

Space Age, l'era del design spaziale, inizia negli anni sessanta ed è fortemente dovuta alle fascinazioni suscitate dalle spedizioni lunari, culminate nell'allunaggio del 1969, che contribuirono a fomentare le illusioni visuali fantastiche dell'uomo moderno che riponeva smisurate aspettative nel futuro, ormai convinto che la società e l'umanità intera si sarebbe allargata e spinta verso lo spazio dove avrebbe continuato la sua evoluzione.

The Space Age, the era of space design, began in the 1960s, and was largely result of the fascination of lunar expeditions culminating in the manned moon landing of 1969, which helped foster the fantastic visual illusions of modern humanity and projected enormous expectations into the future, in the conviction that all humanity would be enlarged and driven towards space and there continue our evolution.

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Gianluca
Sgalippa

SPACE AGE LIGHTS

TRA GUSTO POP E DESIDERIO DI AVANGUARDIA

Et

T La Triennale
di Milano
Design
Museum

Gianluca Sgalippa

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bottom-up changes in society, dominated by women's lib, so their designs were not closely attuned to the times and were embodying in an outmoded bourgeois idea of representation in new forms. Today the work of those masters forms a sort of matrix for our innovations. What they configured at the time as utopia, now feeds the huge reservoir of formal references typical of liquid modernity.

Music, at least theoretically, is the only field of art that could fully embody the innovative freedom that we have explored. It is notoriously subject to very different processes from those that regulate the production of physical artifacts. And yet the new awareness of space scarcely affected musical creation, whose progressive phalanx was generally engaged with rock. This means that the mechanical qualities of electronic sound were preferred to the aesthetic derived from sophisticated and super-advanced technology, the gravity of the sounds generated by guitars, batteries or combo organs prevailed over aseptic spatial forms. Instead "alternative" and progressive music expressed the new social issues as the grounds for protest and the break with preordained values. Also in this field, the Beat generation loved acid sounds and atmospheres, though sympathetic to the appearance in clubs of special effects based on the psychedelic side of the lunar world.

Even the experience of *2001 A Space Odyssey* failed to grasp this opportunity in its soundtrack. Initially Kubrick relied on the composition of themes by Alex North, but at the last moment he switched them for famous pieces of classical music, which naturally have nothing to do with the settings of the film. Although North was considered an avant-garde composer, in that case his work would hardly have furthered musical innovation. His pieces are in fact highly geared to melodic and symphonic effects. Moreover Kubrick's *Odyssey* marked a trend: all science fiction films ever since have been accompanied by sound-tracks based on a medley in a classical-orchestral epic tone, like the ones composed by Vangelis. There were, however, some extreme experiments. An example was the work of Demetrio Stratos, both as soloist and as leader of the Area, and a little known side of Franco Battiato, who introduced a pioneering strain of electronic music into Italian pop.

The space world found an outlet in music down to the second half of the 1970s in the category of commercial pop. Since the parabola of space exploration had come to an end some time before, this development was mostly a consequence of the success of science fiction movies in 1978-80, with an endless sequence of new films. At this stage, the points of contact between film and music lay not in audio and acoustic research, but in image. Artists such as Dee D. Jackson and the Rockets use imagery and themes cast an alluring over an essentially cheap and second-rate style.

A truly innovative contribution was made by Kraftwerk and Jean-Michel Jarre. Kraftwerk are a German group that takes the use of synthetic sound to new heights, making it their keynote. Acid notes in stark sequences evoke an immanent robotic world. A markedly extraterrestrial atmosphere, hovering between the future and the ancestral earth, is recreated in a more structured and full-bodied way by Jarre, who was the first to use the synthesizer as his only instrument in composing. His songs were inspired by—and still evoke in listeners—many aspects of space adventure, from solar travel to magnetic phenomena. For the first time, the prolongation of the metallic note evoked a sense of cosmic rarefaction and an artificial landscape, but it was too late. Design was already entering the post-modern phase.

The Space Age dimension has the merit of codifying an attitude, and perhaps of crystallizing an expressive world, in sectors of design for which the gaze on the future—real or imaginary—is essential. In the contemporary world, the experience of cosmic

achievements have opened an alternative approach to innovation and the Rationalist and Modernist heritage.

Remember that space imagery is associated with a certain degree of provocativeness that has emerged since the 1970s in many forms of experimental design. Its most brilliant platform is Japanese electronics, whose developments and products appeal to everyone. The automobile industry also thinks necessarily in terms of styling and performance geared to the future. And we should remember its experimental connections with fashion, made credible by technological applications in off-the-rack clothes in designs such as those by Gianni Versace in the late 1970s.

But it was with the advent of digital design that the relationship between the real and the imaginary was inverted: it was the concreteness of technology that prepared us, whenever the opportunity arose, for space adventures in forms, styles and languages distilled in an earthly dimension.

Unbelievable Years!

Cesare M. Casati

At the start of this new century of the new millennium I feel it is important to recall that the sixties proved to be an incredible and all-important decade by the changes it wrought in society, attitudes, the figurative arts and design.

It all happened because my generation of young people, then in their early twenties, began at the different ends of the earth to undermine the established way of life and so cast doubt on certain aesthetic, cultural and behavioral values which had been handed down for centuries in good Western middle-class families. All values that turned largely on respect for tradition and the insistence on unquestioningly repeating the experiences of previous generations.

Fashion and music in Britain, the figurative arts in the United States and architecture and design in Europe embarked on a continuous hybridization of experiences in wholly new and unpredictable ways. This influenced many talents simultaneously in many countries and particularly in Italy.

Precisely this initial distrust of conservation led some of us, artists, designers and architects, armed with a strong creative urge, to experiment with and invent new forms of expression based on direct knowledge of the immense progress science had brought by inventing new artificial materials (plastics), new technologies of communication and image reproduction (TV, fax, microfilm, etc.) and innovative low-voltage light sources that finally allowed those designing for the lighting sector to construct luminous and lighting objects that transcended all the formal and technical limits of the materials previously known. The produced variable brightness lamps which could be colored and controlled not only to illuminate but above all to create ambient atmospheres with the same emotional value as theater sets.

Italy at that time had a booming economy, with a generation of young designers who had learned the lesson that Gio Ponti had brought back from a memorable trip to the USA in the late fifties, where he had seen that product design was carried out by large professional firms and major manufacturers of consumer products. Ponti founded the first Italian design association (ADI). He designed and redesigned new objects with really surprising forms and uses: from household utensils to sewing machines and even a car with parts in canvas that closed with a zipper. It was this great architect and designer, unique and indisputable, who paved the way to the wonderful new prospects of a profession that brought the best young designers into Italian industry, so initiating a genuine transformation of the culture of the project and the art of production. This development was fulfilled in the following years, which saw the emergence of many new companies

marketing innovative products that were exported worldwide for their formal, material and functional qualities.

My generation, with the support of a number of progressive established architects, began above all to study new materials and new production technologies and, confident in this new knowledge, literally began to "attack" manufacturers in these new sectors, "forcing" them with their enthusiasm to invest in research and experimentation by presenting projects, inventions and products of such creative depth that they amazed the whole world.

This was the origin of Italian design, which became celebrated.

At that time the undoubted international success of Italian product design, especially in furniture, attracted the attention of many traditional industries, such as lighting. Led by the achievements of Livio Castiglioni and his brothers Piergiacomo and Achille, light manufacturers were among the first to transform their catalogs, eschewing fake candles and crystals and venturing into new projects. They began to turn out products that did not resemble in any way, morphologically or aesthetically, what the market wanted but elicited hitherto unknown feelings and emotions.

