

**FUTURE EDUCATION AND SUSTAINABLE DESIGN:
TODAY AND TOMORROW OF SUSTAINABLE DESIGN AND THE
EDUCATIONAL ROLE.**

**EDUCACIÓN DEL FUTURO Y DISEÑO SOSTENIBLE: HOY Y
MAÑANA DEL DISEÑO SUSTENTABLE Y EL ROL EDUCATIVO.**

Prof.ssa Cecilia Rinaldi
ceciliarinaldi@accademiaitaliana.it
ORCID: 0000-0002-3091-1767
Italian Academy of Art Fashion Design Florence
Italia
Autor para la correspondencia

RESUMEN

El artículo parte de la experiencia del autor como diseñador de moda y docente y hace un balance de la aplicación de los principios del desarrollo sustentable en el campo de la Moda, pero no deja de identificar razones y dificultades en el surgimiento de teorías de sustentabilidad. La obra señala a los protagonistas del cambio y subraya el papel central de la educación y la formación; señala la particular afinidad de las disciplinas artísticas y del diseño con las razones de la Ética del Desarrollo, ya que están estructuralmente vinculadas al trabajo humano tanto en la fase de planificación como en la de realización. Se indican luego principios y métodos de movimientos y fenómenos, en los que se articula el mundo de la moda sostenible, particularmente crítico hacia el "fast fashion", o sea, aquel sistema que continuamente realiza prendas de baja calidad y bajo precio, expresión típica de la modelo consumista que derrocha los recursos naturales y energéticos, produce contaminación y desperdicio, explota el trabajo, por lo que no le importa ni lo ecológico ni lo ético de la producción y comercialización.

ABSTRACT

The article starts from the author's experience as a fashion designer and teacher and takes stock of the application of the principles of sustainable development in the field of Fashion, but does not fail to identify reasons and difficulties in the emergence of sustainability theories. The work points out the protagonists of change and underlines the central role of education and training; points out the particular affinity of the artistic and design disciplines with the reasons of the Ethics of Development, since they are structurally linked to human work both in the planning phase and in the realization phase. Then principles and methods of movements and phenomena are indicated, in which the world of sustainable fashion is articulated, particularly critical towards "fast fashion", that is, that system that continuously makes low-quality and low-priced garments, a typical expression of the consumerist model that squanders natural and energy resources, produces pollution and waste, exploits work, so it does not care about the ecological or ethical aspects of production and marketing.

Palabras claves:

Sustentabilidad,
Educación,
Capacitación,
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INTRODUCTION

Educational models, like teaching methods, need continuous updating, need to be restructured according to changes in historical, cultural, economic, and social conditions. But the task of educational and cultural institutions is also to anticipate the evolution of these conditions, to facilitate the diffusion of the most advanced trends, to contribute to the implementation of the most advanced theories from the point of view of human development.

Today, the idea of sustainable development is one of the concepts on which various university faculties, from physics to economics to art and design, focus their activities.

The principles of Sustainability, enunciated over thirty years ago, are successful among intellectuals, academics and ordinary people, but only in recent years have they entered the programs of the governments of various countries.

The pandemic has been a moment of reflection on the need to change development models and a radical change of attitude towards the planet and society, a moment of reflection that has accelerated trends and processes already underway in a socio-economic system characterized by unbridled consumerism.

Due to the global crisis caused by Covid, accentuated by ongoing armed conflicts, the ultra-rich are multiplying their fortunes and at the same time poverty is increasing considerably, that is, the gap between rich and poor is widening even more.

Predicting the future in terms of sustainability is very complex and there will still be many changes, there will be other blocks to face, difficult moments to overcome, but it is believed that by now the concept has been sufficiently acquired, even if there is still some way to go, especially at the level of governance; it is only in the last two years that we have begun to see decisions and measures by governments and institutions that aim to modify development models in an ethical and ecological sense.

THE SUSTAINABLE APPROACH AS A RESPONSE TO THE NEED FOR CHANGE.

The culture of Sustainability can be a solution for a possible change, but it is not only necessary to introduce new business models and rethink education and training in all its cycles, we need to regain possession of a humanity that is being lost. We also need to rethink the attitude that we human beings must have in order not to get lost in such a highly digitized world, which prefers the speed of results of algorithms to the slower and more meditated cultural elaboration, the efficiency of mechatronics to the imperfections of craftsmanship, quantity to quality.

