Studio Plastique

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About the studio:

We believe in design as the ultimate tool to think and shape the world of today and tomorrow. In our practice, we aim to forge links between the past, the present and the future, the ratio and the heart, the material and the emotional, the real and the virtual, the human and the machine. This empathic approach puts human needs at the center of what we do and results in environments and objects for human life to bloom, critical reactions on contemporary phenomena and envisions of future scenarios.

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Info for Milan Project I "Common Sands" presented at Ventura Future FuturDome, via Paisiello 6, 20131 Milano

Common Sands

Glass Objects retrieved from discarded electronic houshold devices. Today's challenge lays in finding new applications for local resources; not in unearthing new materials.



Short text about Common sands

Over the centuries, especially in the post war period, we have accumulated an enormous but hidden wealth. We are surrounded by a man-made anthropogenic warehouses amounting to more than 50 billion tons of materials providing substantial resources for future generations.

Common Sands is a quantification of sand as a fundamental resource for our civilisation. Pointing out how much we are surrounded by sand without even noticing. By using the silica components present in kitchen appliances as their primary material, the collection of glass vessels materialises the presence of sand. The size of the glass vessels relates back to the quantities of sand used in the various kitchen appliances. The use of glass in the kitchen setting has a lot to do with its hygienic properties in relation to food. This same basic idea was kept in the function given to the glass vessels. By staying within a setting related to food and the everyday but also by staying close to the soul of the object the base materials were sourced from.

Depending on the different appliances we mine our resources from, the result will be an equally different type of glass. They tell a story, restore a relation between source, resource, product and user.

It is an attempt to close cycles, to bring back a human scale to the alienation of our resources. It shows possibilities for design to be of meaning in the way we handle the materials created from natural resources and explores ways to conceive a new economic cycle for the resource sand.

Detailed text about Common sands

How do we relate to our resources?

"The 'stuff' we use and enjoy in our lives appears almost magically[...] the real origins, lifecycle, technical function in use, and 'end-of-life' destination of[...] products and services has been skilfully airbrushed out of the picture." Dr. Robert Crocker / Designing for Zero Waste

The air we breathe, the water we drink, the food we eat, the dishes we use, the paper we print on, the screens we touch, ... the list of resources that we encounter and surround ourselves with on an everyday basis seems endless. Considering that a resource per definition means anything from which added value can be created, also means everything surrounding us potentially could be a resource. This implies that resources do not only define where and how we live, they also have an impact on our environment (and thus on us, directly or indirectly) in a much broader sense. Resources are our wealth and progress. It takes no more than a visit to the dump however to realise that the way we handle them is far from ideal and has something of short-sightedness, leaving the uncanny impression that something is just not right. How can we conceive objects of which it is so unclear what should happen to them after their utilitarian lives?

It is fascinating to observe how our relationship to resources has « mutated » in this context. We come from times in which such questions of responsibility didn't need to be raised. In a primal environment no thought needs to be given to what happens to a material after it has been used. It just continues its cycle. But as we kept on discovering material properties and engineering ever-more complex materials, these cycles stopped working. Our minds however didn't follow the speed of this evolution, in which education could and should play a major role. It stays a very natural reflex to throw a plastic wrapping or a banana peel on the ground, with the difference that the plastic packaging is a man-made material that needs to be kept within the cycle of man-made stuff; it is not compatible with any other cycle. The banana peel on the other hand can return back to wherever in nature; it continues its natural journey. We need to understand that these roads don't cross anymore, they are planets that partly grew apart from one-another. This involves taking care not only of the way resources are processed, integrated and used, but also of what happens to them after they have served a particular function. Designing beginning and end.

How then do we relate to our resources? is the question raised.

Or put differently, how have resources become so meaningless to us?

They are everywhere, in our areas they are so abundant that we do not even look at them anymore. Essential resources like food and water are abundantly available in our supermarkets. Additionally, we are able to regularly purchase the latest gadgets like smartphones, TV's and other non-essential resources, throw them away, etc.

