

## FICTION SCIENCE

At the very outset, we must make it clear that we are not talking about science fiction, but precisely the opposite. Science fiction is a freely constructed tale by a writer or filmmaker, seeking to imagine futuristic utopian scenes, without the need for any scientific basis. On the other hand, fiction science is an absolutely rigorous work, strictly based on logical or mathematical models, but which, instead of seeking some supposed truth about the world, puts itself at the service of delirium, makes the impossible emerge and, above all, parodies science itself. We think about something like *Cantatrix sopranica L.* (1991), by French writer Georges Perec, a collection of extremely rigorous “scientific” articles, with an abstract, key words, graphs, mathematical equations and everything, but which concerns absurd or hilarious themes, such as a ballistic study analyzing the trajectory of a tomato from a given point in the audience to the left side of a soprano’s face, or a statistical survey about the concentration of black flies (*Coscinoscera*) on a desert island, cubic meter by cubic meter, during all the days of the year. Having worked nearly his entire life as a university librarian, Perec became well-versed in the formalisms, conventions, sterility and even the deception of a good part of scientific texts, deciding to create something like a fake science, a tragicomic science as rigorous as it is absurd, as theoretically well-founded as it is deliriously gratuitous. Like Lewis Carroll, a mathematician who adored inexplicable paradoxes and brought logic to the limits of utter unreason.

There is something of fiction science in the work of artist Regina Silveira, and this is perhaps a way of perceiving a thoroughgoing coherence extending through her oeuvre. First of all, it is necessary to recognize that this entire oeuvre is extremely informed – in the sense that it evinces a far-ranging knowledge about the history of art and its key figures, perhaps an outcome of the artist’s background as an art professor – and that it furthermore has a basis in mathematics, physical and biological sciences, philosophy, literature, architecture, cultural theory, political and social sciences, etc. Silveira can be characterized as an artist of uncompromising rigor; everything she does is studied, researched, designed, referenced in history, millimetrically calculated, tested in scale models and so on. It is a show of its own to see her working with her assistants and collaborators. Her projections of shadows, the distortions of images, the dizzying perspectives that give us the impression that we are falling into an abyss, the effects of tridimensionality and monumentality are all rigorously based in geometry, in optics, and above all in Renaissance perspective and its anamorphic distortions. The classic book by Jurgis Baltrusaitis *Anamorphic Art* figures prominently in her working library, as though it were a constant reference. But in Silveira’s work all of this is used to produce hallucinations, nightmares, visual paradoxes and every sort of aberration that can challenge reason and reality. In *Quimera* [Chimera] (2003), a switched-on light bulb emits a black shadow instead of light. Similarly, *Solombra* [Sunshadow] (1990) shows a large window exposed to the sunlight which, paradoxically, projects a black shadow into the

building's interior. Unflaggingly questioning perspective and its illusionist models, the artist works with inexistent objects and beings, constructs absurd and frightening bestiaries, simulates false labyrinths or abysses in dizzying "bird's-eye views." It is as though all the wisdom accumulated by humanity could be used to produce insanity: a geometry of panic.

We see the case of *Teorema da Gaveta* [The Drawer Theorem] (2002), a work realized for the Institute of Mathematics and Computation of the Universidade de São Paulo, in São Carlos. The title involves something of a parody, especially considering that the work is on the wall of a mathematics school, but actually refers to a theorem that was demonstrated by Prof. Achille Bassi, the school's founder, and which, according to statements by students, required such a long demonstration that it did not fit on the blackboard, or even on the desk, so the professor concluded his proof by opening the drawer and writing it there. In this panel, we have a complex problem of projective geometry that consists in fractionating the image into various planes, but in such a way that the eye can reconstitute the image's unity, provided that it (the eye) is positioned at a precise point in space. In this specific case, the shadow of a drawer is projected simultaneously on the frontal surface, on the ground and on the side wall of the building. It can only be seen entirely and in the same plane when the observer stands at a single, specific point, next to a tree. Once he/she finds the correct vantage point, the observer can see the parts of the drawer's shadow come together. From any other point, the figure is enigmatic, configuring an aberrant and impossible geometry. The drawer that projects the shadow is a replica of the real drawer where Prof. Bassi finished the demonstration of his theorem.