Resetting obsolete mechanisms in companies, in the educational field and in institutions, introducing sustainable design models in every field, is necessary and urgent.

Obviously, ideas and awareness must be accompanied by the will to act. In this regard, a radical change is taking place: many companies, from multinational brands to minor brands, are updating, they begin to reject antiquated production and sales

systems, they analyze the needs of consumers, they understand the profound change in the lifestyles of the new generations.

As far as I'm concerned, serendipity, sustainability and ecology are concepts that have always been part of my life, of my personal passion, linked to my land of origin and the education I received. I have always tried to put the theories into practice by introducing actions in terms of sustainability both in my work as a fashion designer and in the field of teaching. Being curious, reading books and articles, documenting oneself, participating in conferences and exhibitions, asking questions and being critical, using new technologies in an intelligent way trying to filter through the overload of world and local news (often false or manipulated) that reach us, differentiating the sources from which to get information, all actions that predispose to be always updated and open to change.

EDUCATION, TRAINING AND ECOLOGICAL TRANSITION. DIFFICULTIES AND OPPORTUNITIES.

Today is the time to take note that it is necessary to act in order to change design methods, production and marketing techniques, and therefore it is necessary to be more pragmatic, more capable of taking effective action quickly.

To achieve these objectives, a fundamental role can be played by educational and training institutions: change is necessary but difficult, also because it finds resistance in current economic structures.

It is therefore necessary to convey to the majority of young people what the difficulties are today and try to find solutions together, abandoning certain naiveté and adopting effective sustainable practices in order to free themselves from accusations of being too theoretical and utopian.

Education and training are playing a fundamental role in a complex period like the one we are living. Education for sustainability in schools and universities has also become increasingly necessary in order to facilitate the ongoing processes of ecological transactions. Digitization, now increasingly embedded in any context (artificial intelligence, data driven and new technologies), must be exploited to the fullest.

In particular, the disciplines of art, aesthetics and design, are those most in tune with the sustainable attitude as they are closer to the needs of creative processing and to the times and modes of manual work, that is, more interested in an authentically human development.

PROFESSIONAL FIGURES PROTAGONISTS OF CHANGE.

The fashion industry is increasingly oriented towards designers who are bearers of ethical values and capable of developing research in the field of environmental and social sustainability.

Together with the figure of the designer, however, the figure of the educator and the teacher must also change: to be innovative and inclusive teachers attentive to the principles of sustainability. Innovative, curious, intelligently emotional that is balanced, in harmony between rationality and emotions, is the

figure of the educator of the future who must learn to team up and rethink new teaching methods.

Teaching in recent years, thanks to the progress of neuroscience and psychological theories, has been much more dedicated to the relationship between the ability to learn and the emotional state of the students. For too long we have focused our education and teaching by privileging rational intelligence over emotions, considered irrelevant to learning. Now we live in a much more complex world, which requires a high level of emotional solidity that is rarely found in all segments of the population and especially in the age of development. Thus, enhancing the value of emotional intelligence in education could be a solution for the growth and development of future generations; it is therefore necessary to integrate in the school curriculum of all levels the development of certain life skills: adaptability, positive behavior, emotion management, problem solving, effective communication, empathy, creative and critical thinking.

An innovative teacher alone can do very little in all this complexity. Hence the importance of teaming up, hence talking about teacher teams; creating a community is now essential. But can we wait any longer to make these changes? I don't think so. Families, too, are looking for new models of education, of teaching that are freer and more aware.

The new generations are more attentive to the changing world, and they deserve to be listened to; renewal also means meeting these needs.

In all of this analysis, what are the levers of change? Certainly to believe always and in any case in training, in continuous professional development, in transformative development, training that knows how to be meaningful, to know how to respond to concrete problems that teachers in this complexity find themselves facing, to know how to assume and know how to cultivate a research posture and obviously try to carve out moments of sharing and collaboration. Therefore, assume an innovative avant-garde position, trying to make what is beautiful exceptionally contagious.

