

Introduction

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Biographical notes: Miguel Angel Gardetti is a holder of a degree in Textile Engineering at the Universidad Tecnológica Nacional, specialised in shell and crude fibres (linen, jute, hemp, ramie y sisal), and has worked in both domestic and foreign industries. He also holds a PhD in Environmental Management at the California Miramar University, USA. Previously, he earned two Master's degrees: one in Business Administration at the Instituto de Altos Estudios Empresariales, IAE – Universidad Austral, Buenos Aires, and the other in Environmental Studies at the Universidad de Ciencias Empresariales y Sociales, Buenos Aires. He was the Founder of the Sustainable Textile Centre, which he coordinates since its beginnings. He is also the Head of the Instituto de Estudios para la Sustentabilidad Corporativa (Centre for Study of Corporate Sustainability) in Buenos Aires, Argentina.

1 Introduction

Because of the size of the textile sector and the historical dependence of clothing manufacture on cheap labour, the clothing and textile industry is subject to intense political interest and has been significantly shaped by international trading agreements. Estimating the number of people working in these sectors is extremely difficult, due to the number of small firms and subcontractors active in the area and the difficulty of drawing boundaries between sectors. According to statistics of the United Nations Industrial Development Organisation (UNIDO) *Industrial Statistics Database* (INDSTAT), around 26.5 million people work within the clothing and textiles sector worldwide (ILO, 2006). The same report indicates that of these 26.5 million employees, 13 million are employed in the clothing sector and 13.5 million in the textiles sector (only people employed in manufacturing) (Allwood et al., 2006).

There is no doubt that the textile (and fashion) industry is significant to the global economy. However, within the context of sustainability, this industry many times operates in detriment of environmental and social factors (Gardetti and Torres, 2011).

2 Sustainability, textiles and fashion

One of the most widely accepted definition of sustainable development – though diffuse and non-operating – is the one proposed by the World Commission on Environment and Development (WCED) (1987) report – *Our Common Future* – also known as the Brundtland report, which defines sustainable development as the development model that

allows to meet the present needs, without compromising the ability of future generations to meet their own needs.

While achieving sustainability is the goal of sustainable development (Doppelt, 2010) the word ‘sustainability’ has several meanings nowadays, and is frequently reduced by associating it to ‘environment’.

Sustainable development is not only a new concept, but also a new paradigm, and this requires looking at things in differently. It is the vision through which we can build a way of being¹. Also, Suzuki and Dressel (2002) define sustainability – *at the individual level* – as the assessment of all human behaviours with the vision of reformulating those that contradict the development of a sustainable future. So, Roy (2011, p.10) explains “that to take sustainability seriously requires us to re-examine our ideas about growth, social equity, consumption, and ‘standard of living’, that putative indicator of social well-being”.

According to the European Commission (http://ec.europa.eu/enterprise/sectors/textiles/external-dimension/index_en.htm), the textile and clothing industry is a diverse and heterogeneous industry covering a large of activities from the transformation of fibres to yarns and fabrics and from these to clothing, that may be either fashion or non-fashion clothes.

The clothing industry is intensive and offers basic level jobs for unskilled labour in developed as well as developing countries. Job creation in the sector has been particularly strong for women in poor countries, who previously had no income opportunities other than the household or the informal sector. Moreover, it is a sector where relatively modern technology can be adopted, even in poor countries, at relatively low investment costs. These technological features of the industry have made it suitable as the first rung on the industrialisation ladder in poor countries, some of which have experienced a very high output growth rate in the sector (Kyvik Nordås, 2004).

At the same time, the textile and clothing (and fashion) industry has high-value added segments where design, research and development are important competitive factors. Textiles provide the major input to the clothing industry, creating vertical linkages between the two. At the micro level, the two sectors are increasingly integrated through vertical supply chains that also involve the distribution and sales activities. Indeed, the retailers in the clothing sector increasingly manage the supply chain of the clothing and textiles sectors.

Basically, fashion is the way in which our clothes reflect and communicate our individual vision within society, linking us to time and space (Fletcher, 2008, 2014).

Clothing is the material thing that gives fashion a contextual vision in society (Cataldi et al., 2010).

Fashion is something that always changes, while its meaning remains unaltered. Fashion – that is a deep cultural expression and aims directly at who we are and how we connect to other people-frequently suggests a passing trend, something transient and superficial.

As Walker (2006) points out these negative connotations of fashion pertain only to the way in which it is manifested and used. Change itself, is inherently neither positive nor negative – it is the nature of the change what matters. Sustainability, by contrast, has to do with long-term perspective. Fashion can be defined as the discarding of clothes that are fully functional for purely semiotic or symbolic reasons (Koefoed and Skov, undated). The fact that the production and use of fashion garments generate a great amount of wastes, would make it appear as an impediment for sustainability.

