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Sustainable Supply Chain Process of the Luxury *Kente* Textile: Introducing Heritage into the Sustainability Framework

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7.1 Introduction: Setting the Scene

The twenty-first century sees the rise of the conscious consumer, who is concerned about environmental and social impacts their purchase decisions may have on their natural surroundings (Rickenbacher, 2020). The phrase *we are what we consume* (Belk, 1988) gains renewed interest, with consumers seeking to portray an image that proclaims this environmental and social responsibility, especially within the luxury context (Rickenbacher, 2020; Roberts, 2020). The latter sees five key consumer trends emerging: (1) *Blingtastics*, who seek to show off luxury wear; (2) *Exclusivists*, who hunt for special editions at a high price; (3) *Old Money*, who seek value brand heritage and authenticity; (4) *New Ascetics*, who focus on artisan and local products and are drawn towards more green luxury; and (5) *Novelty Junkies*, who are highly influenced by new

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technology and look for new trends (Roberts, 2020). Within this chapter, *Old Money* and *New Ascetics* consumers are of particular interest, as these are consumers that are more actively pursuing the sustainable trend, thereby also taking heritage into consideration. These consumer types will be explored further in the latter part of this chapter.

Research on luxury consumption is not new per se, but has gained momentum in the past decade within the fashion and jewellery context (e.g. Ryding et al., 2018; Athwal et al., 2019). Jewellery is often associated with precious material necklaces, bracelets, rings, or earrings that people use to adorn and differentiate themselves from other social classes (Ogden, 1992). Jewellery can be anything, depending on one's cultural background, and has the power to communicate across and through different generations, as it (jewellery) can be passed on as heirlooms (e.g. Ahde-Deal et al., 2016). Thus, it may communicate beliefs, feelings and the aspirations of people who wore them in the past (Ogden, 1992). This chapter focuses on jewellery in a non-traditional sense, rather than looking at gold necklaces or rings, it centres its attention on *Kente*, a luxury handwoven textile produced in Ghana. *Kente* can be described as a type of jewellery in Ghana, as traditionally, it not only distinguishes social classes but also is often worn as a sign of achievement (e.g. at graduation or formal meetings) and to adorn oneself during festivities (e.g. weddings) (Badoe & Opoku-Asare, 2014; Boateng & Narayan, 2017). *Kente* has a long-standing tradition and plays a vital role in the country's history. Although this luxury cloth is now more widely available, due to cheaper wax prints that imitate the traditional colours and patterns, being able to wear a traditional *Kente* strip produced in Bonwire or the Volta region holds powerful meanings (Smulders Cohen, 2019). In the past, research surrounding *Kente* has predominantly focused on the weavers or the production process of the cloth (ibid.). What remains underresearched is how this luxury item, the *Kente* cloth, can communicate sustainability to conscious consumers, thereby shying away from purchasing cheaper wax prints and investing in the original, handcrafted items.

As highlighted, globalisation implies that textiles can be easily imitated, yet tradition and history, cannot. This is due to the wealth of knowledge that is transferred from generation to generation concerning the culture and practices within the community (Paris, 2020). For these *Kente* communities to survive, it is vital to communicate the meaning to

potential consumers that have an interest in both heritage and sustainability.

This chapter explores how far *Kente*, as luxury jewellery, can be used as a communication tool to portray craftsmanship and sustainability along the supply chain, by posing the following research questions:

RQ1: What does sustainability mean within the *Kente* production process?
RQ2: How does *Kente* visually communicate 'sustainability' to the conscious luxury consumer?

This chapter is based on a case study approach—information will be drawn from secondary data to provide an in-depth insight into the traditions and the production processes. It has to be highlighted that the majority of available data stems from the community of Bonwire. Even though other regions are introduced at the beginning of the chapter, the analysis will predominantly focus on Bonwire.

7.2 Background: Bonwire, *Kente*, and *Kente* Production

This chapter investigates the community of Bonwire, located in Western Ghana, as it is the birthplace of *Kente* production, with the community dating back over 300 years (Lartey, 2014; Asmah et al., 2015; Smulders Cohen, 2019). The community itself consists of over 800 houses and is home to approximately 2000 weavers, all of whom are involved in the *Kente* creation process. The weaving profession is generally male dominated, whilst women are more involved in early stages of the production process, such as preparing and dying the yarns in order to be woven into the *Kente* strips, as well as in the later stages of the actual selling of the finished products on the market (Boateng & Narayan, 2017; Smulders Cohen, 2019). Knowledge of the weaving process is passed down from father to son, whilst the spinning, dyeing, and selling process has been passed down from mother to daughter (Boateng & Narayan, 2017).

The focus of this chapter is on *Kente* textiles, which have been declared by the first president of Ghana, Dr Kwame Nkrumah, as the identity for Ghanaians, due to the rich cultural values woven into the individual strips (Fening, 2006). To explain, *Kente* is *the* heritage textile of Ghana and produced either in Western or in Southeast Ghana (Asmah et al., 2015; Smulders Cohen, 2019). The values, beliefs, and traditions are woven into the textiles, providing hidden meanings and story-telling connotations, thus preserving culture through symbols and colours (Badoe & Opoku-Asare, 2014; Kwakye-Opong, 2014; Boateng & Narayan, 2017). Each *Kente* strip has a meaning and philosophy embedded in the patterns and designs (ibid.) that are carefully placed to tell a story and portray standing in society or mark a specific occasion (Boateng, 2011; Boateng & Narayan, 2017). For example, the 'Mako Maso Adeae' pattern holds the same meaning as giving someone a heart necklace or ring, as literally translated it means 'my heart's desire', and proclaims love (Kitenge, 2017). Whilst the *Obaakofo Mmu Man* design is predestined for leaders, its meaning 'one person does not rule a nation' is a reminder that community spirit and working together for the greater good is a key part of the traditions and values of the Ghanaian society (Ross, 1998).

