Abstract: The passage highlights the relationship between the decline of traditional arts in the 19th century and the rise of design and gastronomy as artistic disciplines. It notes that there have been several key moments in this convergence, including the innovative proposals of the Futurists in the 1930s, the explosion of Nouvelle Cuisine in the 1970s, and the Tecnoemotional and Conceptual Cuisines of Ferrán Adrià and Andoni L. Aduriz. Adrià’s. The passage specifically points to Adrià’s participation in the Documenta of Kassel in 2007 as a turning point in the elevation of cooking to the category of ephemeral art, which in his case translates into the hiring, in 2001, of Luki Huber as product designer of El Bulli. Its success will be such that the Roca brothers will seek a similar collaboration with another industrial designer (Andreu Carulla) while Aduriz, for his part, will opt to work with different design studios when conceiving his creations. In recent times, the passage notes, a group of experimental designers such as Food designer Martí Guixé and Eating designer Marije Vogelzang have sought to establish a solid relationship between gastronomy, design, and art with different purposes. Overall, the passage highlights the growing convergence of design, gastronomy, and art, and the ways in which this convergence has developed over time.

Keywords: Design, Gastronomy, Ephemeral Art, Cuisine

1. Antecedents: William Morris, the Futurists and the Nouvelle Cuisine

During the 19th century, the decline of traditional arts, already detected in Impressionism and later in the avant-garde, finds its correspondence in the blossoming of applied arts with William Morris and the Arts and Crafts movement at the head. The immersion in the so-called "age of technical reproducibility" (Walter Benjamin) causes traditional Fine Arts to lose their "aura", their condition of being a unique and singular work, and their place is taken by mass media.

Following the success of Morris, new artistic disciplines such as design and advertising would be born, to which photography and film would be added. Nevertheless, it would have to wait until the
1930s of the last century for another new discipline, gastronomy (born in the 19th century with Brillat-Savarin), to begin to be considered an art by the Futurists, who were the first to realize the new role it should play not as a transmitter of beautiful images or iconographic representations, but as a catalyst of ideas and feelings.

Following their ideology, several of the proposals defended by the Futurist Cooking Manifesto (1930), with Filippo Marinetti at the head, would point out the paths that gastronomy and design would follow from then on, whose paths were beginning to converge. In particular, the search for harmony both on the table and in the foods, the invention of appetizing plastic complexes directed to the sight and imagination of the diners, the use of perfumes or the provision of scientific instruments in the kitchen. Such proposals, where it is impossible not to see a direct appeal to design ("search for harmony, appetizing plastic complexes...") place us in the antechamber of the artist-cooks who will flourish in the 1970s of the 20th century.

Figure 1. Bocuse, outside of his restaurant in Lyon in 1976. Photo by Michel Artault/Gamma-Rapho. Source: grubstreet.com/

In those years, the Nouvelle Cuisine movement emerged in France as an opposition to French Classical Cuisine and its rigid rules. The ten commandments of the new movement would be reflected in the article that Gault and Millau published in issue 54 (October 1973) of the gastronomic guide bearing their name with the revolutionary title "Vive la Nouvelle Cuisine française".
In this decalogue, the chefs of Nouvelle Cuisine - Paul Bocuse (1926-2018), Alain Chapel (1938-1990), Michel Guérard (1933), Alain Senderens (1939-2017) or Paul Haeberlin (1923-2008), among others - bet on the use of new culinary techniques and innovation in order to offer the diner simple but elegant dishes (hence their concern for design), and pure flavors. Thus, Author’s Cuisine is born, understood as:

"Expression of the personal taste of a chef who breaks with traditional schemes and (...) signs his dishes with his own style, modifying traditional and expected flavors"

2. Ferran Adrià and Andoni L. Aduriz have established cooking as an ephemeral and emotional art

Ferran Adrià and Andoni L. Aduriz view cooking as an ephemeral and emotional art. As a result of this transformation, cooking incorporates painting and design into its creations due to the increasing role that colors, tableware, and cutlery play when tasting a dish. From this moment on, feeding the minds will be more important than feeding the mouths, and enjoying the experience will be more important than the food. This crossing of paths should not, however, lead to misunderstandings, as Andoni L. Aduriz (1971) warns:

"Turning cooking into an art does not consist of cooking as if one were painting, sculpting or performing theatre, which is no more than a superficial aestheticisation (...). Such aestheticisation is a false extension of the idea of art that leaves ordinary culinary activity in its banality and reserves the qualifier of artistic to its most spectacular manifestations" (Aduriz and Innerarity, 2012, p. 297).

