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March 2020, the first, difficult, days of the COVID-19 pandemic crisis.

As a laboratory of Design for Sustainability of the *Università di Firenze*, we found ourselves reflecting on what was happening. Among the concerns about the virus, we started to think about the consequences on the medium-long term, worried about a loosening of attention to sustainability facing health challenges. Hence the idea of reviving, in our own small way, attention to these issues through the organization of a series of initiatives aimed at keeping the debate alive. Important meetings, with expert figures and designers able to help us envisioning future scenarios. Contributions that it was a pity to entrust only to the meanders of the network.

Thus was born the Design Sustainability Pills series project, which collects, on paper, the first contributions.

Others will come with the aim of keeping the debate alive.

Design with the Other

There is a need to investigate a multi-species scenario that aims to shift the human-centric perspective that normally tends to minimize or even deny the significance of non-human contributions in the possible definition of the possible redrawing of alliances and opportunities for the living

— Marco Petroni

Pandemic and the crisis of the development model

What has happened in recent months has challenged many certainties. Some people — perhaps more than we think — looked at progress with unlimited confidence, but they have been forced to revise their positions: globalisation carries in itself many benefits but also some dangers, with COVID-19 requiring a radical revision of paradigms. Correct is the approach of those who look at the pandemic as a consequence of our wrong relationship with nature. The seriousness of the environmental situation is evident in the latest report of the UN's Intergovernmental Panel on Climate Change (IPCC, 2020), which notes that the climate changes underlying the increase in the frequency and intensity of disastrous weather phenomena, from torrential rains to major heat waves, are unequivocally a consequence

of human activities and appear unprecedented: if action is not taken to promptly reduce pollutant emissions, these could be even worse. The report reiterates the need for immediate and large-scale efforts by countries around the world to reduce pollutant emissions; the concept is that there is still time but we must act quickly and decisively.

Thus Pope Francis said, «There is an expression in Spanish: 'God always forgives, we forgive sometimes, but nature never forgives'. I don't know if this crisis is the revenge of nature, but it is certainly nature's response» (Pope Francis, in Cozzolino, 2020). A consideration endorsed by several authors. For Jeremy Rifkin:

«[...] the error, let's call it this way to avoid using more apocalyptic terms, is called climate change. Extreme events [...] arrive on a multi-year basis [...] And they always involve a stampede and a disjointed migration of humans, animals and viruses: the latter desperately attach themselves to other living things in order to survive».

(Rifkin, in AA.VV. (b), 2020, p. 21)

More recently, Alessandro Baricco,

« [...] it is reassuring to take the time to read slowly what the Pandemic has inscribed [...] about our relationship with the world. It was difficult to tell us more unequivocally that we have advanced too much in our technique of dominating the existing [...]».

(Baricco, 2021, p. 31)

A concept also reinforced at the scientific level by Clementi and Liotta.

«Scientists have been warning for decades about how climate change is affecting public health [...] Global warming increases the spread of everything [...] Degraded habitats harbour more viruses that can infect humans».

(LIOTTA, CLEMENTI, 2020, pp. 46-47, 79)

The relationship between pandemic and our wrong attitude towards nature, after all, is also effectively narrated in *The Assembly of Animals* by Filelfo: the quarantine gives «a chance to pause and reflect on the fact that this world came to life as a single living being endowed with soul and intelligence, and that under the veil of appearance every human life is nothing

but a brief dream of nature's infinite spirit [...]» (FILELFO, 2020, pp. 91-92) for a man who «is beginning to remember that he is also an animal» (IVI, p. 105).

Everything is thus linked. The pandemic is part of a much larger problem related to the development model. The Goals of the UN's 2030 Agenda are there to remind us of this: indeed, among the goals is world health (3. Good health and well-being), but all points are closely interconnected and cannot be addressed in isolation.

But how many have really perceived this relationship? Even if scientists agree in this regard, who cares about science? Only a few go beyond hasty and biased information. Additionally, there is a strong risk of setting aside the environmental issue in front of the immediate urgency of the pandemic.

«Why did we forget about Greta? [...] Because there is Covid-19, because the pandemic is a huge health — but also economic and social — problem [...] the truth is that mentally, emotionally, we are not capable of handling two problems together [...] Solving one problem at a time this time will not work: we would be rebuilding the wrong system from the past, and by the time we deal with the climate, it will be too late»

(Luna, 2020, p. 1).

