

Designing for sustainability: a dialogue-based approach to the design of food packaging experiences.

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Abstract: Packaging plays a vital role in making products competitive and our lives vibrant and interesting. This paper investigates the design process of food packaging as an artifact that aims to co-create meaning entwined with the values of sustainability through designing propositional artifacts. These are artifacts that embody issues of concern and can help us reflect on their implications. A case study is presented where the aim of communication-through-packaging was to disseminate the values of sustainability in various ways, by informing and motivating consumers to change their buying habits, encourage packaging reuse or upcycling, and embrace authenticity, quality and locality in food products. More specifically case study details the development of a packaging artifact for butter beans from a unique, protected region in Greece. The tools guiding the design process were a framework of information abstraction along with Information Design guidelines. The 'dialogue based' approach refers to the co-evolution of meaning.

Keywords: packaging, food design, design for sustainability, design dialogue

1. Introduction

Design for sustainability calls for a paradigm shift away from today's unsustainable models of production and consumption. Packaging creates designed ephemera that due to their nature have the capacity to make a substantial environmental impact. The food packaging industry is well aware of the need to lessen the footprint of packaging while simultaneously maintaining their focus on issues such as product safety; product promotion and packaging ease-of-use. Much research is underway to develop new packaging technologies in this multidisciplinary area (Verghese et al, 2012). The consumer also has responsibilities beyond adopting responsible behaviours such as showing purchasing preferences for sustainable packaging and re-using/recycling packaging. An example might be that of actively



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supporting local food producers in order to reduce the logistical footprint of products, etc. Trying to reconcile these aims, and others that emerge, requires good thinking tools for designers that can help encompass, as far as possible, such aspects of the overall problem space that make up the sustainability debate.

In this investigative paper, we propose a way to approach the design of more sustainable packaging by using a four layer abstraction model. Through this we investigate visual myth; explore a craft approach; and make use of information design in order to set about creating packaging that embodies the values and meanings associated with sustainability in a material form. The material aspect of the product is the basis on which the user experience will be built, and it should encapsulate the values and goals of the design brief. More complex meanings will emerge through a dialectic process with the product, while visual myth and information design can help guide those meanings to be translated into a new understanding of sustainability. This method aims to provide a more holistic approach to designing food packaging whose purpose, besides those of protecting and transporting the product safely, also aspires to trigger behavioural change towards a more sustainable everyday attitude to food production, consumption and packaging. The MSSA model was adopted as a vehicle to negotiate the creation of meaning associated with sustainability given both its contested and emerging characteristics that create the need for dialogue towards a consensus of what it is and how to get there.

2. Meaning, Semantic, Syntactic, Artifact (MSSA) Model

Packaging can be perceived a means of communication between the producer and the consumer. This communication takes place on many different levels simultaneously. In order to better analyse and model this process of communication, the MSSA framework (Bofylatos & Spyrou 2016) was adapted to the context of packaging. The framework proposes the use of four different layers of abstraction of information in order to facilitate the creation of shared meaning through dialogue. These layers are at the level of meaning, of semantics, of syntactics and of the artifact. Communication modalities and the types of concepts are different at each level.

This model is grounded in the idea of the “holistic reconstruction” of the design process. Given that “the whole is larger than the sum of its parts”, deconstruction into layers of abstraction can lead to the fragmentation of information and the loss of its richness. In order to avoid this loss, the mechanisms of reframing and emergence have been adopted when switching between layers.

This framework enables and encourages a robust communicative context for the design process, for cases where the design refers not just to the qualities of the product, (the packaging) or the service it is to perform (protect, promote the contents of the package), but to the system that these are to operate in. In the case considered here, sustainability is a wicked problem (Ehrenfeld 2008), requiring the creation, maintenance and management of consensus during the design process. Dialogue is central to consensus and when successful,

triggers the co-evolution of high level meanings and shared understandings, which is a requisite for a successful co-design process, the creation of shared meaning with different stakeholders.

In the context of this case study, the different layers of meaning, values and information embodied in the packaging were taxonomised into the different layers of abstraction. The notion behind the process was to synthesise different design principles associated with packaging design and with creating all the different dimensions of the product.

