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Food For Thought: Food as communication and its relevance in Design

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I declare that this **Critical Cultures Research Project** is all my own work and that all sources have been fully acknowledged.

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Introduction

"One cannot think well, love well, sleep well, if one has not dined well."

(Woolf, 1929, p.18).

Food and the practices surrounding food can initially be described as one of the banalities of human life. Our lives depend on nourishment and oftentimes the self-evident role of food can be taken for granted by the wider population (Sonderen, 2020 p.4). But food and eating practices are not simply matters of fueling ourselves or methods of mitigating hunger. Food is ubiquitous, pervasive, an intrinsically multilayered subject influencing our lives in countless ways. Food practices serve to mark boundaries between social classes, territories, nations, cultures, genders, life stages, and occupations. It serves to distinguish rituals, traditions, religions, festivals, seasons, and times of day. Food "structures what counts as a person in our culture" (Curtin, 1992a: 4 cited in Lupton, 1996 p.1).

This research essay will set out to explore the relationship between food, culture and design. There are many cultural meanings and discourses surrounding food practices and preferences in all human societies (Lupton, 1996, p.1). But relatively recently has it developed to become the object of an ever-growing corpus of studies and analysis, encompassing various approaches and topics. These range from sociology and anthropology to culture and gender studies, from marketing, economics and politics to media studies and art criticisms, from nutrition, culinary practice and education to psychology, science and technology, to name merely a few (Parasecoli, 2008, p.11). The complexities of food studies indicate how inherently interdisciplinary the topic is. And so, meanings, discussions and practices around food and eating must be prioritised and accepted to be worthy of detailed cultural analysis and interpretation (Lupton, 1996, p.1). Indeed food is "the symbolic medium par excellence" (Morse 1994: 95 in Lupton, 1996, p.1). I, like many, have developed over the years a deep love and respect for food. Combining various influences from the rich culture I was

surrounded by to more recently the pandemic-induced self-appreciation for the diversity and prevalence of food, I decided this essay would be the perfect opportunity to delve deeper into the relationships we have to food and how my area of experience, that is design, can provide its own contributions and perspectives on food and our relationships to it. Both food and design play an integral role in the various social discourses at play with both ultimately contributing to a rich human experience. It is through these discourses and interplay, that individuals come to understand themselves, their relationship to food, and the world around them.

Food, in all its ubiquity and pervasiveness, can be approached from various angles as mentioned. As this falls outside the scope of this essay, I will focus on selected aspects of food and how it is of relevance to the field of design. The first chapter of this essay will primarily focus upon food as a form of communication; referring to prominent theorists in food studies and consequently how food links to culture. This is followed by how this communicative aspect of food can represent collective identity and social connection which in turn plays a role in and encourages contemporary discourses. In Chapter 2, food is discussed through the lens of design. I will discuss how industries of food and design intertwine, focusing on speculative critical design with analysing various examples of design expressions incorporating food.

Chapter 1: Food as a means of Communication

Food is an essential part of people's lives. Undoubtedly much more than just a means of survival. it plays a significant role in how we understand the world, ourselves and others.

Food, in fact, is a form of communication and can signify a plethora of meanings and understandings. In his foundational work, Communication as Culture: Essays on Media and Society, Carey argues that "communication is a symbolic process whereby reality is produced, maintained, repaired, and transformed" (1992, p.23). If we follow Carey's argument, then surely food is one of the most readily-available symbols that we have at our disposal, which can be viewed from both the perspectives of communication and culture (Cramer and Greene, 2011, p.x). What we consume and the methods of how we acquire it, who and how it's prepared, who's at the table and where we consume, are all forms of communication using food. This section will explore this idea of food and its practices as a form of communication and how it ties into culture and identity. This is followed by how food can both encourage discourse while also be at the centre of various discourses. That is all to say; food holds an inherent power of communication.

1.1 Food as communication and its links to culture

The relationship between communication and culture is a complex and intimate one, informing each other endlessly. "Culture is created, shaped, transmitted and learned through communication, and communication practices are largely created, shaped and transmitted by culture" (Stajcic, 2013 p.6). Communication as defined by the Merriam Webster Dictionary is "the act or process of using words, sounds, signs, or behaviours to express or exchange information or to express ideas, thoughts, feelings, to someone else" (2021). This process attempts to create and achieve a shared meaning, and is influenced by countless factors such as social and cultural context, participants, motivations and purposes. Stajcic states that

communication has a constitutive power, it is not just a process of creating something external (2013 p6-7). Communication can be both intentional or unintentional, can involve conventional or unconventional signals and can take on linguistic or non-linguistic forms. So broadly speaking, communication is the method by which we understand the world and our attempts to convey that understanding to others (Cramer and Greene, 2011 pp x).

