, FR Kay Bea Jones | Knowlton School of Architecture, Ohio State University, USA Marta Klanjsek Gunde | National Institute of Chemistry-Ljubljana,Slovenia Guy Lecerf | Université Toulouse2, FR Maria Dulce Loução | Universidade Tecnica de Lisboa, Portugal Lia Luzzatto | Color and colors, Italy Veronica Marchiafava | IFAC-CNR, Italy

Gabriel Marcu | Apple, USA Anna Marotta | Politecnico di Torino Italy Berta Martini I Università di Urbino. Italv Stefano Mastandrea | Università degli Studi Roma Tre, Italv Louisa C. Matthew | Union College, Schenectady-New York, USA John McCann | McCann Imaging, USA Annie Mollard-Desfour | CNRS, FR John Mollon | University of Cambridge, UK Claudio Oleari | Università degli Studi di Parma, Italy Sonia Ovarlez | FIABILA SA. Maintenon, FR Carinna Parraman | University of the West of England, UK Laurence Pauliac | Historienne de l'Art et de l'Architecture, Paris, FR Silvia Piardi | Politecnico di Milano, Italy Giulia Pellegri | Università degli Studi di Genova, Italy Marcello Picollo | IFAC-CNR, Italy Angela Piegari | ENEA, Italy Renata Pompas | AFOL Milano-Moda, Italy Fernanda Prestileo | ICVBC-CNR, Italy Boris Pretzel | Victoria & Albert Museum, UK Paola Puma | Università degli Studi di Firenze, Italy Noel Richard | University of Poitiers, FR Caterina Ripamonti | University College London, UK Alessandro Rizzi | Università degli Studi di Milano, Italy Maurizio Rossi I Politecnico di Milano. Italy Michela Rossi | Politecnico di Milano, Italy Elisabetta Ruggiero | Università degli Studi di Genova, Italy Michele Russo | Politecnico di Milano, Italy Paolo Salonia | ITABC-CNR, Italy Raimondo Schettini | Università degli Studi di Milano Bicocca, Italy Verena M. Schindler | Atelier Cler Études chromatiques. Paris, FR Andrea Siniscalco | Politecnico di Milano, Italy Christian Stenz | ENSAD, Paris, FR Andrew Stockman | University College London, UK Ferenc Szabó | University of Pannonia, Hungary Delphine Talbot | University of Toulouse 2, FR Raffaella Trocchianesi | Politecnico di Milano, Italy Stefano Tubaro | Politecnico di Milano, Italy Francesca Valan | Studio Valan, Italy Alexander Wilkie | Charles University in Prague, Czech Republic

# **Organizers:**

POLITECNICO DI MILANO



DIPARTIMENTO DI DESIGN









**Sponsor:** 



X-rite PANTONE®







**Patronages:** 





Associazione Italiana di Archeometria

AVISA





MILANO 2015





ORDINE DEGLI ARCHITETTI, PIANIFICATORI, PAEBAGGISTI E CONSERVATORI DELLA PROVINCIA DI KILAND



Associazione nazionale vernici, inchiostri, sigillanti e adesivi

# Index

## 1. COLOUR AND MEASUREMENT / PRODUCTION......11

What is new in color-difference evaluation?(A tribute to Prof. Claudio Oleari, Universitá degli Studi di Parma, Italy)13Manuel Melgosa

Working with the LSh-Color space 22 *Eva Lübbe* 

# Colorimetric characterizations of gonio-apparent surfaces for the development of materials with new visual effects 29

Renée Charrière, Grégoire Lacaille, Maria Pia Pedeferri, Maria Vittoria Diamanti, Barbara Del Curto, Jenny Faucheu, David Delafosse

2. COLOUR AND DIGITAL ......41

A Low Power Color Sensor for Illuminant Invariant Skin Detection 43 Michela Lecca, Massimo Gottardi, Elisabetta Farella, Bojan Milosevic, Muhammad Bilal

BID (Bruteforce Isoluminants Decrease) a RGB-to-gray conver-sion technique for automatic photogrammetry 55 Andrea Ballabeni, Marco Gaiani

The Academy Color Enconding System (ACES) in a video production and post-production colour pipeline 67 Walter Arrighetti

Role of color in designing local containers of Gilan inspired by local clothes and folk music of Ghasem Abad region 76 Laleh Akbar