In this way, the meaning layer is associated with sustainability and creating understandings about how to transition towards this shift. This type of meaning is tied in with wicked problems thinking (Rittel, 1972) and due to its wicked nature it is impossible to define, since defining a wicked problem is in itself a wicked problem. The semantic layer is associated with branding and the visual myth of the product and the transfer of implicit meaning. It is about communicating the values associated with sustainability in a non-verbal way. With the syntactic layer, communication takes form through explicit meaning designed using methods from information design. The goal of this information is to be combined with the visual elements of the semantic layer to lead to the emergence of new meaning about sustainability. Finally with the artifact layer of abstraction we look into the physical aspect of the product and how the tacit knowledge embodied in the materials and processes chosen can supplement this process of communicating the values of sustainability.

2.1 Meaning layer

This layer is made up of the inexpressible ideas that are associated with sustainability. Sustainability, besides being a wicked problem, is a widely contested concept and a wide spectrum of approaches refer to themselves as sustainable. Eco-modernist approaches such as Life Cycle Analysis or CO2 footprint analysis aim to optimise the production process of goods and service without challenging the ideas that created and foster today's unsustainable consumption. On the other side of the sustainability spectrum we find radical interpretations of sustainability such as transition design (Irwin et al., 2015) and sustainment (Fry, 2004), these ideas recognise a need to shift away from the modernist system of values and work towards restructuring human society through the reconstitution of the domains of everyday life (Kossof, 2011) The main challenge when dealing with emerging phenomena is that they can only be partially described, as the emergent variety (Bofylatos et al., 2012) does not exist and we can only speculate about the characteristics it might have when emergence takes place.

In order to better understand the meaning associated with both the product and its packaging seen as a whole, an analysis of different types of meaning was undertaken using the quadruple bottom line (Walker, 2011). The quadruple bottom line recognizes four types of meaning: personal meaning associated with spirituality, imagination and inner meaning; social meaning associated with social norms, morality and empathy; practical meaning associated with practical issues such as covering the basic needs for survival. These three

types of meaning are nested within the existing economic model and thus give rise to the fourth type of meaning, the economical meaning. However, in contrast to the traditional model, economic gain is not the main goal of this meaning, but a side effect of creating sustainable artifacts. Uncovering these types of meaning in a particular context, that of food packaging, can help to make emerge an overall meaning for sustainability in that context.

2.2 Semantic layer

The communicative power of packaging at a symbolic level is well understood and manipulated (Estiri et al., 2010). It is used to distinguish brand and to promote marketing information. Product packaging is capable of influencing the identity of the product brand and also the self-identity of the consumer. It influences brand and self-identity via the lived experience of handling the packaging, having it in the home, where it may even be on display. In addition, it offers experience mediated by advertising. (Underwood, 2003, Venter et al., 2011, Verghese et al., 2012). In advertising, packaging is critical to the communication of the "promise" of the product experience prior to the sampling of the product, where imagery and other symbolic representations of ideas can evoke a wide range of responses, from feelings and memories to those involved in sensory effects like smell, or taste (Underwood, 2003). In the turn towards sustainability, we need to shift the narrative of advertising from promises about the product to including messages about contributing to sustainability.

Using the language of myth, i.e. stories that reflect a collective, cultural, subconscious understanding and expression, we can point to meanings, but these meanings will be ambiguous and open to interpretation (Walker, 2006, p.104). Outer appearance means very little when using the symbolic language of metaphor and myth and what really matters is what lies behind the appearance. In this sense branding and visual myth, aim to trigger the co-creation of implicit meaning through non-verbal communication. The visual myth is a means developed to acknowledge and express ideas about the roots of our design decision making, (Walker, 2006, p.101). In this case it provides a 'way in'; it allows a deeper understanding by adding to the dialogue already started by the original design work. Thus, the visual myth supplements the design object; refers to the creative process behind the designed object; is impressionistic, ambiguous and holistic and refers to, but does not explain, a creative experience, in the same way that the language of scripture, myth, fable and parable are symbolic so that literal meaning loses importance (Walker, 2006, p.101).

