

eight Subjectile/Objectile

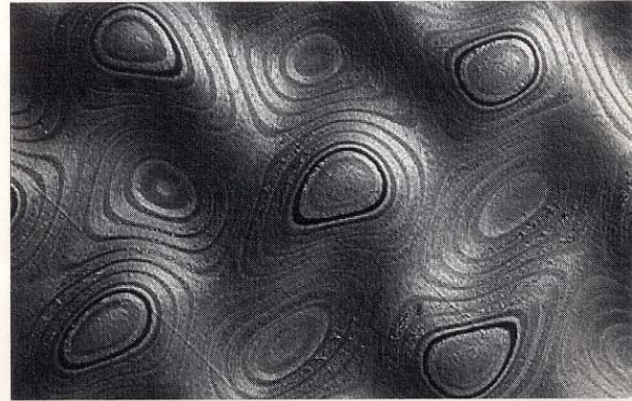
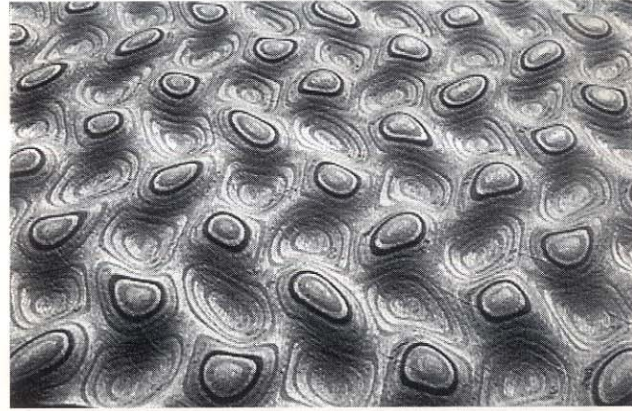
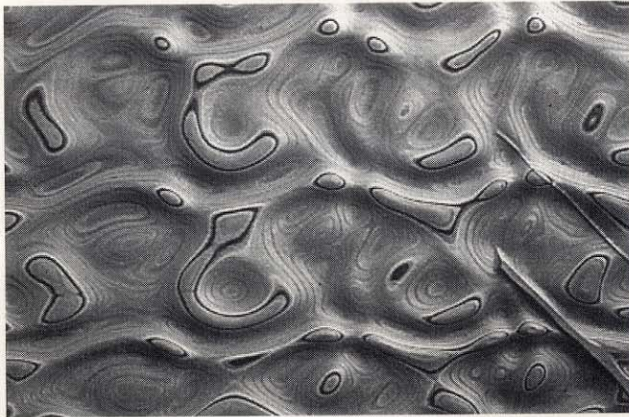
Computer-Assisted Conception and Fabrication (CFAO) systems have two types of use in industry. In mechanical engineering and building, pieces are designed that, though they can be complex, are in fact combinations of simple elements that can be drawn with a ruler and compass. Architecture can be reduced to a play of interlocking frames, and mechanical engineering deals with movements that are combinations of translation and rotation. The use of elementary primitives derives from this: segments of straight lines and arcs of circles. Furthermore, in automobile and aeronautical applications, the CFAO systems are also used to design casings; these are the contours of chassis or the wings of airplanes. The contours are not actually calculated but are subject to an adjustment procedure through wind tunnel tests. Also, their surface is drawn from approximated curves, Béziers or Splines, which are stretched on a bed of points positioned by hand. CFAO systems have certainly increased the productivity of the idea, but fundamentally they offer no advances over the work done by hand. Now, we can envisage second-generation systems in which objects are no longer designed but calculated. The use of parametric functions opens two great possibilities for us. First, this mode of conception allows complex forms to be designed that would be difficult to represent by traditional drawing methods. Instead of compositions of primitive or simple contours, we will have surfaces with variable curves and some volumes. Second, these second-generation systems lay the foundation for a nonstandard mode of production. In fact, the modification of calculation parameters allows the manufacture of a different shape for each object in the same series. Thus unique objects are produced industrially. We will call variable objects created from surfaces "subjectiles," and variable objects created from volumes "objectiles."