The traditional weaving process of *Kente* strips remains a highly complex process, which involves males using hand-and-foot looms to create carefully designed pieces of woven cloth (Badoe & Opoku-Asare, 2014; Smulders Cohen, 2019). Everyone in the community is involved in the production process, thus, it is a community act that showcases belonging and being part of shaping a culture rich identity. It may not be surprising that the *Kente* textile bears a lot of meaning and is of great value in Ghana, thereby providing Ghanaians with a shared identity (Boateng, 2011; Asmah et al., 2015). Due to the meanings that are attached to colours and symbols woven into the *Kente* cloth, it can act as a form of jewellery, thereby expressing not only feelings (e.g. 'Mako Maso Adeae' pattern), but also political standing (e.g. 'Obaakofo Mmu Man') and social class (e.g. 'Emaa da'—a cloth worn by royalty and those that have a high position within society) (Kitenge, 2017; AdinkraBrand, 2020).

This research examines the stages within the supply chain process of the production of *Kente*, from raw materials to finished products, and identifies what sustainability means. Whether it is solely related to the

raw materials used and the finishing processes or if there are other aspects involved that could be classified as 'sustainable'. It further explores how 'sustainability' can be communicated to conscious luxury consumers that have been identified as *Old Money* and *New Ascetics* (Roberts, 2020).

7.3 Sustainability, Supply Chain Management, and Visual Identity

7.3.1 Sustainability

Sustainability has stirred debate since the 1970s, thereby focusing not only on conscious consumption but also on more 'sustainable' business practices, such as changing to more environmentally friendly materials, making supply chains lean, or enforcing tighter social regulations that protect workers (Seuring & Müller, 2008; Henninger et al., 2016; Davies et al., 2020). Sustainability, and more specifically sustainable development, is defined as "meeting needs of the present without compromising the ability for future generations to meet their needs" (UN, 2011). This definition explains that resources should not be overused by the current generation, to the extent that the future generations will have less resources available to meet their needs. Within a community (e.g. Bonwire), there is an aspect of being able to maintain life through the resources we use, in order for future generations to carry on the community practices and traditions (Paris, 2020). It is only through this current generation's maintenance that the future generations may be able to see the importance of their culture and traditions and apply the same wealth of knowledge passed down to them (ibid.). Although this definition has been criticised (e.g. Diesendorf, 2000), it provides a starting point to investigate what needs to be preserved, in the case of this chapter, from the *Kente* weaving process, in order to provide a livelihood for future generations of Bonwire and more specifically the *Kente* weavers. Elkington (1998) divides sustainability into three distinctive pillars: environmental, social, and economic, which are often referred to as the Triple Bottom Line (TBL). These three pillars need to all work together and be in

harmony to achieve sustainable development (Kuhlman & Farrington, 2010).

Environmental sustainability implies that a system, here Bonwire's supply chain, utilises raw materials that are less harmful to the natural environment. Thus, it seeks to avoid depletion of non-renewable resources, and overexploitation of renewable resources (Harris, 2003; Kuhlman & Farrington, 2010). Linking this to the *Kente* production supply chain, in order to be more environmentally sustainable, not only raw materials and production processes should be geared towards minimising their impact on the natural environment but also processes should be safe for individuals (e.g. weavers, dyers), by using products that are not harmful (Linton et al., 2007).

Social sustainability focuses predominantly, here, on Bonwire's inhabitants, is concerned with investments in facilities in the community, and makes the place more attractive for people to live (Harris, 2003). Within the supply chain, social practices can further link to labour laws and introduce social standards (Koberg & Longoni, 2019). Here this pillar focuses on how money gained from *Kente* sales is re-invested into the community, thereby also focusing on the needs of future generations.

The economic pillar is concerned with operating a financially viable business that ensures competitiveness in a volatile market environment, (ideally) without harming the natural or social systems (He et al., 2019). In Bonwire, the economic aspect ties in with the fact that the *Kente* production processes have been in operation for over 300 years and are their main income source. It is vital that this source remains viable in the future, to ensure that the inhabitants' livelihoods are not threatened.

In summary, sustainability is the ability to maintain an entity, outcome, or process efficiently over a period of time and this should guide the conduct of individuals in an ethical manner (Gomis et al., 2011; Mensah & Casadevall, 2019). Gomis et al. (2011) consider sustainability to be synonymous with sustainable development. This research looks at sustainability from a 'preservation' angle, which implies that sustainability not simply is seen as something that needs to be maintained but also looks at the past to see what should be preserved. This links to Gibson (2001), who has suggested including culture into the sustainability framework, as cultures differ globally. In this chapter, it is explored,

whether preservation goes beyond culture, which can change over time, and suggests that instead heritage should be included, as heritage is based on traditions, values, and beliefs that do not change.