Designers are exhorted to implement the cultural wants, preferences and attributes of people into the products that they create, in order to make them culturally suitable and pleasurable for use by all potential users. The dissatisfaction of consumers who use products can be linked to the globalization concept (Razzaghi & Ramirez Jr, 2005). Increasingly, consumers notice the gap between actual and desired pleasure when they consume products and thus their need for authenticity in products emerges. Authenticity becomes an evaluation and decision-making criterion that guides their choice (Liao & Ma,

2009). Consumers prefer product with authentic attributes such as originality, quality commitment and credibility, heritage and style persistence, scarceness, sacredness and purity. For them, authentic products not only satisfy their quality request, but also provide unique values such as assuring them of a healthy and sustainable life or providing them a meaning of sanctity.

Authenticity is a subjective term, but there are societal statements that consumers gravitate toward, and these can be valuable tools in packaging development. What brings out authenticity in packaging is origin; values of the people related to product development; components that build interest, especially in the natural; and nostalgia that makes it memorable (Higgins, 2011).

2.3 Syntactic layer

Information design is “the defining, planning, and shaping of the contents of a message and the environments it is presented in with the intention of achieving particular objectives in relation to the needs of users” (IIID, 1997). Information design goes beyond text and image to design information to be better organized and presented, understandable and satisfying when reading/viewing it. At the same time, images are considered highly effective means of communication “Visual communication is universal and international; it knows no limits of language, vocabulary, or grammar and it can be perceived by the illiterate as well as the literate” (Kepes, quoted by Sless, 1981). Of course, it is necessary to take account of the complex institutional and social frameworks within which the packaging is expected to function, and that are inhabited by the prospective buyers of the packaged product.

In the context of sustainability, a product’s values and local culture are an integral part of the message to be communicated through packaging to the consumer. Information design in packaging design is used to communicate values, cultures and ideas as well as the mandated nutritional information. The communication on the syntactic level is associated with complicated notions, but not complex ones (Glouberman & Zimmerman, 2002) and in this sense, design can create the stepping stone of meaning transfer though the use of explicit reference to the values of sustainability, in contrast with meaning transferred through the semantic layer which is implicit or the artifact layer where the meaning emerging through knowledge transfer, is closely tied to tacit knowledge.

The packet is a designed sign and all of its aspects, both physical and semantic, can ground the product to the shift both in theory and practice of values associated with sustainability.

2.4 Artifact layer

The artifact layer of the MSSA model refers, in the case of packaging, to the physical world. Central to the new discourse on sustainability are the study of material culture and new ways of looking at artifacts. Moving away from the mass produced object and adopting a craft approach alleviates parts of the “malaise of modernity” associated with the production of goods. Embodied knowledge created during the process of crafting is a form of tacit

knowledge associated with material that “*can only emerge when engaged in a dialectic process with the material*” (Massumi, 1992, p.14)

”The qualification of craft practice is neither predicated upon established hand working, machine based skills nor new methods which employ advanced technology but rather on the articulated relation between hand and mind in making which secures a direct human presence, as the loci of power and knowledge, in the made”(Fry, 1994 p.97).

This is reminiscent of Heidegger’s essay “The question concerning technology” (Heidegger, 1977) where the differences between mass production and techne are outlined in the sense that the artifacts produced through this process are engaged in “concernful dealings”; a form of agency that aims to carry out particular functions. Thus what defines our social relations is in large measure prescribed back to us through artifacts:

”knowledge, morality, craft, force, sociability are not properties of humans but of humans accompanied by their retinue of delegated characters” (Latour 1988, p301).

Craft, therefore, is an activity which facilitates a certain experience of being in the world. Shifting from a ‘Having’ way of being in the world to a more authentic way of ‘Being’ in the world is central to the transition towards sustainability. Therefore, craft can be understood to be more than just an activity of making functional or symbolic objects. It is a process of co-creating tacit knowledge (Cross, 2006) and a way of creating propositional artifacts that challenge the existing model of ‘thingness’ and put forward a conscious use that aims to reconstitute the holon (Kossof, 2011) with respect to material culture.