Application of colour local pattern in colour texture images 87 Armando Martínez Ríos, Noël Richard, Christine Fernandez-Maloigne

3. COLOUR AND LIGHTING
Impact of the choice of different walls' finishing and light scenes 101 Laura Bellia, Alessia Pedace, Francesca Fragliasso, Emanuela Stefanizzi
Coloured LEDs Lighting For Food Growing 109   Maurizio Rossi, Daria Casciani, Fulvio Musante 109
Versatility: Lighting Design and Display Systems 120 Ana Paula Pinheiro
4. COLOUR AND PHYSIOLOGY. COLOUR AND PSYCHOLOGY
Computer tests for diagnosis of color vision deficiencies 131 Claudio Oleari, Gabriele Simone
Colour vision wearing sport glasses 143 Ágnes Urbin, Klára Wenzel, György Ábrahám
Ideal Locus of the Green Light in Imam Redha's Holy Shrine (Iran, Mashhad) 149 Ghodsieh Akbari, Maryam Mohammad Gholipour

Italian blues': Does bilingualism modulate colour categories? 159 Galina V. Paramei, Mauro D'Orsi, Gloria Menegaz

### 5. COLOUR AND RESTORATION. COLOUR AND BUILT ENVIRONMENT......171

A hyperspectral imager based on a Fabry-Perot interferometer as a tool in cultural heritage studies 173

Elena Biondi, Tiziana Cavaleri, Marco Nervo, Marco Pisani, Massimo Zucco

Color measurement procedures on 3D artworks: a case study 183

Veronica Marchiafava, Costanza Cucci, Marcello Picollo

Is it easy being green today? Green colour application in architecture and built environment 194 *Justyna Tarajko-Kowalska* 

Perception of Colorscape in Naghsh-e Jahan Square (Isfahan, Iran) 206 Maryam Mohammad Gholipoiur, AliRaza Soomro

Chromatic environmental integration of architectural surfaces: technologies and case studies 211 Alessandro Premier

An Apologia for the inclusion of the combined study of Light and Colour in the Process of Architectural Design 220 João Pernão Environmental Colour: Green Algae in Responsive Architecture and Design 227 Verena M. Schindler

### 

Coloring raw materials impact on the sensoriality of lipsticks 237 Claire Pierron, Emmanuelle Mauger, Nathalie Baudouin, Helene de Clermont-Gallerande

Understanding of lip gloss rheological behavior according to their color composition. The case of sedimentation: focus on pearls and D&C Red 30 Lake 241 Claire Pierron, Emmanuelle Mauger, Nathalie Baudouin, Helene de Clermont-Gallerande

Color impact of pigment wetting ingredients on compact powder composition 248 Hélène Fioleau, Charlyne Grandvuinet, Hélène de Clermont-Gallerande

Effect of Color in monitoring and controlling water consumption 255 Maryam Khalili, Atina Kia

Ground lapis lazuli. A new approach to the history of the colour term 'azure' and the pigment ultramarine blue up to the 13<sup>th</sup> Century 265 *Guido Frison, Giulia Brun* 

Color identity by Pivka municipality flag 277 Vojko Pogacar, Andrej Skrbinek

The Implicit Association in English of the Semantic Categories BROWN and GREY with PLEASANT 289 Jodi L. Sandford

Urban representation and chromatic research in the tradition of Vatican micromosaics 302 Maria Pompeiana Iarossi

The Colour of Maya Architecture 313 Emiliano Della Bella

Social Spectrum; Mapping Rational, Empirical and Metaphysical Relationships with Colour 321 Ken Devine

Organic Architecture's colour: draw and project from Fröbel to Steiner 330 Giulia Pellegri

Design of colored furniture for green spaces to protect the privacy of users 342 Maryam Khalili, Tourang Chamacham, Rasul Fesharakifard

The Colour is served! Synesthesia of the taste and room in Futuristic Cuisine 353 Michela Rossi, Giampiero Mele

## 

# Where is brown?A discussion on colour illiteracy373Dornaz Maani, Ghazaleh Akhavan, Soheil Toosinejad

## Teaching color: the Master in Color Design & Technology 376

Maurizio Rossi, Andrea Siniscalco, Alessandro Rizzi, Cristian Bonanomi

# Colour harmony in graphic design education. Colour systems based on the CMYK colour mixing 384 Agata Kwiatkowska-Lubańska