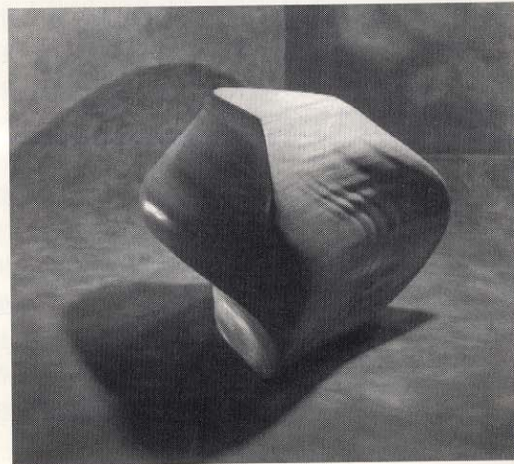
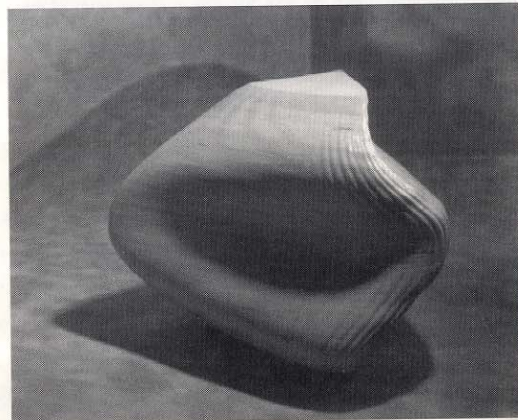
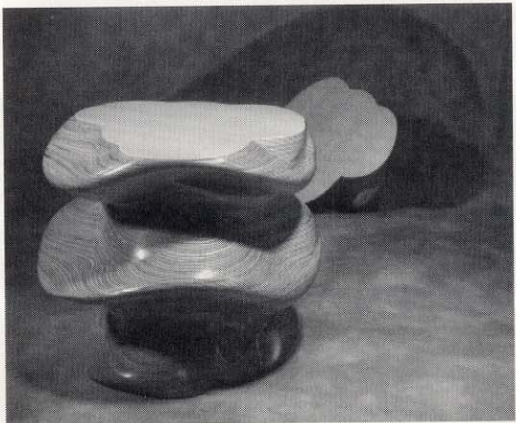
The question today is: what is an object? And this question only makes sense with respect to our daily objectivity, which is to say that set of things that industry conceives and fabricates and that we buy because they create use effects.

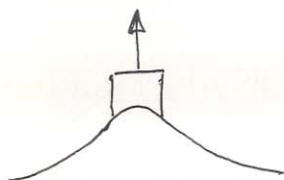
Pierre Clastres is responsible for explaining how the sexual identity of the Guaranis tribe is only suggested by biology. Following from this the adolescent must choose an object: a bow for men, a basket for women. A bow and basket are thus the figures of Guaranis sexual identity, just as vector and concavity form the figures of an extrinsic singularity in mathematics. And everything occurs as if we had found, in the house, the answer to what is happening on the outside. On the outside the vector indicated the site as an eminence in order to determine a territorial identity; on the inside the vector is this object opposite which one must position oneself to determine a sexual identity.

In every case identity shatters singularity. Maximum and minimum break the inflections of whatever curve; hills and valleys pass by in silence along the lines of the landscape, bow and basket assign the roles in sexual division, concavity and convexity oppose the object to the subjectile to determine a subject. And in every case a third element intervenes, because one does not determine oneself vis-à-vis the vector without passing through a frame. The extrinsic singularity presupposes the determination of a system of coordinates, territorial identity is only drawn within the frame of an architecture, the bow and the basket are adopted through the course of an initiation rite.

But it is clear that this objectivity has changed. It used to be that the object was simply what we saw in front of us; it was generally contrasted with the variations that are thought to take place within the subject. It







identité
territoriale



identité
objectale

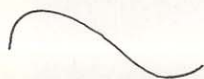
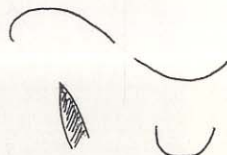


figure de
la singularité



figures de
l'identité

was inseparable from a sense of clash or constraint that went together with a will to last or to resist. The object was thus first a vectorial image: a blade or a stick. It was a secondary image that was conceived in such a way as to maximize the exercise of a given force against its reaction. Whether it took the form of a knife, a vase, or a table, we always remained within vectorial singularities. An ogive, a basin, or a plane of orthogonality are still singularities with respect to the exercise of a vector. In this sense, the modernist movement has only accentuated this mode of objectivity. For it wished to eliminate everything that didn't contribute directly to usage or function and to build using a minimum of materials: it was a whole aesthetic of the engineer, by maximiza-

tion. *Existenzminimum*. That is why ballistic contraptions such as rockets, missiles, and locomotives, all of which are eminently vectorial, still remain the archetype of object design.