In the context of packaging, we are looking at design ephemera with a very high degree of planned obsolescence. This creates the need for a strategy selection that fosters the creation of a long lasting bond with the artifact through re-use and upcycling while at the same time taking the traditional, local craft practices into account. In the following case study we attempt to present such a process in which packaging was approached in a holistic manner and communicating meaning on every level was the goal. Designing ways to transfer tacit implicit and explicit knowledge via the packaging was motivated by wanting to investigate how this process will lead to the emergence of new meaning associated with sustainability.

3. Case study

The case study describes the design of a food product packet undertaken with the goal of promoting sustainability. The product selected is butter beans cultivated in a protected geographical region of Greece, the Prespa lakes. It is a product that is produced using ‘sustainable’ means, it is strongly connected to the local society and an integral part of Greek food culture. The need to find a suitable packaging for this product was identified due to the fact that this product comes in plastic bags for supermarket shelves. Local or organic food products tend to not come in sustainable packaging. It is more likely to see the use of plastic bags or ‘monstrous hybrids’ ,packets made of materials that are biodegradable and

recyclable resulting in a product that is impossible to have no impacts at the end of its lifecycle, (McDonough et al., 2010) which has no connection to local culture and negative environmental impact. We wanted to try to harness the communicative power of packaging to promote a new material culture tied to the principles of sustainability.

3.1 Methodology

The design process model chosen was that of Ulrich's which decomposes the design process into four steps: sense gap, define problem, explore alternatives and select plan (Ulrich, 2011). In this case study these steps were roughly followed, allowing for some adaptations had to be made. This was one of many possible candidates. It was chosen for its ability to be easily communicable to, and graspable by those involved in assessing the packaging project and those who were to evaluate the prototype packaging artifact. In this way it was to indirectly contribute to the understanding of whether, what and how sustainability meanings were created.

3.2 Sense the gap

The packaging design activity began with the 'perception of the gap' in the consumer understanding and experience of packaging. The designers approached food packaging holistically and noted various problematic situations ('gaps') that could be improved.

As an example, it was established that protected local food products, that is, those designated as PGI (Protected Geographical Indication) are not always packed in sustainable packaging which leads to a lack of meaning and experience for the consumer. In addition to this, a number of problems associated with packaging of local food products were identified, some of which were:

- Economic issues such as small scale production and lack of resources for packaging acting only as the means to protect and transport the product
- Greek culture being represented badly or not at all by Greek product packaging
- Consumers being bored by the 'sameness' of product packaging

While it is clear that a food product packaging cannot in itself be the solution to these problems but design for sustainability as a holistic approach can help designers recognize issues in the economy, society and environment where products are situated, and attempt to propose sustainable alternatives.

3.3 Define problem

To this step belongs the identification of consumer needs and the goal definition. Six design principles were developed in order to understand what designer wants to achieve through the packaging. These were expressed in such a way that they can be used in all development phases. These design principles were visualised in a hexagonal scheme and would become the design criteria for the final design evaluation.

3.4 Exploring needs

Firstly, consumers need to be persuaded of the product's quality and benefits before they purchase it. In this phase packaging plays a major role of communicating the product's and producer's values and the facts that makes this specific product unique.

Economic issues in sustainability theory are equally related to practical, social and personal meaning. This calls for packaging sustainably designed, i.e. a design with minimal environmental impacts; locally produced using available materials and human resources; endowed with elements that responding to people's personal values and ethics (Santamaria et al., 2015).

Greek culture is many times not represented by design attempts in food packaging. Consumers tend to want both their country's history and culture represented. Culture is not only based in historical facts but also core ethics and habits in lifestyle and this has to be communicated by the packaging. Fostering and communicating culture is an aspect of sustainability associated with locality.

Consumers want proof of authenticity. They are surrounded by a plethora of products and they want and need to recognize which ones are authentic and unique in what they offer in terms of experience that is not available in other products (Schwartz, 2004). Sustainable packaging design can act as a very effective strategy for differentiation. Furthermore, it encourages consumers to become more selective. They buy products that represent and match their personality. Packaging could have an additional functionality, to become something that the consumer would become attached to regardless of the product inside the packaging.

3.5 Project goal

In the literature on packaging design, packaging is variously seen as a means to communicate branding; entrepreneurial values; product characteristics and properties. Our process of creating packaging artifact proposes communicating product characteristics and information, but also the values of sustainability.