7.3.2 Sustainability and Supply Chain Management

A supply chain and its management are concerned with the entirety of the production process, from gaining raw materials, to producing the product, and finally selling it to the end-consumer (Lambert et al., 2006). Thus, it is "concerned with planning, coordinating and controlling material, parts and finished goods from suppliers to the consumer" (Stevens, 1989, p. 3). Lee (2004) suggests that there are three different qualities of top-performing supply chains: they are **agile**, which means they are rapid in reacting to changing demand, they are able to **adapt** when changes are made in the market structures or when strategies evolve, and they **align** the interest of companies in their supply network in order for the performances in the supply chain to be improved. Thus, the supply chain not only considers the manufacturing of products but also must be able to effectively move them from one point to another (Seuring & Müller, 2008). The overarching goal of supply chain management is to carefully review and potentially change, here, weaving and *Kente* production processes in order to ensure long-term competitiveness (Henninger et al., 2015).

With globalisation, sustainability has increasingly gained a dominant position, also within the jewellery sector (Carrigan et al., 2016). Moreover, sustainable supply chain management (SSCM), defined as "the management of material, information and capital flows (…) while taking goals from all three dimensions of sustainable development, i.e. economic, environmental and social, into account" (Seuring & Müller, 2008, p. 1700), and processes gain momentum (Henninger et al., 2015; Nayak et al., 2020). Gopal and Thakkar (2016) suggest that SSCM aids in the reduction of environmental waste and also considers the social and economic aspects of sustainability. Academics have frequently referred to sustainable supply chain (e.g. Linton et al., 2007; He et al., 2019), and its management (e.g. Koberg & Longoni, 2019; Vijayan & Kamarulzaman,

2020), yet it is unclear what sustainable supply chain processes (SSCP) are. In this chapter, SSCP is the means of being able to balance sustainability factors through activities involved in the flow and transportation of goods from the raw materials to the consumer. This process will involve being able to preserve the environment, as well as consider the people involved within and between these processes and be able to give back to maintain the environment and society.

7.3.3 Sustainability in the *Kente* Production Process

This section focuses on RO1: What does sustainability mean within the *Kente* production process. Looking at the *Kente* production process, and consequently at its supply chain, there are six key stages (Fig. 7.1), which will be carefully reviewed (e.g. Henninger et al., 2015; Smulders Cohen, 2019).

The weaving skill necessary to produce the *Kente* and thus ensure that the supply chain is kept afloat is passed down through generations (Boateng & Narayan, 2017). Interestingly, extant literature discusses the environmental and social aspects of sustainability, but few consider the economic aspect (Gatti & Seele, 2014; Rogge & Reichardt, 2016). Yet, as will be explored, the craftsmanship of the weaver is vital for economic and social sustainability, as without being able to produce the *Kente* products, the community would not be able to exist, as their livelihoods depend on the production process.

Taking the generational aspect into consideration, it becomes clear that the weaving process not only is a tradition but also shapes part of the community's heritage, and thus links to the thought process of 'preservation', which underpins the sustainability framework in this community context. Heritage could be seen to underpin sustainability or to be an element that holds all three pillars together. In the following, the individual stages of the *Kente* supply chain are discussed and explored.

Fig. 7.1 Simplified supply chain process of *Kente* strips (Fening, 2006; Lartey, 2014; Amissah & Afram, 2018; Thirumurugan & Nevetha, 2019)

7.3.3.1 Designing

Design is the first step in the supply chain process. The design aspect refers to the patterns that can be seen on the finished products, as well as the colour selection. As aforementioned, the *Kente* strips not only distinguish individuals of different social classes (Micots, 2020), but are also used for adornment. Different shapes are handwoven into the strips using different colours; each shape and colour carries a different meaning, and they all relate to the life experiences or social standing of Ghanaians (Rovine, 2020). The designs of the *Kente* form a key part in the supply chain process in Bonwire.

There are two aspects to the design process: (1) the design of an individual standalone *Kente* strip, which is used as jewellery and can be draped on the neck or on the arm and worn with a different attire, which makes it stand out; and (2) the design of *Kente* cloth, which is made up of multiple *Kente* strips sewn together to make one big piece of fabric that needs to tell a coherent story (Thirumurugan & Nevetha, 2019) and thus must be carefully joined together to portray the right meaning. This highlights that the weavers must be very skilful to combine the shapes and colours effectively to produce a meaningful product (Fening, 2006). These *Kente* cloths are joined to make up ten yards in length for men to wear draped on their body, and eight yards in length for women to either drape or make into a top or a skirt (Kraamer, 2020).

The art of designing bears a long tradition, in that weavers have been trained by their fathers and grandfathers to visualise the designs in their minds as opposed to sketching them out on paper (Badoe & Opoku-Asare, 2014; Amissah & Afram, 2018). Once the weavers have visualised their designs, a prototype is created, which is presented to the chief for approval, to ensure that they are in line with the traditions and meanings (ibid.). Culturally *Kente* prototypes must be offered to royals first, and only if they decline can be offered to others, which further reiterates the fact that *Kente* strips clearly distinguish social class (Kraamer, 2020).

As aforementioned, cheaper printed versions of the *Kente* design have been produced, as early as the early twentieth century (Halls & Martino, 2018), thereby making the cloth affordable to anyone aspiring to wear

similar designs to the handwoven originals. Whilst this highlights that *Kente* has great market potential, it also had consequences for the community, in that cheaper alternatives are more likely to be bought. After gaining political independence from Britain in 1957, *Kente* was made the heritage cloth "as a symbol of Ghana to promote national identity, unity, and pride" (ibid.). Without the weavers passing down their knowledge through generations, without any physical evidence (e.g. sketches), the *Kente* cloth can no longer be produced, and thus key parts of the heritage would be lost. This highlights the importance of heritage to be included as part of 'sustaining' traditions and livelihoods.

