Nostalgia for a Digital Object*

Regrets on the Quickening of QuickTime

VIVIAN SOBCHACK

Whenever I watch QuickTime "movies", I find myself drawn into someone else's – and my computer's – memory. Faced with their strange collections, moving collages, and juxtapositions of image-objects whose half-life I can barely re-member, I tend to drift into a reverie not quite my own. Indeed, the form usually evokes from me the kind of temporal nostalgia and spatial intensity I feel not at the movies but before American artist Joseph Cornell's mysterious boxed relics. Both QT movies and Cornell boxes preserve "under glass" fragments of a "read-only" memory that is, paradoxically, "random access": that is, dynamic, contingent, associative. Both also refuse mundane space-time, drawing us into enclosed and nested poetic worlds far more miniature, layered, and vertically deep than we usually find in cinema. Both also salvage the flotsam and jetsam of daily life and redeem it as used material whose re-collected and re-member presence echoes with traces of an individual yet collective past. And both also construct "reliquaries" – cherishing "the ephemeral object as if it were the rarest heirloom".

Both QuickTime movies and Cornell boxes contain "intense, distilled images that create a remarkable confrontation between past and present" – a confrontation furthered by QT's stuttering attempts to achieve "real-time" movement, or to embrace the spatio-temporal lacunae that visibly mark its expressions. While cut-out statues and matted silhouettes float gracefully like collaged dreams across photorealist backgrounds that effortlessly warp and melt, "live-action" balks and stiffens in contrast. Strangely static and consequently moving, full of gaps, gasps, starts and repetitions, QT movies intensify our corporeal sense of the molecular labor of human becoming – evoking not the seamlessly-lived animations of real-time and live-action movies, but, rather, the half-life of certain time-worn kinetic objects: wooden puppets with chipped paint, forsaken dolls with missing limbs, Muybridge-like figures in old flip books hovering with bravado and uncertainty between photography and cinema, images of 19th century strong men hand-cranked into imperfect action by old Mutoscopes relegated to the dark corners of amusement arcades.

Given the pleasure I find in their fragmented temporality and intensely condensed space, I have no desire to see QuickTime movies get any quicker – or bigger. I don't want them to achieve the "streaming" momentum of real-time and live-action – measured against the standard and semblance of cinema. Indeed, precisely because QT's miniature spatial forms and temporal lacunae struggle against (as they struggle to become) cinema, they poetically

dramatize and philosophically interrogate the nature of memory and temporality, the value of scale, and the meaning of animation. In sum, I don't want them to become "real movies" at all. Nonetheless, they will – and have. It was just a matter of time, compression, memory, and bandwidth. Thus, it is a shame that QT movies were called "movies": so named, their extinction as a specifically computergraphic form of aesthetic expression was virtually preordained. Although QT is a "multimedia architecture", most developers and users quickly reduced it: "In QuickTime, a set of time-based data is referred to as a *movie*".³

Long ago, André Bazin argued in "The Myth of Total Cinema" that before the technology that made it possible, cinema was *preconceived* "as a total and complete representation of reality...the reconstruction of a perfect illusion of the outside world". Unfortunately this realist desire remains in force despite the emergence of a new medium – one that digitizes, integrates, and transforms all others. Belief in the myth of total cinema has led not only to the realization of sound, color, and relief, but also to the *primacy of cinema*, even as it is transformed into something else by a new medium. Thus, the aesthetic values of QT "movies" are measured against those of "cinema" – and the true computergraphic novelty of QT works becomes historically inverted as a false cinematic "primitivism". Hence the desire to make QT movies quicker and bigger rather than stopping to privilege the stalled and uncanny momentum of their animation and the poetic intensity condensed by their miniaturization and framing.

