Industrial Design. Culture and Hallmarks of a Global Art Form [3/7. Master Craftsmanship]



by Enrico Maria Davoli

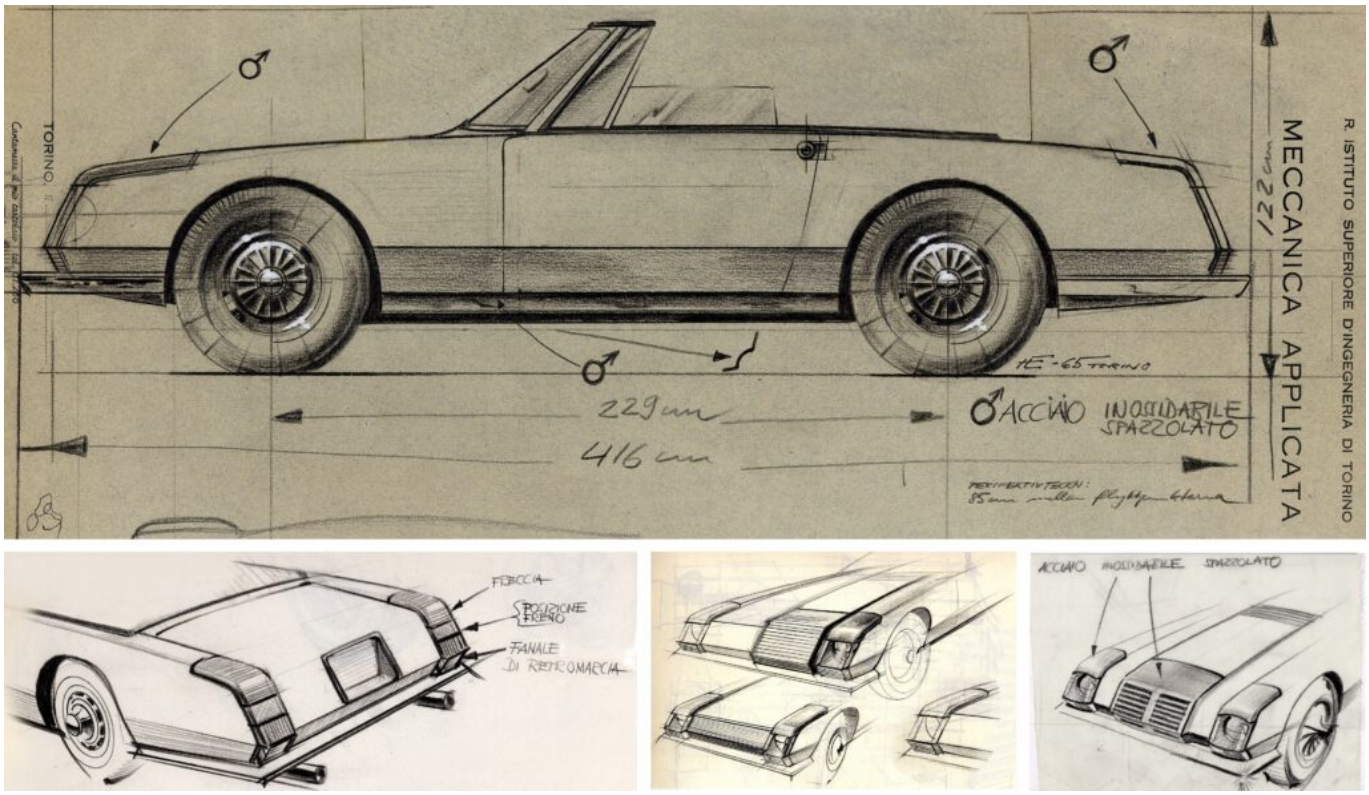
3.1 Project

We have already noted that design is an activity that encompasses and shapes all the fundamental stages in the life of a manufactured object. In this regard, a very effective framework is the “quadrifoglio” (“four-leaf clover”) proposed by Renato De Fusco in his renowned textbook on the history of design. In order to legitimately speak of design, writes De Fusco, the process must encompass four stages that cover the entire life cycle of the product: project, mass production, sale, and consumption. To these four stages, one could now add a fifth, one that is increasingly significant both economically and culturally: disposal and recycling. It is clear, however, that of these four (or five) stages, there is one that holds supremacy over all the others. And it can only be the first: the project.