# 1. COLOUR AND MEASUREMENT / PRODUCTION

# The Colour is served! Synesthesia of the taste and room in Futuristic Cuisine

<sup>1</sup>Michela Rossi, <sup>2</sup>Giampiero Mele,

<sup>1</sup>Dipartimento di Design, Politecnico di Milano, michela.rossi@polimi.it <sup>2</sup>Facoltà di Lettere, Università degli eCampus, giampiero.mele@uniecampus.it

## Abstract

Food arouses a sensory synesthesia. This stimulated the fantasy of Futurists, they chased the convergence of formal arts, indeed. The cuisine could be a scope of global art, because the enjoyment of food involved five senses. Recipes are a demonstration of their experimentation with tastes, smells, sounds, tactile experiences and colours as well. They suggested provocatively food combinations that were unpublished and unlikely to stimulate the enjoyment of all the senses but taste. The formulation emphasizes the role of artists in the birth of a new vision of the alimentation, in which formal and chromatic aspects take over as interactive elements with the sight and the touch. The paper aims to investigate the role of colour in the synesthesia of the futurist cuisine that involved as much food as the rooms, documenting the importance of the futurist heritage on contemporary cuisine.

Key words: Futuristic cuisine, color synesthesia, food design

## 1. Food as a global art

The Futurism was the avant-garde movement that more than others pursued the convergence of all arts through a radical experimentation. That involved formal arts as well as many aspects of daily life with the declared aim of provoking the renovation of social usage. The aesthetic value resulted in the search for a synthesis of the five senses.

Perhaps nothing else satisfies the animal sensitivity as food: in eating the sight and the smell anticipate and reassure about the tactile stimulation of taste in the consumption of the meal. Many idiomatic sentences, as well as the care in food preparation highlight our instinctive tendency to eat before with our eyes and than with mouth.

The Futurists therefore couldn't neglect food, which once exceeded the needs associated with the fulfilment of appetite, had already evolved as the "art of the taste". Food could become a scope of global art.

Marinetti couldn't pass up this wonderful opportunity and in 1909 he affirmed "the importance of nutrition on the creative, fecondative and aggressive capacity of breeds", arguing that "We think, we dream and we act according to what we drink and we eat up". The cuisine could be a great testing ground for new, unusual combinations of flavours, smells, colours and shapes to produce multi-sensory stimuli, meaning gustatory, olfactory, visual, tactile, not to mention hearing.

The very experimental approach will be developed only twenty years later, long after that the first Futuristic cook Jules (Jarro) Maincave joined the

movement in 1913, while Apollinaire formulated the Cubist culinary theory<sup>1</sup> and Carlo Carrà wrote the *Manifesto of painting, sounds, noises and smells*.



Fig. 1 – Color and innovation on the Futuristic table: Djulgeroff's menus for the Taverna del Santopalato, advertising and cocktails (polibibita) by Depero,

<sup>&</sup>lt;sup>1</sup> Apollinaire, *Le cubisme culinarie* (1913)

The following year, the French chef published an article in the form of interview, named *The Futurist cuisine*.<sup>2</sup> He presented it as an original search of harmony of the setting of the table with the colours and flavours of the food. He complained about the boredom of traditional flavours, suggesting new combinations of merely rupture, which anticipated by decades the proposals of nouvelle cuisine, and a more modern setting of table without any other sensory relationship.

The real test, however, followed the first publication of the Marinetti's *Manifesto of the Futurist Cuisine*<sup>3</sup> and the subsequent promotion of a research that recognized food as a formal expression of ingredients, capable of stimulating the enjoyment of all senses.

The following year, Sonzogno published the book *Manifesto of Futurist cuisine* by Marinetti and Fillia (Luigi Colombo). Authors preached the elimination of pasta, which weighed Italians' mind,<sup>4</sup> the abolition of cutlery, not to spoil the tactile pleasure of the body, and the traditional condiments as well as politics at the dinner table. They invited chemists to invent new "*simultaneous and changing mouthfuls*" flavours that could be accompanied by music, poetry and perfumes.

Menus and recipes, which they call "formulas", completed the Manifesto. They emphasized the role of artists in the birth of a new vision of food, in which formal aspects of shape and colour interact with the sight and the touch.

