

## Unpacking Object Agencies in Craft Production Towards Sustainable Development

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### ABSTRACT

*Sustainable development (SD) is a global agenda that needs multi stakeholders participation to ensure it reaches the goals, including craft and design practitioners intervention. It shall begin with understanding what a certain kind of sustainability means at the practical level. Learning that traditional craft practice reflects the SD principles and the significance of objects as agencies, this paper unpack the kinds of objects in craft production and its agency endorse sustainable development principles. It used multiple sources within one research design by triangulating the data from multiple data collection methods: designer interviews; field research in a bamboo craft production in Tasikmalaya (Indonesia); and in a glassblowing workshop in Chicago (North America). The result shows that objects, such as material, tools, and space contribute to the harmony of social, environmental, and economic systems. Objects 'kick back' formulates production constraints in material sourcing and treatment, and capacity of production. It facilitates social capital that strengthens the social system in the community, and shapes craft production to focus on well-being instead of great income. Object agencies in craft production could inspire design intervention in sustainable development.*

Keywords: Objects, Agency, Craft, Sustainability

### ABSTRAK

Pembangunan Berkelanjutan (PB) merupakan agenda dunia yang membutuhkan partisipasi dari pemangku berbagai kepentingan, termasuk keterlibatan dari praktisi desain dan *craft*. Hal ini harus dimulai dengan memahami apa arti keberlanjutan dalam setiap tingkatan praktek. Praktek *craft* tradisional mencerminkan prinsip-prinsip PB dan pentingnya peranan objek sebagai agen. Artikel ini mengurai objek-objek dalam produksi *craft* dan peranannya terhadap prinsip-prinsip PB. Penelitian ini menggunakan metode triangulasi yaitu menyilangkan data yang diperoleh dari beberapa sumber: wawancara desainer; penelitian lapangan pada produsen *craft* dari bambu di Tasikmalaya (Indonesia); dan pada sebuah workshop kaca tiup di Chicago (Amerika Serikat). Penelitian ini menunjukkan bahwa objek-objek, seperti material, peralatan kerja, dan ruang berperan mewujudkan harmoni dari sistem sosial, lingkungan, dan ekonomi. Objek memberikan respon yang mempengaruhi cara pengelolaan sumber material dan pengolahan material, serta penetapan kapasitas produksi. Objek juga memfasilitasi diperolehnya modal sosial yang memperkuat sistem sosial dalam sebuah komunitas, mendorong produksi *craft* untuk berfokus pada kesejahteraan (*well-being*) daripada sekedar kekayaan finansial. Pemahaman atas peranan objek pada praktik *craft* dapat menjadi inspirasi bagi praktisi desain untuk terlibat dalam pembangunan berkelanjutan.

*Kata Kunci: Objek, Craft, Pembangunan Berkelanjutan*

## INTRODUCTION

In the past decades, growth-based economics challenged, then the goals have evolved from growth to sustainable development. It positions the economic system integrated with ecological and social systems. When economic goals focus on sustainable development instead of growth, we must adapt our practice to facilitate the economic, ecological, and social systems integration towards sustainability. Peter Lloyd (2019) suggests that the practice should not only focus on achieving more sustainable outcomes but also on breaking down the components of what a certain kind of sustainability means at the practical level [1].

Traditional craft practice embeds social interaction, and environmental care in the production that reflects the sustainable development principles. There are two main components in craft production, human and non-human (objects). Many scholars discuss objects' agency in the making. They mentioned that the material can be witnessed in sets of ideas [2] and as actors it plays roles in craft [3]. Scholars also discussed how objects and space shape a culture of work and social interactions [4-5]. However, object agency discussions do not explore its relations with the sustainable principles. This paper will unpack the kinds of objects as the component in craft production and its agency that endorse sustainable development principles.

### Craft and Sustainable Development

Sustainable development discourse started in the 70's when the environmentalist argued that the modern growth-based economy was unsustainable on a finite planet that elaborated in the 'Limits to Growth' (1972) and Schumacher's 'Small is Beautiful' (1973) [6]. As a response, Ignacy Sachs (1978) proposed the 'Eco-development,' a development approach that harmonizes social and economic objectives with ecologically sound management, in a spirit of solidarity with future generations [7]. Edward Barbier (1987) articulated the development process as an interaction among three systems: the biological (and other resources) system, the economic system, and the social system [8] (Figure 1). In 2015, Jeffrey D. Sachs described sustainable development as a way to understand the world as a complex interaction of economic, social, environmental, and political systems. His research found out that income per person (GDP per capita) is not the only aspect of happiness. The second major reason for happiness is "social capital" [9], which is defined as the resources that are available to actors as a result of maintaining those relationships or the "durable network" [10]. It consists of a sense of belonging, trust, reciprocity, working culture, norms and values [11]. Sachs also emphasized that the overriding goal is not income but life satisfaction and well-being.

