Georges Teyssot

The Mutant Body of Architecture

Architects Elizabeth Diller and Ricardo Scofidio (D + S), among others, have provoked a stir lately in some quarters by their predisposition towards the problematics of art, society, sexual identities, body-politics, everyday practices, control and surveillance tactics; and the implicit codes imposed by institutions (museums, tourism, the media) and by representational modes (fashion, clothing, the "design" of consumer-goods).

Official architectural criticism insists on interpreting these concerns as incursions–deemed dangerous and illicit–cutting across the sanctified realms of art and architecture.[1] However, the aim of the (architectural) projects at issue is, in fact, to examine current architectural practice in order to question accepted values. To begin with, it is entirely possible to envision activity in either art or architecture as a particular mode of reflection on our contemporary situation, i.e., our "being-there," thrown, projected into the contemporary world by fate. It is precisely because architecture has the very concrete and useful vocation of building shelters for dwelling that it also has the duty and the right to reexamine itself incessantly. Historically speaking, it would not be difficult to demonstrate, without even evoking the artist in the age of humanism, that the approaches and paths of art and architecture have constantly intersected. Indeed, any anxiety raised by such overlapping and intersection is produced by the defensive posture of well-established institutions and their acolytes, whose aim is to safe-guard themselves and the *private* turf of the art market.[2]

1. Roberta Smith, "Architectural Gadgetry in Installation at the Modern," *The New York Times*, 21 July 1989, p. C30; Ellen Posner, "Architecture Without Building, at MoMA," *The Wall Street Journal*, 8 August 1989; a slightly different opinion is offered by Herbert Muschamp, "A Highbrow Peep Show on 42nd Street," *The New York Times*, 1 August 1993, p. H 34.

It is odd, to say the least, that D + S have been reproached for not working as professionals, for "not building," when the whole body of their work–including "projects," a term which itself requires a closer look–is admirably "built," down to the smallest "details", de-tails (in the etymological sense, i.e. ***dé + tailler*** = to cut, in French), cutting and carving into the very flesh of architecture, revealing the many incarnations and incorporations that have constituted its matter and spirit over the centuries.

These architects–these "builders," even–among the most interesting within the orbit of New York's *Cooperschule*, have arrived at a unique and superior level of production because, first of all, they refuse to integrate their activities into a "purely"

2. "Responding bluntly to the question of whether their work resides more comfortably within the world of art or architecture, Diller says; 'We're interested in a lot of things, from performance to construction, and it doesn't make a hell of a lot of difference what's it's called.' By their very indifference, they suggest a need for reconsidering the formulation by which architecture is seen as a crucible of public effectiveness, and art as a refuge for abstract ideas. In an information-dominated culture that no longer considers the tangible to be a touchstone for the true, art and architecture, many practitioners of both believe, must renegotiate their relationship." Quoted from: Nancy Princenthal, "Diller and Scofidio: Architecture's Iconoclasts," *Sculpture*, vol. 8, no. 6 (Nov./Dec. 1989), p. 23. It will suffice to add that D + S are in no way seeking a 'comfortable' theoretical position.

professional practice which could not provide them the proper space nor time for reflection; and secondly, when they obtain an important commission where the inevitable client/architect conditioning does not undermine experimentation in their production, they do not refuse it *a priori*–as proven in the very successful examples of the Plywood (Kinney) House and the Slow House.[3] Above and beyond any specific "program," D + S's projects–be they stage-sets or installations in galleries or museums–immediately raise questions inherent in the site and situation of each specific intervention. In the *Para-site* installation (1989) at New York's Museum of Modern Art, the architects asked this question (of themselves): "Is it possible to take architecture out of its normal reciprocal relation with culture, and place it within the museum context without exiling it to the realm of art?"[4]

3. Work on this residence was interrupted due to lack of funds on the part of the client who–sublime irony–suffered financial losses during the recent crisis in the art market.

4. Nick Backlund, "Living architecture: Diller and Scofidio," *ID*, vol. 36, no. 6 (Nov./Dec. 1989), p. 18.

5. D + S, *Hard Pressed/Pressé*, exhibition catalogue, Centre d'Art Contemporain, Castres, France, 21 April–23 June 1993; Bad Press: Housework Series, Richard Anderson Gallery, New York, 18 November–18 December 1993.

D + S's works often deal with the situation of our "body" in society. Their projects retrace the various "folds" our bodies weave with the world (***body***, in Greek thought, ***flesh***, in the Christian tradition). These creases,[5] these grooves, are acquired by the human body through various physical and emotional, vital and affective, psychic and social experiences. It is not a matter of simply applying physiological, biological, psychological, or even anthropological theories of the body to the realm of architecture, in order to determine an environment that conforms to new standards of comfort and security, a task undertaken by some scientific and empirical methodologies in the last thirty years. Instead, the operations theorized by these practitioners are applied not to discourses and logics, but to regions where no discourses remain: to those vast terrains littered with texts and images criss-crossing society–"to this non-discursive activity, this immense 'remainder' constituted by what, in human experience, has not yet been tamed and symbolized in language [i.e., in scientific discourses]."[6] "Architecture typically enters into a role of complicity, to sustain cultural conventions," write D + S. "However, architecture can be put into the role of interrogator. Given the technological and political re-configurations of the contemporary body, spatial conventions may be called into questions by architecture. Architecture can be used as a kind of surgical instrument to operate on itself (in small increments)."[7]

fig. 1

fig. 1. Quatremère de Quincy, *Jupiter Olympien: l'art de la sculpture antique considérée sous un nouveau point de vue* (Paris, 1814).

6. Michel de Certeau, "L'invention du quotidien," *Arts de faire*, vol. 1 (Paris: U.G.E., 1980) 10/18, p. 125. English translation by Steven Rendall, *The Practice of Everyday Life*, University of California Press, (Berkeley and Los Angeles: University of California Press, 1984), p. 61.

fig. 2

fig. 2 Interior detail, Gustave Eiffel, Statue of Liberty, New York.

7. D + S, Keynote Address, National Technology Conference, Phoenix, Ariz., 29 January, 1993.

D + S are not the only contemporary architects and artists addressing the question of the decorporealized existence typical in Western societies. With the increasing use of machines and of transportation and communication technologies, and the spread of ever-more mediatized operations, we are arriving at, some say, a disembodied style of life. In recent years, various science-fiction novels (William Gibson's *Neuromancer*, 1984) and films (Steven Lisberger's *TRON*, 1982; or Douglas Trumbull's *Brainstorm*, 1983) have uncovered a contemporary spatial vertigo, where subjectivity dis-connects and re-connects through various networks. While dissolving, the body's limits literally delaminate into the multiple surfaces and interfaces of cyberspace. At the confluence of organic and mechanical states, the body can also undergo a mutation, becoming a living (and thus dying) machine, as in Shinya Tsukamoto's stop-frame animation film, *Tetsuo: Iron Man* (1990), or transform itself into a fundamentally foreign, even "alien," organism, as in the films of David Cronenberg (*Scanners*, 1981; or *The Fly*, 1986).[8] This new subjectivity is also taken up by artist Gary Hill who, in his video installation, *As It Is Always Already Taking Place* (1990), exposes the partial images of a single body on sixteen monitors. In what could be thought of as a curious inversion of the "mirror stage," the body is first decomposed, then recomposed technologically.[9] Because these authors and artists are all moved by the urgent necessity of revealing the extraordinary negotiations taking place between the subject and object, the body–indeed, corporeality itself–becomes the best vehicle for the interrogation of the status of subjectivity.

fig. 3

fig. 3. Shinya Tsukamoto, *Tetsuo: Iron Man*, 1990.

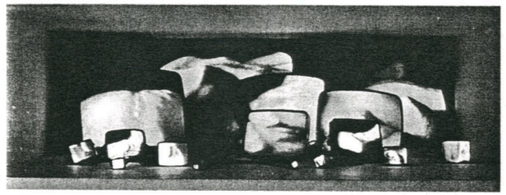

fig. 4

fig. 4. Gary Hill, *As It Is Always Already Taking Place*, 1990.