The futuristic cuisine is therefore a transversal and "interdisciplinary" art. It involves all aspects of food, starting from the somewhat 'contradictory involvement of doctors, called to prove the nutritional value of new proposals, and chemicals, invited to create a synthetic food to feed human body with pills, artificial protein compounds, synthetic fats and vitamins. That was the final goal of the futuristic cuisine! The substitute for real food would make it possible to reduce the cost of living, therefore working hours. In any case it would not have erased the taste for synesthetic experiences, which Marinetti describes. His menus suggest the "consumption" of meals with eyes and/or with the smell, sometimes without eating anything.<sup>5</sup>

Beside of the food, recipes, or rather "formulas" as the Futurists called them, often described the atmosphere and the mood. The attention is fulfilled with the setting of the dining room and the table. Notable are the rich ceramic production of Tullio d'Albisola, the graphic and chromatic research by

<sup>&</sup>lt;sup>2</sup> Fantasio, 1st september 1913

<sup>&</sup>lt;sup>3</sup> Comoedia, il 20th Jenuary 1931

<sup>&</sup>lt;sup>4</sup> Marinetti stated that it spoiled the ... "the lively spirit and the passionate generous intuitive soul of Neapolitans who, in eating it, develop their typical ironic and sentimental skepticism, which truncates their enthusiasm often."

<sup>&</sup>lt;sup>5</sup> Marinetti and Fillia, 1932, "Musical autumn lunch".

Medardo Rosso and Fillia in menus and the advertising billboards by Depero and Prampolini. Advertising graphic was the real invention of the Futurists. The "launcher poster" advertised products of food industry that involved actively the Futurists also in planning stages which anticipated the contemporary developments of Design. They understood the importance of the packaging and the marketing, with unforgotten inventions such as the Fillia's spiral of the "Amaro Cora" and the Depero's bottle and shade of Bitter Campari (fig. 1).

An interesting demonstration of the enduring involvement of Futurism in the food industry is *Il Poema del vestito di latte. Parole in libertà futuriste di Marinetti accademico d'Italia*<sup>6</sup>. The pamphlet, which was illustrated by the young Bruno Munari, was published in 1937. It was a promotional of Lanital, an autarkic textile from casein, produced by SNIA Viscosa. The booklet demonstrates through the advertising activity, the relationship of Futurism with the industry, which was the best expression of the machine's world.

The Futurist cuisine is characterized by irony, imagination and creativity, even colour (fig.2).

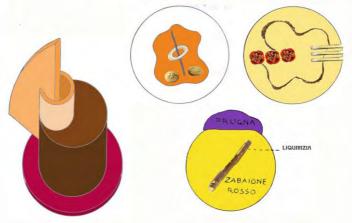


fig. 2 - Futuristic food design: the contrast of colour should increase the dishes appeal as pleasure for eyes. Some recipes describe the "layout" of food in simple pen drawings; the colouring stresses the concept of eatable art that anticipate contemporary trends.

The two most popular dishes are the Nicola Diulgheroff's "Pollofiat", a roasted chicken with balls bearing stuffing that give it a unique metallic taste, and the "Carneplastico", a high meatloaf stuffed with vegetables with a sweet-salty taste and a vaguely phallic shape that enhances the plastic potential of the culinary art (fig. 3). None of them attracts for its colours,

<sup>&</sup>lt;sup>6</sup> The Poem of the dress of milk. Free words by Futurist Marinetti, Academic of Italy.

which are the natural ones produced by food cooking. Other formulas such as Fillia and other painters' ones document a higher attention to colour combinations by the alternation of ingredients. They suggested bold colour compounds according to simple geometric designs, using spinach, tomato sauce, milk, pumpkin puree. In one case it also provides for the correction with methylene blue, anticipating the industrial use of chemical food colours, but generally the futuristic kitchen is coloured by itself, taking advantage from the variety of colours of plants. Meat and dough become plastic stuff of a formal research in which the main subject is not the colour. The reconstruction of the colour palettes in food dishes contrasts with the aseptic colour design of spaces, where dominated the metallic glow of the aluminium.

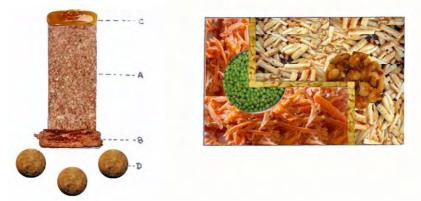


fig. 3 - The natural colour of foods on the design of the recipe of the Carneplastico and the Ortocubo.