Indeed, I would have much preferred calling QuickTime works "memory boxes" rather than "movies" – for "memory box" evokes not only Joseph Cornell's work, but also the essential fundament of QT's existence: the *computer*. As well, referring to diverse containers from reliquaries to shoe boxes filled with photographs or souvenirs, "memory box" draws our attention to memory's historical transformations and the material conditions of its preservation. After all, in our technological moment, what is the computer but a fathomless "memory box" – one that collects, preserves, and allows for the conscious retrieval and visible re-collection of memories, all "cached" in an enormous, unseen network of past images, sounds, and texts.

Memory Boxes and Databases

In The Poetics of Space, Gaston Bachelard writes of a character in a novel who basks in the solidity and order of his oak filing cabinet: "Everything had been designed and calculated by a meticulous mind for purposes of utility. And what a marvelous tool! It replaced everything, memory as well as intelligence. In this well-fitted cube there was not an iota of haziness or shiftiness".⁵ I often get the same feeling from my computer "desktop". It reassures me with hierarchy, clarity and order, with principled and logical menus, commands, and systems through which I can access vast amounts of information (if not intelligence or knowledge). While unseen, this information does not seem hidden to me; rather, it is "filed" away in "folders" and, more deeply, in "records" and "fields". It is rationally organized and always hypothetically available for retrieval and display. Indeed, my computer gives me access to what seems an infinite store of information – and I take comfort in the hierarchical logic of its "unhazy" and "unshifty" memory (of an order quite different than my own). Here is the logical – and official – organization of the office, catalog, library, museum, and stock room. Here, everything has been "designed and calculated by a meticulous mind for purposes of utility". Here, I've no sense of the secretive or unconscious: at worst, information gets bureaucratically "classified", misplaced, or erased (not repressed). Thus, the virtual "solidity" of my "desktop" and "files" refuses ambiguity or

poetry – and any discomfort I feel in the face of mistakes, losses, or frustrations arises not from my "well-fitted cube" but from my own very human and irregular logic.

Human memory doesn't compute neatly. The orderly and hierarchical logic of the file cabinet and its database is not that of Cornell or QT memory boxes. Thus, as Bachelard writes: "A well-calculated geometric description is not the only way to write a 'box." 6 Some other rationale informs these memory boxes: associative rather than hierarchical, dynamic rather than static, contingent rather than determined (even when "given" to us in "read only" form). Its search engines driven to the past by a present moment of desire (not utility), this is the eccentric, extensible, yet localized logic of the hyperlink that radically transforms the phenomenology of the file cabinet and its database. The file cabinet becomes charged with experience, temporality, and desire and its hierarchical order becomes jumbled by logically incompatible – if psychologically comprehensible - functions. Like Cornell's description of a preparatory file for one of his boxes, the file cabinet becomes "a diary journal, repository, laboratory, picture gallery, museum, sanctuary, observatory, key ... the core of a labyrinth, a clearing house for dreams and visions". And the database? Its hierarchical order becomes labyrinthine – comprehensive but incomprehensible, a vast and boundless maze of images and sounds, dreams, and visions in which one follows, backtracks, veers off, gets lost in multiple trajectories, all the time weaving tenuous threads of association into the endless teleology and texture of desire. Here, there is no fixed data or information requiring mere re-collection; here, from the first, are only unstable bits of experience, disordered as they are re-membered.

The poetic power of both Cornell's and QT's memory boxes emerge explicitly from their relation to a larger totality of material and memorial possibilities: they and their found objects exist not only as fragments of personal experience, but also as "emblem[s] of a presence too elusive or too vast to be enclosed in a box. These missing presences crowd the imagination". Thus, in differentiating QT's memory boxes from movies, it bears pointing out that watching a film, I usually don't have a profound sense of all the images left on the cutting room floor; watching a QT memory box, however, I always feel the presence of an elusive and vast absence, a sea of memories shifting below the surface and in the interstices of what I actually see. In other words, I am always aware of the database as *effluvial*.