In summary, I summarize what I believe should be the professional profile of the innovative and inclusive teacher with a few adjectives: curious or inquisitive (you'll forgive me since I don't put the asterisk but I'll use the feminine since school is mostly female), researcher, reflective, open, collaborative, a communicative and passionate teacher but also exciting and motivating, because arousing curiosity and the desire to learn is, as Philippe Meirieu philosopher of education who has written very interesting volumes on the concept of democratization of school and knowledge says, a fundamental challenge.

SUSTAINABLE DESIGN, A CONSOLIDATED REALITY IN EVOLUTION.

Sustainable design is part of a movement that is based on the new Ethics of Development and is characterized by concepts and procedures that I summarize here.

Sustainable Fashion or Slow Fashion (or Critical Ethical Fashion), the definition of "Slow Fashion" comes to us from the not so distant 2008, when the sustainable design consultant Professor

Kate Fletcher, of the Centre for Sustainable Fashion in London tried to define and summarize in a single concept the many pushes in the world scene towards a more sustainable fashion, both from the environmental and social point of view: a type of production and consumption based on the contrast to the "fast fashion" and the growing consumerism, in particular with regard to objectives and values.

Critical Fashion is the set of independent productions that rethink the current "fashion system", through artisanal productions "handmade", not serial or low quantity production, pays attention to the parameters of social and environmental responsibility, the use of recycled materials, organic yarns and fabrics, the protection of workers, transparency in the price of sale to the consumer.



*Timelapse Collection Wardrobe 21 Sustainable Project Cecilia Rinaldi
Ph. Marianna Soverchia*



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Ph. Marianna Soverchia*

THE KEY CONCEPTS OF SLOW FASHION OR CRITICAL ETHICAL FASHION.

Designer, Producer and Consumer have a common vision: quality, social and environmental ethics combined with beauty, product longevity and protection of diversity and people, quality research, innovation but never at the expense of tradition. Quality rather than quantity: a production of less quantity and giving more value to local productions of small businesses. Respect for people: adopting product or process certifications, supporting associations for the rights of textile workers and signing codes of conduct, can help ensure fair and humane treatment for the people who produce the garments and the fabric with which they are made.

NATURAL/BIOLOGICAL AND BIO-SYNTHETIC

Use natural fabrics and/or natural dyes. Use synthetic fabrics caring about where they come from and the end of their life cycle such as Recycled Polyester (polyester compared to other synthetics is very easy to recycle), Ingeo (synthetic fiber made from corn), Lyocell or Tencel (synthetic fiber where the chemicals used are reissued in the production cycle almost 100%) - Don't be too fundamentalist, synthetic is also good! Let's take an interest in the materials we use - Use also mixed compositions of natural and synthetic, Control the supply chain by choosing as much as possible companies/suppliers that adopt certifications GOTS (Global Organic Textile Standard), ICEA (textile products containing natural organic fibers, products made with recycled material, products obtained respecting animal welfare), FAIR TRADE (Fair Trade).

CIRCULAR DESIGN OR ZERO WASTE

Upcycling, Creative Reuse, Recycling: it means the use of waste materials, destined to be thrown away, to create new objects with a higher value than the original material; research of new materials and fabrics, obtained from new vegetable and animal fibers or from the recycling of waste (Research and Fashion at the same pace with Textile Research, Biology and Nano Technologies); use fabric scraps of the companies (obtained from the models and prototypes created in the company and in the production);

Secondhand, Second Hand, Used, Vintage clothing (example of Vinokilo); try as much as possible to restore or mend ruined garments and donate those no longer used;

"DIY" Do It Yourself: make new clothes out of old ones, customize anonymous garments to make them unique;

Deconstructions, deconstructing material to recreate the structure of fabric by weaving, braiding or knotting it;

Multifunctional clothing, creating seemingly complex garments from a single square of fabric (inserting cuts for pockets and buttons to give the desired shapes); also studying the process of shaping design with a zero-waste approach.



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DESIGN FOR SOCIAL

"Km 0" or local foreign production: according to the "Slow Fashion" movement, it is important that in every area of the world local communities are helped to establish small-scale enterprises to produce consumer goods that can also benefit the local community and not only constitute material for low-cost exports to richer continents. Some eco-brands in Northern Europe have chosen to keep their design in the West and relocate production abroad, supporting it without abuse and exploitation of labor. Handmade" craftsmanship, high quality handmade production, unique pieces, buy from artisans to favor local products and fair trade, so buy clothes produced in respect of the environment and workers; low quantity production of products, favoring quality; control of the supply chain by adopting as much

as possible companies/suppliers with certifications GOTS, ICEA, FAIR TRADE (Fair Trade); participate in exchanges, markets, cooperatives, associations for the rights of textile workers and sign codes of conduct can help to ensure fair and humane treatment for the people who produce the clothes and the fabric with which they are made. With local "Km 0" production and trade, this reduces the transport of raw materials and products and pollution.