In spite of Gordon and Hill (2015) explain that the definition of sustainable fashion is subject to interpretation, according to Hethorn and Ulasewicz (2008) sustainability within fashion means that through the development and use of a thing or a process, there is no harm done to the people or the planet, and that thing or process, once put into action, can enhance the well-being of the people who interact with it and the environment it is developed and used within.

2.1 *Textiles and fashion impacts*

Several authors and organisations have analysed textiles and clothing industry impacts. Some of them are Slater (2000), Allwood et al (2006), Fletcher (2008, 2014), UK DEFRA (2008), Muthu (2014a, 2014b, 2014c, 2015), Ross (2009), Dickson et al. (2009), and Gwilt and Rissanen (2011).

One specific study has been *Fashioning Sustainability – A Review of Sustainability Impacts of the Clothing Industry*, which Draper et al. conducted in 2007 for the World Wild Fund and financed by Mark & Spencer.

The textile industry uses large quantities of water and energy (two of the resources of major concern worldwide), as well as generating waste, effluents and pollution. Both manufacture and consumption of textile products are significant sources of environmental damage. As to social aspects, non-qualified jobs have been lost in regions that mostly rely on these industries. Another serious and still unresolved problem is the increasing flexibility that textile and clothing industry companies need. Faced with fierce international competition, these companies find it more and more difficult to ensure lasting stability in employment. Let alone, the clandestine work proliferating both in developing and developed countries. Child labour continues to be a reality in this sector, despite the existing trend to reverse it thanks to the growing pressure of different agencies. Fashion, in turn and in its worst forms, fuels consumerism – leading to over-consumption, fosters banal values to reach success and happiness, as well as generating stress and insecurity in the consumer, and harmful effects on health such as bulimia and anorexia.

Not less important are impacts generated *by the consumer*. Not only Ehrenfeld (1999) and Suzuki and Dressel (2002) place sustainability *at the individual level*. Previously, Early (1993) in the work 'What is sustainable design' from 1993, define sustainability as the integration of natural systems and human behaviours, while Vieira also in 1993 – sustains that sustainability identifies a concept and a developing attitude, that observes the land, water and energy resources as integral aspects of development. That means sustainable society is not possible without sustainable individuals (Cavagnaro and Curiel, 2012). These definitions claim for a more responsible attitude from the consumer² and this refers to, not only reducing water and energy consumption and chemicals and detergent use, but also – as Fletcher (2008, 2014) suggests – to how consumers subvert social and psychological mechanisms that induce blind consumption, namely: the pressure to compare themselves to others, such as through the accumulation and display of possessions, the continuous replacing of things for being 'updated', the cultural obligation to experience everything and buy things accordingly, the constant consumption as part of a continuous process of identity formation. Fashion is consumption, materialism, commercialisation and marketing (Fletcher, 2015).

3 The special section

This special section begins with the article of Aguinaldo dos Santos, Fabrizio Ceschin, Suzana Barreto Martins and Carlo Vezzoli called ‘A design framework for enabling sustainability in the clothing sector’, the authors discuss general strategies to enable environmental sustainability within the clothing sector, providing a propositional framework for decision makers involved in the definition of programs and policies for this sector.

The last work developed by Marsha A. Dickson and Jennifer McCord and titled ‘The integrated business strategy of a Central American denim apparel manufacturer’, examine – in a manufacturer of high-quality fashion denim apparel located in Central America – the environmental and social responsibility as part of a competitive business strategy.

References

- Allwood, J.M., Laursen, S.E., Malvido de Rodríguez, C. and Bocken, N.M.P. (2006) *Well Dressed? The Present and Future Sustainability of Clothing and Textiles in the United Kingdom*, University of Cambridge, Institute for Manufacturing, Cambridge, UK.
- Cataldi, C., Dickson, M. and Grover, C. (2010) *Slow Fashion: Tailoring a Strategic Approach towards Sustainability*, Thesis submitted for completion of Master in Strategic Leadership towards Sustainability, School of Engineering, Blekinge Institute of Technology, Karlskrona, Sweden.
- Cavagnaro, E. and Curiel, G. (2012) *The Three Levels of Sustainability*, Greenleaf Publishing, Sheffield, UK.
- Dickson, M.A., Loker, S. and Eckman, M. (2009) *Social Responsibility in the Global Apparel Industry*, Fairchild Books, New York, USA.
- Doppelt, B. (2010) *Leading Change toward Sustainability*, Greenleaf Publishing, Sheffield, UK.
- Draper, S., Murray, V. and Weissbrod, I. (2007) *Fashioning Sustainability – A review of Sustainability Impacts of the Clothing Industry*, Forum for the Future and Mark & Spencer, UK.
- Early, D. (1993) ‘What is sustainable design’, in *The Urban Ecologist*, Society of Urban Ecology, Berkeley, Spring.
- Ehrenfeld, J.R. (1999) ‘Cultural structure and the challenge of sustainability’, in Sexton, K., Marcus, A.A., Easter, K.W. and Burkhardt, T.D. (Eds.): *Better Environmental Decisions – Strategies for Governments, Businesses, and Communities*, Island Press, Washington.
- European Commission [online] http://ec.europa.eu/enterprise/sectors/textiles/external-dimension/index_en.htm (accessed 28 March 2012).
- Fletcher, K. (2008) *Sustainable Fashion and Textiles – Design Journey*, Earthscan, London, UK.
- Fletcher, K. (2014) *Sustainable Fashion and Textiles – Design Journey*, 2nd ed., Earthscan, London, UK.
- Fletcher, K. (2015) ‘Other fashion systems’, in Fletcher, K. and Tham, M. (Eds.): *Routledge Handbook of Sustainability and Fashion*, Routledge, London.
- Gardetti, M.A. and Torres, A.L. (2011) ‘Sustainable business management in the textile and fashion industry’, Work presented at the *VII National Congress of Textile Technology, called ‘Sustainability as Strategic Challenge’*, Buenos Aires, Argentina, 3–5 August.
- Gordon, J.F. and Hill, C. (2015) *Sustainable Fashion: Past, Present and Future*, Bloomsbury, London.
- Gwilt, A. (Ed.) (2015) *Fashion Design for Living*, Routledge, London.