A central logical and philosophical question in Regina Silveira's work is that of the *indexical sign*. This question was dealt with in a systematic way by North American philosopher and logician Charles Peirce, especially in his writings on semiotics. The indexical sign is the mark or trace that something or someone leaves when passing, that is, it is an image that refers to its object by a physical connection, unlike the *iconic sign*, which is an image imagined by a painter, or the *symbol*, which is an image resulting from a collective convention (like a traffic sign). Typical examples of indexical signs are the tracks left on the ground by an animal, the fingerprints used by police, and the old technique of funeral masks. The shadow can also be considered an indexical sign, as long as we are not seeing the being or object that is producing it. For Peirce, the photograph can also be considered an indexical sign, since it registers the mark or trace of something that posed for the camera at the moment the photo was taken. But what marks the indexical sign, paradoxically, is the absence of the object to which the image refers. The animal track only exists after the animal is gone, since when it is standing on it, the track has not yet formed. Therefore, the indexical sign is a proof that the thing existed, but it is a proof by *absence*. Silveira knows very well how to use the characteristic of *absence*

involved in the indexical sign. In *In Absentia: MD* (1983), we have various objects used by Marcel Duchamp in his sculptures, but they are present only in the form of shadows. Actually, they are ghosts of sculptures. The trace or indexical sign always poses a question of time and ephemerality. It is always something from the past, something that was there, but which is there no more. This is how many thinkers (Roland Barthes, Susan Sontag, André Bazin) have defined photography: as the trace of something that has gone away, the sign of death.

A large part of Regina Silveira's oeuvre is constituted by tracks, marks, shadows, indexical signs of every sort, but these signs are in impossible places, such as walls and ceilings. *Tropel* [Pell-Mell] (1998) and *Tropel (Invertido)* [Pell-Mell (Reversed)] (2009) are works that use one of the artist's favorite techniques: adhesive vinyl based on patterns generated in the computer and printed or cut using a plotter. In both these interventions in public buildings, she applied a large quantity of cut vinyl, first on the building of the Bienal de São Paulo and later on Koege Art Museum (Denmark). These consisted of oversized animal tracks, arranged in such a way that the pattern expands dramatically toward the ceiling. It is as though a band of animals of different species, in panic or confusion, had climbed the walls of the building, leaving their black tracks there (*tropel* is the name given to the noise of many hooves or paws of running animals, as in the phrase "the *tropel* of the horses"). In both cases, the animals seem to be fleeing in panic from some tragedy. The exaggeratedly enlarged perspective and the gigantism of the tracks lend incredible dramaticity to the façades of the buildings, in such a way that it is impossible to remain indifferent to these images. In *Derrapando* [Skidding] (2004), Silveira decorated the walls of the Centro Cultural España, in Montevideo, with tire tracks, as though the traffic of the city had contaminated the building and projected the urban streets onto it (there are other versions made for the Museu de Arte Moderna de São Paulo and for the Trienal Poligráfica de San Juan). But mammals and cars do not go up walls or move upside down along ceilings. Thus the absurdity of these images and their fictional character.

A variation on this theme of indexical signs is the insects represented only by their black silhouettes. These works have everything to do with shadow plays and Chinese shadows, an age-old tradition in the history of human culture. In *Mundus Admirabilis* (2007), for example, she "tattooed" the cubic glass building of the Centro Cultural Banco do Brasil de Brasília with terrifying silhouettes of these giant insects. Silveira often works on an architectural, or even urban scale. She transforms insipid buildings into oneiric mirages, with a frightening gigantism, in terms of their extension, amplitude and importance. But even in her more minimalist works, the perversion is not far away. A common feature in Silveira's work is fine porcelain ware full of silhouettes of insects, as though infected by them. Works such as these

realize the essence of what we call the *sublime*: they are, at one and the same time, incredibly beautiful and apocalyptically frightening.

If we are talking about fiction science, an indispensable variant is applied science, that is, technology. As a worldwide phenomenon in recent years, we have seen a proliferation of exhibitions, festivals, meetings, museums and cultural centers dedicated exclusively to experiments that deal with the point of intersection between art, science and technology, a field that some have denominated *technological poetics*. It is difficult to resist the temptation to look at Regina Silveira's very large-scale artistic work through this lens and to analyze the particular trend she has adopted to confront the challenge posed by this complex intersection. Nevertheless, contrary to what many might suppose, in the case of Regina Silveira, this is not about a recent engagement in a field that suddenly started to become hegemonic in the art world during the 21st century. Ever since the 1970s and '80s, alongside her work in printmaking, silkscreen and drawing, Regina Silveira has also been dedicating herself to experiments with a wide range of media and technologies, such as photography, microfilm, electronic panels, video, video text and, a little later (1991), the computer. She was, therefore, already active in this area when the technological poetics still had a marginal or nearly underground character in the overall field of contemporary art. In 1982, she organized and participated in the first show of microfilm art, Artemicro, at the Museu da Imagem e do Som de São Paulo. Her extremely original work at that exhibition already anticipated, more than 20 years avant la lettre, all of the current discussion about database art, collectionism and the registry of information, as is also the case with the pioneering *The file room* (1994), by Muntadas.