Design projects treating wicked problems utilise 'quasi-subject matter' (Buchanan, 1992), meaning that the design team has to form the boundaries of the problem. Here, six packaging design principles were adopted as a means to tackle the problem space in a holistic way, allowing as well for the interactions between them to be taken into account during the decision making process. In this case the chosen principles were:

Communicating values of Sustainability: The proposed packaging must communicate, highlight and embody the values of sustainability by referring implicitly to practical, social and personal meaning. The designer should not be pedantic about sustainability but find a way that the final packaging design shifts from consumerism discourse to the sustainability discourse (Santamaria 2015).

Locality: The design proposal must make use of the locally available, raw materials, have small and controlled production and give alternatives. It should embrace local culture and aesthetics in a more honest and natural way. It is important that the packaging production depends on local human resources that are flexible and skilful.

Consumer's behavioural change: In the context of sustainability there is a need for packaging design that creates a steady, heartfelt relationship with the consumer, a two-way relationship which reduces environmental waste and promotes reuse. Fostering this type of relationship with packaging can encourage consumers to make more conscious and authentic choices.

Design balanced between visual and information elements: Guidelines of information design on packaging remind the designer that information is not only about graphic design. Designers should decide what to visualise and what to present as text. The final design proposal will disseminate local values (social meaning) and promote authenticity (personal meaning) but also display the necessary food information (practical meaning). Consumers should be able to find the information they need although packaging elements are designed harmoniously. In this holistic approach the designer combines cognitive, sensory and aesthetics values. The materials chosen are also a very important part of the process as tacit knowledge will be created by their embodied properties. Materials are the basis of the experience of both designers and the final user/consumer and in this sense material selection is a quintessential part of customer experience in the context of packaging design for sustainability.

Packaging as an experience: Design creates emotions and mediates an experience with the consumer before they reach the product enclosed in the packet. Attention to the packaging's functionality so that is more friendly and easy to use and interact with. Semantics and Semiotics help with packaging form, material and textures in order to trigger senses.

Highlight cultural characteristics: Packaging should highlight local, unique and authentic elements of the product's culture and satisfy consumers seeking authenticity. It can be connected with tourism and visitors hoping to experience something unusual. They could buy it and include it into their everyday life, to bring back holiday memories. At the same time, the final design should make the product competitive and also provide a clear picture of the product's origins.

The six Packaging Design Principles are visualised by using these principles as dimensions in a hexagonal polygon. The degree of integration of each principle is expressed as a number from one to ten and then is used to define each point of the polygon. This visualisation gives us the clue that the angles of the shape show us how inclusive of all principles the frameworks is, a more rounded shape means that all principles are considered to a similar the same degree (Bofylatos et al., 2012).

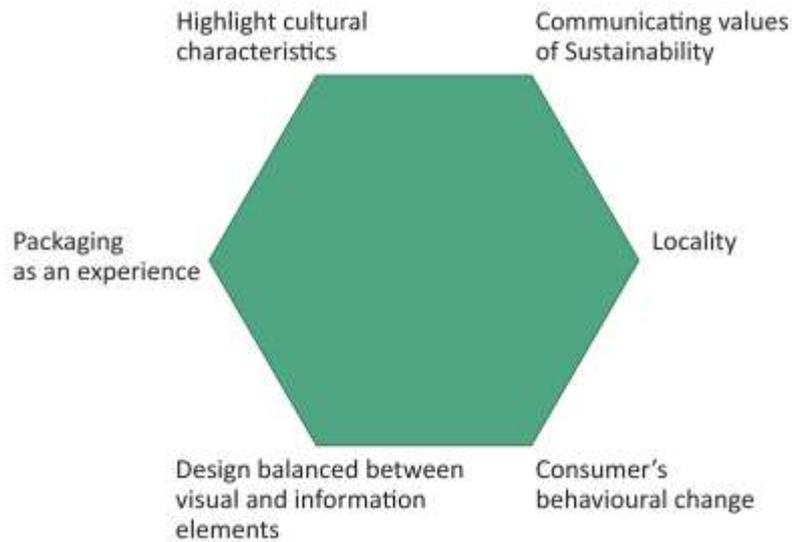


Figure 1 Six Packaging Design Principles visualised in hexagonal model

3.6 Explore alternatives

Given the principles, research was made in several scientific fields (sustainability, information design, marketing, management, product design, and semiotics) in order to select those best practices that would be useful and enlightening in designing food packaging that would communicate sustainable values, while information design was helpful for ways to communicate those values.