Prominent food theorists like Roland Barthes, Claude Levi-Strauss, Mary Douglas and Eivind Jacobsen offer frameworks on how food is communicated, how food communicates and how we communicate about food. Barthes, the prominent theorist and philosopher argues that "food is a system of communication, a body of images, a protocol of usages, situations and behaviours" (Tanner, 2004, p.19). Barthes uses semiotics to argue that food functions as a signifier, as a system of signs that communicate. Food is not only a collection of products used for nutritional purposes but also constitutes a system of communicative value of food lies in its appearance, preparation methods, eating habits, sensory perceptions, context and associations to form a system or chain of meanings. Take for example an apple and how it's not just the act of eating the fruit but also all factors contributing to its production and its cultural associations i.e., the Garden of Eden [Fig. 1a], Snow White [Fig. 1b] and the iPhone [Fig. 1c] to name a few. Coffee also has associations with the idea of taking a break, efficiency and corporate life (Stajcic, 2013, p.8). Barthes writes:

"When he buys an item of food, consumes it, or serves it, modern man does not manipulate a simple object in a purely transitive fashion; this item of food sums up and transmits a situation; it constitutes an information; it signifies" (1957, cited in Le Besco and Naccarato, 2008 p.1).



Fig. 1a: Titian. Adam and Eve (c. 1570) Fig. 1b: Still from Snow White and the Seven Dwarfs (1937) Fig. 1c: iPhone 13 Pro. (2020)

With any interaction of food, one experiences and takes part in an entire system or language of food. Hence, food makes its own statement, it affects culture and culture affects food (Stajcic, 2013, p7).

The way food can be approached as a language is paralleled by the theories of major scholars such as Claude Levi-Strauss and Mary Douglas who further explored food specifically regarding cooking and meals. Stating that food has a code and a system of messages to express patterns about social relationships, this code follows how language expresses thoughts and ideas and therefore how food acquires a communicative value (Counihan and Van Esterik, 2008, p. 44).

On the other hand, the Norwegian professor Eivind Jacobsen, looks at the significance of how we frame food in language describing three different frames for looking at food - as nature, as commodity and as culture. Food as nature, is food as the physical manifestation of where humans meet nature such as the farm, the kitchen, or the earth. Food as commodity describes the consumption and production of food creating industries which have made food into a vessel for capitalism. For example, coffee and Starbucks, the soy industry and veganism, or the act of Instagramming food. Finally, food as culture which relates to tradition, memories, and nostalgia. It links our experiences with food to ourselves and the people around us. Thus, when we eat cake, it is linked to celebrations and birthdays, and feelings of joy and love (Deng, 2020, p.2). Each 'frame' uses food as a vehicle to convey ideas of power, money, health, fame, and desire. Both Barthes and Jacobsen present ways to see food as multidimensional, as something that shapes our cultures and our society, Food can signify and transmit a range of meanings (Stajcic, 2013, p.8).

While on the surface food offers its consumers socialising, entertainment, and escape, it implicitly invites them to not only appreciate the beauty and pleasure of well-prepared food, but also to consume the subtle messages embedded within these representations (Le Besco and Naccarato, 2008, p.1). Thus, food and culture are closely intertwined; in that food acts as a conveyor of culture precisely because we use it as means of communication (Cramer, Greene and Walters, 2011, p.xii). Food and the situations surrounding food function as a communicative practice by which we create, manage, and share meanings with others. Perhaps the most common way that we utilise food through its communicative values is in the construction of identities which will be explored in the following section.

1.2 Food and Collective Identity

"And with our gastronomical growth will come, inevitably, knowledge and perception of a hundred other things, but mainly of ourselves."

— M.F.K. Fisher (cited from Stajcic, 2013, p.5).

Fisher's acclamation of food being indicative of one's identity is asserted in Massimo Montanari's book, *Food is Culture*. The culinary historian identifies that food, like language, is symbolic, signifying a wide range of meanings and conveys the culture of its practitioner. Thus "it is the repository of traditions and of collective identity" (Montanari, 2006, p.132). It is this idea of social and collective identity in regards to food that I would like to pay closer attention to in this section.