More uncanny, more poignant are the early works of Rebecca Horn, which attempt a cartography of subjective and physiological functions of the human body. Her body-sculptures are made from fragments of biomedical equipment (pipes, ligatures, membranes, pumps)–for example, *Overflowing-blood-machine* (1970), in which eight transparent tubes, vertically placed and linked by belts around the nude body of a model, reveal the flux and rhythmic pulsations of blood-circulation, projected through the skin. In *Cornucopia* (1970), a device resembling lungs establishes a direct, sensorial exterior connection between the mouth and breasts of a half-nude female model. The "multifunctional" apparatus allows for a variety of uses, not excluding auto-eroticism.[10]

8. Scott Bukatman, *Terminal Identity: The Virtual Subject in Post Modern Science Fiction*, (Durham, N.C.: Duke University Press), 1993, pp. 243-247; and Friedrich A. Kittler, *Discourse Networks: 1800/1900*, trans. Michael Metteer and Chris Cullens (Stanford, Calif.: Stanford University Press, 1990).

9. *Gary Hill*, exhibition catalog, Christine van Assche, ed., Centre Georges Pompidou, Musée National d'Art Moderne, Galleries Contemporaines, Paris, 1992.

10. See Horn's own description –the device is a way of concentrating "on one's own breasts–feeling intimate with them…touching them in silent consciousness;" cited in Mina Roustayi, "Getting Under The Skin. Rebecca Horn's Sensibility Machines," *Arts Magazine*, May 1989, p. 59.

Rebecca Horn's visual analysis of the "inside-out body" is later pursued through devices extending sensory and sensorimotor organs like the eye and the hand. In *Finger-Gloves* (1972), walking-stick-like prostheses extend the sense of touch. In *Pencil Mask* (1973), twenty-seven pencils, attached to a face-mask with vaguely sado-masochistic characteristics, project a configuration of the artist's profile on a flat surface–creating a sort of "flattening-out" of somatic features and eluding traditional procedures of graphic figuration and figural representation. Similarly–to return to D + S–in *Bed for the Condemned Man* or *Automarionette*, sandbags suspended from levers and attached to the body of a male model project muscular tensions acting on the skeleton onto the body's exterior. The body is thus seen as a pre-tensioned structure whose stresses are rendered visible. A similar demonstration of structural tension was conducted by engineer Robert Le Ricolais in experiments on the mechanics of bridges–tensile structures such as tension-net beams, for example–at the University of Pennsylvania Graduate School of Architecture from 1962 to 1963.

fig. 5

fig. 5. Rebecca Horn, *Pencil Mask*, 1973.

Among the body's perceptive and sensorimotor capabilities, physiology distinguishes between the following three categories: ***exteroception***, which involves our five senses, situated on the surface of the body and exposed to the exterior world; ***proprioception***, related to our sense of balance and proper positioning in space, and to muscular tensions; and finally, ***interoception***, which refers to all the sensations of the visceral organs situated in the body's interior.[11] For health reasons, it is essential that the vital organs (the viscera) be hidden and protected, while the sensorimotor organs must be located on the surface of the body and included among visible objects. Thus, it is rare for a body's viscera to be exposed to view.[12] Rebecca Horn's work reveals–in the same manner as surgical operations or technological "incorporations" (endoscopy, stethoscopy, X-rays, MRIs, etc.)–the workings of the viscera and isolated parts of the vegetative system (circulation, respiration) to a "gaze" hitherto forbidden, dangerous, or even fatal.

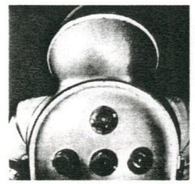

fig. 6

fig. 6. NASA prototype AX-3, 1962.

A series of images from D + S's iconography allows us to zoom in rapidly on the theme of the body's surface and its sur-facings. For example: the late sixteenth-century Saxon armor in the Dresden collection; or the Bugatti "Atlantic" 57 SC (1936); or, again, the view of the interior of New York's Statue of Liberty, exposing the

11. Drew Leder, *The Absent Body* (Chicago: University of Chicago Press, 1990), p. 39.

12. Ibid., p. 44.

fig. 7

folds of metallic skin sculpted by Bartholdi, covering the intricate structure devised by the Eiffel workshops.[13] Next, our attention glides to a NASA space-suit (1962),[14] which sets next to the *Bride in White Gazar*, designed by Cristobal Balenciaga in 1967. The initial thrust is not just fashion, but the simultaneously essential and superficial "nature" of coverings, the latent eroticism of clothing, the secret language of mask and skin–natural or artificial. Is skin not, paradoxically, the most profound thing about us? A border defining within and without, a protective frontier, the envelope of the flesh, the body's armor–skin separates and isolates. An interface of pains and pleasures ("erogenous" zones)–skin is both armament and armor. Blushing, blanching, sweating–like the eyes and the mouth, skin is also a medium, a means of communication.[15]

The importance attached to physical appearance–to the means of controlling or recreating a beautiful appearance–is confirmed by the emergence of numerous tools for this activity. It is always a case of correcting an excess or making up for a deficit: some tools are used to extract (as in plucking hair or waxing legs), others to supplement (as in applying mascara to lashes). All of this activity refers to a code and conforms to a norm. It involves having "the body utter the code."[16] It is deemed imperative to "mechanize" bodies, to make them spell out an order. The same goes for clothing as for skin: we encounter the same double category of instruments–clothing is both tool and body.[17] A garment protects like a tool; from the perspective of the corporal being, it modifies the body's appearance, even its structure (as did corsets in the nineteenth century).[18] Finally as Roland Barthes has demonstrated, every custom tends to devolve into a sign of that same custom. Beyond the implements, and beyond the corporal, there is another function, which is precisely that of signifying. Both clothing and skin refer to codifications of social order such as fashion or social status. Clothes and skin–the epithelial veil–can be manipulated to confer a recognized meaning on the body. By becoming a *pure sign*, recognizable on the "social" level, the body in turn receives a named discourse, a proper name, an identity.[19]

fig. 8

13. See Georges Teyssot, "Erasure and Disembodiment: Dialogues with Diller + Scofidio," in: "Protesi/Prosthesis", *Ottagono*, no. 96, Milan (September 1990), pp. 56-88, the essays by Jacques Guillerme, Anthony Vidler and Mark Wigley, and the "portfolio" by Diller + Scofidio in the same issue; see also Georges Teyssot, "Erasure and Disembodiment," in Joke Brouwer, ed., *Book for the Unstable Media*, ('s-Hertogenbosch, Netherlands: V2-Organization, 1992), pp. 129-163 (in English and in Dutch).

fig. 7. Cristobal Balenciaga, *Bride in White Gazar*, 1967.

14. See, Michael Sorkin, "Minimums," *The Village Voice*, 13 October , 1987, p. 100: "And yet it should be possible to discuss the minimum in architectural terms, in terms that don't presume either some form of physical deprivation or cruddy philosophic primitivism....Two sites...seem available. The first is at the locus of construction, the idea of a purely technical minimum, the phonemics of building....The second possibility originates with the body. Familiarly, here's architecture as the measure of persons, an insight that devolves mainly into mere proportioning....To be sure, its minima can be as scary as any others: a Walkman's one thing, but a spacesuit? And yet, these are surely primitive huts for the times. Perhaps I overstate the case against the spacesuit. Over the summer I visited NASA's Ames Labs in California and saw the latest in rigid, extravehicular outfits, the AX5, designed by Vic Vykukal, one of the America's great hidden-design geniuses. Not only is the AX5 one of the most beautiful designed objects I've ever seen, at once sublimely functionalist and wackily Schlemmeresque, it is also an apparatus of liberation, of extension, of genuine prosthesis, the body simultaneously augmented and housed. Exciting. I've a couple of architect friends called Liz Diller and Ric Scofidio. At a recent show at the Storefront for Art and Architecture, they presented a series of their projects under the rubric 'Body-buildings.' It's a primary modernist tenet they observe, the irrevocable transformation of architecture by the machine, a practice that races its primary lineage to Leonardo, the first great genius of the prosthetic."

15. Jean Querzola, "Le silicium à fleur de peau," *Traverses*, no. 14/15 (April 1979), pp. 163-173.

16. de Certeau, *L'invention du quotidien*, p. 254; *The Practice of Everyday Life*, p. 148.

17. Olivier Burgelin, "Les outils de la toilette ou le contrôle des apparences," *Traverses*, no. 14/15 (April 1979), pp. 25-42.