In its various forms, a project encompasses – at least in theory – the subsequent stages of the object’s life cycle. A project accompanied by technical specifications, dimensions, materials, colors, and whatever else the manufacturing process requires, already contains within itself the subsequent phases of life and, in a certain sense, the destiny of the object to which it refers. It may happen, for example, that a company decides at the last moment not to produce a new item, but this does not mean that the

conditions allowing us to speak of design are lost, even for that project that never came to fruition. Consider the automotive industry, where even exceptionally well-crafted projects – promising on paper but deemed too risky – remain on the shelf, sometimes forever, other times awaiting better times. Even unproduced projects are part of design history. And sometimes they contribute to it, paving the way for subsequent projects that are more carefully considered and better suited for the market.

That said, it must be immediately noted that the project activity as we have come to understand it in the modern era is difficult to imagine in earlier periods. Even with regard to the discipline most closely related to design – architecture – ancient, medieval, and Renaissance traditions have left us nothing resembling a fully developed and detailed design. If anything, we have sketches, ideas, partial views, and technical and stylistic references. What is the reason for this apparent gap?



Hans Ehrich, 2.5 Litre Gran Turismo Convertible, 1965 (Wikimedia).

Certainly, the vast scattering of documents and information we must contend with when studying the past bears some indirect responsibility. The further back in time the events lie, the more dramatic the lack of information becomes. For the most distant past, only an infinitesimal fraction of all the materials produced by human civilization has survived. Consequently, accustomed as we are to today's business environments where nothing is left to chance, when we try to imagine our ancestors grappling with the challenges

of designing artifacts, we tend to believe that they proceeded in a relatively crude, intuitive manner. Which, of course, was not the case, even if their approach was quite different from the one we follow today.

To understand the philosophy of work in times long past, there is a fundamental point worth emphasizing. All the established practices within the productive activities of the pre-industrial era can be traced back to an inseparable pairing: that of craftsmanship and art. Craftsmanship – in the precision of the gestures and the division of tasks between master and apprentices – is also evident in the creation of even the most important works of art, the inimitable masterpieces we admire today in palaces, churches, and museums. Conversely, a certain artistic quality – the essence of a series of creative achievements that can sometimes be traced back to identifiable masters, but are much more often anonymous – is always present in a pre-industrial object, even the most humble and repetitive one.

3.2 From the One to the Many

As a rule, the distinction between art and craft is virtually nonexistent in more archaic, socially egalitarian societies, where consumer goods are scarce. It tends to widen as social complexity increases, when the growing range of occasions and rituals stimulates an ever-broader array of inventions and variations in every sphere (clothing, work tools, household goods, furnishings…). As demand for goods rises, supply becomes more diverse and complex.

From a legal standpoint, those productive activities are granted the status of “Arts” which, due to the social and economic prestige of the work they perform and the products they bring to market, are able to establish an institutional framework for themselves, thereby gaining corporate autonomy and privileges. In medieval cities, depending on the economic and social prestige attributed to each trade, there were thus Guilds of the Major Arts and Guilds of the Minor Arts. Other trades could also be included within them, grouped under the main one. This was the case for painters in Florence, the leading Italian city of the Renaissance: they belonged to the Guild of Physicians and Apothecaries, one of the seven guilds classified as major.



Luca della Robbia, Coat of arms of the Guild of stonemasons, woodcarvers, and sculptors, 1460s, glazed terracotta, Florence, Orsanmichele (Sailko/Wikimedia).

At the heart of the transmission of artistic and artisanal knowledge from the past lies a manual skill honed to solve the same problems with ever-greater brilliance, generation after generation. Cyclically, the technical and virtuosic challenge that few are initially able to tackle eventually becomes routine, triggering new possibilities that had remained unexplored until then. And so on. We learn by doing; we learn by making mistakes. In the pre-industrial era, even machines (because they were always built to alleviate fatigue and improve performance) were nothing more than an extension of the human hand, as they were in no way programmable to perform actions in its place.

In ancient and medieval thought, there is no real distinction between art and craftsmanship. The proper, strictly codified practice of manual skill forms the common foundation for both. Artists are, to the extent that they manipulate and transform materials, craftsmen; in turn, the finest and most renowned craftsmen may aspire to the status of artist, creator of new forms.

In summary: in premodern societies, all objects – from the most humble and everyday to those that are precious and unique, which we today define as works of art and historical monuments – exist under the same aesthetic regime. Within this regime, one can move from one extreme to the other without any breaks. The canonical models developed by the most important workshops are, in fact, adapted into increasingly simpler and more reduced forms, which, however, never go so far as to distort their identity.