Privileging both the fragment and the slightness and ambiguity of their associational links, both Cornell's and QT's memory boxes thus point to their own presence as the poignant and precious visible landmarks of an unseen, lost, and incomprehensible field of experience. What Carter Ratcliff says of Cornell's memory boxes is equally true of QT's: "[T]he mode is enchanted by fragmentariness itself, which serves as an emblem of a wholeness to be found in other times and places"; thus it produces "an aura of loss which is as perfect in its own way as reunion would be". Indeed, "the panic of loss gives way to nostalgia". In operation of the panic of loss gives way to nostalgia".

Frames within Frames

Although "a mode enchanted by fragmentariness", Cornell and QT's memory boxes are themselves bounded *containers*. At the same time, their miniature size, collector's sensibility, and the discretion of their enclosures gain particular power from – and exist always against – their own *containment* by a larger and marked visual field. Both externally and internally, then, Cornell and QT works provoke a structural and poetic tension between two different logics: one represented by the hierarchical and rational organiza-

tion of the "file cabinet" and computer "desktop" where everything has its place in some comprehensive master plan; the other by the associational organization that is the psycho-logic of the memory box and the "hyperlink" in which everything has a relative and mutable order that cannot be mastered as a totality. This tension is simultaneously *framing* and *framed*.

As a framing device, this tension exists in – and as – an *exterior* space (and logic) containing but juxtaposed to the associational logic of the Cornell and QT box. With Cornell's works, there is the museo-logic of the vitrine in which the box sits; with the QT memory box and its hyperlink logic, there is the hierarchical logic of the computer "desktop" upon which it is opened. That is, the larger frame of the vitrine or desktop allows the smaller frame of the memory box an intensified condensation and concentration of its visible contents into an *aesthetic totality*: a poetically meaningful and contained microcosm nested within the dispersed and different order and meaning of the macrocosm that surrounds them. In this aspect, both Cornell and QT memory boxes take on the magnitude and function (if not the geometric size) of 16th and 17th century *Wunderkammern*, chambers of curiosities and art curated less on logic than on the personal sensibilities and desires of their wealthy collectors.

Writing of these condensed collections, Anthony Grafton wonders what contemporaneous visitors sought in them and concludes it was the experience of totality and plenitude: "They hoped...to encounter the universe in all its richness and variety, artfully compressed into the microscopic form of a single room that showed all the elements, all the humors, all the musical intervals, all the planets, and all the varieties of plant and animal creation". 11 Obviously, these viewers of the Wunderkammer were not worried by the implications of its contingent arrangement or overwhelmed by its (to our eyes) chaotic clutter. Indeed, historicized, the Wunderkammer's totalizing impulse can be read as a celebration of mastery, order, and structural homology: that is, comprehension of the "universe in all its richness and variety" is represented mimetically in a single chamber complacently "nested" within the larger frameworks of both the master's residence and God's "master plan". We can find similar compressions and homologies articulated in the smaller Wunderkammern of Cornell and QT boxes as they emerge structurally and figurally nested – framing and framed within a larger field. But this compression of a homologous universe is apparent also in the *content* of these more contemporary memory boxes. Their multi-layered and rich imagery is marked repeatedly by maps, planetary and astrological charts; hourglasses and clocks and other measuring devices; diagrams and schematics of optical devices from the microscope to telescope; evolutionary and devolutionary biological images of microbes, spores, skulls and skeletons. Consistently asserting homologies of shape and structure across scale from the microscopic to the macrocosmic, much like the Wunderkammern these memory boxes position themselves as both framing and framed by larger cosmologies and cosmogonies.

