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Robbe-Grillet's and Johns's Targets

Metafiction, Autopoiesis, and Chaos Theory

Alain Robbe-Grillet wrote “La Cible” (The Target) as an introduction to the catalogue for the 1978 Jasper Johns exhibition at the Centre Georges Pompidou in Paris. The introduction was unconventional because it was fiction and bore no resemblance to the interpretive comments or critical analyses that normally accompany such texts. It was not, except perhaps indirectly, an introduction to the art of Johns, although it did use his Pop-art objects, paintings, and titles as generative sources for the fictional narrative. In the same year, the text was incorporated into Robbe-Grillet’s novel, *Souvenirs du triangle d’or* (130–150).

In the 1950s, in France, the *nouveaux romanciers* were rejecting mimesis, and in the United States, around the 1960s, Pop artists were rejecting the Abstract Expressionism of de Kooning and Pollock. Pop artists and new novelists were fascinated with objects, they were foregrounding the language of art, and they were highlighting the creative process. Johns’s and Robbe-Grillet’s use of things, such as a lightbulb or a coffee pot, led some critics to accuse them, and Robbe-Grillet in particular, of killing the novel and dehumanizing art. Robbe-Grillet’s detailed description of a centipede led commentators to describe the *nouveau roman* as *l’école du regard* (the school of the gaze) and to label its practices *chosisme* (thingishness). In due course the cool objectivity of Robbe-Grillet’s style, known for its absence of psychological analysis, was labeled *le stylo caméra*. The term is Alexandre Astruc’s, and the concept of camera-pen refers to a cinema capable of expressing abstract thought. In this sense, Robbe-Grillet’s style is sometimes described as cinematographic. The term “thingishness” also applies to Johns’s art, particularly to his ale cans, flashlights, flags, targets, and plaster casts. “At every point in nature,” says Johns, “there is something to see. My work contains similar possibilities for the changing focus of the eye” (quoted in Francis, 109). It is not surprising that Robbe-Grillet would incorporate Johns’s objects into his writing, notably “La Cible.”

Johns’s and Robbe-Grillet’s work poses the question, “What is a painting?” or “What is a novel?” Michael Crichton points out that Johns may attach an object to the canvas in such a way as “to throw doubt onto the meaning of the object—even when it is commonplace, such as a cup or a broom or a fork” (25). Objects are defamiliarized because expectations of cause and effect are not fulfilled. The viewer

is perplexed because Johns's apparently useful objects, like Marcel Duchamp's urinal, have lost their utility. As Barbara Rose puts it, "the newspapers and books can't be read: the piano can't be played; the misshapen cutlery and bent hangers can't be used; the drawers don't open" (66).

Pop art, says Lucy Lippard, also "chose to depict everything previously considered unworthy of notice." It used advertising, newspaper illustrations, gaudy furnishings, film stars, pin-ups, and cartoons. "Nothing was sacred" (82). Robbe-Grillet, however, does view such objects as sacred, precisely because they have been elevated to iconic status. For us, he says, they have the same value that the so-called sacred objects of antiquity had for their cultures—objects that archaeologists have been uncovering for decades, if not centuries (*UCLA Lectures*, 4 May 1978). The subject matter of *Topologie d'une cité fantôme* is the archaeology of successive ancient civilizations, whereas the subject matter of "La Cible" highlights objects "excavated" during the mid-twentieth century.

The purpose of this archaeology is to incorporate objects—be they chairs, coat-hangers, hooks, ale cans, flashlights, lightbulbs, or shoes—into a narrative discourse that speaks the language of mass consumption—a consumption engendered by advertising and the ideology that accompanies it; while at the same time highlighting the presence of manufactured objects in everybody's life. Johns's and Robbe-Grillet's art speaks the world around them using the Saussurian *parole* of a society that has been fragmented and pushed back into a state of *langue*. "It is this secondary *langue*," says Robbe-Grillet, "that will serve as a reservoir of materials from which to produce a new *parole* . . . my own" (*Glissements* 14).¹

It is interesting that Robbe-Grillet has incorporated everyday Pop art objects into a text that is opaque. It is also ironic that Johns's useless objects have become useful to the narrator in Robbe-Grillet's fiction. The usefulness of these things, however, has been compromised, and they are as problematic in "La Cible" as they are in Johns's art. The flashlight eventually fails, the spoon has a hole in it, the beer can is empty, the lightbulb shatters, the chair has no slats, the apple has been eaten, the heel of a woman's shoe is broken, and the corridor goes nowhere. There are exceptions, such as the coat-hanger and the hook on which he hangs the coat-hanger and his jacket. Although objects in Johns's and Robbe-Grillet's art may be degraded, they are, in any case, not real. They are merely signifiers. The only real things in Robbe-Grillet's fiction are the words, and the objects they describe are there less to mirror reality than to underscore the creative process. Johns also uses objects, color, and paint as signifiers, to represent not the world, but the creative act.