Marble frieze from the Collegium of the Fabri Tignarii depicting a scene of work in a carpenter's workshop, 1st century AD, Rome, Museo della Centrale Montemartini (Carole Raddato/Wikimedia).

At this point, a few concrete example, chosen from among the many that could be cited, may help illustrate the cultural and anthropological shift that has taken place over the past three hundred years, as a result of technical reproducibility and the mass production of objects in numerically unlimited quantities that are becoming increasingly affordable:

a) Consider a large ancient Greek statue, intended for a sacred space, and the small terracotta tanagra figurines that served as its domestic, miniaturized version. There is an enormous technical and formal gap between them. But it will never be a radical, irreconcilable opposition, like the one that, in the modern industrial age, separates an original from its reproduction – for example, Michelangelo's David from its resin replica sold to tourists;

b) If we were to compare a painting by Apelles, Zeuxis, or Parrhasius – great Greek painters of whom no works remain – with the many vase paintings that reproduced their subjects and style, the latter would certainly appear far less interesting, even banal. But this is nothing compared to the difference

that exists today between a famous painter’s canvas and a version of it printed on a poster to be framed. In fact, any comparison between the two images, though visually identical, is impossible;

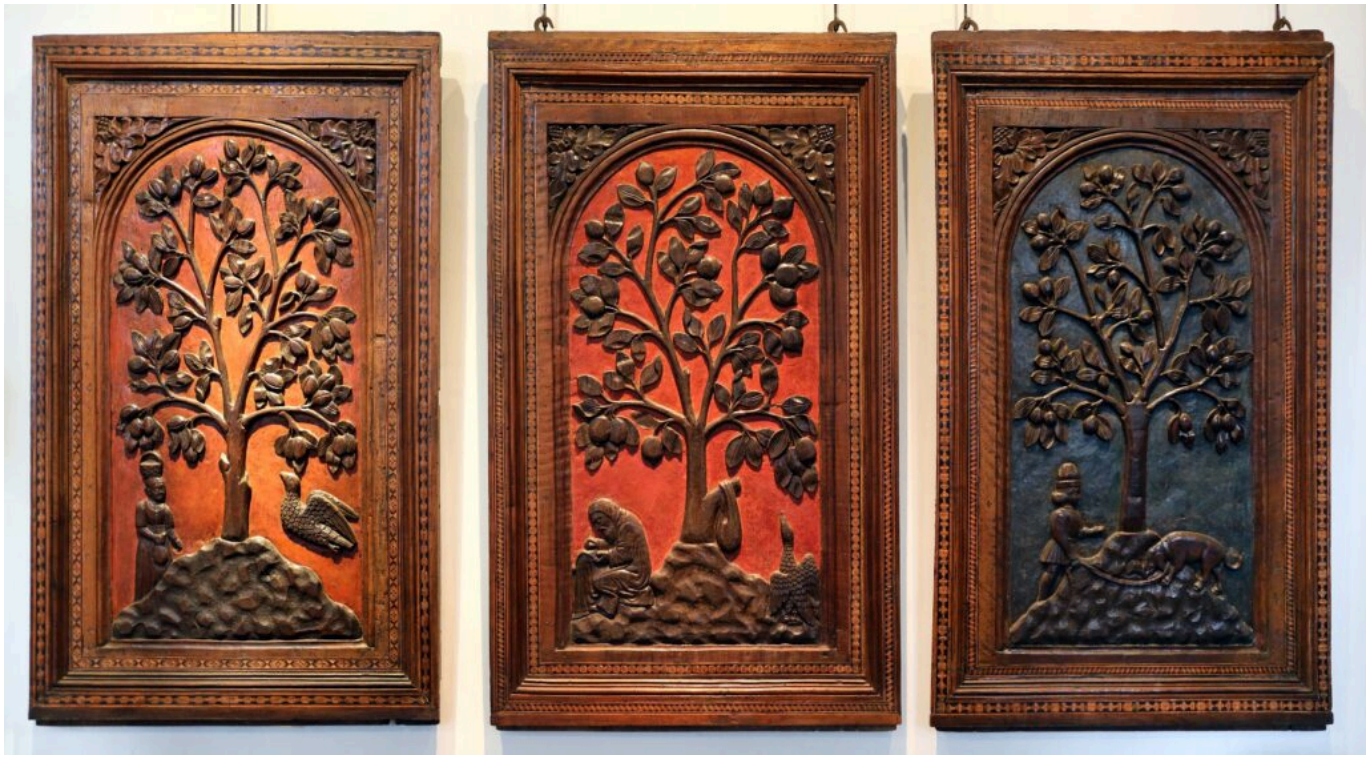
c) Consider, for the Middle Ages, the cathedral of a large city and the small country parish church. Even between them, there is a profound imbalance in terms of aesthetic solutions and socioeconomic prestige. But consider any object from today, and that same object transformed, in the manner of Duchamp, into a Dadaist ready-made. There is no longer any possible relationship between the two respective contexts to which they belong;