Being mindful of the theorists such as Douglas and Levi-Strauss mentioned earlier, the social scientist Claude Fishler furthers the theory of food as a language or code to express social relationships. He uses his 'principle of incorporation' to claim the idea that food is crucial to our sense of identity; "that any given human individual is constructed, biologically, psychologically and socially by the foods he/she chooses to incorporate" (1988, p.275). Using Fishler's idea, it can then be said that, "We are what we eat. We are what we don't eat" (Zhang, 2013, p.174). And so we often define who we are, our 'identity', according to both the foods that we eat and the foods we omit. This idea is continued by Fishler, stating that food can assert oneness but also the otherness of whoever eats differently (1988, p.275). That the 'incorporation' of food is the basis of collective identity- as people 'incorporate' food, they seize the opportunity to demarcate their own and the other group (Scholliers, 2001, p.8). Indeed, it can be stated that identity is constructed through differences as much as similarities to the other; It is the differentiation or the othering that allows us to achieve collective self-esteem and group solidarity (Stajcic, 2013 p.9). Identity therefore cannot be approached in isolation but in conjunction with one's relationship with the other. A vast array of social theorists such as Turner, Hogg, Oakes, Reicher and Wetherell reinforce this significance of identity to people precisely because identity allows one to express similarity and difference to the other (cited in Scholliers, 2001, p.5). Even the prolific sociologist Bourdieu's reasoning that consumption contributes to overt displays of the self and ultimately, one's lifestyle, is applicable to this discussion of social identity. He states that people "distinguish themselves" by the distinctions they make," including what food decisions they make. How one comprehends and consumes culture (food) contributes or marks one's place in society, or social identity (Bourdieu, 1984, p.6).

Equally, food is used as a means to express one's identity to others as well as identify themselves with others. In a sense, food exhibits relationships between individuals and groups through nonverbal forms of communication - a system of signs. Kalčik quotes that "Social relationships are developed and maintained by symbols and, thus, we tend to see groups through their symbols and to identify ourselves through symbols" (Mortezaei, 2020, p.9). Examples of this include food operating as a sign of national and regional identity: brie cheese for the French, pasta for the Italians, curries for the Indians and countless other instances which are more than just food for people from those geographical locations (Mortezaei, 2020, p.90). Thus, food in different contexts function as an identity marker. Food can also indicate the income level, wealth and social class of people. Likewise, in social terms, food indicates different aspects of identity such as religion, gender, age, political preferences, etc. (Leeds-Hurwitz, 1993 cited in Mortezaei, 2020, p.92). Eating a particular food can indicate group affiliation while eating the other group's food can be considered as a sign of accepting them. "By ingesting the foods of each new group, we symbolise the acceptance of each group" (Mortezaei, 2020, p.92). While this can also be true contrarily where the opposition of the other is facilitated through the rejection of their foods.

When it comes to our food, each action, decision, thought that we do or don't do- is an act that signifies/communicates/distinguishes our social identity. These actions, decisions, thoughts are carried out with the help of various factors, economic, social, cultural and political conditions, events and expectations, and in turn, affecting those factors (Stajcic, 2013 p.9). The tie between food communicating identity and culture and hence society is beautiful articulated by Counihan who likens food as both "a product and mirror of the organisation of society..., a prism that absorbs and reflects a host of cultural phenomena" (1999, cited in Cramer, Greene and Walters, 2011, p.xi).

1.3 Food as discussion - as a topic itself and as a facilitator

As described above, we can reason that food and food practices are a form of communicating collective identity. Collective identity is constituted by the differences and similarities to the other; and more precisely it is through the differences and similarities we develop our relationship with food. One can then argue that it is this particular characteristic of food that allows it to be the focus of various discussions, while also being the medium for discussion to take place in contemporary society.

Food as a medium for contemporary discussions to take place can be observed when we look at the specific act of eating together. Montanari identifies that "Eating together is typical of, if not exclusive, to the human race" (2006, p.93). And it can be argued that this particular food practice holds a communicative value, reinstating the theories of Levi-Straus and Douglas mentioned earlier. Deng in her thesis, identifies three social spaces that are fostered in the process of eating together. Firstly, this practice creates spaces for social relationships to develop (2020, p.2). These spaces of eating together can be a place of belonging and acceptance whereby food serves to connect people, both physically and symbolically (Visser, 1991, cited in Cramer, Greene and Walters, 2011, p.xi) [fig.4].



Fig. 2: Still from Eat Drink Man Woman (1994)

Additionally, these spaces can also breed conflict between the priorities of individuals and society. Eating together thus becomes a ground for building both comradery as well as tensions within individuals and groups. (Deng, 2020, p.3). Lastly and arguably, more importantly, Deng identifies that with both these spaces, eating together can therefore be viewed as a space for self-reflection where individuals and groups can confront perspectives similar as well as, different to those of their own (2020, p.3). "It is through our processes of sharing or discussing food that we can view it as a form of discourse." In this sense, we could argue that food serves as a socialising mechanism by which we come to understand our cultures, our societies, and the groups to which we belong. (Cramer, Greene and Walters, 2011, p.xi) Food practices such as eating together acts as a vehicle to promote thinking and discussion, thus food acts as a communicator.