In analyzing the creative act that has produced "La Cible," we need to know that Johns's *Target With Plaster Casts* has four rings, whereas Robbe-Grillet's has nine. The number nine derives from Johns's *0 through 9* painting but also from the



FIGURE 1. Target with Plaster Casts, 1955. *Encaustic and collage on canvas with objects*, 51" x 44". Private collection. Art © Jasper Johns/Licensed by VAGA, New York, NY.



FIGURE 2.
Canvas, 1956. *Encaustic and collage on canvas with objects*, 30" x 25".
 Art © Jasper Johns/
 Licensed by VAGA,
 New York, NY.
 Collection the artist.

nine little boxes above the target. The things in the boxes, however, are not the same objects that Robbe-Grillet's narrator places on the nine rings. Each one of the objects also denotes the number of its ring. The number nine derives from the intertwining lines of the Ballantine ale can logo. Number eight is a piece of frayed rope, number six is a bent spoon, number five contains the digits of a hand print, number four is an inverted chair, three is a chewed green apple, two is a woman's shoe that morphs into the number seven, and one is a yellow schoolboy's ruler.

Johns's painting of a gray surface with a small square, entitled *Canvas*, opens Robbe-Grillet's narrative sequence. The square in the painting becomes the judas hole in the text—a text set in motion when the judas of the prison cell in which the narrator finds himself opens, an arm thrusts itself through the opening, and a hand drops one of Johns's art objects, entitled *Light Bulb*—a bulb that shatters on the cement floor. The narrator organizes this chaos of fragments into the nine circles. Johns's *White Numbers* are also used to order a reality that evolves from the disorder of the little bang—the bulb that shatters on the floor inside the narrator's mind.

It is important to note that Johns paints numbers as objects and that he has concretized abstractions, whereas Robbe-Grillet, by transforming objects into numbers, has reversed the process. Objects have been abstracted. Johns's numbers, either singly or in a series, lose their abstract nature because they are now pictures. Pictures of numbers also function as pictures of things, and therein lies their undecidability. As with Johns's *Target*, which is both real and unreal, the numbers are constantly found and lost, seen and ignored, submerged and recovered. Like the



FIGURE 3. Light Bulb, 1960. Bronze, 4 1/4" x 6" x 4". Art © Jasper Johns/Licensed by VAGA, New York, NY. Collection the artist.

numbers, *Target* is both a painted surface and a subject in depth. Max Kozloff suggests that this paradox is part of a new intention, the product of a deliberate mating of opposites whose fusion is unsettling because meaning is ambiguous (14). We are being asked to think concretely about abstractions and abstractly about objects. Moreover, the message, if there is a message, is unclear because the information is contradictory. All we know is that information is circulating and that our perception has slowed down in order to make sense of the contradictions.

For Jacques Derrida, *la différance* is part of the undecidability of all meaning, which is endlessly deferred and which, therefore, is never fixed. The oscillation of *Target's* meaning between surface and subject, presence and absence, inside and outside, and the signifier and the signified erases one of the binaries while its opposite is being considered. This "erasure" does not eliminate the contradiction; it only blurs and defers it, and the deferral remains as the trace of an alternative that refuses to go away (62).

In addition to undecidability, the painting and the text call attention to themselves as art objects. The target is not meant to be used for pistol or archery practice and it is also only a verbal artifact. Robbe-Grillet's text exists mainly for the pur-

pose of ordering certain objects within the nine rings of his target. The narrator never tells us why he produces this arrangement, even as the narrative conveys the impression that this is its task.

Robbe-Grillet uses Johns's objects in order to generate a text that illustrates the paradoxical nature of reflexive art. Furthermore, in "La Cible" the old techniques of criticism and writing find no purchase, because Johns's pictures contradict Robbe-Grillet's text, and the narrative subverts the visual. Paradox is, in effect, "La Cible"'s superform, because so much is left unsaid as each artist articulates the deferral of truth.

"La Cible" is a reflexive text, and reflexivity, says Niklas Luhmann, "*is the movement whereby that which has been used to generate a system is made, through a changed perspective, to become part of the system it generates*" (8). Clearly, Johns's objects from outside the system have become a part of Robbe-Grillet's target inside the system. Metafiction, like all reflexive art, dwells on its own narration, and in "La Cible," this narration oscillates between the cell, where the narrator finds himself, and the corridor outside. "La Cible" foregrounds its internal machinery as the narrative distinguishes between self-reference and hetero-reference, that is, between the narrative itself inside the cell and the objects introduced from the outside to keep it going.

The cell where the narration takes place is the inside of the system. Metaphorically, it is the prison-house of language and also the biological cell of an autopoietic system. According to Humberto R. Maturana and Francisco J. Varela, autopoiesis means self-making and describes the circularity of a system's organization, whereby each system constructs its own environment through a network of recursive interactions. Johns's *Target* and Robbe-Grillet's "Cible" are examples of reflexivity and autopoiesis. The nine objects introduced from the corridor outside belong to Johns's repertory, and those objects, once inside Robbe-Grillet's cell, form a dialectic which, like a Moebius strip, is reversible. The Moebius strip is a useful image for this reversibility because the paradox of undecidability can function only with the participation of an observer. Indeed, the narrator sees the eyes of the observer, Johns's *Painting with Two Balls*, staring at him from the corridor through the slats of the judas (*Souvenirs* 149). The observer mediates between undecidability and the inside-outside dialectic, while the narrator's actions provide information that cannot be interpreted unless we, as observers, move from the recursive loops inside the system to the objects outside.