18. Philippe Perrot, *Le travail des apparences. Le corps féminin. XVIIIe-XIXe siècle*, "the body, submerged in excessive cloth, finally disappears leaving only its hyperbolic textile double." (Paris: Seuil, 1984), p. 175.

fig. 8. Jana Sterback, *Meat Dress*, 1988.

19. Burgelin, "Les outils de la toilette...," p. 27.

In addition to the eminently philosophical theme of the relation between body and mechanism, the association of woman and machine must be considered–and not simply in terms of a sex-machine, as in the film *Barbarella* (1968), by Roger Vadim and the cartoonist Jean-Claude Forest, in which Jane Fonda is manipulated by a mechano-erotic device. Already in the "1900s style" and "Modern style" eras, the more-or-less dressed female body appeared with great frequency on automobile publicity posters. This image-economy played on several registers, such as classical personification–inevitably privileging the *Goddess of Industry*; or the elimination of the technical object so as to further a smug plot exalting the hygienic lines of the new nakedness of the goddess' body, substituting it for the machine. The turn-of-the-century machine is only visible (that is, can only be depicted) through a media-transfer. The automobile cannot be described, is not even visible, without interposing a woman–and not just any woman, but only one of a "type" corresponding to the canon of "Eros Modern Style": the femme fatale, the mystical virgin, the thoughtful socialite, the dreamy sultana....[20] Indeed, as Alice Jardine argues, "technology has always been about the maternal body...and does seem to be about some kind of male phantasm"; furthermore, she argues that "the machine **is** a woman in that phantasm."[21]

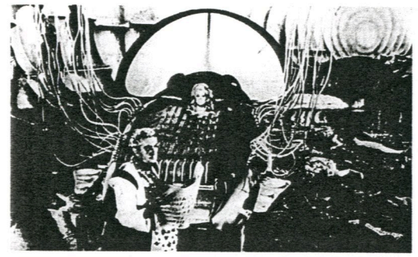

fig. 9

fig. 9. Roger Vadim, *Barbarella*, 1968.

fig. 10

fig. 10. Jean-Claude Forest, *Barbarella*, cartoon, 1967.

In the long string of unconsummated marriages between women, men, and machines, most notable are *L'Eve future* (1886)–*Tomorrow's Eve*–by Auguste Villiers de l'Isle-Adam[22]; Alfred Jarry's *The Supermale* (1902)[23]; and the "machine-based" works by Raymond Roussel, Marcel Duchamp, and Franz Kafka displayed in the 1975 exhibition organized by Harold Szeemann and Jean Clair,[24] who were themselves inspired by Michel Carrouges' *Les machines célibataires* (1954).[25] The latter catalogs what Michel de Certeau defines as "myths of an incarceration within the operations of a writing

fig. 11

fig. 11. *Dürkopp*, German advertisement, circa 1900.

20. Claude Quiger, *Femmes et machines de 1900: lecture d'une obsession Modern Style* (Paris: Klincksieck, 1979), pp. 266-269.

21. Alice Jardine, "Of Bodies and Technologies," in Hal Foster, ed, *Discussions in Contemporary Culture*, no. 1 (Seattle: Bay Press, 1987), p. 156.

22. Auguste Villiers de l'Isle-Adam (comte de), *L'Eve future* [1886]; rev. ed., Alan Raitt (Paris: Editions Gallimard, 1993); trans., *Tomorrow's Eve* (Urbana, Ill., University of Illinois Press, 1982).

23. Alfred Jarry, *Le surmâle, roman moderne*, Paris, 1902; trans. Ralph Gladstone and Barbara Wright, *The Supermale* (New York: New Directions, 1977).

24. Jean Clair and Harold Szeemann, eds., *The Bachelor Machines/Le machine celibi* (in English and Italian) Venice, 1975; rpt. ed., Milan: Electa, 1989; see also German and French edition: *Junggesellen Maschinen/Les Machines Célibataires* (Electa). See A. Montesse, catalog essay: "The incomplete nature of the celibate machine having been noted, the dullest technocratic solution is applied: implanting them with prostheses. Thus, the standardized structure of the personality is achieved in all its splendor: a body without organs, disactivated celibate machine, equipped with various functional extensions." (p.113) We will return to the notion of "body without organs."

25. Michel Carrouges, *Les machines célibataires* (Paris: Arcanes,1954); revised and expanded edition, 1975.

that constantly makes a machine of itself and never encounters anything but itself."[26] All of these turn-of-the-century literary games–no-exit fictions, non-transparent windows, two-way mirrors, mute encounters between automatons, asexual couplings of androids and humans, these incestuous and painful matings between organs and machines–describe how the law is alternately inscribed on the body by means of social machinery, disciplinary appratus, and devices from orthopedics and orthopraxy. De Certeau designated the preceding as "intextuation of the body" responding to "incarnation of the law." Thus, in de Villiers's story, *Tomorrow's Eve*–built by the "electrician" Edison–Eve is an android (a female "Andréide" in the text), a simulated female body, which begins to live through recording devices.[27] Her "Greek-statuesque" body is first of all vitalized by fragmentation and by analysis, which cuts her body into a thousand pieces–a distinctly fetishistic process, according to psychoanalytical theory. The body is then reconstructed through the medium of texts recorded by the engineer.[28] Heralding the post-Turing distinction between "hardware" and "software," de Villiers's Eve foreshadows the emergence of today's so-called "meatware," people and employees who can be reprogrammed. "The machine producing language," de Certeau writes,[29] "is wiped clean of history, isolated from the obscenities of reality, absolute and without relation to other 'celibates.'"

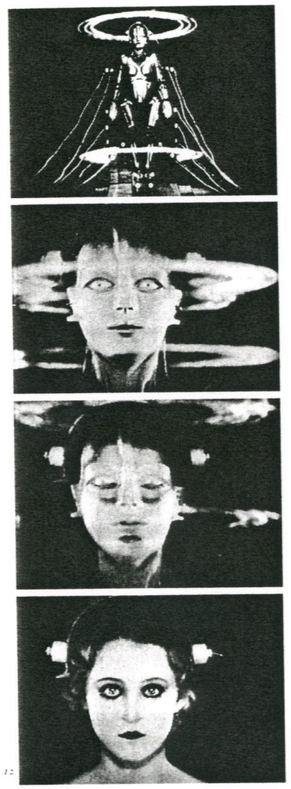

fig. 12

A component of *The Rotary Notary and His Hotplate* (1987), a performance written and directed by Susan Mosakowski at the Philadelphia Museum of Art during the Marcel Duchamp centenary, D + S's *The Bride's Armor* consists of metallic shields molded on organs, protecting and arming the most fragile and "desirable" parts of the female body. These cut-out and reinforced body parts are thus "fetishized" and rendered inaccessible. As parodies of orthopedic instruments, belonging to the aesthetics of hygiene, this cruel armor conditions the "gaze" while forbidding any approach. What is played out on stage is the tragicomedy of the disrobing of

26. de Certeau, *L'invention du quotidien*, p. 257; *The Practice of Everyday Life*, p. 150.

27. "From the earliest daguerreotypes and Edison's first recordings, up till the present holograms, the reproduction of phenomena that designate life has been so highly perfected that one may well wonder whether there will not be a time when the recording machine will have become so faithful to what it projects that it will end up by totally substituting what is submitted to it, while destroying it." From: Jean Clair, "The Last Machine," in Clair and Szeeman, *The Bachelor Machines*, p. 182.

28. Annette Michelson, "On the Eve of the Future: The Reasonable Facsimile and the Philosophical Toy," in *October: The First Decade, 1976-1986* (Cambridge, Mass.: MIT Press, 1987), p. 432.

fig. 12. Fritz Lang, *Metropolis*, 1926.

29. de Certeau, *L'invention du quotidien*, p. 258; *The Practice of Everyday Life*, p. 150.

the bride, whom bachelors can attain only by undergoing self-imposed torture–all of which simulates the interruption of erotic communication, fraudulently promised by the transparency of the glass. Instead of displaying something through the "window" of perspective, Duchamp's *Large Glass* shattered common references and suspended signification. As de Certeau wrote: "Among desiring subjects, there remains only the possibility of loving the language that substitutes itself for their communication. And it is indeed a language-model that is furnished by the machine, composed of different, combined parts (like any statement), and developing the logic of celibate narcissism through the interplay of mechanisms."[30] It is from these languages miming their death, from these orthopedic machines guiding torture, from these prophylactic devices suppressing contact, that a new engineering, a new "architecture" is created, constructed around these prosthetic supplements. This engineering allows for continuous transfers and ever more "transformations,"[31] which are no longer articulated, like speech in a language, but instead, lead to disarticulation.