Replacing the traditional table lamp of satin and lace or the large Murano glass chandelier with Taccia by Gae Aulenti and produced by Martinelli (a glass dome with adjustable indirect light) or Arco by Castiglioni, manufactured by Flos, which focused the light on a table top without the need to suspend it from the ceiling, took a lot of courage. It also took communication skills and surprising marketing strategies which are even now uncommon by their humble simplicity and the intelligence of the messages that some figures, such as Guido Jannon, experimented with skillfully. The communications were based mainly on the dissemination of images in magazines about architecture, first, and then furnishings, and in requiring production managers to communicate with cultural operators in parallel sectors that had never been contacted before by the commercial systems and furniture manufacturers.

The operations always saw all the parties involved simultaneously in major international exhibitions such as Eurodomus, the ICE exhibitions in all European capitals, which I coordinated for the magazine *Domus*, and the unforgettable editions of the Milan Triennale.

The result was a new way of thinking and using the landscape of products and accessories that surround us every day and which hopefully help us live better.

The Future Space-time Challenge

Simone Micheli

Space Age design, which began in the midsixties, the period known as the "Space Age," with the *mise-en-scène* of real "flying objects," is now more than ever becoming relevant again, more for the sake of its content than its form.

The lunar fashion of the period epitomizes the most important themes of an architecture in which utopian optimism about the quest for new opportunities and new planets to explore was used to develop a certain style of futuristic and/or revolutionary living. Modern man favored mobility. For the first time people had leisure and an increasing number of them were influenced by the new lifestyle concepts, some of which continue to furnish powerful insights into contemporary life.

Everything had to converge to recreate visually and emotionally that journey towards the still unexplored universe. In this context furniture became a curved sign, acquiring simpler, unknown organic and/or unreal forms by exploiting the malleability, ductility and flexibility of plastics. For the first time furniture was conceived as an intelligent sensory microcosm, becoming an indefinite, intangible reality packed with functions and information.

Today we are still at the start of these developments. There is a virtual space in which we have barely taken our first steps, just like the man who walked on the moon. A space which we have to question ourselves about, to circumscribe it since it is infinite, so as to be able to take advantage of its impressive and striking potential. This space exists, but only now, with the advent of technology, can we explore a new dimension with a playful component never seen before.

Technology is invested with a crucial, essential, irreplaceable role.

Digitalization seen as a tool for cloning, the offspring of Pop Art and mass consumerism, which was meant to be understood and accepted by the largest possible number of people, has long been in decline, although some contemporary designers are still riding the long wave through iterative emulations. Digital design is bringing back into favour and allowing the development of wonderful spatial and anthropomorphic geometries, which do not fear experimentation, crossing the threshold of the unknown and leading us into a world where we can find the psychic-aesthetic values of our bodies and minds.

In projects, from the most complex to the simplest, from installations to architecture, technology has always been an overriding factor, where what you see is never a formal icon but "other": the result of a measured and careful design that is intended to enhance possible forms of interactivity that have barely been investigated.

The furniture and lighting elements that surround the present and will surround the future modify its essence in relation to the increasingly fertile social and behavioral changes typical of our contemporary experience. The stereotype of the "traditional historical context" must be superseded in order to design new scenarios of dwellings worthy of the name.

The theme of the exhibition "Space Age Lights," lighting rediscovered as a form of language in the 1960s and 1970s, which brought new free and fluid spirits into people's homes, certainly encourages reflection on how far those materialized thoughts have affected our daily design and production today. Mechanical arms, lunar rings, rotating spheres, reflecting bubbles, the ancestors of modern design, related not only to robotic geometries but also the convenience of use and with an aesthetic-lunar appeal. Provocative, outrageous, rational/irrational objects, which have left an indelible and enduring mark. And some are still very relevant.

Many icons of contemporary design, currently in production, were created in those years. However, the eternity to which they aspired was not based on the originality of their forms but the indelible character of their impact.

The sixties and seventies were decades of unprecedented social and cultural upheavals. The passing of time has brought new and more complex, though perhaps less insurrectionary issues, partly as a result of the massification of the media companies, so bringing a new and very different awareness from that of the new generation of the day which demanded a juster world to the cry of "Sex & Drugs & Rock & Roll."

Since then everything has become complicated, everything strives to supersede complexity through the use of technology and artificial intelligence. The design landscape today presents a multitude of objects, ranging from extreme virtuality, passing through raw reality all the way to absurd and abnormal genetic and processual alterations. After globalization has completely effaced localisms by linking them into an interconnected network, the positions of content and experience are seeking hard to restore value to particular forms of identity. The great and grave problems of today, distinguished by endless worlds of expression and content, lie in the impossibility of regulating systems, synthesizing processes and defining unique fields of action.

Then the dimension of stories of eco-friendliness

and environmental sustainability is becoming increasingly critical for redesigning materials for humanity. This will undoubtedly lead to changes of direction in the theory and purposes guiding the possible new practices. In our metropolitan hectic and super-dynamic reality, man needs to revive a slumbering equilibriums, needs to rediscover himself, to recover living spaces associated with his emotions in his body and his mind. Everything moves too fast, everything is consumed too quickly. We need to pause, to reflect. Today it is definitely necessary to alter our outlook in order to favor evolution.

The future will see a light and reversible architecture of the object and for the object, which will have to adapt to the incessant variations of endless possible realities, capable of being translated into many other kinds of objects.

The objective is to awaken the multi-sensory dimension. And the journeys we can make are endless, because there are countless combinations of elements that contribute to this awakening. Today it is necessary to try to build without destroying, to create truly sustainable processes embodying a strong ethical sense, which will in turn help generate a healthy beauty. This corresponds to the vision of a different kind of luxury, not made up of redundancy and opulence, but the essentials of ethical gestures of content, empty spaces occupied only by the basics. Reclaiming the sensory sphere is the only way to achieve a desirable return to the origins, to a state of equilibrium between the parties through a sort of journey back that will enable us to reach the near future.

The contemporary world is synonymous with frenzy; its frantic pace interrupts the natural flow of the individual and emotionally atrophies our innate sensory receptivity. It creates an unbridgeable distance between the desire to be and the need to appear, leading us to remain suspended in a dimension between self and the other. It creates a state of torpor that numbs our senses and makes the internal and external stimuli distant reminders, difficult to perceive and therefore decipher.

If someone were to ask, "What will remain of our architecture in the future?" my answer would be: "The communication of architecture and not architecture itself." The continued rapid evolution of all systems, the constant search for the "new", the hybridization of communications and architecture as a discipline are producing and will produce three-dimensional spatial, complex dreams, which live together in close interaction between design, scientific discovery, technology and the materialization of social disruption. The materials we work with every day are not conceived by industry in order to become an "eternal", but it is the people who are devoted to transforming dreams into reality who have to deal with these issues. The expectations are infinite and the answers provided by design will have to be unbelievable, extraordinary, exciting, functional manifestations of the spirit of modern times, related to convenience and efficiency but also to the sphere of dream, to be raised to a new element which leaves the memory of itself and will be capable of embodiment in environmental sustainability and for the sake of future generations.

True, today almost everything is possible! We, the people of the present, are confronted with technology, with productive, purposeful and commercial references that express the sense of our changing time bubble. We have to increasingly modify our ideas so as to imagine the new architecture as ephemeral architecture designed to last decades, not millennia, as "virtual architecture."

A momentous change of state awaits us! We have to prepare ourselves, we have to think, we have to dream!

SPACE AGE LIGHTS

TRA GUSTO POP E DESIDERIO DI AVANGUARDIA

a cura di
Gianluca Sgalippa

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Casa e Universo. Il disegno dell'alterità

Carlo Martino

Una piccola sfera metallica e scintillante: lo Sputnik 1. Sembra proprio quest'oggetto, il primo satellite artificiale lanciato in orbita dall'Unione Sovietica nel 1957, ad aver dato inizio alla Space Age. Una forma conclusa, semplice ed equilibrata, morbida e allo stesso tempo razionale, archetipo morfologico di numerosi artefatti di design e matrice manifesta di quelle Space Age Lights di cui tratteremo.