7.3.3.2 Sourcing Raw Materials

Kente can contain silk, rayon, or cotton yarns (Lartey & Asma, 2016). Cotton for *Kente* was commonly grown and sourced from Northern Ghana (Lartey & Asma, 2016). With cotton grown in Northern Ghana, raw material transportation was kept at a minimum before reaching its final destination, and thus, the carbon footprint was smaller, as opposed to if cotton were to be purchased from other parts of the world. This links to environmental and economic sustainability: (1) the impact on the natural environment is lessened, by sourcing 'locally' (within the country) (environmental sustainability); (2) the *Kente* weavers were trading kola nuts for cotton, which were needed in other communities to ensure their livelihoods, thereby ensuring that trade stays within the country (economic, social sustainability) (Frimpong & Asinyo, 2013). Yet, with the pressure of companies outside of Ghana producing *Kente*-inspired cloths, the community needed to start 'modernising' by sourcing raw materials outside of their own country, to be able to reduce the overall pricing of the cloth, which implies an increase in carbon emissions.

However, *Kente* weavers have found a way to capitalise on globalisation and reduce the environmental impact, by taking advantage of an ever-growing second-hand market in Africa (James & Kent, 2019). *Kente* weavers are actively sourcing cotton and silk cloth that can be taken apart and reused in their weaving processes (Lartey & Asma, 2016). This

encourages a recycling and reuse scheme that fosters sustainability by making use of 'waste' materials rather than harvesting virgin materials.

Although globalisation and mass-produced wax printed *Kente* cloth have threatened Bonwire's *Kente* production, the community has managed to survive, by adapting and capitalising on 'waste', which further reduced costs. A key learning point here is that it is vital to adapt to market challenges and continue to innovate. With sustainability having a centre stage position, the community could further invest in product innovations that may help them to become more circular, by, for example, sourcing raw materials from other waste materials, such as banana peels or mango skins, which have already been trialled and deemed a viable solution with in the industry (Hendriksz, 2017). Whilst it is acknowledged that creating these new innovative fibres might mean a heavy capital investment, collaborations could help to foster economic viability and ensure the community's survival.

7.3.3.3 Spinning the Yarns

The raw materials sourced are spun into yarns on site, which is a predominantly female job (Fening, 2006; Frimpong & Asinyo, 2013). Spinning yearns on site implies increased control, in terms of waste. Women involved in the spinning process ensure that fibre wastage is kept at a minimum (Lartey & Asma, 2016; Thirumurugan & Nevetha, 2019). Similarly, to the design process, the art of spinning yarns has been passed down through generations of Bonwire women (Frimpong & Asinyo, 2013). This links to the aspect of social sustainability, as everyone within Bonwire has a role to play within the production process of the *Kente*. The fact that people have key roles in their community implies that they are also showing pride in their work and look after one another, as the *Kente* production is a community effort. As such, if a community member is unwell and cannot fulfil their task, another person will fill in, if there is a need.

Not all raw materials used in the production process are made from virgin materials, some are also recycled from, for example, second-hand garments; thus, it may not be surprising that the quality (thickness and

feel) of the yarns may differ. The quality of the yarns reflects social status, which implies that yarns that are seen to be of lower quality will only be used for designs and patterns that are worn by lower social classes, whilst yarns of good quality may be used to produce *Kente* for royals and high society (Fening, 2006; Micots, 2020).

What becomes apparent from the spinning stage in the *Kente* production process is the fact that sustainability plays a key part, in that all raw materials that are sourced are used and carefully made into yarns, thereby avoiding any fibre loss. Quality issues in the yarns are compensated by producing different products for different audiences (e.g. lower quality, lover price, and lower class).

7.3.3.4 Dyeing

Once the fibres have been spun, the yarns are dyed using plant-based dyes (Lartey, 2014), which is a more environmentally friendly methods than, for example, using industrial dyes that contain chemicals. The dyes, which are often acquired from tree bark, seeds, leaves, and other plants, are sourced in the community's surrounding areas, which make them not only cost efficient (economically viable) but also environmentally friendly (Lartey, 2014; Thirumurugan & Nevetha, 2019).

The dye pits are dug in the ground and carefully maintained to ensure minimum contamination. Once yarns are dyed, the dye pits are carefully covered to ensure that they can be used again when needed (Lartey, 2014). The natural ingredients (e.g. tree bark and seeds) are boiled in water, and the colour pigments are carefully harvested and kept to be used in the dye pits. Depending on the thickness of the yarns, the different plants are used to them, as the colours reflect the social class. Thus, golden colours are used for thick yarns, as these are associated with royal designs and high social standing (Lartey, 2014; Thirumurugan & Nevetha, 2019).

Although dying, similarly to spinning, is a female job, it is strongly linked with the design and weaving process, and thus, strong communication needs to be implemented in order to ensure that cultural meaning

is maintained, as certain colours are ascribed to royals and people of wealth (Fening, 2006; Amissah & Afram, 2018).