30. Ibid., p. 260; p. 152.

31. Jean-François Lyotard, *Les transformateurs Duchamp* (Paris: Galilée, 1977); trans. Ian McLeod, *Duchamp's TRANS/Formers* (Venice, Calif.: Lapis Press, 1990), pp. 29-37.

It is recognized that learning the use of a tool or instrument is accomplished through a process of ***incorporation***. As Drew Leder reminds us in his pursuit of Maurice Merleau-Ponty's analysis of perception, the etymology of this word, from the Latin ***corpus***, means "to bring within a body."[32] Incorporation is what enables us to acquire new abilities; these abilities can settle into fixed habits. As time passes, these repeated habits are definitively "incorporated" and disappear from our view. They become enveloped within the interior of a body-structure from which I inhabit the world.[33]

32. Leder, *The Absent Body*, p. 31.

33. Ibid., p. 32.

Alongside this temporal process, a spatial process of incorporation occurs, which is born out of the use of tools, instruments and equipment. For Martin Heidegger, the latter are "ready-to-hand" (***zuhanden***), ready for use, placed around us, available for "manipulation."[34] Tools and instruments constitute components of an equipment-structure forming our environment, and they tend to disappear from our attention when used on a daily basis (as long as they don't misfunction). In the same manner, the organs and appendages of our body (if they are in good health) tend to elude our explicit attention when a precise action is envisaged and undertaken. There is thus a direct connection, a parallel between the disappearance or absence of the sensorimotor organs and that of the tools we hold when acting on the world around us: two forms of absence.[35] Leder's observation supplements Merleau-Ponty's remarks on vision: "The blind man's stick has ceased to be an object for him,

34. Martin Heidegger, *Sein und Zeit*, (Tübingen, 1927); trans. John Macquarrie and Edward Robinson, *Being and Time* (New York: Harper and Row, 1962), on "readyness-to-hand" (*Zuhandenheit*) see pp. 97-98, 139-140.

35. Leder, *The Absent Body*, p. 33.

and is no longer perceived for itself; its point has become an area of sensitivity, extending the scope and active radius of touch, and providing a parallel to sight."[36]

36. Maurice Merleau-Ponty, *Phenomenology of Perception* (London: Routledge and Kegan Paul, 1962), p. 143; cited by Drew Leder in *The Absent Body*, p. 33.

This focal disappearance, which is due to the ecstatic nature of our bodies (from the Greek ***ek-stasis***, "that which stands out"), also occurs with complex instruments like the telephone. In Greek, the term ***organa*** originally denoted the various parts of a war-machine. Aristotle considered the articulated movements of vertebrate animals as being assimilated into mechanical movements, such as those of the components of a catapult. In fact, the Greeks had only one word, ***organon***, to designate both a corporal organ and a tool. Further, the term is very closely related to the word ***ergon***, meaning "labor."[37] This relation between organ and tool, attested to by etymology, history, and theory, defines our action on space, on the environment, on the world we inhabit. Such a relation can "unfold in the space created by our technologically supplemented bodies, not merely that of our natural flesh."[38]

37. Georges Canguilhem, "Machine et organisme," in *La connaissance de la vie* [1952], Paris 1965; trans. Mark Cohen and Randall Cherry, "Machine and Organism," in Jonathan Crary and Sanford Kwinter, eds., *Incorporations, Zone* 6 (New York: Urzone, 1992), pp. 45-69.

38. Leder, *The Absent Body*, p. 34.

The first task architecture ought to assume, therefore, is that of defining and imagining an environment not just for "natural" bodies but for bodies projected outside themselves, absent and ecstatic, by means of their technologically extended senses. Far from assimilating the tool with the body according to the mechanistic tradition of Cartesian dualism, we must conceive tool and instrument "like a second sort of body, incorporated into and extending our corporal powers."[39] It then becomes possible and even necessary to logically invert the terms of our proposition on the role of architecture. The incorporation of technology is not effected by "imagining" a new environment, but by reconfiguring the body itself, pushing outward to where its artificial extremities encounter "the world."

39. Ibid., p. 179.

For D + S, it is not so much a case of imagining new houses for cyborgs, but rather of redesigning and literally recrafting our instrument-enhanced and equipped body, so that it can "inhabit" the world. This situates their work in a tradition of which Muraviev's 1923 projects constitute an important stage: he predicted the remodeling of man's body beyond simple "psychic transformation." In order to "alter humanity's physical type," Muraviev offered to open the new field of "anthropo-technics," even of "anthropo-urgy."[40] In an era like ours, when a return to twenties' Constructivism is invoked too lightly, D + S's architecture goes beyond stylistics, beyond pastiche, and returns to sources.

40. Muraviev, "Vseobshchaia proizvoditeelnaia matematika," *Vsllenskoe dela*, vol. 2 (1923), pp. 131-132. The idea is taken up by K. Melnikov, in his project "the City in Rationalized Repose" (1930), exhibited in Stroitel' stvo Moskyy, where an 'Institute for Changing the Aspect of Man' was supposed to be established; cf. commentary by S. Vlassenko, in *Amphion*, vol. 2 (Paris: Picard 1988, pp. 79ff) and of Jacques Guillerme, "Thèse sur la prothèse. Le prétexte des besoins latents," translated into English and Italian, *Ottagono* 96. (Sept. 1990).

Like it or not, today–eighteen years after the *The Bachelor Machine* exhibition–technologies have extended their field of action. In this account, we are attesting to the triumph of the "biological" over the "natural." Already in the nineteenth century, plastic and reconstructive surgery developed by the military was paving the way for the correction of facial features: **autologous surgery** (using skin from the same body) perfected grafting techniques. While prostheses were increasingly being used in Europe and, after the Civil War, in the United States, local injections of vaseline and paraffin were also being given to patients–to make up for mammary deformities, for example.[41]

41. Perrot, *Le travail des apparences*, p. 185.

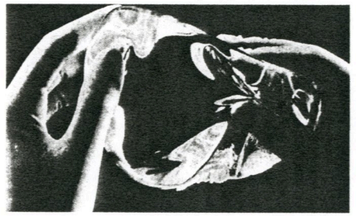

fig. 13

fig. 13. Silicone breast implant.

In our own time, the "conquest" of body-terrains is best emblematized in the photograph of a mammary prosthesis made of translucent silicone enveloped in a thin silicone film. The very serious danger of possible rupture of the implant, discreetly listed under the heading "collateral damage," has been confirmed by numerous incidents. Consider, for a moment, so-called aesthetic surgery, which adds to and subtracts from the body: what strikes the imagination is the heroic will to voluntarily subject one's body to an endless cycle of repeated operations, in order to repair it, perfect it, and make it into an ideal object, instead of accepting it as a place of difference and otherness.[42]

42. Lawrence M. Fisher, "Three Companies Speeding Artificial Skin," *The New York Times*, September 12, 1990: "The preparation of NeoDerm, Marrow-Tech's artificial equivalent of human skin, begins with the inoculation of fibroplasts onto a biodegradable mesh, contained within a sterile plastic bag." And: Elizabeth Rosenthal, "Cosmetic Surgeons Seek New Frontiers. In California, doctors lift almost everything from calves to faces," *The New York Times*, September 24, 1991; here are some of the subtitles: "A Classical Physique Could Be Yours;" "Severe Pain at First;" "It's a big change to see good-looking guys in their 40's asking for facelifts;" "Buttocks Data Lacking;" "How will implants wear for 50 years under the skin of a 20-year-old?" On this subject, see: Jean Baudrillard, "La chirurgie esthétique de l'Altérité," in: *La chair de Psyché*, European Summer University, organized by Giulia Sissa, with the participation of the Association Descartes, the Italian Cultural Institute, the Laboratoire d'Anthropologie Sociale, John Hopkins University, Paris, 7 - 13 July, 1993.