To establish, however, what could be qualified as a work of art, it must, according to Habermas, meet the requirement of validity or aesthetic unity, that is, it must have the power to illuminate what seems familiar to us, to present the usual in an unusual way. And it is in this context where the presence of designers is revealed as an essential element to surprise diners, as Ferran Adrià saw when he hired designer Luki Huber in 2001 to be part of his creative team.

Roger M. Buergel’s (1962) invitation of Catalan chef to participate in the Art Fair in 2007 would definitively sanction this new consideration of gastronomy. His participation was a great success and provided a golden opportunity to reflect on cooking from a novel point of view, which was well articulated by the artist Richard Hamilton (1922-2011) and the former director of the Tate Modern, Vicente Todolí (1958), in their reference work, Food for Thought, Thought for Food. Both would be the greatest defenders of this artistic conception of cooking that no one seemed to dare refute after the publication of the aforementioned book. Todolí himself had already stated, before the controversy, that it was pointless to ask if cooking is an art or not, and that it was a useless discussion, as, as Marcel Duchamp said, "art is whatever one says it is art".

This proposition of gastronomy will be the starting point of Andoni L. Aduriz's Conceptual Cuisine, who would pay special attention to creative processes and their connection with science, technology, and design. The result of this innovative bet is a cuisine capable of expressing its own emotions and feelings and of dialoguing on an equal footing with other artistic disciplines.

Aduriz has adopted an unprecedented language, seeking to use design to turn gastronomy into a new and avant-garde art, an ephemeral art in which it is possible to express the emotions and feelings of the chef-author and evoke various sensations in the diner such as joy, pleasure, sadness, fear, or pain.
3. The gastronomy finds and ally in design: the case of Luki Huber and Andreu Carulla in Catalonia.

Cooking, like industrial design, are creative processes that have as their initial goal to generate reproducible products. This is a goal that artists such as Andy Warhol (1928-1987) also aspired to, whose intention was to mechanize the production of a work of art. The kitchen, however, is marked by its ephemeral character, as Ferran Adrià argues when asked about the relationship between cooking and design (Capella, 2013, pp.10-11).

"Is there any relation between gastronomy and design?"

-Total. One way of defining what cooking is could be "designing food". We chefs have a very similar working system.

Designers use one type of materials, and we use different ones, but in both cases we combine them in a creative way. Although perhaps the most relevant differential fact of the kitchen with respect to any other creative task is its ephemeral creative task is its ephemeral nature, which makes everything more difficult. The designer can conceive something extraordinary and then repeat it in serie: a chair, a house, but not us. In a restaurant, you can't repeat. Each dish is unique, it leaves the kitchen and is consumed instantly. Perhaps this is the singularity that makes it impossible for us to relax when we talk about true haute cuisine"
After the avant-gardes, art, which had already begun an unstoppable process of democratization in the 19th century, lost its aristocratic character and saw how cooking became part of its creative parameters. However, it would have to wait until Ferran Adrià and the birth of the so-called Tecnoemotional cuisine to see how design became a firm ally of cooking.

However, we would have to wait until Ferran Adrià and the birth of so-called Tecnoemotional cuisine to see how design became a firm ally of cuisine:

"This type of relationship helped to change the classic dynamic in a kitchen. If until then the chef or the restaurateur went to a shop to buy a dish that had already been designed, from that moment on we started to design what we needed" (Huber, 2018, p.4).

Adrià's relationship with the world of design began in 1998, when the Catalan chef got in touch with some young designers from Barcelona to create a set of tableware to offer the petit-fours. The result was some highly original pieces, created to adapt to each of the dishes, consisting of thin, silver-plated sheets inspired by origami, which adapted to each of the dishes and sometimes conditioned their content.