7.3.3.5 Weaving

The dyed yarns are moved onto the weaving stage. Weaving is a male profession in Bonwire (Ross & Adu-Agyem, 2008), as it is believed that women will be barren if they sit for long hours (Fening, 2006; Micots, 2020). Men are weaving *Kente* using custom-made hand-built looms (Frimpong & Asinyo, 2013; Nunoo et al., 2021), made sustainability from timber. It is important to note that the community of Bonwire is living in harmony with nature, as such the inhabitants are respecting their natural surroundings and seek to have the least impact on it as possible.

The weaving process involves many accessories that are used to achieve the beautiful patterns woven into the strips (Amissah & Afram, 2018). The loom is one of the main accessories to produce the *Kente* strips (Fening, 2006; Badoe & Opoku-Asare, 2014). There is also a heritage aspect here, in that the looms are made specifically out of timber due to its durability and the looms tend to last for years and can be passed down through generations (Fening, 2006).

Today, *Kente* weavers in Bonwire have to ensure that their supply chain is agility as they have to adjust to lesser demand for *Kente* strips and cloth (Lee, 2004). They may have slightly changed some age-old traditions to speed up production processes, but the most important traditions are still kept, like weaving on the loom (Fening, 2006). Although the original dyeing pits still exist and can be used for recycled yarns; to stay competitive, processed dyed yarns are also imported from China and used to weave the *Kente* strips (Boateng, 2011; Boateng & Narayan, 2017). This can reduce lead time of *Kente* cloth for larger orders, as various parts of the supply chain are cut (Sarmiento, 2020). A drawback of globalisation and being able to use these imported yarns is the fact that some of the processes that were traditionally used are threatened to disappear (e.g. sourcing of raw materials, spinning them into yarns and dyeing them).

Although it could be argued that the weaving process could also be under threat due to technologies (e.g. modernised looms), it is unlikely that this tradition will be banished, as the handwoven aspect is what makes the *Kente* a prestigious textile and thus costly. As such, the price implies that these *Kente* strips and cloths are hard to obtain, thereby fostering the meaning and prestige of wearing them (Boateng, 2011).

7.3.3.6 Selling

Selling is the last stage within the *Kente* production. The finished textiles are given to women to sell both within and outside of Bonwire (Amissah & Afram, 2018). The 'made in Bonwire' label that can be given to these *Kente* strips makes them valuable and authentic to those who choose to purchase them, as they are buying into the community effort and the *Kente* heritage. To expand the product range from strips and cloth, *Kente* is now also transformed into bags and ready-made clothing, to attract more consumers (Antwi et al., 2015). Moreover, to ensure that there is no competition among the weavers and the community spirit is fostered, prices for *Kente* products are fixed.

7.4 Visual Identity

Visual identity has been discussed since the 1970s and is associated with visual (tangible) elements of a product, here, *Kente* (e.g. Baker & Balmer, 1997). Visual identity is defined as the outer sign of the inward commitment (Abratt, 1989), in this case, the colours and symbols shown in the *Kente*, which all have different meanings. From Abratt's (1989) definition of visual identity, it shows that the commitment of the internal aspect of Bonwire towards the production of a product is reflected in the product itself. Looking at finished products and the quality of the products, consumers can see how much work and effort has gone into the creation process, which is of interest to Old Money consumers, who seek authenticity and New Ascetics consumers, who have an affinity for artisanry and locally produced products (Roberts, 2020).

Past research (Bolhuis et al., 2018; Tourky et al., 2020; Foroudi et al., 2020) guides this chapter to gain a better understanding of how visual identity is expressed through the *Kente* strip as a piece of jewellery, thereby attracting a new consumer market that could help the community to overcome challenges of globalisation. In this chapter, visual identity is related to the finished products (e.g. strips, cloths, and accessories) and more specifically what stories these products tell a consumer, in terms of symbolism, and the production process. As aforementioned, *Kente* production is a community effort, with long traditions, thus it could be said that each strip tells a unique story, as it has been produced by an individual of the community, and reflects the experiences of inhabitants through the colours and designs (Ross & Adu-Agyem, 2008).

With the increased threat of mass-produced *Kente*-inspired products circulating on the market, it is vital for Bonwire as a community to still be able to sell their traditional cloths, to ensure they are financially viable, and thus attracting consumer types such as Old Money and New Ascetics consumers can be an opportunity. Some of the most prominent elements of visual identity reflected in *Kente* strips/cloths are the shapes and symbols used in the textiles, as well as the colour scheme, where each colour has a specific meaning. Colour plays an important role in bringing out responses from audiences and highlights the character or the status of the person wearing the *Kente* materials (Fening, 2006; Dor, 2014).

7.4.1 *Kente*'s Visual Identity and How It Communicates Sustainability to Luxury Consumers

This section addresses RO2: how does *Kente* visually communicate 'sustainability' to the conscious luxury consumer.

Luxury customers, when making purchase decisions, usually look for social, religious, economic, or demographic factors within the region to influence their decisions to make a purchase (Obeidat & Young, 2016). Winning luxury consumers depends on a brand's ability to appeal to the local culture and take into consideration the local religion and values of that place, especially in advertising (Obeidat & Young, 2016). In the case

of *Kente*, considering the processes involved in the supply chain could make it especially appealing for Old Money and New Ascetics consumers (Roberts, 2020).