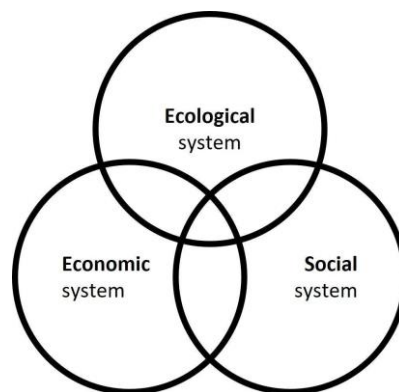


Figure 1. Edward Barbier's sustainable principles: Ecological, economic, and social systems harmony

In traditional craft, social interaction, and environmental care is embedded in the practice. Sennet (2008) explained that social norms counted for more than individual endowments in the traditional “skills society” [12]. Developing one’s talents depended on following the rules established by earlier generations; that most modern of words—personal “genius”—had little meaning in this context [13]. Sennet cited Deming, mentioned that binding in craft communities is created by sharp mutual exchanges and shared commitment. The use of local material creates connection between the craft object, the user, and the local environment [13]. Walker et al. I (2018) stated that craft is place-based creative ecology. Products that emerge from place-based practice are culturally significant if they contribute to a sense of local identity, and may have rich historical links with communities and cultures that offer for the future in terms of sustainability, also well-being [14]. Devani Gumulya (2023) stated that material usage on a product determines 80% of its impact on the environment [15].

### **Object as agent**

Latour (2005) explained that Actor Network Theory tries to render the social world as flat as possible in order to ensure that the establishment of any new link is clearly visible, and aims to give space for non-human actors to become admitted as agents that share power with humans in their relationship. In craft practice, human and non human interact in the process of making [16]. There is a sense in which “the world kicks back”, forms of agency in addition to human ones without assuming some innocent, symmetrical form of interaction between knower and known [17].

Scholars discussed material agencies in craft practice. Adamson (2013) clearly stated that craft is organized around material experience [18]. Camilla Groth (2016) cited Karana et al (2015) that suggests an idea that materials as actors play a role that the designers have assigned to them. Anni Albers (2008) illustrated the significance of material understanding through making by comparing making and toasting the bread. She mentioned that we merely toast the bread, no need to get our hands into the dough, no need to handle materials, to test their consistency, their density, their lightness, their smoothness [19]. Groth (2016) further emphasized that physical touch of material is important to build a designer or maker's mental image to judge material properties based on previous experiences. Therefore, as Wendy Gunn (2013) explained, the material can be witnessed in sets of ideas such as objectification, embodiment, and phenomenology. One of the key characteristics associated with it is eliciting emotional expression through material engagement [20].

Material, tools, space, and others that enable human and material relation in craft practice can be seen as objects or non-human agents (for broader understanding). Fallman (2007) stated that the studio is a multi-faceted phenomenon that has a physical dimension. The actual physical designs of buildings, rooms, furniture, and so on help shape a culture of work that cares as much for the whole as it does for the details. When Fallman focused on physical objects in a studio, Dhaval Vyas, Anton Nijholt, Gerrit van der Veer (2012) emphasized on the studio as a space by mentioning that space and spatial arrangements play an important role in our everyday social interactions. They explained that the way of using and managing the surrounding space is not coincidental, it reflects the way of thinking, plan and act, therefore space can be seen as a technology to support actions. Erin O’Connor (2015) mentioned that not only the tools, hot glass, equipment, but also the breath, color, heat and techniques are the players of studio glassblowing [21]. Ingold (2009) explained that he learned to know things from the inside of his being and through the process of self-discovery by watching, listening and feeling, by paying attention to what the world has to tell us [22]. Those thoughts indicate that objects or the non-human, such as material, tools, and environment surroundings, are significant agencies in craft production.

## METHOD

The literature review displays that traditional craft practice represents social, environment, and economic systems harmony in the community. It also indicates the significance of object agencies in craft and studio practice. Aims to identify objects agency in the field of practice, this research uses methodological triangulation that uses multiple sources within one research design by triangulating the data from multiple data collection methods [23-24]. Honorene (2017) and Fusch et.al (2018) further explained that the triangulation technique combines different techniques that balance each other out to explore different levels and perspectives of the same phenomenon. This research gathered data from designer interviews, field research in a bamboo craft production in Tasikmalaya (Indonesia), and in a glassblowing workshop in Chicago (North America) conducted between June 2020 - June 2023.