After Minimalism, the human body was re-introduced into art through performance–a practice dependent on real time, which could only leave photographic remains. Early works by Cindy Sherman, in the years following, dissected production procedures used in the film industry to fabricate images of the female body. More recently, the transformations this artist effects on her own body, her own "figure," are highlighted and recorded in gigantic, perturbing cibachromes that induce a feeling of discomfort in the viewer. In her *Untitled* 1989-90 series, her body is garbed in a bulbous breast and various protuberances and tumescences recalling the *Madonna Lactens* archetype, among others. "Art," Cindy Sherman seems to indicate, "can and does make the real more so."[43] It can achieve a hyper-realism that unnerves us in relation to the realism of our body. Cutting, deleting, crossing-out; adding and subtracting, eradicating, scraping, obliterating: writing and erasing operations, these are all the various significations of the word "erase"; in French ***effacer***,

fig. 14

fig. 14. Cindy Sherman, *Untitled #216*, 1990.

43. Thomas W. Sokolowski, "Iconophobics Anonymous," *Artforum*, Summer 1990, p. 118.

derives from ***esfacier*** (in Old French), meaning "to rub out the face." D + S often cite the fact that so-called aesthetic or cosmetic surgery also aims at erasing characteristic sexual traits, or at camouflaging somatoethnic features ("ethnic e(race)sures"), in an effort to attain an ideal, objectified body.

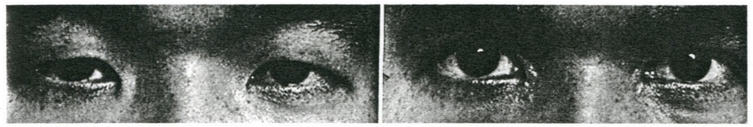

fig. 15

fig. 15. Split V-W medical epicanthoplasty.

The novel *The Girl Who Was Plugged In* (1973), by James Tiptree, Jr., *aka* Alice Sheldon, focuses on an incarnation-disembodiment episode: after a failed suicide attempt, P. Burke, a poor, ugly girl, offers her brain via a remote-control device to the artificial body of Delphi, a "waldo" of ideal beauty. The brief story is sad, and ends tragically. William Gibson's *Neuromancer* (1984) is more optimistic, with all the sexual connotations of total incarnation in desiring machines, and couplings in continuous flux ("jacking into cyberspace"). This work deals with grafting a machine-organ onto an energy-machine, a theme already invoked by Gilles Deleuze and Félix Guattari in *Anti-œdipus* (1972).[44]

44. Gilles Deleuze and Félix Guattari, *Capitalisme et Shizophrénie, L'anti-œdipe* (Paris: Minuit, 1972), Chpt. 1, part I. Trans. Robert Hurley, Mark Seen, Helen R. Lane, *Anti-œdipus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota, 1983).

The development of bioapparatus during the twentieth century has been marked by two principal stages worthy of the status of "theoretical fiction." First, the inception of the term "robot," arising from an industrial environment and coined by the writer Karel Čapek (1890-1938) in his play *R.U.R.*–an acronym for Rossum's Universal Robots (1921).[45] ***Robot*** derives from the Czech word ***robota*** meaning "boredom," "drudgery," and refers to repetitive factory-work. Second, the creation of the term ***cyborg***, short for "cybernetic organism," characterizing a hybrid being, "an embodiment of a monstrous idea, a part-human, part-alien type of automaton–a serial killer who has roamed around science-fiction worlds for decades, and is now about to be reactivated on the laboratory floor."[46] Such is the terminology proposed by two physicians of the biocybernetics research laboratories at Rockland State Hospital in Orangeburg, New York: Manfred Clynes (engineer and neuropsychologist, who studied music, physics and mathematics), and Nathan S. Kline (psychiatrist), in a study related to astronautics for NASA during the 1960s.[47] It may well be that ***robots*** and ***cyborgs*** are not just two stages in technological evolution but rather, two alternatives, two "paradigms" for development. After all, it is significant that one

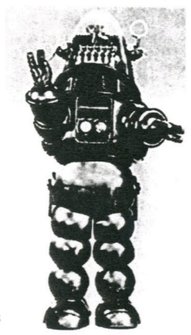

fig. 16

45. Karel Čapek, *RUR* (London: 1923); see: Peter Wollen, "Le cinéma, l'américanisme, et le robot," *Communications*, special issue on video, no. 48 (Paris: Seuil, 1988) pp. 7-37.

46. Kathleen Rogers, in *Virtual Seminar on the Bioapparatus*, transcript to seminar held on 28-29 October 1991 at Banff Centre for the Arts, Banff, Alberta, Canada, 1991, p. 82.

fig. 16. Robby the Robot, *Forbidden Planet*, 1956.

47. Timothy K. Smith, "Measured Response: Do Emotions Have Shapes You Can See And Then Reproduce? Manfred Clynes's 'Sentograf' Finds Distinct Patterns in Music as Well as Life," *The Wall Street Journal*, 23 September 1991. See also Antonio Caronia, *Il cyborg: Saggio sull'uomo artificiale* (Rome and Naples: Theoria, 1991 [1985]).

was born in an industrial factory, and the other in a hospital, like you and me, in an environment managed by *fin-de-siècle* electronics.

fig. 17

fig. 17. Ed Emsh, illustration from *Galaxy*, Sept. 1954.

Consider the following declaration by Warren Robinett, software author for NASA's *Virtual Environment Workstation* (1987)[48]: "using a head-mounted display, we will be able to get inside interactive three-dimensional simulated worlds through which we can move and in which our actions have effects. We will be able to get inside and move through three-dimensional scenes or actions recorded at earlier times. We will be able to project our eyes, ears and hands in robot bodies at distant and dangerous places. We will be able to create synthetic senses that let us see things that are invisible to our ordinary senses."[49] Virtual Reality technology tends to amplify the phenomenon of "focal disappearance" in organs of perception and proprioception.[50] In order to exercise their perceptive role in relation to the environment, sensorimotor organs are already placed on the body's surface. Equipped with a helmet and gloves constituting a new sensitive armor, eyes, ears and hands are extended into a three-dimensional, digitally-simulated, illusionary world–one more step towards the ***incorporation*** of instruments into the body, and at the same time, the ***disembodiment*** of the body itself. The latter is subjected to the experience of a double disappearance: that of the body ecstasized in action (as in the expression "out-of-body"), and that of the automated machine and device, moving ever closer to forms of concealment. In fact, Virtual Reality is no more "de-humanizing" than a word-processor or a flight-simulator; however, it does push the double movement of incorporation and disembodiment towards new limits.

48. Warren Robinett is a designer of interactive computer graphics. He has designed video games (*Atari 2600 Adventure*, 1978), educational software (*Rocky's Boots*, 1982) and software for virtual reality systems (NASA, 1987). Since 1989, he has directed the Head-Mounted Display Project at the University of North Carolina.

49. Warren Robinett, "Technological Augmentation of Memory, Perception, and Imagination," in *Virtual Seminar on the Bioapparatus*, p. 17.

50. Leder, *The Absent Body*, p. 26.

Oddly enough, Warren Robinett's rather "cowboy," "technoid" defense of Virtual Reality simplistically opposes the two paradigms of robot and cyborg in a rhetorical, video game-like manner, setting up an opposition of "good guys" and "bad guys" along the same lines as the struggle between Darth Vader and Obi Wan Kanobi in George Lucas' *Star Wars (1977)*: "One vision of the future is the human being whose senses and muscles are greatly amplified, a human decision-maker, aware and powerful. A competing vision from the field of artificial intelligence is the super-intelligent robot, autonomous, inscrutable, and beyond human control. These are two plausible directions that the development of computer technology can take. Personally, I find it preferable to be the cyborg running the show, rather than the pet of a robot."[51] Invented by video game-programmers in NASA laboratories, the

51. Robinett, "Technological Augmentation of Memory, Perception, and Imagination," p. 17.

Virtual Reality device corresponds precisely to the "war-machine" as defined by Deleuze and Guattari in *A Thousand Plateaus*: "a war-machine in no way has war for its object; its real object is a very special space, a ***smooth space*** that it composes, occupies, and propagates. ***Nomadism*** is precisely the resulting combination between war-machine/smooth space. We are attempting to show how and in what case a war-machine does have war as its object (when State-apparatuses appropriate war-machines that do not belong to them). A war-machine can be revolutionary, or artistic, much more than war-like."[52]