All processes described in Sect. 7.2 of the supply chain can also be observed in the *Kente* Weaving Centre, a tourism centre that was built in Bonwire to showcase traditions and heritage and ensure an 'authentic' feel for the products, which may be especially attractive for both new types of luxury consumers, as it is both authentic and locally made (Amissah & Afram, 2018; Roberts, 2020). According to Obeidat and Young (2016), luxury consumers consider cultural heritage in products they want to purchase (e.g. New Ascetics). This would put *Kente* products on the map, as they are full of cultural heritage and embedded with different philosophies and stories about the experiences in the life of those that wear them. In the case of *Kente* strips, the fact that they are handwoven will make the product come across as being a sustainable product. There is no evidence of machinery used to automatically weave the strips and everything is manually made by the inhabitants of the community, and thus authentic, which might speak to Old Money consumers.

As highlighted, culture, values, and beliefs have been woven into the *Kente* designs and different colours and shapes hold different meanings (Dor, 2014). This is the same in the case of jewellery, in other countries, and as such, *Kente* is usually used as an heirloom (Brown, 2020). In the case of *Kente* strip as a form of jewellery, the visual identity may play a role in the supply chain process. This means that there is a desired outcome for the product and, as such, the production process will contribute to this visual identity.

7.4.2 Visual Identity, Sustainability, and Supply Chain Processes

An aspect that has previously not been researched is the link between visual identity and SSCP. Yet, in the case of *Kente*, a link can be observed as the first stage of the supply chain (design) visualises the history, traditions, and values of the community, which is carefully portrayed through symbols and colours (Dor, 2014). As was illustrated in Sect. 7.2,

sustainability is reflected throughout the traditional supply chain process of the *Kente* production, which is underpinned by long-standing traditions, and thus heritage. Raw materials are carefully sourced, dyed, and processed to reduce waste. Although some of the processes are changing to make it more economically viable, being able to purchase a traditional stripe holds value to consumers, as it can be seen as an investment piece, an heirloom that can be handed down through generations. The symbols and colours portray a hidden meaning that is only known by individuals accustomed with the Ghanaian culture, and as such making it an authentic piece that portrays local artisanry, key aspects that are sought after by Old Money and New Ascetics consumers (Roberts, 2020).

7.5 Conclusion

In summary, it can be said that the community of Bonwire is currently at a turning point. It has managed to survive the industrial revolution and other technological challenges, thereby remaining true to its traditions and heritage. The latter is especially important, as it highlights sustainability can mean more than simply being environmentally friendly, economically viable, or socially responsible, it implies in order to be 'sustainable' traditions need to be kept alive, as it is these traditions that hold together the community and ensure that knowledge is passed down through generations, thereby allowing consumers to indulge in products that are meaningful and can carry hidden symbols.

Whilst mass-produced *Kente*-inspired prints can help to raise awareness of the *Kente* designs, showcasing the supply chain, highlighting the sustainable practices, and artisanry of the country are meaningful to the new types of luxury consumers that are on a quest to not simply acquire more luxury, but something that is authentic and meaningful. As such, it could be argued that incorporating heritage into the sustainability framework provides communities, such as Bonwire, with a competitive edge that might make them survive for another 300 years to come.

Luxury textile companies, in order to remain meaningful or survive, might consider transparency of the supply chain. This allows consumers to see how the knowledge of manufacturing textiles is passed down to

employees. Luxury textile companies should also consider its history and how it started, adopting some old techniques which made their establishment meaningful and useful to the masses. Consumers may look for a story to be a part of, just as in the case of Bonwire; wearing a piece of woven textile with a particular design says much about the person wearing it.

References

Abratt, R. (1989). A new approach to the corporate image management process. *Journal of Marketing Management, 5*(1), 63–76.

AdinkraBrand. (2020). *Kente: Patterns, symbolism and meaning*. AdinkraBrand (online). Retrieved June 07, 2020, from https://www.adinkrabrand.com/blog/kente-cloth-everything-you-need-to-know-about-africas-most-iconic-fabric/

Ahde-Deal, P., Paavilainen, H., & Koskinen, I. (2016). It's from my grandma. How jewellery becomes singular. *The Design Journal, 20*(1), 29–43.

Amissah, E. K., & Afram, A. P. (2018). A comparative study of Bonwire Kente and Daboya Benchibi. *Trends in Textile and Fashion Design, 1*(5), 96–108.

Antwi, A. P., Bin, C., Tetteh, A., & Adashie, M. (2015). Consumers preference and further uses of Kente cloth. *Art and Design Studies, 37*, 36–43.

Asmah, A. E., Gyasi, I., & Daitey, S. T. (2015). Kente weaving and tourism in a cluster of Kente towns in Ashanti. *International Journal of Innovative Research and Development, 4*(11), 113–120.

Athwal, N., Wells, V., Carrigan, M., & Henninger, C. E. (2019). Sustainable luxury marketing: A synthesis and research agenda. *International Journal of Management Review, 21*(4), 405–426.

Badoe, W., & Opoku-Asare, N. (2014). Structural patterns in Asante *Kente*. *Journal of Education and Practice, 5*(25), 52–64.

Baker, M., & Balmer, J. M. T. (1997). Visual identity: Trappings or substance? *European Journal of Marketing, 31*(5/6), 366–382.

Belk, R. (1988). Possessions and the extended self. *Journal of Consumer Research, 15*(2), 139–168.

Boateng, B. (2011). *The copyright thing doesn't work here*. University of Minnesota Press.

Boateng, H., & Narayan, B. (2017). Social capital and knowledge transmission in the traditional Kente textile industry of Ghana. *Information Research, 22*(4), 1–19.