Una piccola sfera in alluminio, di soli ottantatré chili, con quattro piccole antenne, lanciata con un vettore nello spazio, in un universo che portava con sé l'idea popolare d'immensità, di luce – o di anni luce – e di numerose altre sfere: i pianeti.

Sono gli anni in cui l'Italia e molti altri paesi del mondo si stavano risollevando da un'immane tragedia collettiva, il secondo conflitto mondiale, e stavano animosamente ricostruendo le proprie case, le proprie identità e le proprie culture.

Sono gli anni che in Italia coincidono con l'avvio di quello che sarebbe stato definito il "miracolo economico", quindi di una prosperità che derivava da un forte incremento della produzione industriale e di un conseguente, ed esponenziale, aumento dei consumi.

Un periodo in cui l'Italia rappresentava, di fatto, un grande laboratorio creativo dove, sulla base di nuove idee o semplici intuizioni, germogliavano importanti progetti imprenditoriali e muovevano i primi passi quei personaggi che poi avrebbero fatto la storia del nostro design. Alcuni di loro come Gino Sarfatti, i fratelli Castiglioni, Vico Magistretti e Angelo Lelli avranno un ruolo determinante nel design italiano e nella vicenda delle Space Age Lights.

Pochi anni prima, nel 1954, in Italia si avviava un'altra vicenda dall'enorme influenza sull'immaginario collettivo che avrebbe contribuito a coagulare quegli elementi che avrebbero portato, indirettamente, al design delle lampade spaziali: la televisione.

Una finestra sull'universo-mondo, inizialmente in bianco e nero, cui si associava una presenza e un animismo derivante dal suo essere "luminescente" e "dinamico". A suo modo, una lampada domestica che stimolava interesse, condivisione e fantasie. Non sarà un caso che uno dei primi televisori a schermo orientabile, il Phonola del 1956, di S. Berizzi, C. Buttè e D. Montagni, avesse sembianze antropomorfe e addirittura aliene.

Proprio attraverso la televisione, ben quindici anni dopo, saranno trasmesse le immagini del primo allungamento dell'uomo

a opera questa volta degli USA, nel momento culmine dell'era spaziale. Una finestra virtuale attraverso cui si attua quel collegamento, caro a Gaston Bachelard, tra Casa e Universo, e su cui si radica l'idea di luce domestica ispirata allo spazio, o quella di una sua peculiarità di tipo cosmico. Una luce che viene da lontano, fredda, indiretta e galattica.

Torniamo alle origini del nostro tema e alla relazione tra era spaziale, luce e design. Una relazione che, in senso astratto, non può essere scissa.

Già negli anni cinquanta, il design si sofferma a riflettere sul progetto di apparecchi per l'illuminazione domestica, sebbene altre questioni, quali il trasporto o i prodotti di prima necessità per la "ricostruzione", avessero delle priorità.

La lampada come oggetto e la luce come effetto, ma soprattutto la lampada come apparecchio, nel suo significato primigenio di "congegno o dispositivo" si prestano a numerose sperimentazioni. Negli anni a venire, quest'*unicum*, trarrà dallo spazio, inteso come universo cosmico e come fonte indiscussa di luce, forti suggestioni. Dall'osservazione dei prodotti dell'epoca è possibile affermare che era forte negli anni cinquanta un'idea meccanicistica del prodotto industriale, tesa a esaltare l'immagine emergente dell'industria, attraverso la scelta di materiali associati all'idea greve di fabbrica, quali i metalli, e di macchinario, attraverso l'esibizione palese di congegni e dispositivi.

L'apparecchio luminoso, inteso appunto come congegno per fare luce, ben si prestava a questo scopo, vista anche la ricerca embrionale sulla luce artificiale, intesa come nuovo materiale progettuale, capace quindi di contribuire in modo attivo alla lettura dello spazio.

Le lampade di questi anni furono quindi accomunate dal prevalente uso di metalli, alluminio piuttosto che lamiera di ferro, ottone o acciaio, e da una chiara separazione tra struttura, meccanismo di movimentazione e diffusore – contenitore – della sorgente luminosa.

Costanti rintracciabili nel catalogo dei prodotti di alcune aziende emblematiche, attive in quel periodo, tra cui una piccola realtà industriale

milanese, la Gilardi & Barzaghi di Milano, o nelle lampade disegnate da Gino Sarfatti, che già nel 1939 aveva associato il suo nome alla Arteluce. E ancora strutture, meccanismi e metalli erano presenti nelle creazioni di Angelo Lelli per la sua Arredoluce di Monza, e nel catalogo della Stilnovo, con cui collaborarono Danilo e Corrado Aroldi, Gaetano Scolari e Alberto Fraser.

La fine dei Fifties e l'inizio dei Sixties videro in Italia la nascita di importanti industrie dell'illuminazione, in cui prenderanno corpo negli anni a venire alcune delle più significative Space Age Lights, a dimostrazione che il design dell'illuminazione si era trasformato in un ambito merceologico dalle grandi promesse commerciali.

Nel 1958, a Porto Recanati, fu fondata dai fratelli Guzzini la Harvey Creazioni, che produceva lampade e lampadari; l'anno successivo a Merano esordì Flos, con la produzione di lampade in Cocoon – una materia plastica spruzzata di derivazione bellica; mentre nel 1960, Ernesto Gismondi e Sergio Mazza fondarono l'Artemide. Anche a Roma viene fondata da Mario Vento una piccola realtà ad alto valore sperimentale, la New Lamp, un laboratorio/industria che produrrà molti dei *masterpieces* ispirati alla Space Age.

Il decennio dei sessanta, in cui l'era spaziale toccherà il suo culmine con le varie missioni che porteranno definitivamente, il 20 luglio del 1969, l'uomo sulla Luna, si connoterà per il design soprattutto con l'introduzione e la diffusione della plastica come famiglia di materiali dalle ampie potenzialità espressive, ma sarà ricordato anche per i nuovi e rivoluzionari approcci progettuali all'oggetto industriale.

Citando Barthes, la plastica era percepita in quegli anni come una "sostanza alchimica", la cui "infinita trasformazione" portava in sé un'intrinseca magia. Un fascino che aumentava nel momento in cui la sua semitrasparenza e la sua densità venivano esaltate da una luce artificiale, quando, per esempio, erano parte integrante di un oggetto-lampada.

Da qui certamente l'associazione, tra la misteriosa luminescenza di pianeti e galassie e quella di semplici lampade domestiche, e la creazione di un virtuale collegamento tra Casa e Universo.

Certamente l'introduzione della plastica, e di alcune sue sottofamiglie come quella dei metacrilati, diede la possibilità a molti designer di sperimentare inusitate modalità di diffusione della luce artificiale, dalla semplice distribuzione omogenea su piani opalescenti alla strabiliante propagazione del fascio luminoso nello spessore delle lastre di metacrilato.

Non è possibile affermare con certezza quante delle lampade che si fanno rientrare nel filone spaziale lo siano state volutamente fin dalla loro concezione, o quante altre siano state indirettamente influenzate dal filone cosmico e fantascientifico, senza esserne incluse.

In sintonia con quanto stava accadendo nel design, che dal meccanicismo anni cinquanta stava evolvendo verso visioni utopiche del progetto, attraverso concezioni radicali, le Space Age Lights rappresentarono forse un concreto campo di sperimentazione, ispirato a contesti e ambienti impossibili.