Insofar as autopoiesis regulates the function of living systems and also of reflexivity in art, it is appropriate that the narrator in his cell and the observer be part of the larger system in the production of meaning. We, as observers, not only contribute to the dialectic but also experience ourselves as observers. As we strive to

reconcile the inside and the outside, our newly found self-consciousness tries to reconcile the operative closure between the two.

The confusion that we experience in this production of meaning also derives from metafiction's disregard for conventional narrative order—the classic realism of Balzac or Thomas Mann, whose fiction relies on linear chronology, character development, and plot. None of those traditional elements is present in “La Cible” or, for that matter, in any of Robbe-Grillet’s novels. Instead, we have a circular narrative, characters without patronymics, and an autopoietic system whose point of reference is itself and not the world outside it. All of this can be disorienting for readers with time-worn expectations, and their deception frequently leads them to view the new aesthetic as chaotic. As though this confusion were not bad enough, metafictionists such as Robbe-Grillet and autopoietic artists such as Johns introduce chaos theory into their works. Contrary to what traditionalists might suspect, Johns’s art and Robbe-Grillet’s writing demonstrate that Pop art and metafiction do not imply a renunciation of order. What public ignorance perceives as disorder is a new order that has incorporated knowledge about cognition, ourselves, and the world.

In the last thirty years, says N. Katherine Hayles, there has been a radical re-evaluation of the relation between order and disorder, not only in science but also in literature. Both disciplines have incorporated chaos as a dimension from which order can emerge. Furthermore, textuality in both literature and critical theory is now being conceived in ways that incorporate the emerging field known as chaos (Chaos and Order 1). Initially, readers viewed metafiction as unintelligible because it seemed chaotic. But the apparent chaos of metafiction disappeared when readers understood the nature of its disorder, which was a new and different kind of order. In *Le Miroir qui revient*, Robbe-Grillet says that, as a writer, he wanted to dramatize the collision between order and disorder, not only on the textual level but on the cultural level as well (131–133).²

Although chaos theory in literature, sociology, or history is not the same as chaos theory in science or mathematics, there are parallels and convergences. Whereas structuralism thrived on replicating symmetries, postmodernism, like the science of chaos, favors fragmentation, rupture, and discontinuity. Iteration and recursion also destabilize narrative systems by forcing them to yield unforeseen conclusions. These new ways of thinking about order within chaos are useful, says Hayles, because they make room for asymmetries and unpredictability. Nonlinear and random structures are no longer seen as aberrant but as prevalent. Indeed, dynamical systems theory is changing the way we conceptualize chaotic structures in the natural world (*Chaos Bound* 6). “If reality is not natural and self-evident but constructed, it can obviously be deconstructed. Repeatedly in postmodern theory

and literature, the constructed fabric of the world (or the text-as-world) is torn to reveal the void underneath" (*Chaos and Order* 14), that is, the gap between the signifier and the signified. In this case the role of the observer is to note that Johns's and Robbe-Grillet's works draw our attention to art as a constructed entity and to its internal self-reference.

In describing this reality Maturana and Varela posit that the observer and what is being observed are not separate entities (xxvi).³ On the contrary, they are intimately linked and, like the Moebius strip, they reveal an indistinguishable inside and outside. "Any understanding of cognition as a biological phenomenon must account for the observer and his role in it" (48). Hayles notes that the act of observation is necessarily a reflexive one because the observer can also describe herself as an autopoietic system. Maturana's observer, however, has no psychological depth and is like Einstein's observer in the special theory of relativity, one who is simply there. For Einstein and Maturana, "the observer's perceptions construct reality rather than passively perceive it, and this construction depends on *positionality* rather than *personality*" (*How* 143).⁴

Autopoiesis and the Moebius strip have become essential paradigms for our understanding of the coupling between the observer and the observed because the observer system is able to conceptualize representations of its own interactions. When the system interacts recursively with its representations, it becomes an observer in its own right. It can recursively generate representations of its representations and interact with them, a process that Hayles describes as "an observing system observing itself observing" (*How* 144), as, for example, in the works of Escher and Borges, among others. Johns's oil and collage on canvas with objects, entitled *Souvenir 2*, is another example of autopoietic display that incorporates the observer. The beam of a flashlight reflecting from a mirror illuminates the souvenir button with Johns's face on it that will, in turn, be reflected back onto the mirror. Meanwhile, the backside of a stretched canvas contrasts with the collage of objects we are looking at, as the observer and Johns—the artist—eyeball each other. It's as though the title of this particular piece were saying, "Remember to remember to remember," which is why we buy, collect, and store souvenirs.