In addition, some recent choices dictated by health emergency open up new scenarios that are environmentally and socially worrying: from the billions of masks and gloves used in recent months, dispersed in the environment, with difficulty of recycling, to the increase of disposable tableware in catering, to the return of the private car as the centrepiece of mobility, as it is seen by many as a safer means of travel — «Social distancing: it will be the revenge of the automobile» (DI SILVESTRE, President of BMW Italy, 2020). Also to be considered is the triumph of online sales giants, with negative consequences in terms of transportation, increase in disposable packaging, working conditions of operators and their poor protection.

During the first lockdown, multiple voices denounced the risks associated with the difficulty – or unwillingness – to understand the real causes of the pandemic and learn the lesson. «Covid-19 is not a black swan, but a phenomenon that is likely to be repeated in the future, in other forms, if our response is only to return, as soon as possible, to regain previous lifestyles» (Giovannin, 2020).

«Pandemics have always forced humans to break with the past and imagine a new world. This one is not different. It is a portal, a gate between one world and another. We can choose to go through it dragging with us the carcasses of our hatred, our prejudices, our greed, our databases, our old ideas, our dead rivers and smoky skies. Or we can cross it with lighter luggage, ready to imagine a different world. And to fight for it».

(Roy, 2020)

While Ilaria Capua spoke of «[...] a moment of global reset» (CAPUA, 2020).

Today, a few months later, the feeling — or rather the certainty — is that we have learned practically nothing. We are waiting to start all over again as before, probably with the eagerness of those who have long been deprived of something:

« [...] our fear is that the 'catastrophe' has no real critical effect. The impression is that we want to do everything to make the world go back to being exactly what it was," with the 'suspension' not having taken on "the meaning of detachment to restart, almost, of rite of passage, of Earth resting, as in other cultures and other times».

(AIME, FAVOLE, REMOTTI, 2020, p. 12)

Without considering the negative psychological and social implications of what has happened: resignation, fatigue; with the children appearing the most affected of all, from the limits to their education, to dropping out, to the increase in school evasion, to the awareness of not having lived these last months; the neuropsychiatrist Boris Cyrulnik speaks in this sense of «wear and tear on the soul» (cited in Valli, 2021). Instead, we must try to reverse this trend, moving from the awareness that, if we have been able to change radically, perhaps, we can do so again.

According to Hulot (in AA.VV. (a), 2020) the lesson I would like us to learn from the coronavirus health crisis is that, faced with a palpable danger, we were able to take appropriate measures, freeing ourselves from old dogmas; let's do that for the climate crisis as well before it blows up in our faces.

«[...] there is a game ahead of us for a long time. What an unforgivable foolishness it would be to be afraid to play it»

(Baricco, AA.VV. (b), 2020, p. 166).

Ш.

Design: relationships, circularity and science

We now need design to ensure that our lives will change for the better in the post-pandemic reconstruction process

— Alice Rawsthorn

Crisis as a rebirth

The air is pure again, the silence is deafening, the traffic lights mark the time for 'ghost' cars and animals look out into the cities.

It is not the beginning of a movie, but it is what we experienced until a few months ago, forced to stay indoors due to a virus that has spread at an inconceivable speed.

COVID-19 has shown us, and for some it was only a confirmation, that what we considered separately is actually inseparable (MORIN, 2020, p. 23) and that it has been just one of the many crises afflicting the world – political, economic, social, ecological, cultural crises. The most evident fact of what we have experienced is our community of destiny, strictly and dramatically linked to the bio-ecological destiny of the planet (IBIDEM, p. 25). We have learned that we are vulnerable and that the nature, we are part of, needs our help. We must help each other and if we want to reverse the trend we need everyone's commitment. In the contingency of the pandemic, the world of design was proactive and collaborative: for example, it has allowed us to speed up the production times of 3D printed respirators with the Charlotte Valve project (Compasso d'Oro ADI, 2022), to contain the spread of the virus with various types of projects from washable masks to those with an eternal filter such as *Ions* designed by Alessandro Zambelli up to protective barriers. Human design has also shown generosity and creativity as in the cases of 'spesa sospesa' (Italian for suspended food shopping), recovering old habits such as that of traditional Neapolitan 'suspended' coffee.

We have shown that we know how to react, but perhaps today

«We now need design to ensure that our lives will change for the better or the better in the post-pandemic reconstruction process».

(interview with Rawsthorn A., *Design Emergency*¹, 2021)

What we did in the short term is not enough to the paradigm shift we need to face the crises we are experiencing. The UN *2030 Agenda* reminds us that there is a need to intervene in a multisystem way.

The set of initiatives called *Design Sustainability Pills*, curated by the *Design Laboratory for Sustainability* of the DIDA Department (*Università di Firenze*), raised questions about the future after the pandemic. How will the society get out of it? How can we improve our future? What will the transport be like? How will social relations change? Which things do we really need? How will the world of work and production change? What will the new materials be?