Silveira was also one of the pioneers of video art in Brazil: her first three finished videographic works date to 1977, but she had already been experimenting with this technology since 1974. With technological resources of the Museu de Arte Contemporânea (MAC) – at that time directed by Walter Zanini, from the Centro de Estudos e Artes Visuais (Aster), which she herself had created together with other artists – and of the Cockpit studio, created by artist Roberto Sandoval, all in São Paulo, she realized a consistent body of videographic works, characterized by extreme economy of media, by hyperminimalism, and a precise conceptual support. In *Campo* [Field] (1977), for example, she traces imaginary geometric figures with her own finger, which moves throughout the camera's field of view, without ever going outside it, constructing quadrilaterals and transversal lines, but all virtually, since her finger does not leave any mark along the paths it traces. A good part of Silveira's work, as we have seen, is constituted by absent objects, with only their mark or shadow remaining. Here, it is the image itself which is absent. The screen is white and empty the whole time, and the viewer must imagine the drawing that the finger would be creating if

it were leaving some trace on the screen. *Artificio* [Artifice] (1977) is another experiment in the erasing of the image. The video shows only the word “artificio” written on the screen. But this word is written on transparent strips. A hand repeatedly enters the field and pulls away these strips one by one, so that the word disappears from the screen and only an empty field is left. A third experiment in erasure is *Objetoculto* [Hidden Object] (1977): a black mask hides nearly the entire image, leaving only a small central gap, through which the viewer can guess the presence of a nearly invisible face. This same technique was to be used systematically by German video artist Marcel Odenbach, many years later. At the height of the military dictatorship and during the sway of federal censorship, Silveira also made *A Arte de Desenhar* [The Art of Drawing] (1981), a repertoire of offenses and obscenities represented by way of manual gestures of aggression well known to the Brazilian public. In *Morfás* [Morphs] (1981), everyday kitchen or bathroom objects, captured in big close-up or traveling shots, are transformed into aberrant creatures, like monsters pulled from some sordid bestiary.

The computer has always been present in the artist’s life, ever since her semidigital and semicyberspatial debut with video text, but in general she uses the computer as one more tool in her work, rather than as a presentation medium. Even so, Silveira has ventured into telematic networks and artificial reality in some circumstances. A good example is *Descendo a Escada* [Descending the Stairs] (2002), a work realized for an event of art and technology in São Paulo, called *Emoção Art.ficial* [Art.ficial Emotion]. The theme of the labyrinthine and dizzying stairway, constructed through distortions in perspective, suggesting abysses beneath the floor, has been a constant in the artist’s work. This theme of stairs going down to nowhere was already present, for example, in *Escada Inexplicável* [Inexplicable Staircase] (1999) as well as in *The Other Staircases* (2003), in which Silveira “continues” the stairway of the New York Public Library by means of a fake, absurd and scary set of stairs, à la Escher or Piranesi. In the digital version, the staircase is interactive, and turns as the visitor ventures in the direction of the dark space below. What was already dizzying here becomes acrophobic (from acrophobia, the fear of heights). This spiraling staircase has four hair-raising “landings” and, as though this were not enough, a soundtrack simulates the “footsteps” of absent walkers lost in the labyrinth.

Rosalind Krauss, in her book *Art in the age of the post-medium condition* (2000), observes that many contemporary artists (but she is referring mainly to Marcel Broodthaers) no longer define themselves by specific media or artistic fields, that is, they are no longer simply visual artists, photographers, filmmakers or video artists. Rather, they work with concepts or projects that involve all the specialties, in such a way that the media used vary in accordance with the demands of each project and are always multiples or associated with each other. This is what Krauss calls the “post-medium condition”: the works are no longer media specific –

they are larger than the media, they cross through them and surpass them. In some cases, they create their own media and supports, as in some works by Regina Silveira, which have used the city of São Paulo itself as the “screen” – with a projector mounted on a truck, it is possible to “tattoo” the city with enigmatic images in movement. This is the case with *Super-herói (Night and Day)* [Superhero Night and Day] (1997), which consists of the projection of a Superman flying over the city; *Transit* (2001), a projection of flies on the buildings, as though the city were contaminated by a plague; and *UFO* (2006), which simulates the descent of a flying saucer.

In all these examples, we have the performance of an artist who practices a strange form of science, closer to alchemy than chemistry, with more affinity to myths than to history, more ideographic than ideological, halfway between astronomy and astrology. Fiction science.

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