## 2. Interior Design as a food background

One of the important demonstration for the Futurism and for that "reconstruction", which had to include gradually the various field of the human experience, was the initiative to open in Torino a restaurant, where the new futuristic foods had to be presented to the public in a futuristic way. For the realization of the scenery that had to host this demonstration, they chose the painter Fillia and the architect Nicola Diulgheroff. The purpose was the transformation of Angelo Giachino's restaurant in a proper place for the diffusion of the futuristic cuisine. The name of the restaurant, named by Marinetti at the end of the Circuito di Poesia (The Circuit of Poetry) between the futuristic paintings at the Galleria Codebò, was Taverna del Santopalato (The Holy Palate Tavern). Fillia himself declares in an interview that: "first of all I ask you to notice that our initiative and our activity for the opening of Santopalato has entirely artistic purposes, creators and engines of an our

culinary theory. It is not about a Diulgheroff's speculation nor mine. We will simply give to the Tavern a futurist mark... The Tavern... will be decorated by architect Diulgheroff and by me with the exact purpose to move in the futurist debate from theory to practice".

Fillia and Diulgheroff's project in order to receive an organization of different flavours, smells, colours and meanings had to create a space with an atmosphere which had to be the summary of the mechanical modern life.

The Tavern reached a big notoriety even before its inauguration, thanks to the several announcements. The inauguration took place on the 8th March 1931. The main hall was a big cubical box, standing side to side on a smaller one. It was decorated with completely bright, half-circular columns, with big and bright metallic oculus <u>stuck</u> at the half of the height of the wall, which was completely covered by the finest aluminium. This latter was not a simple covering of the wall but it was conceived as a working element of the interior. Fillia wrote in his book "dominant aluminium, agile bone structure of a new body, complete with the rythm of the indirect light. The light is also one of the fundamental reality of modern architecture and it has to be space, it has to be a living part with the other shapes of the contruction".



fig. 4 - Historical pictures of the inner space of Taverna del Santopalato in Torino.

The shiny and reflective effect of the aluminium had to support the chromatic presence of the futurist dishes. The colour of the posters, the

dishes and the people created an effect of chromatic movement, similar to a kaleidoscopic one. This idea of inner space features the room of various projects, which concern in some way Diulgheroff's food retails in the following years: the bar Cinzano in 1932 and the bar Cora in 1933, both in Torino, as well as the stand for Rivella company in 1934 at the Fiera del Levante in Bari and the Italian restaurant in the Colonial Exhibition in Paris propose again that kaleidoscopic idea of colour and movement, which was generated by reflections of the advertising graphics in the interior.

Diulgheroff's ability in the advertisement, of his own is the bigger part of the advertising posters for different business, from water to boilers, from companies in building field to alcoholic drinks, brings him to have various requests from firms not only as publicist but also as interior designer. The year after the inauguration of Santopalato the same architect designed the interior for a new Bar Cinzano in the First Exhibition of Fashion Design, held at Valentino in Torino. Here the materials the walls are different: metallic grids, mirrors and shiny surfaces. Together with reflective and coloured coverings, they had the purpose to increase the visual effect of advertising slogans everywhere, also on the floor. The main focus is to recreate the kaleidoscopic image of the Santopalato. This concept of space recalls the Futurist poetry of "parolibere" (free words) composition. The chromatic use of walls, which were made of different materials, refers to Van Doesburg's artistic compositions recalling the Neo-Plasticism in a neo-futurist way.

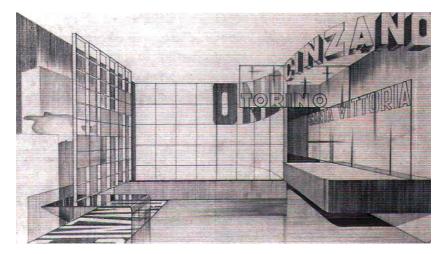


fig. 5 - The project for the Cinzano's bar in occasion of the First exhibit of Fashion Design, held in Torino in 1932

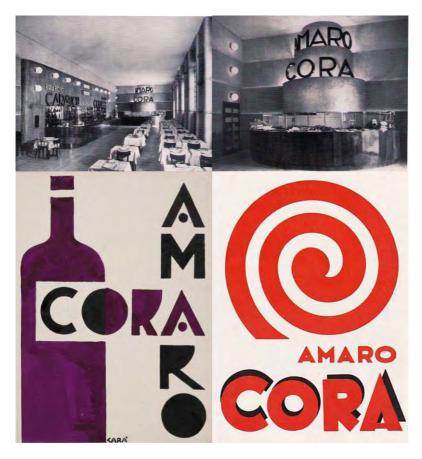


fig. 6 – In order from the top: the interiors of Cora bar designed for the second Fashion exhibition in 1933. The advertising for Amaro Cora in the same time.