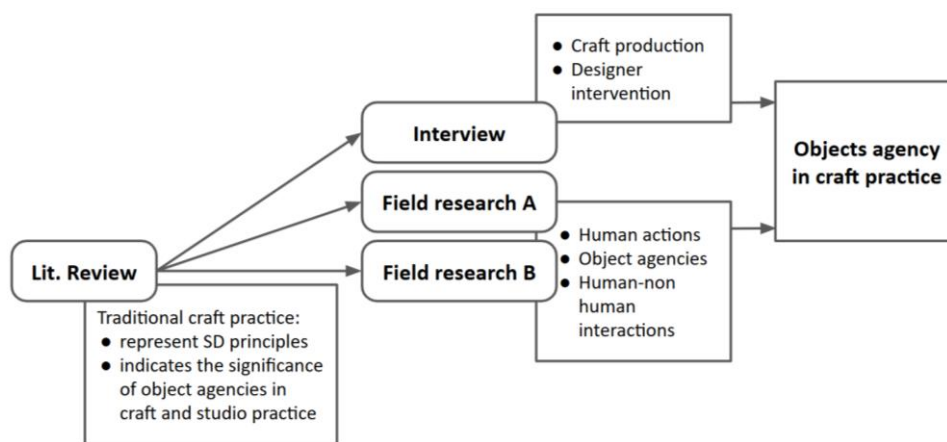


Figure 2. Methodological triangulation that uses multiple sources in this research

The designer interviews gathered insights from six designers and master crafts who work in craft production in several places in Indonesia. The interviews use open-ended questions that permit the complexity of a single idea or phenomenon to emerge from the participants' perspectives [25]. Field research conducted in different places (in Indonesia and North America) to find shared properties on the object agencies in two craft productions sites. Laurene Vaughan (2017) mentioned that practice sites provide the context, means, and study parameters [26]. The field research consists of observation and interview with the master crafts. The observation focused on human actions, the existing tools, space, and their interactions. The interview gathered master crafts' reflection on their activities in the craft production. The interview questions help the interviewee to reflect on their actions, considering Schon (1983) argument that competent practitioners usually know more than they can say [27].

## FINDINGS

Craft practice involves objects such as material, tools, and space [28]. The interviews and observation found that the objects demonstrate its agency in social, environmental, and economic systems in the craft community. Designers and master crafts interaction with objects in craft production shapes their thoughts about the social, environmental, and economic systems. Their emotional connection with material, supported by direct touch (tactile) with material and tools as body extension, endorses social and environmental care. Craft space facilitates comfort and supportive interaction within

community members that strengthen their social system. In the craft community, economic system motions are slow and limited. Their practice focuses on well being instead of simply economic income.

### **Sustainable principle in craft production**

The Indonesian designers who work with Indonesia craftsman expressed their concern to sustainability by mentioned that the mission of their practice is to improve craftsman well-being, sustaining the plantation, and craft regeneration, by trying to do good for social and environmental sustainability - not for fair trade certification, and the goal of all acts is fairness for all. Conveying the same concern, the glassblowing master craft said that they love to be more sustainable like using locally produced components and continuously support people in their community. Their concern about the social, environment, and economic system reflects throughout the interviews.

### **Focus on well being instead of income**

Craft production focuses on well-being instead of great income. The glassblowing master stated, "It's not huge, not fast, not like big scale-able money-making endeavors. All of these really good things are small and slow, nice. Like all of these good things just take time." An Indonesian master craftsman stated that they are not looking for fast money but to cultivate values, to keep learning, and to be passionate. Designer interviewees explained that craft production cannot be pushed because it depends on hand and heart. It should be nurtured, grow slowly, and organically. Designers and master crafts define craft production as work with pleasure. It is a slow process and cannot be pushed. Their statements reflect on - and emerge from - their interaction with material.

### **Emotional connection with material**

Craftsmen value material as a living object. Glassblowing master expresses emotional connection with material by saying, "I love glass, working with glass, and making my art with glass." Craftsman who works with natural material mentioned that they sell (craft object) living things, it breathing while weaved, and it change its color through the time, it also has its own life. The engagement between craftsman and natural material starts as early as the material grows. The craftsman sources the material from their own backyard or bought from the neighbors. It's owned by the community. That type of sourcing enables craftsmen to trace and manage the quality of material. In case of *mendong* material sourcing, they cultivate the craft material at the unproductive rice field instead of the productive one because rice field is important for their food safety. It reflects their awareness of the system's harmony.