Luki Huber (1973) was the first industrial designer to be hired by a restaurant in 2001 (three years after the first experience with petit fours with Esther San Millán, Rafa Mateo, and Miguel Gascó). This idea was proposed by Albert Adrià, the brother of Ferràn, who is also a chef. Huber's work focused not only on designing machines and utensils, but also on designing objects for the table, and introducing a series of "found objects" (similar to what Duchamp did,
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giving rise to the birth of conceptual art) in the kitchen that changed the act of eating, generating a new communication with the diners through a language different from the usual. Without worrying so much about the design of the space, their basic idea was that each piece of crockery or cutlery should maintain a coherence not so much between them as with the concept that each dish represented, an idea that Andoni L. Aduriz would later pick up. And this is precisely what happened when the Adrià-Huber tandem used slate trays as plates, as well as all kinds of custom-cut containers (pharmacy gel bags to serve ice cream, pipettes containing mango sauce, mini cones for frozen shots, capillary skewers to ingest a solid preparation and sip the sauce, glass bowls, silver-plated brass boxes for meringue, brass flowerpots, zigzag trays, three-dimensional paper crockery, aroma balloons).

Huber thus gave rise to creations such as the FACES collection, which was presented in 2006 at the Vinçon hall in Barcelona alongside the creations of other designers such as Xavier Claramunt, Toni Arola, Martín Azúa and Julia Mariscal (Huber, 2018). That same year Ferran Adrià received the Lucky Strike Designer Award in Berlin and the following year he presented, together with Huber at the Centre Georges Pompidou in Paris, the exhibition The Creative Methods of Elbulli (2005).

Some of Luki Huber’s creations were Sferifications: through the use of syringes that generated balls that simulated caviar, only through the use of other ingredients such as, for example, melon; or the Jelly Spaghetti that exemplified elBulli’s molecular¹.

Luki Huber, with an eclectic style, introduced, for the first time in history, the utensils used in a laboratory within the scope of the kitchen with a disruptive character and a creative intentionality. Without a designated place in the kitchen, Huber’s work process was similar:

"Ferran says that the molecular cuisine that was practiced at elBulli was possible thanks to Luki. And he says even more: "He opened a path that was a disruptive event in the design of food". So disruptive was it that today in design universities there is a subject called Food Design. Probably, without the paradigm shift that marked the association between Albert Adrià, Luki Huber and Ferran Adrià, university programmes would not have considered it". (https://valenciagastronomica.com).

This same trail would later be followed by product designer Andreu Carulla (1979) with the Roca brothers (Restaurant Celler de Can Roca), with whom he has been working for more than a decade and where he currently holds the position of creative director.

Normal restaurant in Gerona, which, starting from the local environment and popular culture, reclaims the native as a style, one of the creative principles of Ferran Adrià (Soler, Adrià, F. and Adrià, A., 2007, p. 58).

To achieve this, he has collaborated with local artisans and has used sustainable materials from the area (such as the Bisbal ceramics) for his designs. Some of his creations for the table (such as the famous Gol de Messi or the Roca on Wheels dessert cart) are included in the Tapas: Spanish Design for Food catalogue, an exhibition organized by Acción Cultural Española and the Museu de Disseny de Barcelona, curated by the Catalan designer Juli Capella. Within the sustainability section and the design of objects, the pioneering initiative "Roca Recicla" at the Zero Waste of Celler de Can Roca, which began in 2018, should also be highlighted. Here, El Celler gives an outlet to waste materials generated by the restaurant itself through the design of non-ephemeral objects. As creative director, he is the author of the RR201 (2018) stool series from the collection, made from fish transport boxes and presented under the slogan "One

¹ Using pvc tubes that were filled with Parmesan whey with agar-agar and gelled on cooling.
man’s trash is another man’s treasure”, or the RR400 (2020) of aprons and bags made from highly polluting vacuum cooking bags.

In the case of Andreu, he is the creator of a great variety of table objects and machinery projects that he also carries out from his parallel studio (Acid Studio) with a more engineering and UX design approach. Carulla has designed "emotional" tableware such as Plat de Pa (El Celler de Can Roca, 2013) in aluminum that emulates the slices of bread used for the popular Catalan dish of bread with tomato, only this time they are used to serve the delicacies of El Celler; machines such as the Oxymoron Maker to heat filled brioches for Rocambolesc; or projects that combine design, gastronomy and technology such as Tocaplats (2015), which he did in collaboration with Neil Harbisson (the Cyborg artist) and which reproduces the sounds of the food itself from the colors of the dishes.
It is about generating a sensory experience from sound as an ingredient, following the line of the British restaurant The Fat Duck with its acclaimed dish Sound of the Sea by Heston Blumenthal. He has also been responsible for the designs of the shape of the chocolates of Whole Fruit for Cacao Berry (2021), introducing himself into the field of Food design for the industry.