Bolhuis, W., de Jong, M. D. T., & van den Bosch, A. L. M. (2018). Corporate rebranding: Effects of corporate visual identity changes on employees and consumers. *Journal of Marketing Communications, 24*(1), 3–16.

Brown, A. (2020). Four ethical luxury jewellers to put on your radar. *Financial Review* (online). Retrieved June 05, 2020, from afr.com/life-and-luxury/fashion-and-style/four-ethical-luxury-jewellers-to-put-on-your-radar-20200421-p54lss

Carrigan, M., McEachern, M., Moraes, C., & Bosangit, C. (2016). The fine Jewellery industry: Corporate responsibility challenges and institutional forces facing SMEs. *Journal of Business Ethics, 143*, 681–699.

Davies, I., Oates, C. J., Tynan, C., Carrigan, M., Casey, K., Heath, T., Henninger, C. E., Lichrou, M., McDonagh, P., McDonald, S., McKechnie, S., McLeay, F., O'Malley, L., & Wells, V. (2020). Seeking sustainable futures in marketing and consumer research. *European Journal of Marketing* (ahead of print).

Diesendorf, M. (2000). Sustainability and sustainable development. In D. Dunphy, J. Benveniste, A. Griffiths, & P. Sutton (Eds.), *Sustainability: The corporate challenge of the 21st century* (pp. 19–37). Allen & Unwin.

Dor, G. W. K. (2014). Ephraim Amu's "Bonwere Kentɛnwene": A celebration of Ghanaian traditional knowledge, wisdom and artistry. *African Music: Journal of the International Library of African Music, 9*, 7–35.

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st century business. *Environmental Quality Management, 8*(1).

Fening, K. O. (2006). History of Kente Cloth and its value addition through design integration with African wild silk for export market in Ghana. In *Paper presented at trainers course and 4th international workshop on the conservation and utilisation of commercial insects, Duduville, Nairobi*, Vol. 1, pp. 62–66.

Foroudi, M. M., Balmer, J. M. T., Chen, W., Foroudi, P., & Patsala, P. (2020). Explicating place identity attitudes, place architecture attitudes and identification triad theory. *Journal of Business Research, 109*, 321–336.

Frimpong, C., & Asinyo, B. K. (2013). A comparative study of history, equipment, materials, techniques and marketing approach in the traditional weaving in Ghana. *Art and Design Studies, 7*, 1–8.

Gatti, L., & Seele, P. (2014). Evidence for the prevalence of the sustainability concept in European corporate sustainability reporting. *Sustainability Science, 9*, 89–102.

Gibson, R. B. (2001). *Specification of sustainability-based environmental assessment decision criteria and implications for determining "significance" in environ-*

mental assessment. Canadian Environmental Assessment Agency Research and Development Programme, Ottawa, Canada.

Gomis, A. J. B., Parra, M. G., Hoffman, W. M., & McNulty, R. E. (2011). Rethinking the concept of sustainability. *Business Society Review, 116*(2), 171–191.

Gopal, P. R. C., & Thakkar, J. (2016). Sustainable supply chain practices: An empirical investigation on Indian automobile industry. *Production Planning and Control, 27*(1), 49–64.

Halls, J., & Martino, A. (2018). Cloth, copyright, and cultural exchange: Textile designs for exports to Africa at the National Archives of the UK. *Journal of Design History, 31*(3), 236–254.

Harris, J. M. (2003). *Sustainability and sustainable development*. International Society for Ecological Economics (online). Retrieved May 05, 2020, from http://isecoeco.org/pdf/susdev.pdf

He, Q., Gallear, D., Ghobadian, A., & Ramanathan, R. (2019). Managing knowledge in supply chains: A catalyst to triple bottom line sustainability. *Production Planning and Control, 30*(5/6), 448–463.

Hendriksz, V. (2017). *Sustainable textile innovations: Banana fibres*. FashionUnited (online). Retrieved June 25, 2020, from https://fashionunited.co.uk/news/fashion/sustainable-textile-innovations-banana-fibre/2017082825623#:~:text=Fabrics%20made%20from%20banana%20fibres,alternative%20to%20coton%20and%20silk

Henninger, C. E., Alevizou, P. J., Oates, C. J., & Cheng, R. (2015). Sustainable supply chain management in the slow-fashion industry. In T. M. Choi & T. C. E. Cheng (Eds.), *Sustainable fashion supply chain management: From sourcing to retailing* (pp. 83–100). Springer.

Henninger, C. E., Alevizou, P. J., & Oates, C. J. (2016). What is sustainable fashion? *Journal of Fashion Marketing & Management, 20*(4), 400–416.

James, A. S. J., & Kent, A. (2019). Clothing sustainability and upcycling in Ghana. *The Journal of Design, Creative Process and the Fashion Industry, 11*(3), 375–396.

Kitenge. (2017). *Everything you need to know about Kente*. Kitenge (online). Retrieved May 13, 2020, from https://kitengestore.com/everything-need-know-kente/

Koberg, E., & Longoni, A. (2019). A systematic review of sustainable supply chain management in global supply chains. *Journal of Cleaner Production, 207*, 1084–1098.

Kraamer, M. (2020). A cloth to wear: Value embodied in Ghanaian textiles. In R. Granger (Ed.), *Value construction in the creative economy* (Palgrave Studies in business, Arts and Humanities). Palgrave Macmillan.