But people forget that the vector image is subordinated to a frame image without which the vector only remains a tendency. Functionalism presupposes a certain kind of structuralism. For objects exist only inasmuch as there exists a sort of contract about their use or production. In the days of craftsmanship, the traditional object was overlain with a whole set of customs and usages that were the true source of objectivity, even if some objects only had the status of tertiary images: frame objects, fetishes, or symbols. These images did not exist in virtue of the contract; they were the very representation of it. In fact, an entire side of traditional decorative culture only served as a reminder of the contract that was at the origin of the object.

Conversely, at the time of technical reproducibility the object could assume an appearance of pure objectivity, as the repetition of the model was given as the only legality of the series. That is because the industrial norm first appeared as a simple law of constancy that had replaced the traditional contract. And when the norm took this form of a unique standard model, any legality other than that of repetition was a breach in the law of the series, to the point where ornamentation became something of a crime. The object was meant to maximize the utilitarian function, and its very repetition was the sign of its legality. Many also took this legality to be a form of equality: the identical object, produced by the masses for the masses. But this sort of contract is no longer viable today. For the standard model is not the same as equality and the norm is not the same as the law. Now that generations of industrial objects are constantly

being replaced by new ones, we feel that the nature of the contract has changed, and hence also the nature of the object. Modern objects are eroded by time. The permanence of the law gives way to the fluctuation of the norm. The modern quasi-crystal is no more than a quasi-object. What is at stake is the convergence of a number of factors that influence each stage in the life of a product:

Consumption: our everyday actions invariably pass from the realm of tradition or law to that of the norm. The purpose of the norm is not to stabilize our movements; on the contrary, it is to amplify the fluctuations or aberrations in our behavior. Changes are the mode of the norm. The rigid elements of our behavior are articulated with one another in order to produce increasingly variable configurations. Objects, which are those solid parts of our actions, are but a moment of densification in the folds of our behavior that is itself fluctuating. The object has become inconsistent, a gadget that is replaced by other gadgets; but it can also become the singular nodal point of a modern continuum through variation. We are then faced with a new category of images: no longer vectors and their opposite reactions, but inflections that our behavior exposes.

Production: digital machines and productive technologies in general allow for the production of an industrial continuum. From the mold we move toward modulation. We no longer apply a preset form on inert matter, but lay out the parameters of a surface of variable curvature. A milling machine that is commanded numerically does not regulate itself according to the build of the machine; it rather describes the variable curvature of a surface of possibility. The image-machine organization is reversed:

the design of the object is no longer subordinated to mechanical geometry; it is the machine that is directly integrated into the technology of a synthesized image.

Representation: henceforth, the image takes precedence over the object. The CFAO image, malleable in real time, has lowered the status of the prototype, as well as all the representation of the object. The modes of production of images, as in the case of advertising images, are no longer derivatives of this primary one. One often hears about the image of a product, but in fact the product itself is in the first place an image. For simulation produces simulacra at the same time as the model changes its meaning.

Modeling: the primary image is no longer the image of the object but the image of the set of constraints at the intersection of which the object is created. This object no longer reproduces a model of imitation, but actualizes a model of simulation. The anatomical gestures of the user, the surface of the set of constraints of the material, the curves of optimization and of management, all constitute the geography that governs the object. Through television sales, the factory and its flexible workshops become the utopian site of the ideal market. The object, as well as the fluctuations in its price, is modulated at the intersection of the curves of supply and demand.

Function: a field of surfaces thus governs the object that has now become the set of possibilities of their intersection. But the surface of the object also becomes separated from its function when the latter is no longer mechanical but electronic. Just as Leibniz had conceived it, texts, information, images, and sounds are now all the

object of numerical manipulation, so much so that the electronic parts that make up the functional core of the modern object no longer have anything to do with the visual or auditory restitution that realizes their concrete function. There are no more mechanical forces, only simple plates of integrated circuits that have but a determinable relation to the function of the object. The external shape of the modern object has only an aleatory relation with the electronic function. The shape of this new objectivity prolongs surfaces of resonance, whether screens or membranes, that restore the materiality of the numerical processes. Data of this sort can then create an image on a cathodic screen, but it can also create a sound on an acoustic membrane or, better still, produce a surface of variable curvature.

Marketing: an alea puts form in a state of fluctuation that offers us a true image of the norm. But it is no longer that standardized object that is defined by a law of repetition; rather it is this quasi-object that is but a fragment of a surface of possibilities where each exemplum is different. Yet it is not a personalized object, either, intended for a preidentified client. It is an object that fluctuates on the curve of variation of a new industrial series. It is an ordinary object that may well entertain singular relations with a user.