Nonetheless, times and cosmologies change – transformed in and by historical sensibility. Thus, in Cornell's boxes, homologies between the micro- and macrocosmic are not emblematic of man's security and mastery – and, in QT boxes, they are used to foreground a relativism quite other than the comforting and nested unity of God's master plan. Cornell's boxes are nostalgic – indeed, elegiac – in relation to harmony and order. Homologies between mundane and cosmic objects thus provoke a sense of the great loss and mystery of "totality" and perfect "comprehension" – the boxes, as Ratcliff noted, generating "an aura of loss ... as perfect in its own way as reunion would be". In QT memory boxes, homologies between the micro- and macrocosmic are also not about mastery, security, or

"nested-ness". Here, self-similarity across scale and structure constitutes the disconcerting relativism of "chaos", often evoking the vertiginous and non-hierarchical "totality" of "infinite regress" and "cosmic zooms", thus undoing a hierarchical history that frames and privileges the mastery and rationality of both God and Man. Indeed, in QT, it is not God's rational master plan framing or framed by the memory box opened on my computer desktop or browser; rather, these images of maps, measures, microbes, and constellations mimetically contain, figure, and point to the containment and mastering structure of a more contemporary – and secular – "main frame": the computer.

As suggested earlier, along with the poetic tension generated by the juxtaposed relation between the interior and exterior spaces of these contemporary memory boxes, poetic tension also emerges framed within the intimate space of the boxes themselves. Bachelard writes: "For many people, the fact that there should exist a homology between the geometry of the small box and the psychology of secrecy does not call for protracted comment". 12 Nonetheless, it is worth noting that within both Cornell and QT memory boxes, we see such a homology dramatized again and again: the "secret" vagaries and "hyperlinked" debris of contingency, dream, and desire overlaid in palimpsestic relation to the geometry and hierarchy that governs the "orderly" order of the rational "file cabinet". Cornell's work evidences such internal tension in memory boxes that exist in taxonomic series titled "Jewel Cases", "Museums", "Pharmacies", "Aviaries", and "Habitats" which often, as Ratcliff notes, "tuck images into drawers and vials and grids". 13 Compartments, drawers, slots, grids, and boxes within boxes: these displays of hierarchy and order point not only to potentially larger (and smaller) organizational frameworks so that scale, in Cornell's art, becomes "multiple"14; such nesting also points to potentially uncontrollable fragments of temporality and experience that are infinitely extensible in their generation of secrecy, memory, and meaning.

The same is true of QT memory boxes. Frequently overlaying the image fragments and detritus of their re-membered experience are orderly grids and schematic diagrams, geometry in the form of mattes that segment and compartmentalize. And, specific to the particular medium, such compartmentalization and grid work points not only to the larger order and framework of the surrounding "desktop", but also to the smaller, hidden, and thus more "secretive" orders of the computer: microchips, bits, and bytes. Re-membered experience in QT is often explicitly "bit-mapped" and "pixel-ated". Boxed fragments of photorealist images are compartmentalized further into smaller boxes yet – dissolving the personal meaning and contours of human memory and re-solving them into the visible and controlled geometry that in-forms the underlying memory and structure of the computer itself.

There is, then, both without and within QT and Cornell memory boxes, a tension between two kinds of logic and order and between a desire to re-collect and to re-member. Memory is thus generated and enacted by both box and viewer as a multi-stable phenomenon – one echoed in a *palimpsestic* structure and imagery that together provoke a richly poetic ambivalence and ambiguity". On the one hand, the geometry of compartments, mattes, and pixels re-collect and contain the amorphous and ever-extensible material of experience. On the other, the composited and collaged accumulations and associations of this experiential material challenge the neatness of the re-collection by re-membering it – and we are reminded there is a radical difference between a "pharmacy" and a "treasure box", between a computer's memory and our own. In sum, Cornell and QT memory boxes gain their poetic power from the juxtaposition and layering of "two kinds of space"; as Bachelard suggests, "intimate space and exterior space…keep encouraging each other, as it were, in their growth".¹⁵