Kuhlman, T., & Farrington, J. (2010). What is sustainability? *Sustainability, 2*(11), 3436–3448.

Kwakye-Opong, R. (2014). Beyond ethnic traditions: Philosophies and socio-cultural relevance of the Ashanti and Ewe Kente cloths. *Research on Humanities and Social Sciences, 4*(26), 150–165.

Lambert, D. M., Croxton, K. L., Garcìa-Dastugue, S. J., Knemeyer, M., & Rogers, D. S. (2006). *Supply chain management processes, partnerships, performance* (2nd ed.). Hartley Press.

Lartey, R. L. (2014). *Integrated cultural weaves (Fugu, Kente and Kete) woven with organic dyed yarns*. Master's Thesis, Kwame Nkrumah University of Science and Technology, Ghana.

Lartey, R. L., & Asma, A. E. (2016). Organic dyed yarns for Kente weaving. *Africa Development and Resources Research Institute Journal, 11*(3), 18–42.

Lee, H. L. (2004*)* The triple-a supply chain. *Harvard Business Review* (online). Retrieved June 25, 2020, from https://hbr.org/2004/10/the-triple-a-supply-chain

Linton, J. D., Klassen, R., & Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of Operations Management, 25*(6), 1075–1082.

Mensah, J., & Casadevall, S. R. (2019). Sustainable developments: Meaning, history, principles, pillars and implications for human action: Literature review. *Cogent Social Sciences, 5*, 1–21.

Micots, C. (2020). Kente cloth (Asante and Ewe peoples). *Khan Academy*. Retrieved June 20, 2020, from https://www.khanacademy.org/humanities/art-africa/ghana/a/kente-cloth

Nayak, R., Akbari, M., & Far, S. M. (2020). Recent sustainable trends in Vietnam's fashion supply chain. *Journal of Cleaner Production, 225*, 291–303.

Nunoo, S., Parker-Strak, R., Blazquez Cano, M., & Henninger, C. E. (2021). My loom and me: The role of the handloom in a Weaver's identity creation. In M. A. Gardetti & S. S. Muthu (Eds.), *Handloom sustainability and culture*. Springer.

Obeidat, M., & Young, W. D. (2016). Consumer purchasing decision for fashion luxury brands in Dubai: A case of Armani. *International Journal of Management, Accounting and Economics, 2*(4), 7–23.

Ogden, J. (1992). *Ancient jewellery: Interpreting the past*. The University of California Press.

Paris, D. Y. (2020). *We are the Earth: How cooperation with indigenous communities can change the World*. Eco-Age (online). Retrieved June 26, 2020, from https://eco-age.com/news/how-cooperation-with-indigenous-communities-can-change-the-world

Rickenbacher, P. (2020). *Forget retail therapy – This is the age of the conscious consumer*. World Economic Forum (online). Retrieved May 13, 2020, from https://www.weforum.org/agenda/2020/01/conscious-consumption-not-retail-therapy/

Roberts, F. (2020). *Global luxury goods: Today and tomorrow*. Euromonitor International (online). Retrieved May 13, 2020, from http://www.dragonink.co.th/trend2013/Global_Luxury_Good%20Today&Tmr.pdf

Rogge, K. S., & Reichardt, K. (2016). Policy mixes for sustainability transitions: An extended concept and framework for analysis. *Research Policy, 45*(8), 1620–1635.

Ross, D. H. (1998). *Wrapped in pride: Ghanaian Kente and African American identity*. UCLA Fowler Museum of Cultural History.

Ross, M., & Adu-Agyem, J. (2008). The evolving Art of Ashanti Kente weaving in Ghana. *Art Education, 61*(1), 33–38.

Rovine, V. L. (2020). Woven beliefs: Textiles and religious practice in Africa. In V. Narayanan (Ed.), *The Wiley Blackwell companion to religion and materiality*. Wiley.

Ryding, D., Henninger, C. E., & Blazquez Cano, M. (Eds.). (2018). *Vintage luxury fashion: Exploring the rise of secondhand clothing trade*. Palgrave Advances in Luxury Series, Palgrave.

Sarmiento, I. G. (2020). *Kente cloth: From royals to graduation ceremonies…to congress?* NPR (online). Retrieved June 20, 2020, from https://www.npr.org/sections/goatsandsoda/2020/06/11/875054683/kente-cloth-from-royals-to-graduation-ceremonies-to-congress

Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production, 16*, 1699–1710.

Smulders Cohen, J. (2019). The *Kente* weavers of Ghana. *Text, 17*(2), 149–157.

Stevens, G. C. (1989). Integrating the supply chain. *International Journal of Physical Distribution & Materials Management, 19*(8), 3–8.

Thirumurugan, V., & Nevetha, R. P. (2019). A review article on "Kente cloth in home furnishings" – overview. *Journal of Textile Engineering and Fashion Technology, 5*(6), 306–308.

Tourky, M., Foroudi, P., Gupta, S., & Shaalan, A. (2020). Conceptualizing corporate identity in a dynamic environment. *Qualitative Market Research*.

UN (United Nations). (2011) *Report of the world commission on environment and development: Our common future*. UN Documents (online). Retrieved June 09, 2020, from http://www.un-documents.net/wced-ocf.htm

Vijayan, G., & Kamarulzaman, N. H. (2020). An introduction to sustainable supply chain management and business implications. In Information Resource Management Association (Ed.), *Sustainable business: Concepts, methodologies, tools and applications*. IGI Global.