Last but certainly not least, the concept of the Slow Fashion movement is to try to adopt a style that transcends the trends of the moment and favour durable, quality fabrics.

WHAT THE FUTURE HOLDS.

"Fast fashion" probably has a very long life ahead of it and many producers have no intention of slowing down the pace of production. Having said that, designers, producers and consumers can choose not to close their eyes by adopting a "slower" and critical style, in order to safeguard both the planet and human rights (and in the long run, also their wallets). Slow Fashion or Sustainable Fashion with all its internal movements is still a niche but slowly, especially in recent years, has seen a significant expansion. The return of handmade products, tailoring, couturier, haute couture, NO Brands, the new generations (Millennials and Generation Z) more aware and attentive to global issues, are facts that are beginning to be evident. Another change that is now visible: on the one hand the giants of Mass Production and on the other hand Sustainable Fashion and High Fashion. Currently more and more established and famous brands are adopting more and more sustainable solutions for the future. Creating a network, both digital and physical, cooperation, creating partnerships, participating in trade fairs, raising awareness of the issue through webinars, seminars, conferences, talking about it in schools and universities and joining collectives (Lotto zero for example with The Directory), these are the actions that contribute to the success of the new ethical and sustainable fashion.



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CONCLUSIONS.

Development must be sustainable, that is, it must guarantee respect for nature and human labor, it must not waste resources and must guarantee a serene future for future generations in terms of quality of life and the environment.

However, in order for Sustainable Development not to remain a mere theory or a buzzword used instrumentally for political or commercial ends, its principles must be known and, above all, implemented, but this requires that a favorable socio-cultural climate be created. To this end, a decisive change of mentality is required not only of governments, but also of productive and commercial activities, teachers and, obviously, of individual citizens.

Particularly important are education, training and the role of the teacher, who is now required not only to play a technical role but also to consider not only the rational intelligence but also the emotional aspects of students, as fundamental to learning.

The arts, aesthetics and design are the sectors most in tune with the sustainable attitude, since they are based on intellectual and creative elaboration in the ideational-design phase and are closer to the rhythms and modes of manual work in the realization phase, that is, more interested in authentically human development.

In the fashion design sector there has been much experimentation in recent years. Some of the most relevant phenomena are:

Slow Fashion: ecologically and socially sustainable fashion in contrast to "fast fashion", a system that makes low quality clothes at very low prices and launches continuous new collections;

Critical Fashion: independent productions that contrast the current "fashion system", through "handmade" craft productions, taking care of social and environmental responsibility;

Circular Design and Zero Waste: upcycling, creative reuse, recycling, use of waste materials, destined to be thrown away; research of new materials and fabrics, obtained from new vegetable and animal fibers or from the recycling of waste, use of fabric scraps of companies; marketing of second-hand, used, vintage clothes; rearrangement or mending;

Design for social: production at "km 0", development of local communities with small businesses that produce and distribute at short distances. Craftsmanship "handmade" high quality unique pieces produced by individuals or small businesses.

The activities that adhere to the world of Sustainable Fashion use companies that produce fabrics and yarns that have certifications of raw materials and product, we mention some:

GOTS: Global Organic Textile Standard is promoted by the leading international organizations in organic farming, in order to ensure responsible and sustainable development in the textile sector,

ICEA: certification for the textile sector that extends to textile products containing natural organic fibers, products made from recycled material, products obtained in respect of animal welfare,

FAIR TRADE: Fair Trade.

New generations more aware and attentive to the global ecological and social aspects, a certain reaction to the standardization of taste, more sober lifestyles, transcending trends, which make people prefer quality to quantity and refuse waste, the need to be included and informed in the process of making and customizing a product, the return of the "handmade" and tailoring, are some signs that give hope for a fairer, simpler and more solidarity-based future.

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