Just like gathering around the table, food can bring us together or divide us when discussing prevalent matters of society. Food and food practices have inevitably grown to become the focus of a host of issues and discourses, both directly and indirectly. Food is at the focus of issues such as obesity, eating disorders, malnutrition, global hunger to name a few, these issues impact the world's population to varying degrees. With topics like globalisation, immigration, inequality, sustainability and climate change, our food and food practises all play a role in a myriad of contemporary discourses [fig.5]. Discourses about food are prevalent on a small scale but also within larger social structures such as government, media, and popular culture. (Cramer, Greene and Walters, 2011, p. xiii) Often, these discourses can create a bond or likewise, conflict between individuals and groups because they offer myriad perspectives about food and issues related to it.



Fig. 3: Sophil Guillbrants (2021) - The Politics of Food.

Nevertheless, it cannot be dismissed that food and its practices plays a deep rooted role in contemporary society by both facilitating discussion while also being the focus of many contemporary dialogues. Farb & Armelagos state that food "is symbolically associated with the most deeply felt human experiences, and thus expresses things that are sometimes difficult to articulate in everyday language" (Cramer, et al., 2011, p.57).

"How we eat, how we feel, how food iconises, how food relates to the body, how it functions within the media, how it functions on the street and in the house, how it makes us act, how it relates to other arts, this complex nature is what makes food a fascinating, self-evident but nonetheless obscure matter" (Sonderen, 2020, p.12).

It is this characteristic of our relationship to food which is the most intriguing and is the space where the field of design can potentially play an invaluable role. This will be discussed further in the following chapter.

Chapter 2: Food and Design

Food is a basic human necessity, while design exists further down the ladder of biological need. Despite this, both food and design are expressions of culture, making them deeply symbolic. Humans are the only animals that cook and the only ones to use design to problem solve. "These two acts—the essential and the essentializing—have repeatedly converged in human history. From the beginning, in fact" (West, 2017). With food being deeply integral to society (and indeed human nature), this chapter will consider where the field of design fits into the wider discussion of food. As design is my disciple of study, I attempt to highlight the role design plays in our relationship to food.

The relationship between food and design began from the dawn of civilization. Humans have never been without some form of design, beginning with the earliest tools devised in order to hunt and to farm. Given that the production, distribution, and consumption of food is a central human activity, the involvement of these tools and communities is crucial to the food production process. Design has been central to every development in food production and food practises (Margolin, 2013). But this essay proposes how food is applied in design, specifically through the method critical speculative design to provoke discussion and discourse. I begin this chapter with exploring the relevance of designers to the wide ever-growing corpus of food studies and highlight the specific method/field; Critical Speculative design as an exemplar field of investigating our food relationships. This is followed with an analysis of two examples of work where food has been discussed through this particular type of design.

2.1 Relevance of designers to food studies

The ubiquitous presence of food in our everyday lives means that popular culture often overlooks the symbolic complexity of the subject. Professor Peter Sonderen suggests one reason why this happens is due to the phenomenon of the 'wicked problem'. A term first coined by Horst Rittel, 'wicked problems' describe complex subjects that mask their true intricacies. It resists clear definition, popping up in different societal intersections and mostly requiring a change of system (2020, p.7).

"Food has so many appearances, so many roads, so many producers, so many users, so many tastes, so many outlooks, so many manifestations, so many aesthetics, so many rules, so many ingredients, so many matters, so many supply routes, that it in fact escapes a unified view and analysis, and therefore loses its transparency at the moment of its appearing." (Sonderen, 2020, pp.7-8).

Due to the specific complexity of food, effective collaboration of researchers from different fields of study is essential in providing a discursive cultural theory about food (Mortezaei, 2020, p.24). Artists, designers, makers can play a role in delving deeper into their ideas on food from their respective fields of expertise. "Wicked problems cannot be completely solved but they can only be approached; they can even be denied, understood differently, which leads to different approaches" (Sonderen, 2020, p.8). Sonderen expressed that the goal here is not necessarily to solve any food problem but to offer alternative and idiosyncratic perspectives in the world of food and research. (2020, p.9) Food by nature is a multidisciplinary phenomenon (Mortezaei, 2020, p.29), therefore calling for a multidisciplinary approach as there is no one way of approaching the field.

Both the studies of Food and Design have much in common, in that their subject matters are extremely broad and not as easily defined (Margolin, 2013). Food and Design are ubiquitous and have been intimately connected, with both ultimately being valuable to the human

experience. Design has operated as the servant of industry, typically working on products associated with food (package, container, appliance), and which, Schifferstein points out, has been relatively less about determining what people eat and how and why they eat it. This role has remained primarily in the hands of "breeders, farmers, food technologists, marketers, chefs and hospitality experts" (2016a, p.3427). The author advocates for a more involved inclusion of designers in discussions around food due to the unique creative skills and tools that designers have acquired during their training and practice (Schifferstein, 2016b, p.109).