During the Second Exhibition of Fashion Design, held in Torino in 1933, Diulgheroff designs the interior of the Bar Cora. The room was narrow and long with the entrance on one of the shorter sides; therefore the architect placed the counter on the long side, on the left of the entrance. Spheres and slogans on the same wall generated the lighting. The wall in front of the counter was painted with orange shades that became clearer upwards and it was illuminated with diffusers, in contrast with the aluminium varnished columns. To use in the best way the perspective tunnel generated by the proportion of the room, the architect designed a half-circular counter with decreasing element and put above it the graphic of the Amaro Cora.

In this case the colour stresses the structure of the space and underlines the graphics, which had different sizes and colours. There is not any

kaleidoscopic effect, but the chromatism accentuates the tunnel effect of the interior.

The only chromatic key in the inside of this space were the big posters, painted by Diulgheroff himself, promoting the Metzeger, the bier of Torino and the Amaro Cora (tonic liquor Cora), the curtains and the various objects within.



fig. 7 - The stand of Rivella designed by Diulgheroff at Fiera del Levante in Bari in 1934.

The Rivella's stand designed by Diulgheroff in 1934 for the Fiera del Levante in Bari, probably never realized, was an example of advertising architecture similar to the one for bar Cinzano. Its constructivist interior had reflective materials and the coloured graphics would constitute a strong advertising call. In this case, the reflective effect of materials would guarantee a kaleidoscopic effect of movement in a chromatic disorder.

The use of colour by one of the most important figure of the Futurism in Torino highlights a choice focused on chromatism to enhance the structure of the mechanical space. Starting from an idea of space and colour influenced by the Neo-Plasticism, Diulgheroff comes to a completely innovative interpretation of chromatic movement that breaks the unity of the spatial box, extending the poetry of the painting to the architecture. The idea of the coloured space recalls the avanguards' culture, but Futurists develops it with grown awareness, thanks to the discussion and debate inside their circles.

# 3. Conclusion. Anticipating food trends.

The literary documents confirm the importance of Futurist heritage in the contemporary cuisine. Provocateurs experiments of Futurist artists, who improvised cooks, left a mark in the renovation of food industry that is recognizable in developments of the Nouvelle Cuisine, the Molecular Cuisine and in today Food Design. They also marked with their implicit desire to elevate the cooking to a noble art, equating it to literature and main formal arts.

Recipes and menus emphasize the importance of colour in the gustatory synaesthesia, involving not the taste of the food, as well the whole mood of the room in which meals were consumed. The comparison between the formulas by different artists shows a different approach depending on their prevalent training.

Of course the more "colourful" recipes are those by painters.

In Futuristic cuisine, the use of colour is not a feature in itself, because the colour is only one among five sensorial perceptions, which affect the mood together with the interior that backgrounds the eating.

The role of the colour and in this kind of shaping of the interior of food retail is the element which balances the static space and the chromatic dynamism of the inner design, based on light games, and the reflections of the colour graphics, of food and the table set on the tinny walls.

The food is just the stuff of a global art.

## References

- [1] Marinetti e Fillia, Manifesto della Cucina Futurista, Sonzogno, Milano, 1932.
- [2] Reyner Banham, Theory and Design in the First Machine Age, New York, 1960
- [3] Luciano Caruso (a cura di), Manifesti, proclami, interventi e documenti teorici del futurismo, 1909 1944, Firenze, Spes Salimbeni, 1980
- [4] Claudia Salaris, Marinetti, padre della nouvelle cuisine, La Gola, 1985.
- [5] Guido Andrea Pautasso, *Cucina futurista: manifesti teorici, menu e documenti*, Abscondita, Milano 2015
- [6] Valeria Garuzzo, Nicola Diulgheroff architetto, Marsilio, Venezia, 2005