"Little Movies": Miniaturization and Compression

Digital theorist Lev Manovich has used QT to make a series of what, with historical irony, he calls "little movies". 16 All six use classic cinematic imagery as the raw material of an exploration that interrogates the differences between the cinematic and the digital. All also foreground and privilege the limitations of computer memory under which they are constructed and by which they are constrained – and, in various ways, all thus explore their miniature size and compressed nature. "A Single Pixel Movie" is particularly striking. To a quite literally "loopy" tune reminiscent of Laurel and Hardy's theme music and against a black background, we watch the small square of a primitive "movie" in which a strong man holding a pole does rote exercises, intermittently interrupted by the sound of a "blip" and a digitized circle of "light". With each blip, the image becomes smaller and smaller (and less and less audible) until both blip and "movie" are reduced to a single pixel on the screen. The effect is more compelling and poignant than the comical repetition of mechanical motion and see-sawing music would seem to warrant. We watch more and more intently as the already miniaturized image becomes smaller and smaller - and we become more and more aware of the increasing fragility and impending disappearance not only of the early cinema strong man but also of the QT "movie" presently being extinguished from our human sight.

It is no small thing that these "little movies" are "small" both spatially and temporally. Bachelard tells us in *The Poetics of Space*: "It must be understood that *values become condensed and enriched in miniature*". ¹⁷ Thus, as Susan Stewart notes: "A reduction in dimensions does not produce a corresponding reduction in significance". ¹⁸ Quite the opposite. Suggesting that "we should lose all sense of real values if we interpreted miniatures from the standpoint of the simple relativism of large and small," Bachelard points out: "A bit of moss may well be a pine, but a pine will never be a bit of moss. The imagination does not function with the same conviction in both directions". ¹⁹

The "little movies" in QuickTime – or, as I prefer, QT "memory boxes" – not only emerge from and allegorize the objective necessities and constraints of data storage involving digital memory and compression, but they also accrue phenomenological and aesthetic value as an effect of these limitations. Objectively, the miniature is a compression of data in space, but phenomenologically and poetically, compression and condensation intensify the experience and value of the data, making it something rare and precious, something spatially intensified and temporally condensed that is "vast in its way". 20 As Stewart suggests, "a constant daydream the miniature presents" is that "the world of things can open itself to reveal a secret life... a set of actions and hence a narrativity and history outside the given field of perception". 21 The miniature, then, is always to some degree secretive, pointing to hidden dimensions and unseen narratives. Its "nested-ness" within a larger whole draws us not only beyond its frame, but also into and beneath it. Thus, the miniature nature of QT's "little movies" or memory boxes exaggerates interiority – not only that of the individual perceiving subject, but also of the computer. Thus, whether in my sight or not, the strong man of Manovich's "little movie" will exercise forever in the depths of my – and the computer's – memory. Unlike with cinema, I never quite have the sense that QT "movies" are ever really "over". (Rather, their "terminal" status is "under".)

In sum, the spatial condensations of Cornell and QT constitute an interiority that transcends quotidian spatial and temporal relations – and "as an object consumed", their miniaturization "finds its 'use value' transformed into the infinite time of *reverie*". ²² Excluded by their physical size from the miniaturized interior of the memory box, both artist and

viewer *imaginatively* prospect and inhabit its suggestive spaces, filling them with their own missing presence in fragments of autobiography, dream, memory, confession. (Speaking both to us and for its maker, one QT miniature superimposes over a vague, empty, and receding hallway the following textual reverie: "Here is the solitude from which you are absent". ²³) Like Cornell's work with its slots, drawers, and compartments meant to contain and control the materials of overwhelming experience, QT memory boxes draw us inward into an ever-extensible reverie: its compartments, according to no "rational or logical sequence", further housing and condensing "private and nearly unfathomable associations, almost like a metaphor for the cells of the unconscious mind". ²⁴ Here, in the reverie the miniature provokes, it can indeed be said that "the poet inhabits the cellular image". ²⁵

Mnemonics and Reliquaries

The miniature memory boxes of Cornell and QuickTime, in framing and effect, are "reliquaries" – preserving, as it were, precious remnants and souvenirs that gain additional poetic force in that they are "under glass". As Bachelard notes, "valorization of the contents" can also emerge through a "valorization of the container". Hence the fragment and the miniature "encourage" each other – evoking the "singular", the "rare", the "fragile", the "ephemeral, "and the "compressed" as materially and poetically valuable. Manovich makes "little movies" that his text suggests will disappear, "the artifacts of the early days of digital media. "Bachelard privileges treasure chests and caskets. And Cornell creates "jewel cases" and places some of his compositions "under bell jars" as if "holding captive a moment in a transient, enclosed world". ²⁷