Fig. 4: Potential role of the designer in food innovation processes (Schifferstein, 2016).

LinYee Yuan, the editor and founder of the future foods magazine and website, MOLD [Fig. 5a,b], explores this remark during an interview on why it's so critical for designers to be part of the food discussion (see Appendix A). Designers are engaged in systems of thinking and how "question-asking is a very critical tool in a designers toolkit" (Lewis, 2021).

"Instead of engaging in a food system that is linear from production to consumption, with the help of designers, we can reimagine the food system as a dynamic, fluid, and complex network of care. Through products and systems that emphasise our interconnectedness, my hope is that designers can help us re-establish a relationship with food that offers a path towards recognising beauty in diversity – embracing an ancient future" (Yuan, 2021).



Fig. 5a: MOLD Issue 05: SEEDS (2021)

Fig. 5b: MOLD Issue 01: Designing for the Human Microbiome (2017)

It is clear that there is a need for designers to inquire about food not only as a form of sustenance, but food as a symbol for relationships humans have with each other and the world. This is true of the relatedness of food, about the networks, and about "the inbetween-ness of food". Sonderen, who like the anthropologist Counihan mentioned earlier (on pg.8), comments that the way we approach food is "the mirror of our human relations towards the matter(s) of the world. Designers therefore can and should concentrate on all kinds of aspects of the big chains that (in-)forms food" (2020, p.32).

Our relationship with food and its practices are closely connected with rituals, customs, behaviour, status—in short, with the implicit, cultural codes of a community or society. The link between functional basic needs and the semiotic and embodied aspects of food makes this an interesting but complex field of research. It is precisely here that design along with various forms of research can contribute to a desirable future for our food, "one in which there is not only sufficient food for the entire world population in the physiological sense, but in which food also contributes to the resilience, inclusivity and cultural cohesiveness of communities" (Van den Eijnde in Sonderen, 2020, p.64). This section presents these two fields as linked entities, describing valuable insights to be noted in the research of food through design. I argue that this form of alternative and idiosyncratic inquiry of the 'wicked

problem' that is food can be especially beneficial and explored in the field of Critical Speculative Design, which will be discussed in the following section.

2.2 Critical Speculative Design

Over the past several decades, the designer's role has expanded from its purely problem-solving role, with the emergence of more 'conceptual' design practices such as speculative design, discursive design, design fiction all under the umbrella term that is, critical design. These forms of design don't solve problems but pose questions and act as catalysts for thinking and discussion. Rather than utility or aesthetics that usually are championed in design, their ultimate aim is to inspire reflection upon challenges society faces through design methods of research and presentation. This section will attempt to discuss the topic of critical design, in particular speculative design, and its relevance as a method of discussing contemporary discourses surrounding food.

Designers Dunne and Raby have been the most articulate proponents of the idea of "critical design". Their work defines the term as "a form of research aimed at leveraging design to make people more critical about their everyday lives". The design duo suggests that one way to overcome the complex problems of today is by changing our values, beliefs, attitudes, and behaviours (2013, p.2). As mentioned in section 1.3, food relates to various discourses at play in current society and therefore can be challenged with the use of critical design. Dunne and Raby emphasise that the basis of this practice is by being sceptical of what is a given; "about thinking through design rather than through words and using the language and structure of design to engage people" (2013, p.35).

It is important to note that the term 'critical design' can be expressed in many ways. (Francisco Laranjo, 2015). These terms include; critical design, speculative design, interrogative design, design-for-debate, radical design, conceptual design, design fiction, future design, discursive design, to name a few, all with subtle distinctions between them (Auger et al., 2021, p.70). It is this ambiguity that possibly turns both the public as well as designers themselves away from the potential and importance of this type of design to the world. In this essay, I will not attempt to provide a "pure" or "correct" notion of critical or speculative design and the differences between the variations, but rather focus on what is at the root of them all. In this case, that is the inclusion of the public in the re-thinking and dialogue (Mitrovic, I. & Šuran, O, 2016, p.9) of ideas that are ideologically, socially, and/or psychologically charged (Tharp, B. & Tharp S., 2015). Design can raise awareness, provoke debate, and make people think and reflect on when it comes to food, its practices and systems.