Instagram talks and guests invited to webtalks tried to answer to these and other questions, because the pandemic was not only a crisis but also an opportunity to reflect on what we really need.

Every complex system faces crossroads — crises, decisions — which, as argued by Gandolfi (2008, pp. 214-215), can lead either to the degradation of the system or to an increasing complexity. Our future, if we do not want a social, cultural, environmental, economic regression must necessarily become complex.

¹ Alice Rawsthorn and Paola Antonelli launched the Instagram Design Emergency profile in April 2020 which investigates the role of design in building a better future (for further information see also RAWSTHORN AND ANTONELLI, 2022)



Design moves as a tool that tries to prefigure alternative scenarios, almost post-Anthropocene ... By changing these relationship paradigms, the design of possibility becomes the design of reality

— Marco Petroni

Firstly, I would like to focus on the relationship between Human and Nature to clarify the role that design can have in building future scenarios, post-pandemic and also of a new coexistence, if you prefer, a new way of inhabiting the planet. In order to frame this profound relationship, it is necessary to analyse an important step: design moves from objects towards hyper-objects, creating a new dimension of the project. We will then see, through the study of some examples, how this step has actually been underway for some time in contemporary design culture. It is, in fact, a debate that arose at the beginning of 2010 and which has recently become central and global related to the culture of the project. What is meant by hyperobjects? Hyper-objects – defined by the British philosopher Timothy Morton – are dimensionless realities due to the complexity of measuring them quantitatively, but also realities that have very important effects on our daily life. Therefore, these are phenomena that we are unable to grasp in our individuality but which are profoundly modifying our existences.

Design, social innovation and and sustainable development

TALKS Lorenzo E.N. Giorgi In the near future, we will not need hyper-technological professionals, but managers who deal with complexity, that is, professionals who know how to manage the complex challenges of the future, integrating several different skills.

Lorenzo E.N. Giorgi

I shall start this presentation by emphasizing what the past year and a half has been like. A tiring period, where the state of uncertainty inevitably led us to have medium and short term visions. This is the biggest risk we are taking right now. The truth, on the other hand, is that we have an obligation to increase the long wave of our ideas and our perspectives. It is a duty for us as designers, but also a commitment and a new goal. These are the moments of uncertainty, fear and distraction that jeopardise our daily life. These are the moments in which we must commit ourselves to designing new models. Glocal Impact Network is an association co-founded by three partners coming from the field of international cooperation. In 2014 we stopped doing international cooperation because its long processes bored us and so we started working for *Liter of Light*, an international NGO that operates mainly in the Global South with the aim of bringing a more sustainable,

Beyond aesthetic perfection

In the contemporary debate, it is very important to educate to the objects we buy and put at home. We no longer know how objects are made ... We forget that they can be repaired and the very aesthetics of the repair does not fascinate us, when instead there is added value in this too. It is a change of perception.

— Duccio Maria Gambi

I have a very manual approach to work, because I need to relate to the subject. This is a necessary perspective for my artistic feeling. I believe that this approach must be rediscovered or retransmitted through Design.

There is now too much distance between the object, its context and the way in which it is produced. We move away from his affectivity. It always seems that objects are unrepairable, that they are not self-producing and that creation is almost impossible, a remote event through a machine that is far away. In my opinion, it is really important in these times to be able to regain the desire to get in touch with the materials and, starting from here, to understand that it is not so difficult also to

Cambio

Simone Farresin | FormaFantasma

Non abbiamo cercato di realizzare un prodotto con un'estetica preconfezionata, ma un oggetto che seguisse un attaccamento al contesto

FormaFantasma

In today's presentation I decided to focus on three projects we have recently developed.

First of all, I want to start by talking about where we work. Our studio is located in Amsterdam and is relatively small, we are seven people. It is essential for us to work together with others, not only physically within our studio, but also in conversation with others.

In this historical moment there is an attempt to use Design as a restorative tool, which can contribute to the improvement of the world in which we live.

This specific use of Design – I believe that as a designer – can be done on various levels: in the way we establish our ethics, our systems of work and conversation with others. It can be very complex as well as very trivial, such as the crediting of the people who work with us, but also the contribution that others make to your work. Maintaining and recognizing the knowledge that others give you is an aspect that, I believe, is fundamental.

We are also responsible for a Master's Course in Design at the Design Academy Eindhoven – GeoDesign – a term that was given to us by Joseph Grima, who was very generous towards

A design that takes a stand

Federica Fragapane

I think that data visualisation can be an excellent tool not only to communicate to people, but also to give a voice to those who do not have the tools to do so.