Virtual Reality will probably have to depart from a space where all situations are dependent solely on a body's sensorimotor apparatus, which is governed by the technology itself. This kind of space is organized by successive motor-connections–an action leading to a perception, leading in turn to a new action, etc. The resulting chain of horizontal actions/perceptions is consonant with narration, and conforms closely to the narrative space of action films, videogames, or computer simulation: techno-distractions that constitute the smoothest "future" of Virtual Reality.[53] This is hardly cause for indignation–after all, wasn't cinema originally a boulevard attraction? But will it be possible to interrupt the chain, to witness the collapse of action and narration, to break the sensorimotor links and achieve pure optical and sonorous effects or situations, to institute cerebral circuits and short-circuits, so that space, "having lost its motor-connections, becomes dis-connected, emptied," and the actual image interrelates with the virtual image?[54]

fig. 18

It appears that today, dichotomies other than that of organism/machine can be called into question–for example, mind/body, animal/human, energy/fatigue, public/private, nature/culture, male/female, primitive/civilized. "High-tech culture," writes biologist Donna Haraway in the *Cyborg Manifesto*, "challenges these dualisms in intriguing ways. It is not clear who makes and who is made in the relation between human and machine. It is not clear what is mind and what is body in machines that resolve into coding practices. In so far as we know ourselves in both formal discourse (e.g., biology) and in daily practice (e.g., the homework economy in the integrated circuit), we find ourselves to be cyborgs, hybrids, mosaics, chimeras. Biological organisms have become biotic systems, communication devices like others. There is no fundamental, ontological separation in our formal knowledge of machine and organism, of technical and organic. The replicant Rachel in the Ridley Scott film *Blade Runner* (1982) stands as the image of a cyborg culture's fear, love, and confusion."[55]

52. Gilles Deleuze, "Entretien sur Mille Plateaux" (1980), in *Pourparlers. 1972-1990* (Paris: Minuit, 1990), pp. 50-51.

53. Trish Hall, "'Virtual Reality' Takes place in the Real World," *The New York Times*, 8 July 1990; Woody Hochswender, "Battles So Real They Almost Hurt," *The New York Times*, 29 August 1990; John Markoff, "Art Invents A Jarring New World From Technology," *The New York Times*, 25 November 1990; E. Shapiro, "Punk Rock and Military Jobs Lead to Mattel Video Games," *The New York Times*, 26 November 1990.

fig. 18. Virtual Reality, VPL Research, 1993.

54. I have freely borrowed from Gilles Deleuze in "Sur l'image-Mouvement" (1983) in *Pourparlers*, pp. 67-81, and p. 86; quote: pp. 72-75. In the summer of 1993, D + S were invited to the Banff Centre for the Arts to develop a Virtual Reality project to be exhibited in the Centre Georges Pompidou.

55. Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," rpt. in: *Simians, Cyborgs and Women–The Reinvention of Nature* (New York: Routledge, 1991), pp. 177-178. see also: "Cyborgs at Large: Interview with Donna Haraway," in Constance Penley and Andrew Ross, eds., *Technoculture* (Minneapolis: University of Minnesota Press, 1991), pp. 1-20; and Donna Haraway, "The Actors Are Cyborg, Nature is Coyote, and the Geography Is Elsewhere: Postscript to 'Cyborgs at Large'," *Technoculture*, pp. 21-26.

In the enthusiastic adherence to the cyborg model and metaphor, reference is constantly made to a being "half-human, half-machine," which seems to imply a fifty percent division between natural and artificial. From a strictly ontological perspective, it would be interesting to know if, by modifying this proportion to fifty-one percent, or to sixty-six percent, a threshold of humanity could be determined. We well know that our being is in no way reducible to each of our organs–we can change them without modifying it in any way. However, as Stéphane Ferret writes, "reasoning on a part is not the same as reasoning on the whole, and it is precisely at this subtle disjunction between the body and each of its organs where word-play arises between 'having' and 'being' a body."[56]

fig. 19

It seems, in our present state of knowledge, that the limit of humanity or animality of the cyborg consists in the existence of a brain which, of all our organs, undeniably occupies a place apart, and constitutes in itself the threshold we were wondering about.[57] This conclusion leads us to the following declaration by Jean-François Lyotard, on the subject of the human brain: "the community-form of individual brains which has proven the most efficient–i.e., political democracy and socio-economic liberalism…–seems to be the most appropriate for developing brain-performance. But the system remains dependent on the body's providing it with nourishment in the form of energy…and ensuring its reproduction. What is at stake in all contemporary research, whatever the discipline, is the following: how to free the human brain from the constraints shared by systems living on earth," in order to survive the relatively immanent destruction of the solar system–in four to five billion years.[58]

As for attempts to "redesign" the body, we need only recall cases of electronic-transmitter implants which monitor bodies on supervised discharge. Surveillance, hygienics, health–any number of microrobots are waiting to invade our bodies. As Paul Virilio explains, "The law of ***mechanical*** proximity which governed the development of our surroundings, i.e., the 'exogenous' environment of the human species, has given way to a law of ***electro-magnetic*** proximity, which remains to be discovered, and apprehended, before we submit more or less passively to the coming invasion of our bodies, to the control of the 'endogenous' environment, i.e., our bowels, our viscera, by ***interactive*** feats achieved through biotechnological miniaturization–beside and beyond

56. Stéphane Ferret, "Extraits de corps," in *La chair de Psyché*, European Summer University, see note 42. See also Ferret's *La Philosophie et son scalpel: Le problème de l'identité personnelle* (Paris: Editions de Minuit, 1993), p. 12 and following. See also Mark Poster, "Robocop," in Jonathan Crary and Sanford Kwinter, eds., *Incorporations*, *Zone* 6 (New York: Urzone, 1992), pp. 436-440.

fig. 19. Paul Verhoeven, *Robocop*, 1987.

57. Roger Penrose, *The Emperor's New Mind: Concerning Computers, Minds and the Laws of Physics* (Oxford and New York: Oxford University Press, 1989), see pp. 3-29 and pp. 374-449.

58. Jean-François Lyotard, in *Virtual Seminar on Bioapparatus*, p. 28.

fig. 20

the culmination of major mass-communication technologies already running our society."[59]

Cause for concern, or even anger? One subject not mentioned in an ostensibly neutral scientific article in the *New York Times*[60] is the use of such devices by psychiatric hospitals. What about mental compliance achieved through "psychotropes" and drugs? New technologies are certainly providing the means of exercising total control over body and soul,[61] through immense population-surveillance networks exercising biomedical powers, ultimately more despotic than the most fearsome dictatorships. This terrifying prospect has been dubbed by Jean Querzola the ***biopolitical panoptic scenario***.[62] Such a pessimistic, even paranoid outlook can be countered by adopting the ironic tone taken up by Querzola: "In a liberal society with democratic pretensions, why should only the handicapped have the right to prostheses? Isn't the real market of the future among normal people instead?"[63] Along similar lines, Donna Haraway maintains that "the cyborg is not subject to Foucault's biopolitics; the cyborg simulates politics, a much more potent field of operations."[64]

Today, according to Jacques Guillerme, the very notion of prosthesis is increasingly tending towards applications divided mainly between positive or substitutive restoration of perception-related infirmities and experiments on tissue cultures and organ transplants which, with varying results, are becoming more numerous and diverse. Indeed, transplants are the most subtle of prostheses, entailing separation of matter and functional repair in an exchange of otherness. Isolated from the "donor" organism, the transplant (graft) is a "free" organ, ***without body***, orphan and celibate, between life and death. It comes from "the interval produced between relational and functional death."[65] The graft becomes other and is substituted for a deficient part in the "receiver" organism; it corrects a pathological lack, but also, at the same time, it creates a new level of regulation and determines another state of normalcy.[66]

Charles Levin aptly comments: "Unfortunately, the dominant image of Freud's legacy remains an over-simplification: there is consciousness (an afterimage which only appears to exist in the 'here and now'), and then, there is the ***andere Schauplatz***–the 'other scene.'...In short, it tends to be assumed, even in psychoanalytically informed cultural theory, that the body is a kind of biological given which can be canceled out of the equation or simply held constant; whereas, the matter to be studied and

59. Paul Virilio, "La loi de proximité" (30 April 1991), *Ottagono* 100 (September 1991).

fig. 20. Jana Sterbak, *Generic Man*, 1987-89.