Critical Speculative Design expands the critical practice towards imagination and diverse visions of possible future scenarios (Mitrovic, 2016 and DiSalvo, 2012, p.109) [Fig. 6] using design as a medium to challenge. Its foundations lie in discursiveness (analysis, reflection, examination of various possibilities, anticipation and so on). At times provocative and at other times whimsical, the work is "the use of designerly means to express foresight in compelling ways with the intention of engaging audiences" (DiSalvo, 2012, p.109). Speculative design practice should be understood as an attitude, an approach open to various methods, tools, techniques and instruments as well as other practices and disciplines. It attempts to anticipate the future and at the same time helps us to re-think the present (Auger et al., 2021, p.69-70).

"Speculative design thinks about current laws, political systems, social beliefs, ethics, values, fears and hopes, and projects how they can be translated into future material expressions and embodied into the material culture" (Gorjanc, 2019 cited in Auger et al., 2021, p.74).



Fig. 6: Diagram describing traditional design vs speculative design, (Mitrović, 2016)

Therefore, when we look at our current relationship to food, and the various discourses surrounding the future of that relationship, Critical Speculative Design can operate as a tool for reflection and discussion. Food can serve as a subject, a starting point for critical thinking. Instead of food drifting into the space of being self-evident and banal, design can bring food into the focus of discussion. The last section will provide two examples of speculative design works that highlight food discourses to provoke discussion and thought.

2.3 Representations of food in Critical Speculative Design

Design can play, and is already playing, a critical role in rethinking the future of food. In the space of critical speculative design practice, the most notable works are those of Dunne & Raby. The project, *Foragers*, was developed in response to the looming overpopulation crisis and food shortages. The UN has predicted that we will need to produce 70 percent more food in the next forty years to feed a population of nine billion by 2050 (Silva, 2018). However, when we continue to overpopulate the planet, use up resources and ignore warning signs, *Foragers* suggests an interesting solution by highlighting the potential of synthetic biology to modify human digestive systems. Inspired by herbivores, humans can maximise the nutritional value of their urban environments through devices that function as external digestive systems (Dunne & Raby, 2013, p.151) [Fig. 7&8].



Fig. 7: Foragers - Augmented Digestive System and Tree Processor, Dunne & Raby. (2009)

The pair took a multidisciplinary approach in researching and creating the four fibreglass models paired with a two-minute video that illustrate this novel approach to future food. "We were interested in this idea that rather than changing the environment we should begin to change ourselves," says Raby. "On one level that's literal – changing our digestive system – but also changing our values and attitudes, our relationship with limited resources" (ICON Magazine, 2011). *Foragers* captures both the real and the not-real using the visual language of design to convey a seductive and ambiguous plausibility (Dunne and Raby, 2013, p.104). This project provided new insights into the application of speculative design to complex discourses regarding our relationship to food, and contributed new ideas to debates about the future of farming and food production by broadening imaginative scope.



Fig. 8: Foragers - Various Processing / Digesting Devices, Dunne & Raby. (2010)

While Dune and Raby propose genetically engineering our own bodies, on the other hand, the design studio, Nonhuman Nonsense suggest using biotechnology to modify our food sources. *The Pink Chicken Project* proposes changing the colour of the birds' bones and feathers to pink using the genome-editing tool CRISPR [Fig. 9a]. Since scientists suggest that chicken bones are a primary identifier of the Anthropocene, this intervention would modify the future fossil record, making the geological trace of humankind pink! (Auger et al., 2021 p.156). Chickens are the most common birds and approximately 60 billion are killed every year for food, leaving a distinct trace on the earth's crust (Ong, 2021) [Fig. 9b]. With this in mind, Nonhuman Nonsense presents this proposal as a way to warn Earth's future inhabitants about human-inflicted environmental destruction, social injustices, and political immorality through the Anthropocene (Biodesign Challenge, 2020). Paradoxically, the project rejects the current violence inflicted upon the non-human world but is itself an act of violence through the non-consensual modification of the bodies of billions of chickens (Auger et al., 2021, p.156).



Fig. 9a: The Pink Chicken Project, DNA editing. (2021)

Fig. 9b: The Pink Chicken Project, pink earth strata. (2021)

The proposal exudes qualities of parafiction; fiction presented as fact through its in-depth research and presentation which allows provocation for thought and discussion. Through methods of speculative design, Nonhuman Nonsense tells a story that lies somewhere "between utopia and dystopia where contradictions, paradoxes and humour merge" (Ong, 2021) Using design, *The Pink Chicken Project* forced its audience to dig deep into the

multiple interlocking systems of crisis and the complex ethical and political issues that underpin society's power structures; from our food choices to technological advancements and ultimately the footprint of humankind.