To put it simply, we are alienated from our resources because they seem to appear as magically as they disappear. Opposed to that, we know that a piece of wood comes from a tree. A tree grows for years to become a workable resource. We know to value and appreciate this. And even at the end-of-life, we can use it for heating or let it disintegrate in nature. It's a principle innate of natural materials. These principles however are rarely valid for man-made and engineered materials. We do not really know how they are made, neither where they come from, nor how they can or could be recycled (because they often cannot) at the end of their use.

Based on these observations this topic craves to be questioned.

How could we handle resources differently, give them back their visibility, their value? Restore our relationship?

And how could we change our relationship to resources in general or in particular?

How can objects be made with consciousness for the resource? Restore common sense?

At the end the resource is where everything should start, again.

Focus: Sand

In terms of importance for our civilisation, one resource tops everything: sand. We could even go as far as to say our current Age is the Sand Age, similarly to the Bronze- or Iron Age. This might be surprising, as it is commonly perceived as a rather banal material. We enjoy it on our beaches, but few know it makes our electronic devices function, our homes light and warm, our communication fast (and ever faster), our energy more sustainable, to name a few!

When looking closer into the processes sand goes through to become glass, microchips, solar cells, or aerogel for example, one enters a world of such sophistication and complexity that it leaves one in awe.

This awe tarnishes further along the road, when we find the devices integrating these jewels of sand technology at the end of their life, on big heaps. In the European context, much is done to recycle and market resources into a new cycle. This works well for metals, less for plastics and not so well for the sand based materials integrated into electric and electronic appliances. Of all the effort done to extract, transport, refine and process sand into the most complex of parts, none is done to recycle glass, silicon, silicones, microchips, glass ceramics and consorts. Let alone there being any effort done designing products allowing for a circular use of their materials and resources. Sand, apparently, is too abundant, too cheap to care for. This however stands in strong contrast to the geopolitical context of sand mining, marked by scarcity and ecological disaster as portrayed in the documentary « Sand Wars » by Denis Delestrac.

Moreover, interviews with actors within the recycling field pointed out the economic problem glass residues cause within the refinement processes used for other materials. These factors add up to make the silica residues of no economic value whatsoever for the recycling business, rather the opposite as it literally costs recycling companies money to evacuate the silicate residues for road- or landfill. These observations are for us as designers an ideal premise. We have a free material to work with, a market to develop, a cycle to close.

Considering the fact that the material doesn't find another cycle worthy of the name, leaves us with the question why? Because it is hard to obtain the same. Mixing sand derivates and glass types together leaves us with a different glass, deviating from the wished-for standard, with properties like colour being hard to control. But then, if not trying that, but embracing the properties exposed by the new material these various silicate residues create when molten together, new possibilities appear. A material mined from a different source then nature. A « glass » that carries the story of the processes it went through, making it rich in content and context and moreover creating a new application field and market for this particular waste material.

This is what is aimed for with « Common Sands ». In the first place, the project is a quantification of sand as a fundamental resource for our civilisation. It points out how much we are surrounded by it without even noticing it. By using the silica components present in kitchen appliances as their primary material, the collection of glass vessels materialises the presence of sand. The size of the glass vessels relates back to the quantities of sand used in the various kitchen appliances. The use of glass in the kitchen setting has a lot to do with its hygienic properties in relation to food. This same basic idea was kept in the function given to the glass vessels. First of all by staying within a setting related to food and the everyday, but also by staying close to the soul of the object the base materials were sourced from. A fridge used to conserve and contain food, becomes a tray to present or consume food.

Aesthetically, the pieces aim to show that the deviating properties of this new material can become a strength. Depending on the different appliances we mine our resources from, the result will be an equally different type of glass. They tell a story, restore a relation between source, resource, product and user.

It is an attempt to close cycles, to bring back a human scale to the alienation of our resources. It shows possibilities for design to be of meaning in the way we handle the materials created from natural resources and explores ways to conceive a new economic cycle for the resource sand.

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