60. In *The New York Times*, 20 June 1990: "A Massachusetts company is developing a tiny electronic component that can be implanted in the body to release small amounts of drugs or other biologically active materials in response to a pulse of electrical current.... The device is based on the discovery of conductive polymers–chemicals that intrinsically conduct electric current that can be chemically bound with drugs..."

61. Jean Baudrillard, "Clone Story, ou L'enfant prothèse," *Traverses*, no. 14/15 (April 1979), pp. 143-148.

62. Jean Querzola, "Le silicium à fleur de peau," *Traverses*, no. 14/15 (April 1979), p. 169.

63. Ibid., p.170; see the work of some Italian designers, like Denis Santachiara in *Ottagono* 96 (September 1990).

64. Donna Haraway, "A Cyborg Manifesto: Science," in *Simians, Cyborgs and Women*, p. 163.

65. Michel Guillou, "Le corps et l'appareil," *Traverses*, no.14/15 (April 1979), p. 136.

66. This paragraph is inspired by Jacques Guillerme's admirable article, "Thèses sur la prothèses: le prétexte des besoins latents," trans. in "Protesi/Prosthesis," *Ottagono* 96 (September 1990). My thanks to the author for providing a copy of his original French manuscript.

understood is rather what society pumps into the body (or 'writes' onto it)."[67]

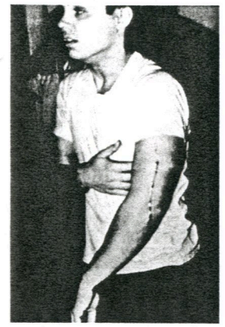

fig. 21

In 1961, in an act of "appropriation through designation," Piero Manzoni, a manipulator of text and context, made a prophetic gesture by exhibiting a nude model on his sculpture base and signing her as his work. This act was just one step away from declaring the artist's own body as the irreducible site of intervention, finally collapsing the distance between the agent and the activity of art. At the "center" of ***body art***, literature, cinema, and chronobiology is a de-centered body, from Kafka's *Penal Colony* to Vito Acconci's first photoworks, "paging body in space and space in body,"[68] to Chris Burden's performance *Shoot* (1971),[69] to Bruce Nauman's "actions" (*Making Faces*, holograms projected on glass, 1978), to Charles Ray's *Shelf* (1984): so many mise-en-scènes of explorations operated on the body itself, considered to be the ultimate end of art. Inscribed on the flesh of the body is the text of the law, the *logos* of a society that has "become flesh." Eventually and eventfully, the process of ***incarnation*** must be probed to the limit of its disincarnation. That limit is the vulnerability of the body itself. In *Para-site*, D + S applied quotes by Jeremy Bentham and Michel Serres, in reverse raised letters, to the seats of two ceiling-hung chairs. The statements were designed so as to imprint themselves on the flesh of an imaginary occupant.

fig. 22

This odd return of Carnalism in art, which also inspires phenomenology's last avatars, thrusts us into the mystery of incarnation: "a notion at once pious and sensual, a blend of sensuality and religion."[70] Traditionally, since the Middle Ages and the Renaissance, social groups, cities, buildings, etc., have been represented in the image of the human body, in a system of anthropomorphic analogy for which the text of Vitruvius provides the architectural source. For Renaissance theorists like Alberti, Francesco di Giorgio, and Filarete, buildings are genuine bodies, the most perfect among them being temples and churches. The same idea applies to cities–the seat of the social and political body.[71] The notion of the social body, juridical in origin, articulates society's **limbs** in heads, arms and legs–a sort of corporal projection underlying the classical notion of incorporation. This image will tend to

67. Charles Levin, "Carnal Knowledge of Aesthetic States" in Arthur and Marilouise Kroker, eds., *Body Invaders: Panic Sex in America* (New York: St. Martin's Press [Culturetext], 1987), p. 113.

fig. 21. Chris Burden, *Shoot*, 19 November 1971.

68. *Vito Acconci: Photographic Works, 1969-1970*, exhibition catalog, Brooke Alexander, Inc., New York, 1988, with a text by Kate Linker. See also Amnon Barzel, ed., *Vito Acconci*, exhibition catalog, Museo d'Arte Contemporanea Luigi Pecci, Prato (Firenze: Giunti, 1992), with texts by Jeffrey Kipnis and Jeffrey Ryan.

69. Marc Selwyn, "Chris Burden: I Think Museums Function The Way Churches Function For Religion–It's The Place Where You Go To Do It," *Flash Art*, Jan/Feb 1989, pp. 90-94.

fig. 22. D + S, *Para-site* (chair embossing detail), 1989.

70. Gilles Deleuze et Félix Guattari, *Qu'est-ce que la Philosophie?* (Paris: Minuit, 1991), p. 169.

71. Erwin Panofsky, *Meaning in the Visual Arts: Papers in and on Art History* (New York, 1957). See chapter two, The Theory of Proportions of the Human Body [1921]; more recently, see Paul von Naredi-Rainer, "Like the Parts of a Well-Formed Human Being," *Daidalos* 45, pp. 64-71; Joseph Rykwert, "Body and Building," *Daidalos* 45, pp. 100-109. From an art-historical point of view, see Barbara Maria Stafford, *Body Criticism: Imaging the Unseen in Enlightenment Art and Medicine* (Cambridge, Mass: MIT Press,1991). For a historical approach, see Michel Feher et al., eds., *Fragments for a History of the Human Body, Zone* 3, 4 and 5 (Cambridge, Mass.: MIT Press,1989). For some recent architectural connections, see Alberto Perez-Gomez, "The Renovation of the Body. John Hejduk & The Cultural Relevance of the Theoretical Projects," *AA Files* 13, pp. 26-29; Anthony Vidler, "The Building in Pain: The Body and Architecture in Post-Modern Culture," *AA Files* 19 (Spring 1990), pp. 3-10.

metamorphose into medical metaphors: first, from the sixteenth to the eighteenth centuries, into a body-physics orchestrating the "body-opera" with its gears, fluids, and organs; then, in the nineteenth century, into thermodynamics and chemistry. An extraction-based therapy, which considers the "ill" as an excess which must be rooted out, is followed by an addition-therapy, where the "ill" is attributed to a lack which must be compensated for. Medical instruments thus undergo successive mutations: extracting activities consist of taking something out of the body, i.e., cutting, pulling, excising, removing; adding operations supplement the body, i.e., inserting, laying over, gluing, covering, assembling, sewing, linking. Finally, operations in the twentieth century will consist in substituting missing or deteriorated organs, with artificial lungs, valves, cardio-regulators, prosthetic joints.[72]

72. Michel de Certeau, "Des outils pour écrire sur le corps," *Traverses*, no. 14/15 (April 1979), pp. 3-14. Also published as Chapter Ten of *L'invention du quotidien*, pp. 231-261; trans., "The Scriptural Economy," Chapter Ten, *The Practice of Every Day Life*, pp. 131-153.

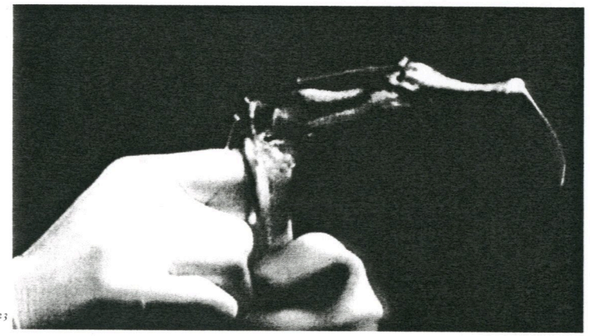

fig. 23

fig. 23. David Cronenberg, *Dead Ringers*, 1988.

