

# Wallpaper\*

\*Architecture | Design | Art | Travel | Entertaining | Beauty & Grooming | Transport | Technology | Fashion | Watches & Jewellery

OCTOBER 2020

Guest  
Editors

Design  
Emergency

Paola  
Antonelli

Alice  
Rawsthorn

*on design's role during and after Covid-19*



## Design

Unique works created by GT2P in which lava stone from Chilean volcanoes is variously worked before being fired in a kiln. From left, 'Remolten N1: Monolita Chair 15', 2019; 'Remolten N2: Self Organization Mirror', 2019; 'Remolten N3: Dysgraphia Rock 3D-printed Vase', 2020, and 'Remolten N1: Revolution Coffee Table', 2018; 'Remolten N1: Monolita Side Table 15', 2020; and 'Remolten N1: Monolita Shelf/Screen 10', 2020







What makes the work of the Chilean collective G2TP stand out is its deft ability to play at opposite ends of the design spectrum at the same time. Its members are rooted in the specifics of a very particular place, but equally part of the global conversation. They are fascinated by digital techniques, but also by craft skills. They share a communal identity, but they each make a different contribution to it.

GT2P is based in Santiago, which is about as far from the conventional centres of the design world as you can get, but the collective has shown in New York with Friedman Benda, in Melbourne at the National Gallery of Victoria, at Milan Design Week, and in London, where the Design Museum has GT2P's 'Suple' bench in its garden. 'Suple' is Chilean slang for 'workaround', or makeshift. The core of the bench is a cast-bronze five-way joint that connects three vertical and two horizontal timber beams, one of them supported by a piece of rock, to create a stable seat with a mix of rough and smooth, formal and informal.

The GT2P studio is in a residential building in a low-rise modernist suburb, built in the 1950s. It's a long way from Santiago's city centre, where art deco »

# LAVA FLOW

Melting moments with Chilean design studio GT2P as it takes volcanic rock to new extremes

PHOTOGRAPHY: CRISTOBAL PALMA WRITER: DEYAN SUDJIC





Left to right, GT2P partners Guillermo Parada, Tamara Pérez, Sebastián Rozas and Victor Imperiale at their studio in Santiago

towers and the National Museum of Fine Arts, with its glass roof prefabricated in Belgium, sum up the sense of an early 20th-century European city exiled at the edge of the world. The studio is equipped with computers and 3D printers as well as kilns.

In all its messy splendour, GT2P's Catenary Pottery Printer stands dripping liquid clay onto the floor. It's a contraption that Antoni Gaudí would have recognised from his plans for creating complex curves for the vaults of La Sagrada Família. It has a homemade timber frame construction that somehow suggests a puppet theatre, which supports an adjustable muslin sheet to give the studio an analogue, hands-on version of parametric geometry software. The complex curves of the muslin surface can be adjusted by moving weights back and forth along the X or Y axis, just as a computer program would. But here the form is created by pouring layers of liquid clay, known as 'slip', over the muslin, and allowing the clay to set. It has been used to design a range of small domestic objects.

GT2P's tongue-twister of a name stands for Great Things to People. But it also contains the names of two of the group's founders, Guillermo Parada and

Tamara Pérez, who met while they were architecture students. The group also includes Victor Imperiale and Sebastián Rozas. Parada does the talking, Pérez is chief maker, Rozas leads on their architectural projects, Imperiale ensures that they are all digitally literate. They have designed restaurants, installations, playgrounds and furniture.

Working with Marc Benda of Friedman Benda, they have invested a lot of time working out how to use one of Chile's most abundant raw materials: lava. With scores of active volcanoes to choose from, they have collected material from five in particular. Osorno, a 2,562m-high volcano with a pure conical form and snow-topped peak rising over the shores of Lake Llanquihue, is particularly beautiful. It has a difficult nature that must be treated with respect. Osorno is a stratovolcano, a species made up of alternate layers of lava, pumice and ash that is liable to violent eruptions on a massive scale without warning. Calbuco, another of the volcanoes that the team worked with, last erupted five years ago, throwing up an ash cloud 15km high and threatening settlements as far away as Argentina. They have also used material »



## The surface bubbles and drips, the molten lava seemingly made into a frozen solid

from the Chaitén and Llaima volcanoes, and from Villarrica, one of the few volcanoes in the world with a permanent lava lake.

After months of experiments, GT2P came up with a laborious technique that involves grinding up lava rocks into a powder, then cold-moulding this in stamped powder moulds made from alumina, which will not melt at temperatures that turn lava molten. These, in turn, are placed in stoneware boxes and fired in a kiln where the lava powder melts, replicating a lava flow in a controlled eruption. The heat of the kiln determines the strength and colour of the piece. Lava starts to melt at 1,180°C, resulting in a purple colour. A little hotter and the material turns grey-black. At 1,300°C, when the lava turns liquid, the colour is brown.

The studio has also experimented using no moulds, instead allowing the lava powder to ‘self-organise’, as for a recent mirror. Some of its pieces are 3D-printed, using extruded lava paste, before they are fired in the kiln. The team call this technique ‘paracrafting’. It’s their way of combining physical craft with the discipline of the contemporary technologies of parametric manufacturing. As they put it, it’s a way

to ‘manufacture a landscape’, an expression that reflects the tension between the rigour of mathematically derived formulae that shape a pure form, and the acceptance of the accidents of production processes.

One recent result of their endeavours is a chair, the ‘Remolten Nr: Monolita Chair 15’, an extraordinary object made to celebrate GT2P’s ten years in practice. It is the first time the team have pushed the material this far. The fundamental form, shaped in stoneware before being coated in lava and fired, is a chair reduced to its graphic essentials. But the surface bubbles and drips, a version of the molten lava that it once was, seemingly made into a frozen solid.

The team have used the same techniques to create a range of other objects, including a side table with a built-in light, as well as screens and room dividers. The functional alibis are straightforward, but the way that these simple utilitarian objects are made, and the material that they are made from, ask wider questions about the meaning of creativity in the midst of a tidal wave of disruptive technologies that is transforming both design and art. ★  
*gt2p.com*

Above left, examples and prototypes from several Remolten series show the range of textures and finishes produced by GT2P’s different techniques

Above right, ‘Remolten N1: Monolita Low Chair 15’ seen in progress, as a lava coating (the darker areas) is added to the stoneware form