4. When food becomes a stimulus: Mugaritz

Mugaritz, the restaurant of Andoni L. Aduriz in Guipúzcoa, with a minimalistic spatial design and content influenced by Nordic style (and being pioneers in eliminating tablecloths to avoid distracting diners), has not had an exclusive designer, but rather a set of them:

"What are the criteria for choosing the design of the plates on which each food is arranged? Before the start of each season, we make a decision in this regard by doing several things. The first is the selection of the dishes and then, when we see which of them we think will work best, the choice of tableware. Logically, each year we use material from previous years, although at Mugaritz we use a large amount of tableware designed and worked with different types of designers and artisans, which in themselves have given rise to another type of language." (Personal interview with the author).

Since the opening of his establishment, the Basque chef felt the need to have an original tableware that fit the experience proposed to his diners and the requirements of a avant-garde restaurant. To satisfy it, he commissioned the company Bidasoa to design the first tableware from square plates that today have become somewhat retro.

The second order was received by the company Montgatina (creator of the Ola dinnerware for Ferran Adrià, an authentic best-seller), which immediately corrected the defects of its predecessor by conceiving the flat plate as if it were a canvas where Aduriz could "paint" his creations. This innovation would make the dinnerware not feel like a simple more or less beautiful container where to deposit the food, but as an element inherent to avant-garde cuisine. Its design would allow to enjoy the new dishes through the enhancement of smell,
When gastronomy finds in art a reference and in design an ally.

When gastronomy finds in art a reference and in design an ally.

sound - as in the case of the Mortar of the Spice and Seed Soup (2012) -, or touch, as in the Punto Final plate (2017), a creation that invites the diner to suck, touch or lick the penultimate dish of the menu.

Figure 8. The Seven Deadly Sins by GR Industrial for Mugaritz, photo by José Luis López de Zubiría, 2023. Source: territoriogastronomico.com

In this aspect, the design of the restaurant would undergo constant evolution due to the fact that, as Mugaritz cooks, "they have needed ad hoc tableware for the different types of cuisine" (personal interview with the author). The success of some of these designs was such that in 2008 the Art Directors Club of New York awarded a prize to the tableware created by the Laia Studio for Mugaritz. Other later creations are the work of Luesma & Vega, creators of designs of unquestionable beauty and great functionality, such as those called Nest or Silence. Among these creations, the wooden tower with different heights and thicknesses that closes the tasting menu and which, conceptually inspired by the film Seven (David Fincher, 1995), brings together different types of chocolate around The Seven Deadly Sins (2013), stands out for its significant value.

In regards to some of its most recognizable dishes, where the objectification of food takes the starring role and the support of it completely fades away, one could say that Mugaritz approaches the role of the most experimental designers described in the following section, where the design/gastronomy tandem fulfills an artistic function whose objective is to leave a record of a critical vision towards an aspect of our society, culture, or habits.

Within this block, his tribute to popular culture and its icons, such as the Lagarto soap with handmade hot bar and honey and oatmeal whipped water (Mugaritz, 2009), stands out. A dish that invites one to taste an apparently soapy element, placing the diner at the limits of what is known, is Gominola de Vaca (Mugaritz, 2015), where he totemizes a product evoking childhood memories or his criticism of the conservative values of the Michelin Guide (which has never awarded him a third star) with his Bibendum in Stale Wine Toast Soup (Mugaritz, 2016).
5. Design anticipates the act of cooking

This first core of designers falls into the category of those professionals trained as product and industrial designers who work on the creation of tools and spaces for consuming food. However, there is another series of designers, perhaps more experimental in their approach, who use food as an element of communication in an attempt to break with the rigidity of the classical language of design. This is the case of Food Designer Martí Guixé, a pioneer in this hybrid area where design and food meet. His research in this field began in 1997 and was recognized by the Associazione per il Disegno Industoriale (ADI) in 2002. But what is Food Design?