— Federica Fragapane

I am an information and visual designer and I deal with giving a visual form to more or less complex information and data. I work on projects that are characterized by different levels of complexity and experimentation. I am co-author of *Planet Earth*, a children's book published by National Geographic Kids and White Star, and co-author of *Geopolitical Atlas of Water*, an atlas published by Hoepli, which covers diverse and complex issues related to water. Over the years I have collaborated with the United Nations, with the BBC, with Scientific American, Google and with "la Lettura", the cultural insert of the *Corriere della Sera*.

To give you just a brief introduction to what my path has been, I started to get interested in the world of data visualisation in 2011, during my studies at the *Politecnico di Milano*. I attended the *Density Design* training course which was focused on information design and data visualisation. In 2012 I started working at *Accurat*, an information design studio based both in Milan and New York. In 2015 I embarked on my professional path as a freelancer, basically because I was very curious to see how my career would evolve in this direction.

IV.

Hyperfluxes. Towards a rhizomatic and cooperative approach to design

Society is based on the awareness of human solidarity, it was even just in the state of instinct. It is based on the unconscious recognition of the strength that the practice of mutual aid gives to each, of the close dependence of each one's happiness on the happiness of all, and of the sense of justice or equity that leads the individual to consider the rights of each other individual as equal to their own. On this broad and necessary basis higher moral feelings develop.

Pëtr Kropotkin

Designing on the edge

The current COVID-19 pandemic has caught us completely unprepared, despite the fact that some experts have been predicting it for some time. The planetary emergency has in fact brought about a sudden change in our lives, removing convivial and political practices from the public sphere and relegating them to the contexts of the private sphere. Thus modifying what used to be our daily habitus.

What then is the contribution of design and, consequently, how does the role of the designer change?

One possible perspective comes from the fourth order of design identified by Buchanan. This is a field in which design is con-

fronted with the design of «complex systems or environments for living, working, playing, and learning» (Buchanan, 1992). This is an area of design that, through an attentive look at contemporary challenges, is increasingly interested in exploring the role of design in

«[...] sustaining, developing, and integrating human beings in broader ecological and cultural environments, shaping these environments when desirable and possible or adapting to them when necessary».

(Buchanan, 1992, p. 10)

Related to this possible perspective is another one, which proposes the assumption by design of methodological approaches combined with rhizomatic logic (Deleuze, Guattari, 1980). Specifically, the idea would be to re-signify the design process with the rhizomatic process, giving shape – according to the rhizome logic – to «a reticulated, complex and emergent production of collective knowledge» (Deleuze, Guattari, 1980), overcoming the current more linear and analytical design paradigm. The scenario for the discipline of design is therefore to rediscover its dual reflexive and critical nature, reinforcing the latter and making increasing use of knowledge derived from extradisciplines, operating on the borderline and implementing targeted actions of filtering and transposition of "other knowledge" to be grafted into the core structure of design culture. Design is shaped and in-formed to renew disciplinary fundamentals (Pizzocaro in Baule, Caratti, 2016). The pandemic scenario thus becomes the design context to be understood and translated, «recognising (with the knowledge tools derivable from the most appropriate discipline) this new design space both as a set of global and persistent elements – normative, physical, economic, social – and as a local constellation of joint micro-contexts» (Baule, Caratti, 2016). Crucial at this point is the composition of a frame of meaning that arises from an extradisciplinary investigation conducted in the borderline spaces between knowledge. A sprawling operation necessary to narrate the LDS Design Sustainability Pills project, the result of a collection of thoughts, signs, meanings, practices and aesthetics useful for designing in the pandemic scenario.

V.

The new domestic social landscape

Technique is not, so to speak, in the wild, outside of society, but is placed within it and is strongly conditioned by social, economic and cultural dynamics.

Tomás Maldonado

The experience of COVID-19 was an incredible experiment in world social innovation (Manzini, 2021) that generated transformations whose effects are partly visible and partly still invisible, including the demonstration that Mankind is not at the center of the Universe, but which is a much more complicated part of the web of life (Manzini, 2021).

The digital space is not an absolute discovery, but it has significantly shifted the center of gravity of attendance with respect to the physical space and we therefore find ourselves living in a hybrid space shifted towards the digital space. The close relationship between media reality and cultural forms seems to have found its unitary denomination in the concept of *mediology*. The mediological approach thinks of the media as a place of contemporary experience as a territory of production and negotiation of expressive languages and symbolic forms, as a setting for the construction of paths of meaning, both individual and collective, as places of cognitive living, real worlds: those that Boccia Artieri called media-worlds (Boccia, Artieri, 2004).

¹ Look at R. Debray's works (1991; 1994). For Italy, look at the anthology edited by Miconi A. (2000) and Abruzzese A. (2003).