The craftsman responds to material character and behavior. For example, craftsmen harvest the bamboo between 6 am to 11 am, cut it in pieces, and directly lay bamboo under the sun to get the best material quality. They manage the limited time between cutting and drying the bamboo because the delay can cause color dullness. Weaver explained that *lontar* leaves are more manageable to weave within the morning due to their humidity; they can bend without breaking. The observation on glassblowing master while working with hot melted glass shows the same findings that master craft knows exactly the right moment to roll the blow pipe (or blow tube), shape, and blow the hot glass.

### **Tools as body extension**

The tools are accessible, easy to use, inexpensive, and environmentally friendly, and applicable in the craftsman working condition that connects with the sustainable development concept.[29] Observations also found the craftsmen use their body parts as tools. Tools or equipment act as the

extension or addition of the craftsman body. Therefore, some of the tools are personal or tailor-made such as blowpipes for glassblower and bamboo knives (Figure 2, left) for bamboo craftsmen. Sometimes, they use (spontaneously) any material that exists around as tools to support their hand work such as newspaper to shape the hot glass (Figure2, right) or piece of bamboo to apply the glue.



Figure 3. Bamboo knife (left) and news paper (right) as craftsman body extension

### Safe space and comfort zone

Space shall not be categorized as an object, but the findings show that space as a non-human agent, supports social systems in craft production. It facilitates social interactions that create a sense of belonging, trust, reciprocity, working culture, norms and values. Physically, both workshops, in Tasikmalaya (Studio A) and Chicago (Studio B), have similar characteristics. It is divided into dynamic working space and static storage space—the dynamic working space located in the middle of the workshop surrounded by the static storage spaces. Both have no solid or clear boundaries in the working space, have spacious front yards (Figure 3), open-wide entrances (Figure 4), and roof extensions (Figure 5). It expresses openness, informality, multi-functionality and flexibility. The interconnected space and flexible workspace allow the dynamic flows of activities and communication.