Both these speculative suggestions allow us to think and question both the current and impending structures of society and culture. They pose questions concerning not only our current food systems but other related topics of discussions such overpopulation, the impact of genetic engineering, and the human waste footprint. Here, both designed objects act as a focus for thinking about the subject of food. Specifically, they present a scenario that enables the public to unpack the desirability of a world presented (Auger et al., 2021, p.181). Nonhuman Nonsense suggests the intentions of their project and other speculative works alike encourage more people to "take part in discussions around what kind of societies we want, encouraging ordinary people to realise they too have a say and an impact on the planet's future" (Ong, 2021). It is through these alternative realities that speculative design manages its critique (Dunne, Raby 2013 p.49). Through this type of design, there is an aesthetic enquiry into the way the world could be, highlighting problems, opportunities and ethical complexities, all relating to food. As fittingly summarised by Matt Ward, the Head of the Design at the University of London, "critical design tries to produce material that resonates with our current cultural and social context. It responds to dynamics of discourse, markets, science and economics to reflect and advance our understanding of the human / material condition" (Mitrovic & Šuran, 2016, p.20). Using critical speculative design, these practitioners reveal the intimate link between food and culture, highlighting the role design plays in our society's various food discourses; ultimately to cultivate a rich human experience.

Conclusion

Having discussed food as a form of communication in some depth, this essay analysed the connection of food to communicate identity, especially that of the collective. The characteristic of food and food practises permeates most aspects of our lives and can be observed in a manifold of instances in culture. With food linked to the collective identity and thus social connection and social detachment, it inevitably seeps into many societal discourses. Food has the ability to facilitate and encourage these discussions and concurrently food regularly centres many topics of discussion. Furthermore, this aspect of food is discussed in respect to the field of design. It advocates for the role of design in the overall study and understanding of food as part of culture. Food and design have been intimately linked throughout history but through the methods of speculative critical design, we can encourage thinking and discussion around food and discourses that relate to food.

Despite the quintessential nature of food and our identities surrounding it, its impact and influence has been largely presumed without rigorous research. Examining this concept with a critical mind helps us to better understand the role of food in our lives and how food in turn impacts our lives through its cultural impacts. The pervasiveness and complexity of food makes it all the more interesting subject to research. Of course, this exploration into food as a communication device in this essay is not exhaustive and there are many other things that could be discussed, including food and its links to memory, immigrant identity and motherhood. This essay establishes the foundations for examining food as a communication medium and builds a framework through which future studies can be developed. The understanding that food is a powerful communication medium is indispensable and in order to use it actively and accurately we need further research and exploration led by a variety of disciples including artists and designers. The study of food through design can lead to a

deeper understanding of both the fields of design and food as creators of culture. Inspired by the words of the legendary designer, Robert L. Peters, it can also be said food along with "Design creates culture. Culture shapes values. Values determine the future" (Medium, 2019).

Appendix

Appendix A: Conversation with LinYee Yuan (Tuesday 14/12/21 15:00 GMT/10:00 EST)

LinYee Yuan is a design journalist and the founder and editor of MOLD. MOLD explores how designers can address the coming food crisis by creating products and systems that will help feed 9 billion people by the year 2050. Yuan graduated with a Bachelor's degree in Asian American studies from Columbia University. In 2013, Yuan created MOLD and in addition to the website and a self-published bi-annual print magazine, MOLD hosts events and exhibitions, works with next generation food brands, and commissions products from emerging designers. LinYee was previously the entrepreneur in residence for QZ.com and an editor for Core77, T: The New York Times Style Magazine and Theme Magazine. She has written about design and art for Food52, Design Observer, Cool Hunting, Elle Decor and Wilder Quarterly. She is currently based in New York.

Q: What led you to first initiate the idea to create MOLD and create such a large body of work centred around food. How did you become so deeply interested in food?

A: At the time when I was covering industrial design I noticed that there was no one really writing about food design. It was still very much in emergence. It still is, I would say, an emerging field. And it's quite misunderstood, I would say. As somebody who is passionate about food, I was really curious about these projects that were coming up and so I started looking into it and decided to start my own website. It was just a side project on the weekends just for some fun. Through that, it just became increasingly clear that there was actually a very urgent topic of conversation to be had. Actually through a student project that I was writing about, I realised that there was a food crisis and I thought well, designers in particular are problem solvers. They are trained to ask the right questions. They are professionally trained to work in an interdisciplinary way. I thought they would be very well situated to be part of the conversation and really have a seat at the table when talking about food. It shouldn't just be policy makers or retailers or farmers. They shouldn't be the only ones talking about that. And so that's kind of what shifted the focus of the editorial into a really a more urgent conversation around what the shape of the future of food might be.

Q: How do you think designers play a role in informing and enlightening the wider audience about the concerns around food? How does design play such an important role for food and industry and how can we branch out as designers to get more people talking and engage with food?