The preciousness articulated here is thus connected to the particular kind of contingency that informs the artfully arranged but "found" objects of the memory box. That is, we encounter these re-membered objects as objectively assembled according to subjectively *ephemeral* associations, the very slightness of the links among them making their present appearance seem singular, fragile, fleeting – and thus precious. Stewart, writing of the material fragments of the past gathered in photograph albums or collections of antiquarian relics or souvenirs, points out: "There is no continuous identity between these objects and their referents. Only the act of memory constitutes their resemblance. And it is in this gap between resemblance and identity that *nostalgic desire* arises". Hence the corollary desire to preserve these tenuous associations, to keep them "in mind".

Cornell and QT memory boxes, then, tend toward what I would call a "mnemonic aesthetic" – privileging and practicing various devices that serve to preserve the fleeting memory, to "pin it down" and "put it under glass" like the gloriously colored butterflies one sees fixed in the vitrines of natural history museums. Such mnemonic practices are all based on repetition and rhythm and take a variety of forms and modes: "rote quotation" and mnemonic "clichés"; "looping", duplication, cyclical recurrence, repeated uses of images, objects, and sounds; rhythmic and repetitious patterning that is ritualistic, mechanical, or "mantric". All are mobilized in a concentrated effort to keep hold of memories that keeps threatening to slip away and vanish.

What Ratcliff observes in Cornell's work can be also observed in QuickTime memory boxes. The artist, we are told, "is drawn to 'material facts' – objects and images – whose preciousness is ratified by memory and he often calls on popular memory to reinforce his own. His image-chains often run along lines of well-worn cliché – butterfly, swan, ballerina".²⁹ Through repetition, Cornell make common objects mysterious: a row of wine glasses, a field of thimbles, a series of cork balls or pharmacy vials. However, this is "not

the intellectualized notion of serialization, but more like the ritualized repetition of the alchemist".³⁰ Indeed, as Ratcliff says: "To duplicate an image endlessly is often to make its spell all the more binding". 31 Both Cornell and QT memory boxes are also highly citational: that is, they not only attempt to fix personal memories through repetition, but also quote and repeat previous artifacts of cultural memory – particularly privileging those that speak mnemonically to technologies of reproduction and preservation. Hence, both QT and Cornell memory boxes are "deeply involved with the photograph, the postcard, the photocopy, and the printed reproduction of works of art".³² The boxes also use and repeat art historical images that reference the past: well-known paintings, old lithographs, classical statuary. Sound is also used mnemonically to an extraordinary degree in QuickTime. It marks time in repetitive patterns and, in musical form, is generally less melodic than it is insistently rhythmic. While often voiced (literally) in fragments, it also is often looped, repeating a partial thought, setting up a percussive rhythm of mechanical repetition, "scratching" or "stuck" in a temporal sonic groove as if in an old phonograph record, possibly creating a "mantra. "Indeed, middle Eastern and Indian music are used to a striking degree – particularly given often unrelated cultural imagery.

In their attempts to grasp and preserve the ephemeral fragments and fragile relics of memory, the boxes construct mnemonic rituals and, as Ratcliff notes, "ritual is mechanical, so any ritualizing aesthetic must have the power to mechanize the artist's meanings". This mechanization is particularly compelling in QT memory boxes – for, rather than the "ritualized repetition of the alchemist" that marks Cornell's work, QT boxes do often convey "an intellectualized notion of serialization". That is, ritualized duplication and repetition often seem much more "mechanical" than "alchemical". Indeed, QT works derive much of their poetic power from *mimetic allegory*: the boxes duplicate and repeat their "memory fragments" as figural repetitions of the functional capacities of the computer itself to "duplicate", "copy", and "paste". Here, the mnemonic aesthetic emerges not only from a desire to preserve scarce and rare memory, but also from the ritualized and "mechanical" capacity of the computer to do the same.