L'immaginario spaziale e fantascientifico, alimentato, oltre che dalla cronaca delle missioni sovietiche o americane, anche dalla cinematografia con film divenuti dei cult quali *Barbarella* di Roger Vadim e *2001 Odissea nello spazio* di Stanley Kubrick, entrambi del 1968, dalla letteratura New Wave, la corrente letteraria britannica e americana di fantascienza, e da numerosi altri mass media, offriva per il design di questi "centri d'irraggiamento" un ampio bacino iconico e morfologico da saccheggiare. La luminescenza e la rotondità di pianeti e satelliti si offrivano come soluzioni per quell'autonomia dell'artefatto che trovava nella sfericità e nella compiutezza di questo solido un riferimento unico.

Concludendo, il senso di questa sintetica riflessione sulla vicenda del design delle Space Age Lights è rintracciabile nel carattere fortemente evocativo dell'alterità esercitato da questi strani apparecchi, in relazione a un universo cosmico sconosciuto. Una traduzione in segni e in prodotti del "mito" – come direbbe Barthes – della parola "spazio". Una vicenda che conobbe un discreto consenso, preparata gradualmente dagli eventi reali, le missioni extraplanetarie, e alimentata dalle innovazioni tecnologiche e culturali degli anni sessanta. Un mito che trovava nella "luce" il *fil rouge* tra terreno ed extra-terreno, ma anche negli elementi cosmici un ampio repertorio di segni da tradurre in "popolari" forme domestiche.

Le alterità che oggi il design è chiamato a evocare sono di altro tipo, forse non così lontane come quelle degli anni sessanta del Novecento, ma non per questo meno complesse da rappresentare. Ci riferiamo all'attenzione verso culture profondamente diverse dalle nostre, in cui ancora i segni, codificati da centenarie tradizioni artigianali, si stanno trasformando in potenti veicoli di legittimazione.

English Texts

by Sarfatti in the previous decade, of the unattached lamp, receptive to transformative actions (of varying degrees) by the user.

The 2042/18, obviously together with other products, suggested that the world of images and forms was about to change at giddy speed and above all to cut across product sectors. Even the spectacular product designs of television variety shows, which represented the most disengaged part of public service broadcasting in a really progressive phase, absorbed the spirit of renewal. An example was the program *Sabato Sera*, presented by Mina in 1967, with an all-white set and the interplay of gleaming lines underscoring the edges of the tiered seating. Pending the iconographic shocks from France in spatial orientation, fashion also made a significant breakthrough by assimilating, after a lag of several decades, modern conceptions of decoration and ornament. The models by the most famous Italian stylists adopted austere and compact lines, so creating, for the first time in the history of design, a semantic tie with products in other categories.

This survey of the various fields of creativity cannot afford to neglect the cinema. Although Italian comedy was still closely associated with the tradition of neo-realism, including the permanence of shooting in black and white, some films, both disruptive and isolated, sought to interpret the new dimension. The most striking example was certainly *La decima vittima*, directed by Elio Petri (1965). The film rather self-consciously showcased the new design. Marcello Mastroianni and Ursula Andress, protagonists of a surreal and dreamlike plot, acted in spaces dominated by futuristic plastic furniture. With a strong precursive charge, Petri presented a saturated and psychedelic production design, whose acid tones—the film was appropriately in colour—were typical of lysergic-induced states.

In design from the years between 1967 and 1970, the complexity Branzi mentions was now extremely elevated, a quality that has increased inexorably in the decades since then, and is characterized by the phenomenon of interference. No clear dividing lines can be drawn between the different experiences and different styles. We can only say the overall picture that emerges is a radical and multifaceted kaleidoscope, in which the conquest of the Moon and the protest movements were two components—contradictory, as we saw in the introductory essay—of a world that was changing explosively.

The visual manifestations of these changes induced visual semantic stress which found an outlet in the psychedelic dimension as liberation. True, the creative and social experiences of the second half of the 1960s were bound up with their liberating movements which released them from the bourgeois schemes and forms of expression of the European tradition. This release required (and achieved) physical breakthroughs (the Moon landings), mental transgressions (hallucinogenic drugs), moral affirmations (the occupation of campuses to undermine preordained values), and so forth. The breakthroughs also entailed creating paradoxes and hybrid states. However I believe it is not appropriate to speak of distinct creative approaches, though connected by the play of reciprocal influences. Rather we can see it as a substantially compact revolutionary climate, which can be analyzed in accordance with three different but integrated parameters in that historical period with the aim of changing things: psychedelia, Pop and the spatial dimension.

I will conclude this chapter by analyzing the first two because the third will be dealt with in the next section.

The psychedelic adventure was the most intriguing substrate of the Beat generation. In this respect, the Italian *Wikipedia* provides a cultural take on the term which does not exhaust its significance but presents a kaleidoscopic reading in terms of suffering and exalted outcasts: “Beat is a term with many meanings already in English, and in Italian it is translated and explained in various ways. Beat as beatitude,

the ascetic and ecstatic salvation of Zen spiritualism, but also the mysticism induced by various drugs such as alcohol, frenzied sexual encounters, incessant talk, dissecting everything that the mind contains. Beat as in beaten, defeated. The inevitable defeat that comes from society, its restrictions, the unassailable schemes it imposes. Beat as the call to live freely and with an awareness of the moment. Beat as rebellion. Beat as tempo. Beat as rhythm. [...] Beat is the discovery of self, life on the road, sex free from prejudices, with drugs, human values, the collective consciousness. Beat is not political but, though many movements originate from this source. Beat is not religion, despite the strong religious strand in this movement. Beat is freedom to be defeated. But much more likely beat is one of the many terms that has no real semantic meaning, only mystical overtones, inherent in the beat soul, happy, rhythmic and rebellious of that generation.”

The late 1960s was the theatre of the extreme generation. From the music of The Doors to endless visual experiments, LSD seems to have been the most credible source of the new radical attitudes. Hallucinations seemed capable of revealing the dark side of reality, whose existence the bourgeois world had pushed into the shadows. More precisely, out of the utopia that drove the ideology of the political and student protests the road led to dystopia, the vistas of apocalyptic, severed and acontextual projects played right across the board.

This scenario is exemplified by the movie *A Clockwork Orange*, directed by Stanley Kubrick (1971). The locations are perfect stylizations of an era, but serve as backdrops to the forays of a degenerate generation. The Moloko Bar, for example, is super-trendy, but its specialty milk drinks are spiked with drugs. And Skybreak House in Hertfordshire where the rape takes place is actually an early work by none other than Sir Norman Foster!

Though they interpreted a troubled and tumultuous zeitgeist, most subversive artistic events in the 1960s were set in an acid context, detached from reality, even when they drew on scientific-rational ideas. This was the case of Programmed Art, Optical Art and Kinetic Art, which created illusory figures despite the support of minute grids taken from the Gestalt theories that also underpinned the teaching at the School of Ulm. It is not easy to precisely establish their reciprocal boundaries, but the three approaches shared an attempt to relate vision to a substantially compact optical platform both in their phenomenology and space-time coordinates. In Pop and Optical Art, the viewing of paintings, which remained the most common form of representation even in the avant-garde, also occurred within a very limited experiential circuit. A striking expansion of performance art was offered by a production of the Gruppo Zero. Though well-integrated into the galaxy of experimental art groups in the period, it stands out from them because it helped pave the way for the design of lamps with the psycho-spatial orientation typical of the end of the decade.