A: I think a lot of it is going to come down to publication and the work that designers themselves do. I think it's about using the professional skills that you are trained with which is about working in an interdisciplinary way to really explain to people why it's so critical for designers to be part of that conversation. I think part of that is the way design is turning to

which is a) working for the (Audio cut off) b) the design process of that research is really critical c) the way designers are taught to sympathise with information and produce something that can take many shapes. I also think that designers are trained to ask a lot of questions which I don't think a lot of professions are based around question-asking...This is a very critical tool in a designers toolkit. Designers have conversations around concordance with large scale design and what that looks like and why that's important. It's a conversation they've been having for a while and I think that the world is just catching up with that conversation. Even human- centred design has been such a dominant and I would say kind of a masculine approach to design and all these women would watch (Audio cut off) I would argue that its feminie design that is coming out and these new ways of reading into the world and being able to connect it all these things.

Q: Thinking about food, identity and personal connection to food. I'm interested in knowing more about your own personal journey with food. Could you maybe talk a bit about that ? Like growing up and childhood memories.

A:I'm a first generation in the US. My parents immigrated from a different country and settled in the United states. I think food has always been a connector to my ancestral roots. So for my family,food is really important as a way of placing our identity and where we come from. And going to the chinese grocery store like every other week with my family, or driving across town was part of our rhythm. I definitely feel a connection to other first generation people in the US because of our conversations and our experience of being different. Also my mother is a nutritionist and my father was an avid gardener and so I just always had a very healthy relationship with my food. I think when I understood that growing food was something that people could do in their suburban homes. I think all of those things set me up for understanding the cultural importance of food which is why I think that now I've really come to see food and what it looks like now. It is this type of doubling down on this visual cuisine and culinary opportunities, really listening to the land and what it can actually provide. I think these values come from my experience growing up.

Q: I'd say I'm very similar to you being an immigrant myself. For culturally diverse communities food plays a prominent role. Many of our memories are tied to food and I was wondering if you have any specific memories tied to food?

A: I don't know what my first memory of food was but I can just say that my whole childhood was very much revolving around food and food memories and sharing food and flavours. I think that these bicultural multicultural children being shamed around something that they eat, it just makes me and still makes me really sad that it is still a narrative that we have to kind of visit. Because that's all about the colonisation of food right? and I think finding joy in all different types of food, the beauty of so many different ways of approaching food and flavour. That to me is actually the key to the future of our food. It's like we can not expect to eat avocados 365 days out of the year, there shouldn't be that expectation, it's a really false one that industrialised systems have planted into our minds. This idea that texture, flavour and all of these kinds of other facets of food to find joy in those things is so critical to human being viable. It's really interesting my daughter has a food allergy and im breastfeeding now so I have to cut of all of these food that I love and it's been really

interesting because I'm exploring this world of dairy free ,nut free food that are I've written about but never fully embraced because i love cheese and eggs and nuts. And now I'm living in this other world. What I've realised is that I've fallen back on the foods I grew up on which happened to be dairy free, predominantly nut free and egg free. I now eat congee rice porridge every morning with dried fish and pickles and green onions and vegetables. All these things that I grew up eating and none of these things have dairy,eggs or nuts. It's been really interesting to revisit this culinary foundation that I have because of the lifestyle shift I needed to make. I think that a weird small example but I do think there is going to be a world in the future where certain things that we might have relied on as staples in our diets for example avocados, might not be readily available and honestly shouldn't be. So can we draw on our diverse culinary backgrounds and find joy in not replacement but like other things we should be eating. Just little things like that are really important.

I do think as the world shifts to become more multicultural and become more educated about different food and practices, it's a huge factor in how we change our perspective on food and the food crisis.

Appendix B: Glossary

| Term | Definition |
|---------------|---|
| Self-evident | A fact or situation that is clearly true and requires no proof or explanation. |
| Semiotics | Semiotics is an investigation into how meaning is created and how meaning is communicated. Its origins lie in the academic study of how signs and symbols (visual and linguistic) create meaning. |
| Discourses | A spoken or written communication between people, especially serious discussion of a particular subject. A system of thought, knowledge, or communication that constructs our experience of the world. |
| Semantics | The study of the meanings of words and phrases in language and in a particular context. |
| Greenwashing | A superficial or insincere display of concern for the environment that is shown by an organization |
| CRISPR | A powerful tool for editing genomes, meaning it allows researchers to easily alter DNA sequences and modify gene function. It has many potential applications, including correcting genetic defects, treating and preventing the spread of diseases, and improving the growth and resilience of crops. However, despite its promise, the technology also raises ethical concerns. |
| Idiosyncratic | A characteristic, habit, mannerism, or the like, that is unique or peculiar to an individual. |

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