d) The furnishings of a Renaissance aristocratic family differ vastly, in both quantity and quality, from those of a peasant family. Yet nothing that separates these two different ways of life compares to the stark contrast between a set of stainless-steel cutlery and a set of disposable plastic cutlery, both of which are found in many homes today.

3.3 Tradition

The common thread linking the four examples we have just examined lies in the cohesive and unified landscape that human intellectual endeavors once presented, in stark contrast to what we see today. This is obviously not about yearning for a golden age, which, moreover, never existed. But that nostalgia for a lost unity that we often feel when thinking of times gone by likely has to do with those working methods, which excluded no one – indeed, compelled everyone to participate. The production chains that produced masterpieces were the same ones that gave rise to variations, copies, imitations, and adaptations, even the most cheap and tacky ones. The various manufacturing activities were closely intertwined, rooted from the start in the same geographical districts, close to the same sources of raw materials.

The status of men varied – and in a highly significant way – ranging from slave to warrior, from priest to king. The way objects were perceived and used, however, remained essentially unchanged. Regardless of the version – more or less elaborate, more or less exclusive – that each person could afford of an object, the formal archetypes, compositional repertoires, proportional criteria, and functional and symbolic combinations that shaped its creation remained constant.



Lorenzo da Origgio, Giacomo da Torre, and Giacomo del Maino, Choir screens formerly in the Basilica of St. Ambrose, 1469–71, carved, inlaid, and painted walnut, Milan, Diocesan Museum (Sailko/Wikimedia).

However unbalanced it may be, the coexistence of pre-industrial objects never creates an unbridgeable gap between one object and another, or between one way and another of thinking about, producing, and using the same object. With the Industrial Revolution, however, what we define as artistic and what we define as artisanal take divergent paths. Industrial mass production systematically interposes itself between the two, and neither can be defined anymore except in synergy with or in contrast to it. The artistic begins to take on the form we see today: that is, a form of production linked to an eminently intellectual, reflective, and individualistic sphere, where manual labor plays an increasingly uncertain role. Conversely, craftsmanship becomes synonymous with correct and impartial execution, the result of a precisely quantifiable work performance in terms of labor and materials used. After having gone hand in hand for millennia, art and craftsmanship are parting ways.

It should also be noted that, in the era preceding the Industrial Revolution, the landscape of natural resources and their availability was quite different from what we see today. The range of raw materials available for use in various manufacturing sectors was limited, and it expanded only very slowly and with great difficulty. The qualities and performance characteristics of various materials seemed virtually unchangeable, fixed once and for all. Despite the refining processes they underwent, their animal, plant, or mineral origin remained a clear, easily observable fact. This does not mean, of course, that scientific and technological progress was not felt – and at

times with remarkable intensity – even in the most distant eras. But it was only with the Industrial Revolution that the idea began to take hold that an object could be continually reimagined and restructured from scratch, with ample room for discretion.



Mold for manufacturing the Juicy Salif citrus juicer, designed by Philippe Starck in 1988, manufactured by Alessi since 1990, London, Design Museum (Daderot/Wikimedia).

From the largest structures – those of an architectural and urban nature – down to the smallest everyday objects, the pre-industrial world is organized into clear and distinct typological categories. Consider the buildings of classical architecture. Palatium, domus, bouleuterion, odeon, temple, altar, propylaea, basilica, theater, amphitheater, stadium, mausoleum, nymphaeum, portico, hypostyle hall, and others that could be mentioned are, in fact, types. The most prestigious of these types rise to become permanent canonical forms, archetypes imitated time and again, as was the case with the Parthenon in Athens or the Pantheon in Rome. In turn, different types can hybridize with one another to give rise to more complex forms, as is the case, for example, in the great Roman bath complexes, where elements pertaining to civil architecture (basilica, portico), sacred architecture (nymphaeum), and funerary architecture (mausoleum) are combined.