Early in the twentieth century, quantum theory helped to create our postmodern consciousness because, says David Porush, it was at the center of one of the most important epistemological controversies of the last fifty years and it influenced both pop culture and postmodern literature (79). All this notwithstanding, there was one element missing: the link between microscopic systems and macroscopic ones. Thomas P. Weissert says that although quantum theory confuted determinism on the microscopic level, it left macroscopic predictability intact. The third revolution in physics, says Weissert, after relativity and quantum theory, is chaos theory (224). In addition to linking the microscopic and macroscopic sys-

tems, the center of chaos theory, says Hayles, is the discovery that deep structures of order are hidden within the unpredictability of chaotic systems. Chaos, she says, denotes not true randomness but orderly disorder (*Chaos and Order* 1). Unpredictability generates new information, and what holds chaos theory together is the flow of information circulating through it (*Chaos and Order* 6–7).

One of the tenets of information theory states that information contains both pattern and randomness. That state of affairs leads to the unexpected result that an infusion of noise or static into a system may cause it to reorganize at a higher level of complexity. Pattern and randomness together can produce a complex dialectic that helps to define both, as each one contributes to the flow of information circulating through the system (*How* 25). Until recently, the general view was that noise hampered the transmission of a message. Chaos theory, however, sees noise less as a disrupter of information and more as an element capable of ordering disorder.

According to Maria L. Assad, the French word *noise* circumscribes a “topological space” where chaos brings forth order. Its genesis emerges from “a plurality of creative moments that surge forward, cross, intersect, fall back, link and relink” (278). Assad’s analysis of Michel Serres’s *Genèse*, *Hermès* (I–V), and *Le Parasite* focuses on the birth of order out of disorder (279).⁵ Moreover, in Serres’s works the “object” is always a black box where chaos changes to order. The black box is where the things that give order to our lives originate. Both Hermes and the parasite are thus figural spaces in which the sciences, philosophy, mythology, literature, and the visual arts generate discourses on the relation between order and disorder.

There is a strong resemblance between Serres’s black box and Robbe-Grillet’s cell in which Johns’s objects generate the narrative. Roch Smith notes that in *Topologie d’une cité fantôme* the shape of the cell is rectangular, perhaps square, or even cube-shaped. The novel’s “sets of numbers—three, four, and especially five—seem endowed with a generative power all their own” (92). In *Topologie*, a woman’s cry generates disorder as the narrator, also in a cell, pen in hand, incorporates the work of Paul Delvaux, René Magritte, Robert Rauschenberg, David Hamilton, and Robbe-Grillet himself. There are five male generators, five bars on the cell’s five windows, and five fingers on the hand holding the stylet-pen. This is the generative cell where the number five organizes the narrative in much the same way that the nine numbers of “La Cible” organize it. In “La Cible,” however, Johns’s art objects, not the five men mentioned above, structure the narrative, and the disruption is the shattering of the lightbulb, not the woman’s cry. The cry from the outside, like the bulb, triggers the narrative process. Robbe-Grillet compares the triggering effect of the bulb and the cry to the fertilization of an ovum. In *Topologie*, there is a prison cell with virgins in it waiting to be immolated, and the cell is silent until the cry of terror activates its “sterility.” The cry is the insemination that, in time, produces the body of the text. This cry introduces disorder into the cubic cell (*UCLA Lec-*

tures, 8 June 1978). It is the initial disturbance that leads to growth and, eventually, to the complexity of the full text, that is, to a higher degree of order. In *Topologie*, as in “La Cible,” what is in play is the double meaning of the word “cell.”

If we apply this information to “La Cible,” we begin to understand how a meaningful structure can emerge from chaotic flux. The shattering of the lightbulb and the random scattering of its fragments are the energy from which the target emerges and on whose nine rings the narrator places Johns’s objects. The narrative demonstrates the so-called “butterfly effect” common to chaotic structures: small causes produce great effects through nonlinear development. The term derives from chaos dynamics, which state that the negligible flapping of a butterfly’s wings can influence distant weather patterns. Robbe-Grillet relates such far-reaching effects to cellular structures in biology and the thematic generators that organize his texts. In *Le Miroir qui revient*, he states that nature has constructed all living systems, from the amoeba to the human brain, from only eight amino acids and four nucleotides, and that implies that a work of art, like a living organism, can emerge from the infinite complexity of possible combinations within the system (220–221). If we imagine the narrator’s cell as a biological cell to be fertilized, and not a prison cell, then the objects that the arm introduces through the opening trigger a form of mitosis that leads eventually, through cell division, to greater complexity and differentiation.