The Gruppo Zero had a very mixed membership, but its basic aim was to create a free space of communication which would allow artists to start from scratch, experimenting with new materials and expressive procedures, beginning with applications of science and technology to create true object-pictures with vibrant, luminescent, reflective or dynamic features. It seems to have drawn liberally on the legacy of Dada and Futurism. It dissolved traditional composition to make way for futuristic installations with an extraordinary visual impact, made from tubes of plexiglas, aluminum or steel, joined up to mechanical engines, rotating discs or neon lights. The equipment (in the most technical sense of the word) available to Gianni Colombo, Manfredo Masironi, Günter Uecker, Heinz Mack, Alberto Biasi and Nanda Vigo shifted the practice of art into a sphere alien to painting and sculpture, a fact that led, especially in the case of Vigo, to a link with lighting design. Then, in pursuing as its aesthetic and poetic

objective research into new technology related to movement, light and a playful dimension of experimentation, the Gruppo Zero was the first to create mobile and flying installations centred on a circular dynamism, pure whiteness and endless variations on light and silence.

The idea of space-time dynamism also gave rise to the idea that sensory experience is neither absolute nor immutable, but relative and variable (i.e. it changes depending on the point of view). Hence perception is a fluid phenomenon that takes place in a space-time continuum of reality, which is therefore credited with a virtual sense of perpetual change. The very idea of movement, moreover, understood both in the real sense as illusory/virtual, reveals the strong conscious/subconscious role of the viewer who, for the first time in history, was finally considered an integral part of the process of artistic creation: it was not only the subject that modified the object, but the contrary was even more true.

Getulio Alviani’s work occupied a tangential position to Gruppo Zero and other groups active at the time but it was an inseparable part of the same maelstrom of ideas and visions. Close to Kinetic Art, he explored mutations of form in relation to the movement of the observer in a new circumstance of composition, notably the iridescent gleams of brushed metal under the reflection of surrounding light. His works were mainly two-dimensional, but they replaced the traditional techniques and media with strips of steel or aluminum whose appearance alters infinitesimally due to concentric microscopic scratches, rather like those on a vinyl disk. Alviani’s stylistic code introduces into the “pictorial” representation a theme capable of enhancing the design project, which rehabilitates steel as a material in step with the new space age. Inevitably, the metal, gleaming, dynamic and even legitimized by art, is the subject of a new beauty projected into the future. His use of light is essential and immediate.

This brief overview, which shows the technical complexity underlying the works of the Gruppo Zero, reveals the underpinnings of many far more lysergic—and even mystic—figurative inventions than those developed in the coeval avant-garde currents.

We can now isolate the works that constituted the strand of Space Age Lights, or the artistic insights within Gruppo Zero that interacted, directly or implicitly, with the design of some light fittings.

The exaltation of the laws of optics applied to perspex was expressed primarily in the celebrated Acrilica lamp, a sublime object by Joe Colombo dating from 1962 (though Oluce put it into production only some years later). Acrilica does not call for much comment: a quintessential shape, the principle behind it was then taken up by other designers. They included Cespuglio di Gino, designed in 1968 by Ennio Lucini for Guzzini, which looks like a bouquet of electric discharges emerging from the jagged edges of the plexiglass. Both formally and in terms of invention it was preceded by 584 designed by the Studio Albini-Helg (1963).

In 1966–68 Ugo La Pietra developed the same conception in a more textural form. His plexiglass tubes, plates and hemispheres were scored with repeated dotted or linear motifs. Refracted on them, the light creates fascinating three-dimensional patterns cast or projected onto the surrounding space. In this case, the light display acquires a greater environmental charge than in the previous two lamps, so heightening its psycho-emotional component.

These three examples reveal a completely new approach to design. By principally using the technique of indirect light, the lamp is no longer called upon to illuminate space in terms of brightness, but is a self-referential installation, strongly iconic and transgressive. In fact even technological innovations and optical principles were manipulated to produce the desired scenic effect. As “metaphors of themselves,” the new lamps were also charged with a pop quality.

We should note that pop design is just one vein of radical design. In design, “pop” is not a term used to identify a style—as happens in art with Andy Warhol and Roy Lichtenstein—but to project a mental style, an approach open to new creative processes and lifestyles. In this case our concern is with the word “pop” as an adjective, i.e. pop with a small “p”, and which diverges from Pop as a codified movement in official art history. The affinity between the art movement and the upheavals in the new generation of architects consisted in the quest for artifacts with strong iconic qualities, destined to break into the domestic landscapes of the day.

Pop design takes to an extreme a quality that characterizes the broad context of radical design. In the general dismantling of the compositional values which descended from classic Italian Rationalism, which designed a domestic space in terms of unity, modularity, coordination, integration and standardization, the pop poetic turned more than ever to elements, again according to Branzi [cit., p. 111], that signal “their independence of the stylistic and behavioral context. A more tolerant way of designing furniture, foreseeing the user’s active intervention, which the product often stimulated through its eccentric presence. This was thus a new approach to consumer goods, no longer presenting them as definitive products but self-defined as partial, while affirming their presence on the basis of a new functionality and an expressive value that often stemmed from components that were more anthropological than industrial. These new objects embodied a withdrawal of the project, i.e. a decrease in the designed part of the house, leaving the main area freely available for intervention by the user. A strategy of total planning was replaced by a strategy by points, in which space was vitalized by a few eccentric centres of radiation in a system that was discontinuous and incomplete because consisting of exceptions rather than continuities.”

Despite the stylistic range of radical design, the conception of Space Age lamps was underpinned by the idea of the lamp as totem, emphasized on the formal plane with highly expressive designs unrelated to their context. Compared to the work of Archizoom, Superstudio and Ettore Sottsass Jr., they were more closely related to the icons of consumerism and acid images, reaffirming the splendor of technology as a medium for aesthetic values and new imagery.

Home and Universe. The Design of Alterity

Carlo Martino

A small, glittering metal sphere: Sputnik 1. It appears to have been this object, the first artificial satellite launched into orbit by the Soviet Union in 1957, that marked the beginning of the Space Age. An closed form, simple and harmonious, smooth yet rational, the morphological archetype of many artifacts of design and the manifest matrix of those Space Age Lights that we will be dealing with.

A little aluminum sphere, weighing only 83 kg, with four small antennas, it was launched by a rocket into space, in a universe that bore with it the popular idea of immensity, light—or light years—and numerous other spheres: the planets.

Those were the years when Italy and many other countries around the world were seeking to recover from a collective tragedy, World War II, and were courageously rebuilding their homes, their identities and their cultures. These years in Italy coincided with the start of what was called the “economic miracle” and a degree of affluence produced by a boom in industrial production and a consequent exponential growth in consumption. It was a time when Italy was, in fact, a large creative laboratory where new ideas or simply intuitions were giving rise to important business projects. Some figures were then taking their first steps that eventually led them to make the history of Italian design. Some of them, such as Gino Sarfatti, the Castiglioni brothers, Vico

Magistretti and Angelo Lelli, played a part in Italian design and the history of Space Age Lights.

A few years earlier, in 1954, there was another new development in Italy which was destined to exert an enormous influence on society, helping crystallize the elements that led indirectly to the design of space age lamps. This was television. Television was a window on the world. Initially it was black and white, associated with a presence and an animism arising out of its being “luminous” and “dynamic.” In its way it was a lamp that stimulated interest, togetherness and fantasies.

Significantly one of the first swivel screen TV sets, made by Phonola in 1956 and designed by S. Berrizzi, C. Buttè and D. Montagni, had an anthropomorphic or even alien appearance. It was television, fifteen years later, that broadcast the images of the first manned lunar landing, by the U.S., this time at the height of the Space Age. A virtual window which implemented the link, dear to Gaston Bachelard, between Home and Universe, and which is rooted in the idea of light inspired by the domestic space, or that peculiar quality of a cosmic kind. A light coming from far away, cold, indirect and galactic.

We can return to the origins of our topic and the relations between the Space Age, light and design. A connection which in the abstract sense is indissoluble. Already in the fifties design had paused to reflect on lamps and home lighting, although other things, such as transport or basic necessities for reconstruction, had the priority. The lamp as object and light as effect, but above all the lamp as a unit in its original significance of “device or object,” lent itself to numerous experiments. In the following years it derived powerful ideas from space, understood as the cosmic universe and the undisputed source of light.