Figure 4. Studios front yard

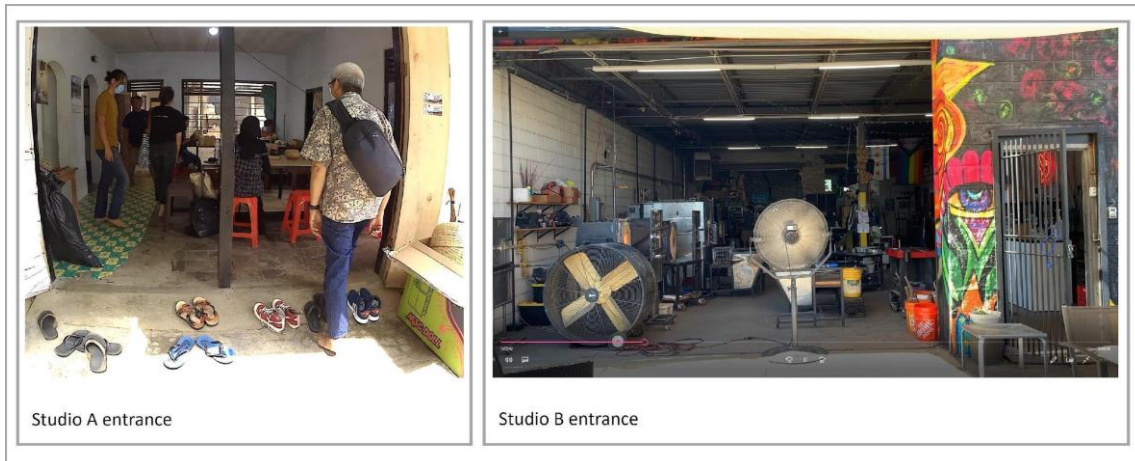


Figure 5. Studios entrance

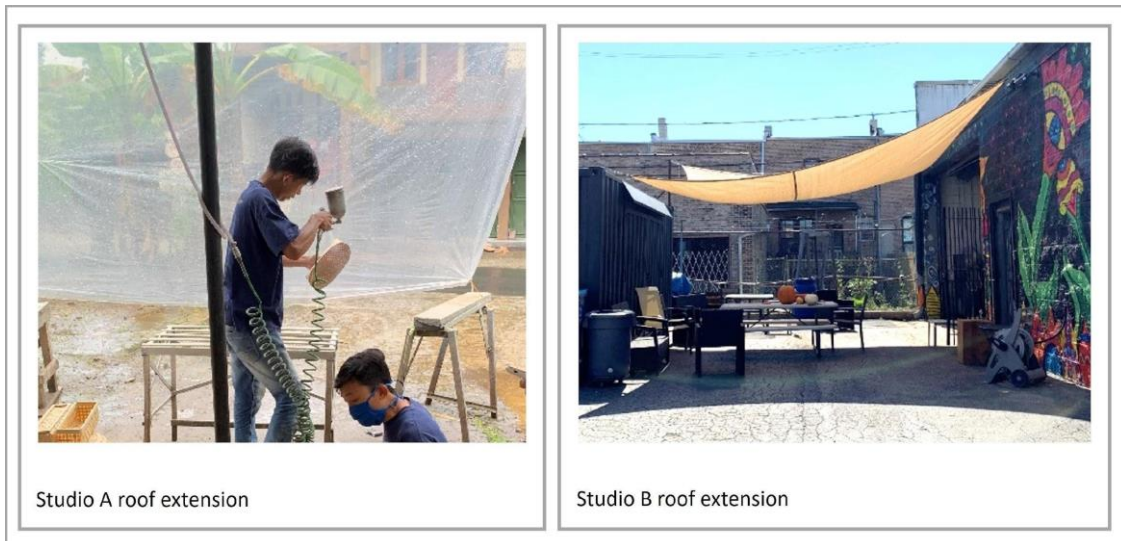


Figure 6. Studios roof extension

Master craft ensures the workshop can be a safe space and provides comfort for everyone. Indonesian women weavers are chatting and singing while weaving, sometimes taking care of their infant as well. Working, socializing, and nurturing melt in one space. The glassblowing master explained that the entire space is like a community space. People involved in programs that are scheduled for certain times are often coming on other times. Therefore people in different programs kind of lead over, they interact and they're all working together. It results in the collaborative nature of working. She emphasized that people come to that space for more than just work in particular time but for support and feel safe. Some craft workshops in Indonesia provide leisure facilities like TV, sports, and napping space. In the glassblowing workshop, they have an outdoor area to enjoy summer (Figure 6) and sofas inside the workshop for winter.



Figure 7. Leisure facilities at Studio B

## DISCUSSION

This investigation unpacks the object agencies in craft production towards sustainable development. There are three interconnected systems, environmental, social, and economic. In craft production, objects contribute to the harmony of the three systems. Objects in craft production consist of material, tools, and space [28]

### Object agencies in environmental system

The material usage, in general, determines a product's impact on the environment [15]. Crafts that use local material create a connection between the craft object, the user, and the local environment [13]. Adamson [18], Groth, and Albers [19] emphasized the connectedness between craft and material. They suggest that material is a significant actor and its engagement with the human actor elicits emotional expression [20]. The material usage in craft is more than a practical consideration. The craftsmen express their emotional relation with material. It prevents the exploitation of material sourcing and preserves the availability of the raw material. Craftsmen value material as a living object and interpret material's 'kick back' to formulate production constraints in material sourcing and treatment and capacity of production. Material as an object and its relation with human actors contributes to environmental sustainability.

### Object agencies in social system

Craft communities are created by sharp mutual exchanges and shared commitment [13]. It is supported by the interconnected space and flexible workspace allowing the dynamic flows of activities and communication, as seen in Studio A and B. Booth Studio expresses openness, informality, multi-functionality, and flexibility. Space and spatial arrangements are important in our everyday social interactions [5]. It creates a sense of belonging, trust, reciprocity, working culture, norms, and values [11], which is known as social capital, the major reason for happiness besides income per person (GDP per capita) [9]. The master craft emphasizes that the space can be a safe space and provides comfort for everyone, enabling working, socializing, and nurturing melt in one space. It is not a space limited to money capital production but a space that contributes more to social capital.

### Object agencies in economical system

Sachs also emphasized that the overriding goal of sustainable development is not income but well-being [11]. Walker et al. I (2018) believe that craft offers sustainability and well-being [14]. A master



craftsman explained that they produce craft objects (economic commodities) but do not like scale-able money-making endeavors because good things just take time. Another master craftsman stated that fast money isn't the goal, it's about cultivating values, learning, and passion. Craft production focuses on well-being instead of great income. Craft objects represent the act of nurturing and the slow process of passionate works that contribute to the economic system toward well-being.

## CONCLUSION

Sustainable development as a concept evolves through environmentalist and economist thought and exploration, and later inspires social politics discourses. It emerged as a response to the modern growth-based economy that is unsustainable on a finite planet. On other hand, traditional craft practice reflects the sustainable development principles through its object agencies. Object agencies in craft production are an inspiration for practices to achieve the three systems harmony.

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