If, however, the shattering of the lightbulb produces a “little bang,” that is, a miniature form of original chaos, then the subsequent evolution of possible combinations—the series of objects placed on the numbered circles of the target—also generates a complex order. This additional congruence between “La Cible” and chaos theory posits that when an arm reaches into the closed system through the judas and drops a lightbulb that shatters on the floor of the cell, the splinters and their numberless permutations will generate random combinations, as small uncertainties spread through the system and are amplified. For example, the impact of the glass bulb on the cement floor reverberates in the narrator’s ears “like a gigantic drop of water,” and “the numberless white splinters of the fragile sphere . . . find themselves projected in all directions by identical forces” (*Souvenirs* 131). The splinters form “a series of concentric rings like those produced by a pebble falling from the sky and breaking the water’s calm surface.” The pattern “looks like the target with nine rings that crack marksmen use for rifle practice” (*Souvenirs* 132).

Concentric rings on the water’s surface generated by a falling stone are a classic illustration of chaos theory. Once the pebble hits the water it disappears and becomes invisible. All we see is the pattern of ripples, a continuously evolving configuration. Jo Alyson Parker compares the inaccessible pebble to the attracting point in a chaotic system, allowing us to think about narrative in ways that enhance spatiality as opposed to thinking of narrative as a temporal continuum (100). In Robbe-Grillet’s narrative, time stops frequently, and space is enhanced whenever

the narrative returns to its point of origin. The generative cell, be it the prison-house of language, *doxa*, or the imagination, is the point of departure and return for all of Robbe-Grillet's fiction. "La Chambre secrète," one of the short stories of *Instantanés*, is a trope for the mind that generates the artist's obsessions and his scenarios. Christian Milat points out that there is only one true space in all of Robbe-Grillet's fiction: the room (75). The white cell in "La Cible" is no exception, as Robbe-Grillet plays with the objects that are thrust through the judas (the objects are determined by Johns's original decision to transform them into art) and the pattern of the splinters of glass. Robbe-Grillet appropriates Johns's objects in a very personal way, and he inserts them intratextually into his own works as well as onto the nine rings of the target.

This new target with objects, which is not the same as Johns's *Target With Plaster Casts*, is emblematic of Robbe-Grillet's art—a trope of the larger enterprise—and several objects are synecdoches of earlier fictions. The piece of used rope in the eighth circle is borrowed from the novel, *Le Voyeur*, in which Mathias, the protagonist, gathers bits of string and ties them into figure eights. The seventh circle belongs to Angelica, who is the woman in "The Target" and in Robbe-Grillet's autofictional memoir, *Angélique ou l'enchantement*. The five fingers of a red handprint, from the film *Glissements progressifs du plaisir*, form the number five in the fifth circle. A green apple from *La Belle captive* is inserted in the third circle, where its chewed core resembles the numeral three. In various other fictions we find the highly eroticised high-heeled shoe that goes into the second circle.

The nine rings of the target, like the watery ripples, echo the attracting point that generates the pattern, and what we see displayed on the target are the conscious images of unconscious desire. Desire, like the pebble that sinks beneath the surface, is invisible, but its ripples are part of the continually evolving configuration. Desire and finitude are the invisible attractors, within whose folds lurk Eros and Thanatos. In fact, in their analyses of Robbe-Grillet's work, Raylene Ramsay, Roger-Michel Allemand, and Milat highlight eroticism and death. For example, Robbe-Grillet uses Jensen's *Gradiva*, which also influenced Freud's interpretation of dreams, as a generator for his novel, *Topologie d'une cité fantôme*. Ramsay believes that the volcano that spews forth rocks to wound vulnerable young women is Robbe-Grillet's metaphor for "the pain/pleasure of a personal psychosexual sadistic drive" (70).⁶ Allemand believes that on the whole Robbe-Grillet's work is a sarcophagus that brings together the two contradictory postulates of death and decomposition on the one hand and durability (the survival of his work) on the other (239). Milat believes that the blue shoes and the green apple in *Souvenirs du triangle d'or* connote rape, and that the little circle within the big circle, that is, the center of the target, is the woman's vagina (231, 247). In *Projet pour une révolution à New York*, the quartered body of a woman is compared to a target (33). The tar-

get is as important an attractor as the cell. Sex and death, freedom and constraint are powerful generative agents.

An attractor is any part of a system that attracts the system to it. In science it is described as an event that, when described mathematically and plotted as a graph, looks like the hole in the bottom of a basin. Such an attractor acts like the irritant around which, in a supersaturated solution, crystals begin to form. Porush says that once the crystallization process begins, it continues as long as the system remains open to additional input. One form of the crystallizing process, known as the Bénard Instability, occurs when a prepared liquid is heated from below. As the heat increases, the solution organizes itself spontaneously and kaleidoscopically into ovals of color which, under the right conditions, grow increasingly more organized. The phenomenon intrigued Ilya Prigogine because the growth pattern resembles the one found in living cells. Prigogine saw in such spontaneous self-organization the primordial leap that might have occurred from inanimate to animate matter (Porush, 72).

Such insights make the crystallization process a metaphorical counterpart of the behavior of Johns's objects. Color is important in both, not only for the circles of color on Johns's target, but also because the colors of Robbe-Grillet's objects (the blue shoe, the red hand, the green apple, and the yellow ruler), as with the Bénard instability, become progressively more organized, even as they increase in complexity. As the narrator begins to combine the objects and their colors he notes that "there must be some hope of a solution in that" (*Souvenirs* 149). The word "solution" promises an answer to the problem, but its ambiguity also connotes the supersaturated solution in which crystals of color form around the attractor. The bull's-eye of the target replicates that hole in the center of the basin.