"It is important to be clear that Gastronomy is the art of preparing food, while Food Design is a discipline that applies design strategies and methodologies to drive innovation in food. It is like combining cooking with design thinking; through food, it is researched and understood, defined, conceived, explored, prototyped, and finally tasted." 2

Martí Guixé has exhibited his works and food performances in institutions such as the MACBA in Barcelona, the Centre Georges Pompidou in Paris, and the MoMA in New York. His creations include his I-Cakes, a project in which he generates a series of cake-shaped objects that graphically show the amount of ingredients they contain and in what proportion (Guixé, 2003), his Techno-Tapas Spam Bar (Sala Vinçon, Barcelona, 1997), and the Solar Kitchen Restaurant, created together with Antto Melasniemi, in which he advocates the use of alternative energies for cooking. Many of his Food Design works have a vindictive component, such as Sponsored Food, where the logos of different brands are displayed on potato omelettes: "The idea of creating a network of sponsored food restaurants, free of charge, would allow people to free themselves from the social behavior that develops from the need for survival" (Capella, J.,

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2 https://www.gastromakers.com/2022/05/11/que-es-food-design/
Seedsafe (2010) is, however, an object made for the well-known tableware manufacturer Alessi, which simulates a piggy bank for collecting seeds once one has eaten, with the aim of reclaiming our historical gastronomic heritage.

In the same vein, outside the Iberian Peninsula, we also find the work of Marije Vogelzang (who defines herself as an "Eating Designer") linked to the field of education and dissemination and who explores the limits of the perception of food during the act of eating it. Within this sphere, it is worth mentioning, finally, another group of designers, who would also fall into the category of Food Designers, who, attracted by the rise of cuisine and following the aesthetic guidelines set by avant-garde chefs, work from and for the industry. This is the case of Balbosté, a "Culinary Design Studio", or Arabeschi di latte, a "Food Design" founded by Francesca Sarti in 2001, which has carried out projects for brands such as Marni, designers such as Tom Dixon, or institutions such as The London Design Museum. They all share a common link: they explore food not as an object in itself, but as an accumulation of relationships, reinforcing the storytelling to connect with the spectator and make them part of the culinary experience (Flood and Rosenthal Sloan, 2019, p. 83).

Figure 10. Solar Kitchen Restaurant by Martín Guixé and Antto Melasniemi (Lapin Kulta, Helsinki), photo by Inga knolke, 2011. Source: dexigner.com
Both the working processes and the intentionality behind these projects have forged a strong bond between designers and artists. This was the approach of the exhibition FOOD: Bigger than the Plate, curated by Catherine Flood and Mary Rosenthal Sloan for the Victoria and Albert Museum (London, 2019). Their approach was to illustrate how food currently functions as a nexus between different artistic expressions and between other disciplines such as anthropology, agriculture, technology, or the development of biomaterials. The act of cooking is thus understood as a facilitator of political, social, and emotional connections, in which design plays an essential role.

Figure 11. Seadsafe by Martín Guixé for Alessi, photo by Inga knolke, 2010. Source: designboom.com

Figure 12. Sharing dinner por Marije Vogelzang, photos by Kenji Masunagi, 2005. Source: marijevogelzang.nl/
The exhibition showcased pieces by designers, artists, and architects who had worked in a multidisciplinary manner with chefs, scientists, or local communities in the development of works that covered everything from how food is produced to how it is consumed. Among these works, it is worth highlighting those of designer Fernando Laposse with his project Totomoxtle (2016), which transforms corn husks into a marquetry material; those of architects Atelier d'Architectura Autogérée (AAA) with their project AgroCité (within R-Urban), a reflection on how rural practices enter the urban space; those of Uli Westphal (Supernatural, 2010 and 2014), centered on creating wallpapers made from the food packages of supermarkets such as Aldi, Neto, Albertsons, and Lidl; and the sensorial cutlery of Korean designer Jinhyun Jeon's (tableware as of these creators work in transdisciplinary practices, like Adrià and Aduriz, using similar methodologies that take food as a starting point to talk about issues such as climate change, pollution, bad practices in the food industry, or the reuse of waste materials. In these cases, it is no longer so much a question of designing an object with a precise functionality, but rather that the symbolism of the object itself, before using it, provides us with information about the way we eat or the role of men and women in relation to nature and their environment.

Figure 13. Exhibition FOOD Bigger Than the Plate, photos by Victorian & Albert Museum (London), 2019. Source: vam.ac.uk/

6. References

About the Author:

Dr. Santamarina, Ph.D., is a designer and food art historian. Her work is represented by Rossana Orlandi gallery in Milan and Mint gallery in London. She is a Ph.D. Doctor of Audiovisual Communication and her thesis reflects on how the visual arts influence contemporary cuisine. She is the Head of the Food Cultural Lab at IE University and a product design professor of Complutense University of Madrid (Fine Arts Faculty).