4. Design steps

Information about the product was collected, as well as existing packaging types. A collection of some of these is shown below in Fig 2.



Figure 2 Aesthetics inspiration

4.1 Select plan

In this project, which was carried out for research purposes, the design for the packaging artifact embodies bibliographic conclusions, tacit knowledge and values of sustainability. The artifact was not targeted to a specific customer (producer, manufacturer) but acted as a vehicle of exploration of sustainability and information design in packaging.

Consequently the graphics (logo, label, information card) and visual elements were designed as well as a prototype packaging. This included choosing the materials and testing the relationship between graphical and physical elements. After several iterations of combining all the elements, improvements were made in order to create a more realistic and self-explanatory artifact in the sense that it should not only embody the values behind the

product but the necessary information as well. The final design is a propositional artifact that aims at to compiling all levels of meaning into one entity.

The designed logo indicates the meaning of small sack (Greek tr. 'tsouvalaki') which is used by farmers to carry pulses in open markets so that consumers may buy in bulk and remains simple to avoid overshadowing the whole front label. Fonts that give the sense of handmade packet have been chosen for the rest of the label. The circular label on the side acts as a reminder of reusability and confirms that this material is the appropriate to store pulses. It also gives the main information about the product inside which is its actual size and what it looks like, due to the opaque material of the packaging.

On the first page of the information card the required information is presented. Inside the brochure information has been organized in the form of questions that trigger consumer to read and also with symbols and visualisations to reduce text and make information easier to remember. At this stage information is provided about the environmental benefits of beans cultivation; the dependency on workers and traditional cultivation techniques and the nutritional value of the product. In addition information about the properties of beans: pulses in general: and about the region of cultivation and its uniqueness (note: the Prespa Lakes have been a National Park since 1974). On the last page a simple but traditional recipe is presented to help consumers enjoy the product.



Figure 3 "Tsouvalaki" packaging

4.2 Evaluation

Design quality is derived from how well the artifact satisfies user needs, and thereby closes the perceptual gap in the user experience. Evaluation using a focus group of potential buyers was made after it was explained to them what the six design principles stand for. The hypothesis made was that participants would like to buy the product and gift it to a friend of another nationality, living abroad. Five people participated in a session of thirty minutes. Their ages spanned from 21 to 55 years old and they had no practical knowledge of design. The designer extensively explained the six principles of packaging design and then asked the participants to grade the artifact on their perceived fulfilment of each design principle. The evaluation was carried out through a semi structured interview using the following base questions:

- Are sustainability values illustrated through packaging?
- Do you believe that locality is promoted?
- Would you search for this kind of information and be more conscious of your choice next time you have to select food products?
- Do you think the information is well presented and organised?
- Do you find this packaging functional and/or appealing to the senses?
- Do you believe that cultural characteristics are adequately presented?

The grades' average forms the hexagon in the following figure. The hexagonal model helped the designers to understand which of the principles had been successfully communicated and which aspects could be improved.