Study of the products of the period shows that the fifties had a strong mechanistic idea of the industrial product and sought to enhance the emerging image of industry through the choice of materials associated with a weighty idea of the factory such as metals and machinery and through the overt display of industrial apparatus and devices.

The light unit, understood as a device for making light, was well suited to this purpose, due in part to the nascent research into artificial lighting, understood as a new design material, hence capable of actively contributing to the interpretation of space.

A common feature of lamps in those years was the prevalent use of metal, aluminum rather than sheet iron, brass or steel, and a clear separation between structure, mechanisms of movement and the diffuser-container of the light source. These constants can be seen in the product catalogs of some emblematic companies active in the period, including a small Milanese firm, Gilardi & Barzaghi, or the lamps designed by Gino Sarfatti, who had first associated his name with Arteluce in 1939. These structures, mechanisms and metals were present in the creations by Angelo Lelli for his firm Arredoluce in Monza, and the catalog of Stilnovo, which worked with Danilo and Corrado Aroldi, Gaetano Scolari and Alberto Fraser.

In Italy the late fifties and early sixties saw the birth of important lighting manufacturers. In the coming years produced some of the most significant Space Age Lights, showing that lighting design had become a significant product market with great commercial promise. In 1958, at Porto Recanati, the brothers Guzzini founded Harvey Creations to produce lamps and chandeliers; the following year in Merano, Flos began to produce Cocoon lamps, made of a plastic spray-on material of wartime derivation; while in 1960, Ernesto Gismondi and Sergio Mazza founded Artemide. Mario Vento even founded a small company with a high experimental value in Rome. Called New Lamp, it was to produce many of the Space Age-inspired masterpieces.

The sixties, when the space age reached a climax with the various missions that ultimately succeeded in putting a manned craft on the moon on July 20,

1969, were notable in design above all for the introduction and spread of plastic as a family of materials with a broad expressive potential. They will also be remembered for revolutionary new approaches to the design of the industrial object.

Echoing Barthes, plastic was seen in those years as an “alchemical substance,” whose “infinite transformation” bore within it an intrinsic magic. A fascination that was heightened when its translucency and density were enhanced by artificial light, as in a lamp.

This was certainly the source of the association between the mysterious glow of planets and galaxies and that of simple household light bulbs, with the creation of a virtual connection between home and universe.

Certainly the introduction of plastic, and some of its subfamilies such as the methacrylates, gave many designers an opportunity to experiment with unusual ways of diffusing artificial light, from simple homogeneous distribution on opalescent planes to the amazing diffusion of the light beam in a slab of methacrylate.

It is impossible to say with certainty how many of the lamps that are now classed in the space age current were actually intended as such right from their conception, or how many more were indirectly affected by the cosmic sci-fi trend without being consciously a part of it.

In line with what was happening in design, which was evolving from the mechanismism of the fifties through radical conceptions towards utopians visions of the project, Space Age Lights were a concrete field for experiment, inspired by impossible contexts and ambiances. Space and sci-fi imagery were powered not only by accounts of the Soviet and American missions but also the cinema, with films that became cults, such as Roger Vadim’s *Barbarella* and Stanley Kubrick’s *2001 A Space Odyssey*, both released in 1968, while British and American New Wave science fiction and numerous other media also influenced the design of these “centers of radiation,” offering a rich iconic and morphological repertory for designers to plunder. The luminescence and roundedness of planets and satellites provided an autonomous image that was unique in its sphericity and perfection.

To conclude, the meaning of this brief reflection on the history of the design of Space Age Lights is to be found in the strongly evocative quality of alterity embodied in these strange devices in relation to an unknown cosmic universe. They are the translation into signs and products of the “myth” (as Barthes would say) of the word “space.” It was development that enjoyed a fair degree of popularity, being gradually prepared by real events, extra-planetary missions, and fostered by technological and cultural innovations in the sixties. A myth that found the common thread linking the earth and the heavens in lighting but also in cosmic elements, a wide repertoire of signs that could be translated into popular domestic forms.

The alterities which design today is called on to evoke are of a different kind, perhaps less remote than those of the 1960s but no less complex to represent. They are cultures that are very different from ours, in which again the signs codified by centuries of craft traditions are becoming powerful vehicles of legitimation.

The Space Age Dimension (1961-1974)

One of the cardinal points of design in the 1960s was the emergence of plastic as the embodiment of typological and production models that were completely different from those of even the more recent industrial tradition.

In some ways the incursion of this new material into furnishings, which occurred at the same time as rapid changes in the home living and as a result of improvements in the chemicals industry, followed a logic quite remote from the ideas underlying Pop

design. The Rationalist approach was still going strong, based on serial production as a response to the needs of the new consumer society. While the adventures in design discussed in the previous chapter sublimated complexity as a dominant historical characteristic, plastic furnishings were an attempt to cope with it. And while radical design laid the emphasis on difference, atmosphere and symbolic allusions, hard plastic furniture introduced the idea of an artificial, coordinated and repetitive habitat. Despite their technical limitations, polymers became available in modular components. In more concrete terms, apart from being chairs, tables, trays and lamps they were also used for panelling and cladding, fitted walls and bookcases. The fact that they were could be stacked conveyed an impression of endlessly extensible volumes. By lending themselves to the game of modularity and convertibility, they acquired a clear environmental value.

In any case, design linked to the use of polymers possessed a radical charge equal to all the other strands of design in the period. It marked the aspiration to a completely synthetic world based on a single material that would express a new sense of modernity in everyday objects and embody the ideals of freedom and democracy. In the world of plastic, form and technique were obtained simultaneously in the new material. But, as usual, our discussion emphasizes the first of these factors in order to grasp the similarities with the experience of space research.

The plastics industry grew big through two processing techniques, injection moulding and thermoforming. The first gives us fairly small products with long production runs for the homes of people sympathetic to the new lifestyles. Injection moulded resins are used to encode precise stylistic features: the shell configuration, the continuity between the parts, the predominance of white; glossy surfaces; rounded profiles; and finally visual and gravitational lightness.

The second opened up design to bold new constructions. Treating acrylic sheets as semi-finished products, it is the result of less mechanized processes (i.e. involving more manual intervention), it aims at shorter production runs (or even one-off pieces), and above all it makes very large sizes possible.

A strong boost to Space Age style came from high-volume thermoformed monoblocs, the technique that was behind the construction of the dwellings inspired by the moon shots. Curved and organic surfaces, big transparent bubbles and seamless shells provided ideas and solutions not only for living in compact volumes but also for luxuriating in dreamlike forms and drugs. The figurative closeness between the two worlds was immediate, though there was no correlation in the contents. Nevertheless they had a common denominator: they were opposed to the utopian longings which had led in earlier times to the intellectual caprices and of course failure. The world of production and space research were in sync with the times and capable of changing Western civilization. The interruptions in this twofold process were perhaps the result of as many historical conjunctures once alien to each other.

At this point we can look at what was happening in space exploration in the 1960s, notably through the efforts of NASA, the American space administration.

For convenience, the narrative of space conquest draws directly on the entries *Apollo Program*, *Apollo*, *Apollo 11* and *Space Race* in the Italian Wikipedia, the popular Web encyclopedia. I believe it gives a detailed and coherent account of the various developments.

The number and duration of NASA's activities exceeded those of the Soviet Union. Therefore, apart from the Sputnik and Soyuz programs (flights by manned spacecraft without moon landings and with

very limited media disclosure by the Soviet Government), the significant image was conveyed by the U.S. missions. The relevant time span was the second half of the 1960s, though trips to the Moon continued to be made until 1972 with gradual improvements to the available technology.