- Gwilt, A. and Rissanen, T. (2011) *Shaping Sustainable Fashion - Changing the Way we Make and Use Clothes*, Earthscan, London, UK.
- Hethorn, J. and Ulasewicz, C. (Eds.) (2008) *Sustainable Fashion, Why Now? – A Conversation about Issues, Practices, and Possibilities*, Fairchild Books, Inc., New York, USA.
- ILO (2006) *Global Employment Trends Brief* [online] (<http://www.ilomirror.cornell.edu/public/english/employment/strat/download/getb06en.pdf>) (accessed October 2006).
- Koefoed, O. and Skov, L. (undated) *Sustainability and Fashion in Openwear – Sustainability, Openness and P2P Production in the World of Fashion*, Research Report of the EDU Fashion Project (Creative Commons).
- Kyvik Nordås, H. (2004) *The Global Textile and Clothing Industry Post the Agreement on Textiles and Clothing*, World Trade Organization, Geneva, Switzerland.
- Muthu, S.S. (2014) *Assessing the Environmental Impact of Textiles and the Clothing Supply Chain*, The Textile Institute and Woodhead Publishing, Cambridge.
- Muthu, S.S. (Ed) (2014a) *Roadmap to Sustainable Textiles and Clothing: Eco-friendly Raw Materials, Technologies, and Processing Methods*, Springer, Hong Kong.
- Muthu, S.S. (Ed) (2014b) *Roadmap to Sustainable Textiles and Clothing: Environmental and Social Aspects of Textiles and Clothing Supply Chain*, Springer, Hong Kong.
- Muthu, S.S. (Ed) (2015) *Roadmap to Sustainable Textiles and Clothing: Regulatory Aspects and Sustainability Standards of Textiles and the Clothing Supply Chain*, Springer, Hong Kong.
- Rinaldi, F.R. and Testa, R. (2015) *The Responsible Fashion Company: Integrating Ethics and Aesthetics in the Value Chain*, Greenleaf Publishing, Sheffield.
- Ross, R.J.S. (2009) *Slaves to Fashion: Poverty and Abuse in the New Sweatshop*, The University of Michigan Press, Ann Arbor, USA.
- Roy, A. (2011) *Sustainable Fashion and Textile Design*, Sonali Publications, New Delhi.
- Slater, K. (2000) *Environmental Impact of Textiles – Production, Processes and Protection*, Woodhead Publishing Limited – The Textile Institute, Cambridge, UK.
- Suzuki, D. and Dressel, H. (2002) *Good News for a Change: How Everyday People are Helping the Planet*, Stoddart Publishing Co., Toronto, Canada.
- UK Department for Environment, Food and Rural Affairs (UK DEFRA) (2008) *Sustainable Clothing Roadmap Briefing Note December 2007: Sustainability Impacts of Clothing and Current Interventions*, DEFRA, London, UK.
- Vieira, R. (1993) 'A checklist for sustainable developments', in a *Resource Guide for Building Connections: Livable, Sustainable Communities*, American Institute of Architects, Washington, DC.
- Walker, S. (2006) *Sustainable by Design – Explorations in Theory and Practice*, Earthscan, London, UK.
- World Commission on Environment and Development (WCED) (1987) *Our Common Future*, Oxford University Press, Oxford, UK.

Notes

- 1 Ehrenfeld, J.R. (2002) *Sustainability by Choice*, unpublished.
- 2 To see the new paradigms in consumption and information, please see Rinaldi and Testa (2015). Also, Gwilt (2015) explores improved practices to take care of clothes during the wearing phase.