The system of architectural orders serves as the connecting tissue between built structures and open spaces (streets, forums). The Doric-Ionic-

Corinthian trio, with its accompanying ornamentation and finishes, defines spaces, establishes proportions and dimensions, and highlights civic functions. The repertoire of architectural orders is also essential for decorating interiors, but it is in exteriors that its role as an interface between the private and public spheres – between the domestic and political realms – is best realized. Whether separate or combined within the same building, the robust and “masculine” character of the Doric, the delicate and “feminine” character of the Ionic, and the pictorial and “baroque” character of the Corinthian define its purpose and social prestige – and, consequently, its style. Even the interior layout and its attributes (arrangement of rooms, volumes, orientation, circulation axes) adhere to a flexible yet precise discipline.



Doric, Ionic, and Corinthian orders on the façade (1616–20, by Salomon de Brosse and Clément Métezeau) of the Saint-Gervais-Saint-Protais Church in Paris (Tangopaso/Wikimedia).

The entire vast array of human artifacts is organized into richly varied categories: from vessels to carpets, from silks to lace, from glassware to silverware, from epigraphic characters to the various types of handwriting used on papyrus, parchment, and paper, from weapons to agricultural tools, from land vehicles to boats, from furniture to ceramic tiles, from coats of arms to emblems. As with the macro-objects of architecture, so too for all others, various civilizations have produced technical manuals and catalogs of models, even if very little of this has survived to the present day. All of this meant that, until a few centuries ago, the relationship between humans and objects was characterized primarily by stability and established custom. Or, if you prefer, by a change so subtle that it could be mistaken for spontaneous evolution, independent of human will.

We can therefore say that, in pre-industrial contexts, the guiding principles that shape the design of an object – form, dimensions, materials, pigments, and ornamental details – are neither spontaneous nor individualistic, at least not in the sense we are accustomed to today. Everything falls within long-established patterns, which gradually incorporate technical and formal innovations, grafting them onto the living trunk of tradition. Project – if one can speak of a project – does not take shape as an individual initiative, but as a work-in-progress rooted in a widely shared body of ideas, and develops as a variation on a given theme. The artisan conceives the artifact by drawing on a technical, formal, and stylistic repertoire that is the heritage of the workshop where he works, to which he may contribute, if he is able, further experience and improvements.



Pietro Mosca (1870–1952) at his barrel-making factory in Pieve di Cento (BO), in a photo by unknown taken in 1900, Private collection (Wikimedia).

This heritage is safeguarded, above and beyond the workshops themselves, by the professional associations responsible for regulating the practice of arts and crafts. Throughout history, organizations bringing together those who practice the same trade have taken on various forms and names: from the collegia of ancient Rome to the medieval guilds. But they all share certain fundamental similarities. They are hierarchical organizations that value seniority and experience. They protect their body of knowledge and technical innovations from being appropriated by outsiders, manage the benefits for their members, monitor the conduct of the various workshops, and impose sanctions for any violations of common rules of conduct.

The slave-based economy of antiquity, as well as the medieval economy based on serfdom, provided a supply of cheap labor, often of high quality. For all these workers, any form of artistic or intellectual claim to what they produced was ruled out. Only those who practice the liberal arts (a term used to define the body of literary, legal, philosophical, and mathematical-geometric disciplines, placed at the pinnacle of knowledge) can, in some cases, aspire to such claims. The mechanical arts (that is, manual activities) are recognized as culturally and spiritually significant phenomena only insofar as the toil of labor is, par excellence, the path leading to righteous living and, from a Christian perspective, to eternal

life. There is therefore no reason why someone who designs and crafts furniture, jewelry, fabrics, clothing, ceramics, or other such items should be regarded as an author deserving of special celebration. Such honor may be granted – here too, very rarely – only to those who work in the most sophisticated and institutional fields of the visual arts, such as architecture, sculpture, painting, and miniature art.

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Homepage: Emanuel Josef Margold, Bahlsen cookie box, 1917 (Christos Vittoratos/Wikimedia).
Below: fragments of ceramic molds used for casting bronze vessels, Shang Dynasty, 1400–1100 BCE, Anyang, Yin Xu Museum.


銅陶范
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