In "Two Marks Jump", for example, serial images are stutteringly animated, duplicated, and endlessly looped. Two of the same young man leap into and out of a scene accompanied by a similarly looped and endless yell; here the titular description of "two" Marks is self-consciously belied by the rote duplication of an infinite series of one. ³⁴ "Hommage à Magritte" [sic], not only duplicates and transform the artist's emblematic bowler hats, but it also "mechanically" animates his famous painting "Golconde", in which dozens of indistinguishable little bourgeois men rain down upon a sterile town-scape. ³⁵ In QT memory boxes, then, mechanical serialization and mnemonic repetition often combine, each "encouraging" the other to keep in mind – to re-collect and represent – the ephemera of memory that would otherwise disappear from view.

Time, Movement, and the "Illusion of Life"

The miniature encourages the experience of intensity, interiority, and material preciousness through its compression and condensation of data in space. But the miniature also effects our sense of time. As Stewart points out, there is "a phenomenological correlation between the experience of scale and the experience of duration". That is, time is transformed in the miniature: it thickens in significance and implodes. Compressed to "nest" in small spaces, time is reflexive: it falls back upon itself and "encrusts", building up the weight of a generalized past – or it collapses from its own density, diffusing into an ahistorical and

infinitely deep state of reverie. Thus, as Stewart says: "The miniature does not attach itself to lived historical time. Unlike the metonymic world of realism,...the metaphoric world of the miniature makes everyday life absolutely anterior and exterior to itself". 37 Furthermore, when we engage the miniature, our sense of temporality never "streams" toward the future. Temporal compression and condensation conflict with forward movement and "lifelike" animation. Thus "the miniature always tends toward tableau rather than toward narrative, toward silence and spatial boundaries rather than towards expository closure".38 Fragments and traces of past experience exist in our sight and reverie as not only poetically evocative but also emblematic of irrecoverable "originary" moments of wholeness. Broken and poignant, the fragment's stuttering or static and tableau-like presence points to both the passage of everyday life from particularity into allegory and to the great temporal mysteries of matter's slow and inexorable emergence and extinction. (Here, we might remember the memory box's tendency to figure and make thematic cosmological imagery that suggests not human temporality, but the imperceptible dynamics and perspective of "longue durée": a form of history written not in human events but in the cosmic temporality of geologic or climatic transformation.)

There is, finally, an extraordinary obfuscation (and questionable desire) in the nomination "QuickTime". QT is anything but quick: its animations are forestalled, its "illusion of life" incomplete. Compressing and condensing its imagery in a "miniature" number of bits of digital memory and display space, the material conditions that inform QT's miniature memory boxes are literally dramatized in the "half-life" of its objects. Not only are these objects constituted as fragments in space, they are also fragmented in temporality and motion. Thus, even when human in form, the animated "subjects" of QT are experienced as partially discontinuous and without agency. Phenomenologically, their movement seems imposed from "without" rather than emerging intentionally from "within". At best, like the puppet Pinocchio, they struggle against their existence as mere kinetic objects in frustrated fits and starts, stuttering out the desire to become a "real boy" – that is, fully alive in the temporal continuity and spatial coherence of intentional and realized action.