The widespread photographic documentation shows, however, little interest in the design of instruments, except in its thematic and typological aspects. The specifications and functional requirements of equipment, clothing and vehicles inevitably prevailed over aspects of design and style. Despite the boldness of their achievements, the equipment and gear they used strike us as rough and ready, more like a patchwork than an accomplished mechanical and futuristic project. In the introductory essay I observed that the task of studying a stylistic protocol truly worthy of the new world was fulfilled by sectors, namely product design and the cinema, that had no direct contacts with the astronautic world but was profoundly inspired by it. However, the various real space experiments did develop types of space habitats which can be further divided into several sub-topics of design, mostly for equipment with a high electronic content.

The most astonishing components were certainly the vehicles, true compact micro-habitats, self-sufficient and essentially impermeable to the cosmic void. They took the form of missiles (or, in the more archaic phase, rockets), spacecraft (of which the flying saucer, more a product of fantasy than of real research, is the most flexible and reduced version), modules (in where there was no hierarchy of parts, or above, below and side, because it was suspended in a vacuum without any propulsive direction) and capsules (used to make landings).

This list is sufficient to classify many of the typological and formal solutions underlying the design of the lamps in our collection. It should be born in mind that in this cultural phase lighting fixtures were freed from functional constraints and acquired a more figurative role. For this reason the ties between the forms of space age artifacts and lamps was stronger than those with other product categories.

An icon of the greatest interest was certainly the LEM (a pronounceable acronym of the Apollo project's Lunar Module or LM). Its splayed truss legs (with disk-shaped feet), geometric-polyhedral cladding, reflecting metal panels and everted radar antennas elicited a broad range of compositional influences. There were other ancillary structures such as the gantries that enclosed missiles before launching and the Lunar Rover, down to the antennas, the spherical helmets of the astronauts and the numerous tubes attached to their spacesuits.

The temporal correspondence between the lunar adventures and cinema was almost perfect. In 1968 two historic films were released: *Barbarella* directed by Roger Vadim and starring Jane Fonda, and *2001 A Space Odyssey*, Stanley Kubrick's masterpiece. The differences between the two films were profound, but both crystallized the enthusiasms of an era. The first had an evident comic-book strain, heightened by the sexy figure of the heroine. Many disparate influences converged in the production design (archaic worlds and clunky or futuristic technology) which give the space era an evident pop value.

By contrast, *2001 A Space Odyssey* remains a cultural and iconographic cornerstone of the Space Age because of the philological precision with which the director recreates the atmosphere inside the vehicles as well as the cosmic void. The absence of gravity, the zeroing of space-time coordinates and the human rarefaction—remember that the protagonist is a highly advanced computer which manages the entire enterprise—even won NASA's approval for its richly scientific treatment.

The style outlined by scenes, costumes and equipment was rigorous and eschewed exhibitionism. Even more prophetic elements (such as the flat panel monitor and large surfaces illuminated by

LEDs) lie outside reflections of a purely stylistic order. The interiors of the space ship are designed in terms consistent with the rigor of scientific knowledge, to the point of attaining a platform of completely new solutions capable of “representing a visual experience that bypasses understanding to tap directly into the unconscious with its emotional content.”

Kubrick's *Odyssey* had no catastrophic or educational overtones, and the same was true of Andrei Tarkovsky's *Solaris* (1972). But the catastrophic strand appeared in works from the first half of the 1970s (*THX 1138*, *Logan's Run*, *The Man Who Fell to Earth*, and others). Some important productions activities were structured in the form of sagas, both for cinema and television: *Star Trek* (begun in 1966, it continued for over forty years), *Space: 1999* (a British series made between 1973 and 1976, when it was broadcast by the RAI in Italy with the title *Spazio 1999*) and the celebrated *Star Wars* franchise.

In the development of science fiction cinema, Kubrick's *Odyssey* was the real turning point. The genre developed with great intensity over only a few years and there were observable improvements in the designs of sets, costumes, ships and weaponry. Weaponry was a key point. The development proceeded primarily towards catastrophism, stimulated by a widespread pessimism about technical progress and paralleled by the virulent polemics over the Vietnam War, as well as by the desire to amaze audiences through unlikely and disturbing inventions which actual or planned space research either did not contemplate or was still unable to achieve.

2001 A Space Odyssey and the moon landings also triggered positive and confident visions. Obviously designers grasped the symptoms of a broader sea change.

Firstly genre films embodied a formal code that had affinities with product design and particularly interior design, and was to remain unchanged in cinematic productions in the decades to come. But we need to clarify one point. Although science fiction and space research are based on ideas of progress and multi-lateral evolution, we have to observe a first paradox. The expressive code they embodied seems to have been somewhat crystallized and unchanging. Ever since the 1960s, forms, colors and lights have composed a recurrent code, varying only in improvements to the special effects.

Be that as it may, production designs in sci-fi movies can all be recognized to some extent in inventions in the *Space Odyssey*, beginning with its launch of total-white. Though there were already outstanding examples of white plastic in furniture design (chairs by Eames and Saarinen in the 1950s), the elimination of colour as a feature of futuristic scenes emerged in the second half of the 1960s. Aseptic and standardized forms are the values expressed by such spaces. The interior of extra-terrestrial bases are covered with panels that echo the modular furniture surfaces in plastic (in the real world), with the alternative of metal surfaces. Fluorescent lighting or tiny interstitial flashing lights are used to (seemingly) banish any decorative purpose. The design of the new lamps followed the thrust of these visual innovations. The plastic was again dominant. The modes of production were the same as those described above, but here I will provide more detail. First, there was thermoforming of the acrylic sheets, primarily in its opaline form for light diffusers and transparent support structures. Secondly, shells, domes and undulating bodies were produced by injection moulding, especially if the parts had to be opaque to conceal the wiring. White was the primary colour, which today appeals to us as in its yellowing, and also its deformation by the heat of incandescent bulbs: an unresolved contradiction that has ruined (in a physical sense) many examples of KD28 and KD29 by Joe Colombo for Kartell.

But here there emerges a real question. Today Space Age lamps come to us from the hands of collectors or physically, in a few cases, from reissues by manufacturers. Those models used incandescent light sources, which are currently becoming obsolete. Even when CFLs retain the bulb form, they nevertheless have a different volume—they project further because of the integral ballast—and shed a light whose quality differs from the originals. A sort of melancholy also stems from the disappearance of the chromed light sources which at the time revolutionized the perception of domestic micro-landscapes.

Metal also made a comeback to provide spectacular expression. Both subliminally, through specific references originating from the aerospace companies, space aesthetics were embodied above all in steel with a mirror or chrome finish. Lamps were therefore made from semi-finished parts (especially tubular elements, with their traditional functions) and from sheet metal specially machined for the purpose by lathing or deep-drawing. What in the previous generation of lamps had been simply a lighting ploy—the parabolic reflector—now became an explicit figurative evocation: the shiny metal cupolas were liberate transcripts of flying saucers or planetary settlements. But there was still more to them. We will go further into the matter below.

The most beguiling trend was definitely the use of glass to create culturally intriguing forms. Many of the domes in white opaline cased glass (especially in the glossy version) were quite similar to plexiglas. The only manufacturing expedient adopted was that the plastic shape could not have a flange below the dome, which was possible only with mould-blown glass. However, it was free blowing that created a new and unpredictable expressive link. Perhaps the strangest phenomenon was the role played by Murano's glassmaking tradition, which in those years made not only a surprising recovery but also created a strongly distinctive style, which at least originally eschewed the sensuous and decorative.