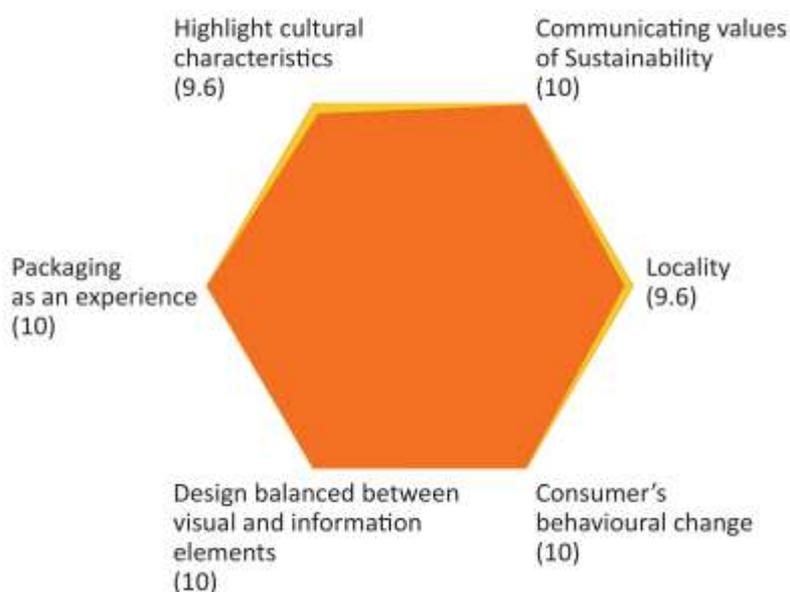


Figure 4 Average grades visualised in hexagonal model

The evaluation study also gathered qualitative comments from the participants while they were interviewed. Participants commented on the new spiritual dimension of packaging,

they were enthusiastic about some details on packaging but also they proposed some improvements of the elements they did not like. In the table below are comments as expressed by participants.

This evaluation is considered as part of this case study in design packaging. At this stage, there was a need to see the reflection of our ideas and of the artifact on other people. The goal was not to make an evaluation of the final product. Feedback was needed right in this stage in order to make conclusions for the research and the design stage.

	Interesting details	Improvements proposed	General issues
"TSOUVALAKI"	<ul style="list-style-type: none"> • use of natural, biodegradable materials • portable and useful for storage • reflects the use of product, packaging full and stretched when bought and lighter and loose after some of the product inside is used. 	<ul style="list-style-type: none"> • logo more connected to the region of cultivation (Prespa Lakes) 	<ul style="list-style-type: none"> • bonding with packaging, product and culture that conveys, expropriation • packaging implementation depending on people and collaboration • materials prepossess reuse • trigger senses • promotion of locality and preference for local products • promotion of fair trade and sustainability • co-creation of a contemporary "Greekness" (Yagou, 2012) • "educational" way of presented information showing values in general (nutritional, environmental, aesthetical) • experience in many levels (materials' originality, "educational" information, presentation and reading, potential reuse)

Figure 5 Participants' comments

5. Conclusions and discussion

The paper presents a case study using the four layer of abstraction model MSSR in the context of packaging. Using this model we were able to realise and design for different modes of communication aiming to engage in a dialogue leading to the emergence of new meaning about sustainability. This was done by designing all three aspects, the brand, the information and the physical aspect of the product in an entwined way. The emerging discipline of food design in conjunction with the ever growing demand for a shift towards

sustainable lifestyles calls for a radical redesign of packaging, a very environmentally intense resource. The holistic approach adopted in this study illustrates how different semiotic layers of packaging can be designed to communicate a more robust and diverse message to the consumer aiming to promote sustainable lifestyles, wellbeing and behavioural change. In addition to information design and communication, craft plays an important role as the product created through this process is more closely tied with the sustainability discourse than its mass produced counterparts.

As far as the final designed artifact, the potential consumers regarded packaging as innovative and thought aspects of sustainability, locality and behavioural change were very significant and useful. They expressed comfort with familiar traditional cues for the participants and pleasure with the packaging because of its material, rich culture and value of reuse. There was some difficulty in understanding the meaning of the “locality” and “packaging as an experience” design principles because of the unfamiliarity with these notions and their meanings in design. Overall, a wealth of remarks on general issues demonstrated that consumers were well aware of the communicative and evocative power of packaging and would respond to meanings and discourses around sustainability when suitably stimulated.

This paper reinforces the need for literature research and cognitive tools use in tangible design such as packaging. We acknowledge the aid of Information design beyond the graphical aspects of package labelling in the rest of its elements and attributes. We consider a very wide range of information that needed to be presented and made informed decisions about what will transform to visual or tangible elements. Adopting a craft-oriented approach added a further layer of complexity to the process of selecting appropriate materials, firstly due to locality and secondly through the integration of tacit knowledge and dialectics with the material and its properties and finally by being recognized as the basis of the packaging experience. The same can be said about material studies, branding and visual myth theory and other cognitive constructs used.

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