Central here is *intermittent motion*: time and action broken into fragments, gaps foregrounded, the laborious struggle to achieve human momentum and agency. In the misnamed QT "movie", Pinocchio's *bildungsroman* of self-realization is countered with the oxymoronic miniaturization and intermittencies that undo cinema *within* cinema (something that also occurs in the uncanny films of Jan Svankmajer and the Brothers Quay). Indeed, Cornell's own filmmaking efforts were meant to undo cinematic "live-action" and "real-time": he insisted that *Rose Hobart* – shot at sound speed (24 fps) and using fragments of a 1931 sound melodrama (*East of Borneo*) – be projected at silent speed (16-18fps) to the accompaniment of scratchy phonograph recordings.³⁹ The intermittent motion in Cornell and QT memory boxes, then, is always more than merely mechanical: it articulates the existential conundrum of *discontinuity*. That is, "momentum" is condensed and compressed into a series of reified and frozen "moments". Thus, the "illusion of life" becomes temporally solidified in what we might call a kinetic "souvenir": a memory of motion that is now merely its token.

In closing, we know that Pinocchio eventually became a "real boy" — and that QuickTime will eventually and seamlessly "stream" into real-time and live-action "cinema". But something quite poetic will be lost. Call me retrograde: as QuickTime enlarges and quickens to the myth of total cinema, I feel nostalgia for the impending loss of a unique historical experience and a rare and precious digital object.

Notes

- 1. Kynaston McShine, "Introducing Mr. Cornell", in *Joseph Cornell*, ed. Kynaston McShine (New York: The Museum of Modern Art, 1980),11.
- 2. McShine, 9.
- "Introduction to QuickTime", Developer Documentation for QuickTime 3, Apple Computer, Inc., 1997, n.p.
- 4. André Bazin, "The Myth of Total Cinema", in *What is Cinema?*, trans. Hugh Gray (Berkeley: University of California Press, 1964), 20.
- 5. Gaston Bachelard, The Poetics of Space, trans. Maria Jolas (Boston: Beacon Press, 1964), 77.
- 6. Bachelard, p. 83.
- 7. Dawn Ades, "The Transcendental Surrealism of Joseph Cornell", in Joseph Cornell, 33.
- 8. Carter Ratcliff, "Joseph Cornell: Mechanic to the Ineffable", in Joseph Cornell, 43.
- 9. Ratcliff, 59.
- 10. Ratcliff, 43.
- 11. Anthony Grafton, "Believe It or Not", The New York Review of Books, November 5, 1998:16.
- 12. Bachelard, 82.
- 13. Ratcliff, 60.
- 14. Ratcliff, 43.
- 15. Bachelard, 201.
- Little Movies: Prolegomena for Digital Cinema, 1994-1997 can be accessed on the Web at: http://jupiter.ucsd.edu/~manovich/little-movies/
- 17 Bachelard 150
- Susan Stewart, On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection (Baltimore, MD: Johns Hopkins University Press, 1984), 44.
- 19. Bachelard, 163.
- 20. Bachelard, 215.
- 21. Stewart, 54.
- 22. Stewart, 65.
- 23. "Flight from Intention" by Victoria Duckett, Laboratory for New Media, UCLA Department of Film and Television: http://pixels.filmtv.ucla.edu/
- 24. Ades, 26.
- 25. Bachelard, 228.
- 26. Bachelard, 86.
- 27. McShine, 10-11.
- 28. Stewart, 145.
- 29. Ratcliff, 54.
- 30. Dore Ashton, quoted in Ratcliff, 57.
- 31. Ratcliff, 64.
- 32. McShine, 13.
- 33. Ratcliff, 58.
- 34. 1993, no credits available.
- 35. Hommage à Magritte: A QuickTime Movie by Lisa Osta, 1993.
- 36. Stewart, 66.
- 37. Stewart, 65.
- 38. Stewart 66.
- 39. For seminal discussion of Cornell's films, see Annette Michelson, Rose Hobart and Monsieur Phot: Early Films from Utopia Parkway, *Artforum*, 11, no. 10 (June 1973) 47-57; and P. Adams Sitney, "The Cinematic Gaze of Joseph Cornell, in *Joseph Cornell*, 69-89.

^{*} The article is earlier published in Jeffrey Shaw & Peter Weibel (eds) (2003) Future Cinema. The Cinematic Imaginary after Film. Cambridge: MA: MIT Press with ZKM.