Johns's painting, entitled *Untitled*, displays the many colors that are part of Robbe-Grillet's solution: "the imprint of the hand was red, the shoe blue, the ruler yellow . . . By combining the ruler and the shoe one could obtain the raw green of the apple. . . . The ruler and the hand together should produce an orange. . . The strong hand and the woman's elegant shoe should generate the verb to violate" (*Souvenirs* 149) because the mixing of red and blue generates the color violet. Prigogine's speculations about the jump from inanimate to animate matter are illustrated by the jump from the passive and inanimate color *violet* to the active verb *violier*. Such paranomasia requires the observer's participation if there is to be a spark of insight, but it also connects the body of the text to an erotic charge of considerable violence. Prigogine's insights are replicated in metafiction in general and here, in particular, in Robbe-Grillet's cell, where matter, that is, the narrative itself, evolves from the inorganic into the organic. The author's play of language and sexual violence animate the text. The living dimension of the writing

process highlights its own generative dynamic, thereby once again transforming metafiction into an autopoietic system.

Prigogine's model allows us to describe the delicate balance between chance and necessity. Robbe-Grillet's encounter with Johns's art was perhaps predictable, but the way he incorporates it into his writing is an example of what Porush describes as "free invention within a structure of constraints" (Porush 75). Robbe-Grillet gives free reign to his imagination within the structure of constraints imposed on his fiction by Johns's objects. The best way to view this collaboration is to see it as the intersection of two minds and two art forms that capture the evanescent movements and fluctuations of the creative process. Both artists illuminate the working processes of human cognition and the act of ordering information. In describing how the act of organizing information gives rise to human cognition, and with the circular shape of the target in mind, we have, so to speak, come full circle. Johns and Robbe-Grillet illustrate the fact that order exists, even within chaos, and that the free play of the imagination can generate order from imposed constraints, be they physical, social, artistic, or personal.

Robbe-Grillet's constraints are also his attractors. The cell (or the room) is one such attractor, and it is the *conscious* center from which all his fictions emanate. The target is another attractor, and its center is the *unconscious* hole that harbors his eroticism. Most of the rings, in one way or another, connote violent sex and death. In *Le Voyeur*, the string looped into a number eight was used to immobilize Jacqueline-Violette before her death. In *La Belle captive*, the rope (the wire hanger in Johns's *According To What*) was used to hang the woman in the canning factory. In *Glissements progressifs du plaisir*, the handprint "reaches" toward pleasure, and in *Projet pour une révolution à New York* two "strong hands" grip the starlet's neck (54). Indeed, sex and death structure Robbe-Grillet's dialectical diegeses. They also form the Möbius strip of apparent opposites that indissolubly links the inside and the outside. Insofar as the ontology of strange attractors defines him as an artist, Robbe-Grillet is no doubt correct to assert that he has never spoken of anyone or anything but himself (*Miroir* 10). His art projects him as the target of his endeavors: both masculine and feminine, mortal and immortal, conscious and unconscious, inside the work and outside. He is the grain of sand that contains the universe. He is the target-door of the cathedral—the sacred structure of relative durability, which contrasts with the profane beer can that hits it in the center and makes it resonate.

In applying a poststructuralist methodology to the target and the cell—the two attractors—we can postulate an ongoing and proliferating textuality. Indeed, chaos theory facilitates the infinite play of signification within the bounded areas of the strange attractors. Their interplay stretches not toward revelation but around it, like the circles on the target. The narrator is defined by the circles and the greater

their number, the greater the complexity of the whole. Inexorably, the text(s), the narrator, and the observer move toward the center of the target, toward the unconscious attractor, inward then outward, in a play of infinite regress.

“La Cible” is a metonymic system because the trope is not a function of similarity. Each object is a part of the whole, and the rings are synecdoches. Robbe-Grillet’s target is a metonym for eroticism and the cell is a metonym for the creative process. We can, in fact, think of them as “signatures” with which Robbe-Grillet defines his artistic self. As signatures, the target and the cell are analogous to Johns’s *Flag* or his *Painted Bronze* (*Savarin*). The *Flag*, with all its biographical denotations and connotations, marks the beginning of Johns’s career, and the *Painted Bronze* (*Savarin*) was reproduced as the poster for his 1977–1978 show at the Whitney, the year that Johns’s picture appeared on the cover of *Newsweek* (24 October 1977). The poster defines Johns the artist, and “La Cible” defines Robbe-Grillet the writer.

