

ZOU DESBIENS
SELF-ORGANISING SYMMETRIES

ALLOWING GLASS TO SHINE LONG AFTER ITS ABSENCE

After working, blowing and sculpting with hot glass for a long time, Zou Desbiens has developed a fascination for its countless resulting textures. Other than its candy-smooth luster, bold colours and panoply of usages, this simultaneously fluid and solid material can be creased, pleated, mat, translucent, stretched, and squashed. It is these very same textures, resulting from the material's many imposed manipulations, which reveal its unique properties. It is exactly these very same hypnotic and physical properties that are the basis of the research that lead to this exhibition.

Usually, in a contemporary glass art exhibition, one contemplates works, while appreciating their random colorful meanders or the technical prowess of their forms. However, Zou Desbiens' recent works are more focused on the effect that glass has on its environment, somewhat in response to the many manipulations that a glass artist imposes to the material. Indeed, by exclusively using transparent clear glass that is voluntary misshapen into non-utility form and categorizing them as unaesthetic from a fine craft standard, the material then becomes the focal point. What's more, by imposing a narrow correlation between glass forms and a beam of light, the projected glass textures create optical effects on the cast shadows and become more important than the glass piece. It is while trying to create various caustics¹ and broadening her interest of the various textures, which can possibly be created on the surface of glass, that Zou discovered the many poetic aspects of their miniature landscapes, seemingly tiny cosmos within very specific frames.

Fascinated by the optical effect that glass has on the surrounding surfaces, even more so than glass itself, she began to reproduce these effects by using the photogram technique. Concurrently, she discovered the concept of *Li* that is found in repetitive natural forms, essentially similar, but inherently different, produced by an adequacy of energy and material.

A CUSTOM-MADE PROCESS

A photogram is a photographic image that is produced by placing an object on photosensitive paper, exposing it to light and revealing it with the aid of chemical products. To create the works of this exhibition, a glass object was carefully chosen and placed on the photosensitive paper. The objects created by the artist with various glass art techniques including sculpting and casting hot glass and cold working polishing, reacted like any lenses in contact with a beam of light from a photo enlarger lamp. For Zou, this process has become a way of illustrating the elusive nature of light.

¹ In optics, a caustic or caustic network is the envelope of light rays reflected or refracted by a curved surface or object, or the projection of that envelope of rays on another surface (WEINSTEIN, Lev Albertovich. *Open Resonators and Open Waveguides*, 1969).

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SELF-ORGANISATION OF FORMS IN VARIABLE SYMMETRY

Motivated by the need to avoid the traditional aesthetic aspects of glass arts, especially the functional, bold colors and technical prowess characteristics, Zou Desbiens has largely simplified the presentation of her works. Instead, she has focused on what fascinates her most about glass, especially her intimate relationship with light.

At some point during her artistic researches, she discovered the concept of self-organising symmetries which are present in a majority of patterns found in nature. For example, the simple ripple patterns on a sea-shore, for instance, are created by multiplicity of contributory factors, including tides, currents and winds... All of these are drawn into self-organising, self-limiting order whose charm lies precisely in the fact that it is repetitive, yet infinitely variable.² In traditional Chinese cosmology, these natural phenomena are called *Li* and are directly connected to Zou Desbiens' current work. According to the more poetic vision of nature, *Li* are essentially dynamic formations, and as such can give the impression of being a frozen moment, of a process caught at a particular instant of time, or, in a more abstract sense, of the principle of energy engaging with that form.³ In the artist's work, it is the moment when the dynamic undulation of light passes through the immobile glass that is transcribed in the manner of *Li* onto the photosensitive support. Not only are each moment in the dark room unique, but each glass piece is different with thermal and physical history, resulting in an abundance of patterns.

Moreover, these patterns, issued from the union between glass and light are immortalized due to a formal organisation very similar to those found in nature: on dunes, at the bottom of water beds, in the venation of foliage. This resemblance can be explained with the complementarity of the fabrication procedures of both the glass elements as well as with the photograms. During the sculpting of the glass pieces, the artist voluntarily provoked cold worked engraved marks, leaving an undulated aspect on the surface of the glass. This method simultaneously demands an accurate control and an immense technical letting-go. The artist then acted on these multiple factors that influenced the material, by provoking natural and self-organized undulations according to the physical properties of the glass. Thereafter, the carving and polishing of certain surfaces play a varying role in the interaction between the light wave and the glass object. Additionally, this work process is dependent on the use of film photography which automatically implies the capture of a precise moment in the imperceptible movement of the light wave and being dependent of the necessary chemistry for the development of the images. This adds a series of susceptible factors that are crucial to the uniqueness of the final pictorial compositions. Paradoxically, to create such dynamic images, in which we can definitely perceive movement, Zou Desbiens had to take stance in the absence of light in the dark room as to seize a range of subtleties. Ultimately, the starting point of her work, the glass object, is liberated from its formal aspect, technique, colour, and utility, to express itself with the motive of its own nature, highlighted with a precise dosage of light.

² WADE, David. *Designa: Technical Secrets of the Traditional Visual Arts*. 2006, p. 276.

³ WADE, David. *Li: Dynamic Form in Nature*, 2003, p. 3.