Many of the glassmakers (AV Mazzega, Vistosi, etc.) combined traditional patterns with lunar motifs, creating some extremely fascinating light diffusers. The textural effects were based on effects of unpredictability and rarefaction, associated with the visual resources of milk glass. Hence no colouring, but white in uniform hues, mottled, or shading towards full transparency. And when it is transparent, it may achieve the effect known as *pulegoso*. This is a term in Venetian dialect meaning “full of fleas,” as the glass is dotted with thousands of tiny bubbles. The sinuousness of blown glass is well suited to rounded volumes (closely resembling astronauts' helmets) and bladder forms, a clear anticipation of the organic forms of the late 1990s.

Although each material and the production technique related to it favoured very precise iconic references, the formal landscape we are reconstructing was rich and varied. The spatial dimension was inflected and interpreted in many different ways and all the morphemes possible. The Space Age not only hinged on human forays into the solar system: it also related to the present all the styles accumulated through the twentieth century, which were dealt with in part in the first chapter. It is as if the Space Age had found a revelatory moment, after decades of incubation, thanks to its scientific and social maturity.

It was the field of decorative lighting that embodied all the knowledge coming from centuries of astronomical geography but also the inventions of recent times. The form of the solar system, as well as of orbits, planets and asteroids, provided multiple opportunities for exploring form, just as in real or imagined technological artifacts. The foundations of space research in the form of geodesic domes, flying saucers, command modules, spacecraft with solar panels or enormous space ships with complex forms suspended in the void of the universe.

The Space Age was a fairly cultural phenomenon, but its various interpretations were related not only to contacts with Pop Art or hallucinatory experiments. Within it we find a lively mosaic of images and of typological and geometrical allusions. But we should again stress that the design of Space Age lamps was very compact. And it was also as a result of fairly recurrent compositional and formal values that prompt us to question ourselves about the real scope of this innovative ferment.

Most of the designs are distinguished by choices that even some masters of the Modern Movement sought to counteract. First of all, axial symmetry. The contribution of Modernism to lighting was almost non-existent, but it had sufficiently unhinged the rules of classical composition. Still, Space Age lamps continue to possess an almost classical visual solemnity which stemming from compositions that, consciously or unconsciously, are essentially rooted in the design tradition. Or did they perhaps aspire to inaugurate a new kind of classicism through forms related to the present but rewritten with the compositional criteria of the past?

We should also emphasize the permanence of Euclidean geometry as (especially combinations and variations of the figures of the circle and sphere), which could not yet be replaced, for historical reasons, by Cartesian curves. This feature assimilated the geometric layout of our lamps to what occurred in Italian furniture of the 1930s, where the wave of international Deco was transcribed with rather stiff and austere lines, suited to the moral and political climate to the period.

I feel that even in a context with a subversive intention, the style of some of the 1970s lamps anticipated the static post-modern aesthetic, rather as happened with the coeval architecture of Paolo Portoghesi, whose skillful interplay of decomposed geometric forms foreshadowed the monumentality and symbolism typical of the 1980s.

The manufacturing and entrepreneurial landscape was markedly transversal in its taste and aesthetic leanings and a strong unity in a quality target public. The Italian companies which we still remember for their brilliance at the time are those widely celebrated by historians: Valenti, Reggiani, Kartell (which produced not only the sensational models by Joe Colombo but also 4025 by Olaf von Bohr), Luci (associated with the names of Corrado and Danilo Aroldi, among others), Arteluce (as always directed by Sarfatti, in his final phase), Artemide (then still producing furniture complements, as well as best-sellers such as Eclisse, Selene, Dalù e Nesso, not to mention Pallade and Telegonus, now no longer in production), Lamperti (the producer of Pelota by Cesare Casati and Emanuele Ponzio), Oluce (which produced some celebrated pieces by Joe Colombo), Martinelli (owned by Elio Martinelli who also designed the famous Cobra, Serpente and Foglia), Guzzini (which produced advanced models with the Harvey brand), Tronconi (whose lamps included Isos by Giotto Stoppino), Flos (strongly averse to formalism, perhaps due to the direct influence of Achille Castiglioni) Stilnovo (which presented cheap models that were easy to manufacture), Bieffeplast (for which Adalberto Dal Lago designed Drive), and finally Gabbianelli, which before restricting its output to tiles interpreted spatial forms with ceramic shells in bold colors.

Abroad, the Spanish Fase produced models that are now represented in collections worldwide and reach high prices. Its lamps seemed to anticipate the figures in Japanese sci-fi cartoons. And the Dutch Raak used lathe-turned sheet metal and glass bubbles for models based on maximum lightness.

Also observable in the period was the emergence of a curious phenomenon, which paved the way for the generation of our multi-functional electronic artifacts. A single unit incorporated radio and artificial light. Highly successful commercially and so well established in the popular memory is the cordless Europhon radio lamp designed by Adriano Rampol-

di in 1970. Several variations on this theme were developed in Germany in the wake of the philosophy and “style” associated with the Hochschule für Gestaltung. In the mid-1970s, as digital clocks came in, they were also integrated with audio and light functions. This taste was global. Many of the pieces in this exhibition are from the U.S., Germany, Belgium, France or Britain, hence countries that were sufficiently advanced industrially and socially and had adopted new lifestyles.

In terms of quality, it should be stressed that the difference between the constructional value of lamps by the most renowned manufacturers and those by “minor” firms was not particularly marked. At the time low cost design products and products with a democratic Northern European origin had not yet arrived in Italy. Hence the renewal of the vocabulary in the direction of Space Age design was embraced enthusiastically on all levels by firms which marketed products that were uniformly valid.

It was in the early 1970s that the new ultra-modern looking lamps, especially chromed fixtures and those made of blown milk glass, entered the popular imagination and the homes of all segments of consumers, even those who least favoured novelties, sometimes creating conflicts with the period or traditional furnishings. The specimens that we have received bear witness to a modernism that is now chipped and rusted, but with a very expressive charge of enthusiasm. That stylistic adventure, of course, is part of a much wider horizon of furniture design.

In the decades under consideration, unlike what happens in contemporary design culture, fashion (then still called “couture”) had no place in design. Yet there were astonishing efforts by stylists to adapt to the times - in fact to found a new Futurism in garment design. It was the mid-sixties when Paris riots triggered a drive for radical renewal whose influence extended to Italy and America.

The couturiers who worked on Space Age fashions were Pierre Cardin, André Courrèges and Paco Rabanne. The first two in particular interpreted a completely new style for both men and women, seeking to epitomize all the ferments of the period. Stark and rigid geometries revolutionized the typology of clothing and new ways of dressing: as in space, fashion was unisex, with a few signs and images borrowed from science fiction. The allusions to the cosmonautical world were explicit. In 1967 Cardin courageously launched a special collection entitled “Cosmocorps.” Porthole-spectacles, headgear resembling astronauts' helmets, jackets in polyethylene and a profusion of zippers related Cardin's fashions to designs by Joe Colombo. At the same time Courrèges modelled skimpy white dresses or capes with invisible seams on the geometries of the new furnishings in moulded plastic...

In France, there was a dynamic circularity between design for the home, fashions and spatial influences. It was not slow to affect the work of the most important Italian fashion houses. In Italy there were two outstanding brands, which we have already mentioned (they are now almost eclipsed), Lancetti and Mila Schön, which sought to establish a compromise between traditional tailoring and the new ideas from Paris.

However, Cardin, Rabanne and Courrèges were defining a style intended to remain mostly in the glorious annals of fashion, without tackling the wider demand on the market. The impediment to the fashion revolution suggested by the spatial styles did not reside in the persistence of tradition. There were two obstacles. The first was the mismatch between design and the technologies actually available. Even though some stylists used fabrics made with metal fibers, such as the nascent Terital and Lycra, techno fabrics were still unknown.

The second limitation was social. The couturiers attempted to satisfy the spirit of the time, being but inspired by an exceptional and extreme event they produced a contradiction: they neglected the real

In copertina

Un modello di provenienza francese,
databile all'incirca al 1969

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