Consider again the pebble falling into water as an example of a strange attractor. The pebble is the invisible part of the system that generates the whole. In Freudian terms, the pebble is the latent content and the ripples are the manifest content. For Robbe-Grillet, the disturbances that generate the rings (ripples) of “La Cible” are sex and death, both of which are generalized terms that form the matrix of his unconscious and ours. The matrix of Robbe-Grillet’s art reveals itself in the details. If the artist’s unconscious is the veiled (latent) part of the system, a system that is the source of constant disturbance(s), then the visible (manifest) objects of art are the ripples (in this case, synecdoches) that reveal and confirm their origin. If we think of the drives of the unconscious as a chaotic system, then art as a conscious enterprise is the disturbance that generates a higher level of complexity by unveiling the disorder that lurks beneath the surface.

When we look beneath the surface of Johns’s paintings, we can discern similar complexities. For example, the hatchmarks of the paintings *Tantric Detail* I, II, and III (1980, 1981, and 1981) resemble the hatchmarks on *Savarin* (1977), *Cicada* (1979), *Dancers on a Plane* (1980), and many of Johns’s earlier works, including *Scent* (1973–1974) and *Untitled* (1972). The revealing detail in the *Tantric Detail* paintings is that the abstract pattern of the hatchmarks now harbors a hairy scrotum and a skull. The scrotum seems to be slipping down onto the middle panel from the join between it and the upper panel. And the skull seems to be sliding down onto the third, lower panel from under the join with the middle panel. The effect leaves the impression that the body parts have been lurking beneath the abstract hatchmark pattern, waiting for the opportunity to slip onto the surface from beneath the two fissures.

Sex and death, as the veiled content of Johns’s and Robbe-Grillet’s art, manifest themselves in the specifics of their work. In “The Target” Robbe-Grillet uses



FIGURE 4. Tantric Detail, 1980. *Charcoal on paper, 58" x 41"*. Art © Jasper Johns/
Licensed by VAGA, New York, NY. Collection the artist.

objects from Johns's art that invade the generative cell (the secret room of his imagination) where disturbances engender circles of complexity. As observers, we interact with these circles, objects, and numbers (as Robbe-Grillet and his narrator did before us) and from the splintered chaos of the lightbulb we too apprehend the possibility of order and give shape to the art form(s) that will reveal order's complexity. As Luhmann points out, object and creative process coincide when a system starts operating, because "it takes an observer to see the paradox of a beginning that presupposes itself, to recognize the self-implicative structure of the distinguishing act, and to plunge himself, at least logically, into confusion" (31). The paradox is in the arbitrariness of all beginnings. Even chaos can be created by a distinguishing operation, as in Johns's *0 through 9*, a painting in which ten numbers (construe zero as a ten) are superimposed in order to abolish the value of each one taken separately, but also to enhance their value when combined. The chaos of color and sequence reveals a complexity of a higher magnitude. No wonder the narrator's "head is spinning" (*Souvenirs* 135).

The shape of the narrator's head mimes the text's recursive symmetry because its general form is replicated throughout the narrative. Oval symmetries in "La Cible" include the target, its rings and its center, the Ballantine logo, the top of the beer can, the lightbulb ("looks like a big white pearl" — *Souvenirs* 131) and the circular configuration of its shattered fragments, the lenses of the flashlights, the apple, the cabochon, the zero, the generative cell as ovum, and the circularity of the text itself. Hayles points out that the repetition of such symmetrical configurations acts like a coupling mechanism capable of transmitting changes from one level to another. In chaos theory, a river's turbulent flow produces "swirls inside swirls of the same form, inside of which are still smaller swirls" (*Chaos and Order* 10).

"La Cible"'s circularity enhances the complexity of the system. Johns's target and Robbe-Grillet's cell are the strange attractors that crystallize the chaos of the bulb's fragments into zones of meaning within the rings where the objects organize the narrative. The target and the cell are compressed images of time because they represent the evolution of a system in which the narrator matches objects with the numbered rings of the target. Time does not stretch out across a horizontal trajectory but is instead an experience of simultaneity, circularity, and reversibility. At the end of the narrative, time seems to turn back on itself recursively as the loudspeaker counts backwards from nine to zero.

The form of the narrative unfolds within Robbe-Grillet's and Johns's spatial constraints, as the narrator incorporates objects from Johns's art world and places them in orbit around the center of the target. Each encounter constructs a new reality and a new order that perturbs the preceding arrangement, thereby increasing the complexity. Indeed, each ring folds the topology of the attractor into a time-system that is unpredictable, where time is compressed and flattened into a

graphic form that exfoliates from the internal dynamics of the narrative. Imagine the circles of the target and its numbered objects radiating outward from the bull's-eye—the unconscious or, if you will, the strange attractor—whose focus needs a narrative that will give it life, order, and complexity. The observer has to evaluate the constraints that have shaped Johns's and Robbe-Grillet's works as he or she tries to discern the principles that have gone into their organization. For example, what kind of an object is the yellow ruler? Is it a measuring device, or is it the number one, that is, is it an object or is it a number? In fact, it is both, and the number one, like all the other numbers, has lost its abstract character and has become a material thing. Furthermore, it has “muddied” the referential relation between signifier and signified. The number one has become opaque, and we see the texture of a signifier that has become a new signified incorporating both materiality and abstraction. Such incessant interweaving, as with Johns's painting *0 through 9*, is enough to make anyone's head spin.

“La Cible” reveals Robbe-Grillet's impatience with the overdetermination of linear narratives. He has the uncanny ability to apprehend the dynamics of narrative, with its resistance to totalizing perspectives, and to put those dynamics into the foreground in order to encourage the active participation of the observer, who then becomes an integral part of the autopoietic system. According to Maturana and Varela, the circular interplay of autopoietic processes always operates in the present. “The present is the time interval necessary for an interaction to take place. Past, future and time exist only for the observer” (18).

We may remember Johns's paintings because we have seen them in the past, but they are always re-experienced in the present. The present tense is also Robbe-Grillet's narrative time, and autopoiesis, as a self-reflexive moment, indicates that we are dealing with a metafictional text. The language of metafiction is inevitably a chaotic generator of undecidable meanings that tend not to reflect the world around us but to interrogate the transmission process itself. Peter Stoicheff aptly notes that “metafiction is an investigation of the chaos of meaning's production” (87).

It must seem apparent to most informed observers that metafiction is a marginal art in a culture that values newspaper language and bestsellers above art as a cognitive experience. But this marginalization gives metafiction, as well as Johns's art, their legitimacy, because in challenging meaning they challenge discursive modes that seek communicative transparency. Metafiction and Johns's art are the cinders in the machinery of *doxa*. They make ideology grind and grate, they disturb current systems of meaning, they facilitate new modes of perception, and they encourage new levels of insight.

Finally, and in conclusion, both Pop art and the *nouveau roman* bridge the gap between artist and observer, between the inside and the outside, and in doing so

they target the machinery of autopoietic systems and chaotic structures, whose apparent disorder leads to a higher order of cognition. Johns and Robbe-Grillet draw attention to a theory of art even as they put the theory into practice; Robbe-Grillet's target-preface is, in fact, fiction masquerading as theory, because it mimes the self-referentiality of Johns's art even as it incorporates it into its own circular structure.

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NOTES

- 1 This translation and all subsequent ones are my own.
- 2 See also *UCLA Lectures*, 20 April 1978: The dominant discourse of a culture, says Robbe-Grillet, represents established order. If a novelist writes differently, he is accused of introducing disorder. Nonetheless, the *nouveau roman* exists in order to disrupt established order (my paraphrase). See also *UCLA Lectures*, 4 May 1978: Metafiction is a trap that subverts its own discourse, and the structure of the text is undermined by the games within the text (my paraphrase).
- 3 See also Heinz von Foerster's letter to Fremont-Smith, in which von Foerster describes the inclusion of the observer in the observed as the central issue of cybernetics. Quoted in Hayles, *How*, 74.
- 4 Physics was the first field to cast doubt on the reliability of perception. In 1905, Albert Einstein's Special Theory of Relativity destroyed the concept of the stable, objective observer. Between 1900 and 1930, quantum theory introduced the paradoxes of statistical probability and indeterminacy. In 1927, Heisenberg's Uncertainty Principle further undermined the old certitudes. Heisenberg demonstrated that when you measure the mass of a particle, you alter direction, and that when you measure direction, you change the mass. The position of the observer interferes with the measurement of a phenomenon by influencing the results. In the end, a scientist's inquiry into the nature of the universe culminates not in his or her measurement of an objective reality but in a man-made reality, because the answers are determined by the questions that frame the inquiry. The observer is in the solution. We have come to realize that our description of the world is always relative and that physics and mathematics are less an equation describing natural phenomena than a mirror of the scientist's preoccupations. The questions asked determine the results and they order the reality in question.
- 5 Hayles, in her analysis of Serres's essay, "Lucretius: Science and Religion," in *Hermès*, 91-124, points out that war, order, abstraction, aggression, and death have predominated in the West throughout its long, bloody history. This is Serres' realm of Mars. In the realm of Venus, he celebrates love, creativity, embodiment, sympathy, and life, because the ocean, Venus' birthplace, will signal a new reign of turbulence, fecundity, and disorder. The interesting part of Serres's essay and Hayles's description of it, is the tie-in with Robbe-Grillet, who links straight lines and order with male discourse, and curved lines, circles, arabesques, and disorder with female discourse. Robbe-Grillet's novel, *La Jalousie*, is structured along the orderly Cartesian values of the husband in opposition to the subversive disorder and arabesques of his wife's world. Also, in *Le*

Miroir qui revient, the unruly depths of the ocean appear in Robbe-Grillet's nightmares about women: "The ocean was turmoil and uncertainty, a realm of insidious perils where flaccid, viscous creatures mated in the muffled waves" (13–14).

- 6 Ramsay was the first critic to link Robbe-Grillet with chaos theory: "There are striking analogies between Robbe-Grillet's textual trajectories and the forms of chaos theory. The influence of chaos theory may be direct but seems more probably to have been indirect, diffused through the general cultural and intellectual climate" (77).

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