The last two centuries have also seen the appearance of orthopedic instruments that purportedly "correct" the body by artificially propping up the anatomy. Resulting from the mechanical conception that considers the body as a machine, a whole current of thought has developed among engineers and architects who can be designated as partisans of the ***building-machine***. From Dr. Tenon's "healing-machine" (late eighteenth century) through architect Adolphe Lance's "house-machine" (1853); to Henry Provensal's 1908 building conceived as a "human thoracic cage" reproducing the respiration of the lungs; to the "dwelling-machine" launched by Le Corbusier in *L'Esprit Nouveau* in 1921[73]: there is no need here to elaborate further on the obvious parallels between nineteenth- and twentieth-century hygienics and modernist architecture.

73. Georges Teyssot, "The Disease of the Domicile," *Assemblage* 6 (1988), pp. 72-97.

fig. 24

As for orthopedic harnesses, it is well known that through the imposition of his father's posture-correcting apparatuses, the young President Schreber endured paternal aggression under the guise of hygienic austerity. Orthopedic therapies, however, underwent a significant

fig. 24. *"Geradehalter,"* a device to correct poor sitting posture, from Doctor Schreber's *Kallipaedie*.

transformation during the nineteenth century–described by Georges Vigarello as "support-tool inversion." The application vector of such tools no longer operates from the exterior on the human body, but conversely. Body-building is thus achieved by repetitive exercises on the new devices which constitute gymnastic machinery. The body no longer submits to mechanized pressure, but instead exerts its strength on those apparatuses–apparatuses which become singularly specialized.[74] This athletic machinery will be a source of inspiration for modernist architecture: furniture will be conceived in an "anthropotechnical" framework like a machine upon which the body exerts its strength; the room, conceived like a gymnasium where one works out. "Gymnastics apparatus," Jacques Guillerme points out, "tend to subject corporal movements completely, giving them a sort of molding-pattern–their forms codify the expenditure of physical energy, and objectify physical efforts by assigning them pre-determined exercise programmes."[75]

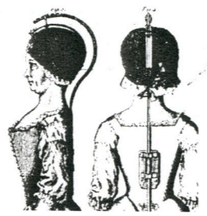

fig. 25

fig. 25. Levacher de La Feutriel, *Machine for Curing Rakitis*, 1772.

74. Georges Vigarello, *Le corps redressé. Histoire d'un Pouvoir Pédagogique* (Paris: Jean-Pierre Delarge, 1978); see also Georges Vigarello, "Panoplies redresseuses. Jalons pour une histoire," *Traverses*, no. 14/15 (April 1979), pp. 120-131. And William G. Niederland, *The Schreber Case: Psychoanalytic Profile of a Paranoid Personality* (New York: The New York Times Book Company, 1974), pp.49-84.

75. Jacques Guillerme, "Sur quelques antécédents de la machinerie athlétique," *Recherches*, no. 43 (April 1980), pp. 95-107; see also Guillerme's "Des raisons machinales du corps," *Traverses*, no. 14/15 (April 1979), pp. 105-112.

Today, ***high-tech sweat*** extends and modifies former ***body-building*** practices–an American passion since the 1870s. The program of the generalized domestication of muscle-building has led to increasingly sophisticated electronic equipment, forming "a range of prostheses, which also realize the plugging of the machine into corporal functions,...inducing an exterior, mechanical, perception of one's own body."[76] Le Corbusier will draw an inhabitant boxing on a patio of the Immeuble-Villas (1922).[77] Think of Alfred Jarry, writer, pataphysician, cyclist, and of his bedroom–which he entered by pulling himself up through a trap-door with a rope; the bedroom designed by Walter Gropius and Marcel Breuer into the apartment of Erwin Piscator in Berlin (1927-28), equipped with a punching-bag for boxing practice; or the home-gymnasium shown by Gropius at the Berlin Architecture Exhibition in 1931. Rem Koolhaas recently questioned the tangential relationship between modernist architecture, gymnastics, and athletics.[78] And this is precisely what D + S illustrate, playing on words, in their *BodyBuildings*.

fig. 26

76. Jean-Jacques Courtine, "Les stakhanovistes du narcissisme. Body-building et puritanisme ostentatoire dans la culture américaine du corps," in Georges Vigarello, ed., *Le gouvernement du corps*, *Communications* 56 (Paris: Seuil, 1993), p. 228. According to Courtine (p. 249, n. 41), the term body-building first appeared some time between 1900 and 1905, based on the expression to build (up) one's body.

77. Cf. Yago Conde, "Boxing Le Corbusier," (with a commentary by Josep Quetglas), *AA Files* 19, pp. 50-52: "The maxim Le Corbusier and Ozenfant published in the very first issue of *L'Esprit nouveau*, 'Everything is either a sphere or a cylinder' (Tout est sphères et cylindres), should be read as 'The body is everything.' The body is a mechanism. It bends itself, tenses, jumps. It is simultaneously the agent and the result of any action. It builds, moulds, corrects itself. Gymnastic machinery operates on it, making it more precise. It is molded by chairs, pavements, collars, pens. The body also operates on the space around it, incising, crossing, altering it. It can even treat itself as space, becoming the coiled agent of its own construction. Its theater of operations is the gymnasium."

78. Cf. OMA (Office for Metropolitan Architecture), "La casa palestra," *AA Files* 13, pp. 8-12; and Georges Teyssot, ed., *Il Progetto Domestico. La casa dell'uomo. Archetipi e prototipi*, exhibition catalog, XVII Triennale di Milano (Milan: Electa, 1986); see also Georges Teyssot, *Interior Landscape/Paesaggi d'Interni*, Lotus Document no.8 (Milan: Electa, New York: Rizzoli International, 1988).

fig. 26. Chris Duffy; Nationals Heavyweight Champion (United States), 1992.

"If hygienics is philanthropic," continues Jacques Guillerme, "it is also philotechnical. For various pretexts which it would be interesting to compile and classify, it is implicitly promoted in the ranks of productive body technology. The actions of which the body is capable can, in effect, be linked to the well-being of the individual, and simultaneously, to the strength he develops accomplishing work."[79] In 1847, Herman Von Helmholz proposed the principle of energy conservation, maintaining that matter and force cannot be conceptually disentangled. He demonstrated that it is impossible to create force out of nothing. Thus, the theory of energy conservation was formulated, which held that there was a single, indestructible, and infinitely transformable energy basic to all nature. A particular usage of the concept of "work," modeled on the machine, was extended by Helmholz to a general principle of nature. Universalized as the demiurge present in all nature, the concept of labor power (***Arbeitskraft***) redefined the principle of motion in the universe in terms of its power to "perform work." As a physicist and physiologist, Helmholz contributed to the elaboration of the modern concept of labor power as the quantitative equivalent of work produced, regardless of the source of the energy transformed.[80]

79. Guillerme, "Sur quelques antécédents de la machinerie athlétique," p. 98.

80. See Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (New York: Basic Books,1990), p. 55. See also Anson Rabinbach, "L'age de la fatigue à la fin du dix-neuvième siècle," *Urbi. Arts, Histoire, Ethnologie des Villes*, vol. 2 (December 1979), pp. 33-47; and Georges Ribeill, "De l'oisiveté au surmenage: les figures du travail au XIX siècle," *Urbi*, vol. 2 (December 1979), pp. 49-56.

Helmholz ultimately arrived at the theory of the ***animal body*** which is not simply analogous with, but identical to, a thermodynamic machine. Whereas the machine

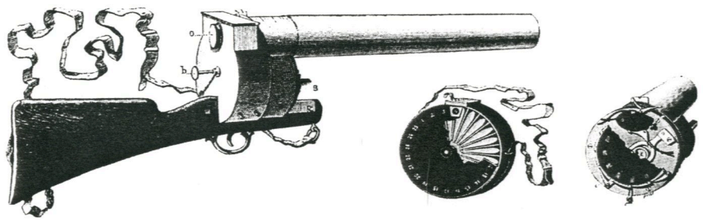

fig. 27

fig. 27. Etienne-Jules Marey, *Photographic Gun*, 1882.

was anthropomorphized through the ***automata*** of the eighteenth century, now it was the metaphor of the motor-engine that was anthropomorphized. But, as entropy–which described the irreversibility of heat flow–revealed the "loss" of energy in conversion, so ***fatigue*** revealed the loss of energy in the conversion of ***Kraft*** into production. Consequently, the focus on muscular force in physiology directed scientific research toward the problem of work, and led to a science of fatigue, to ergonomics, to scientific management.[81] Etienne-Jules Marey's investigations into the dynamic laws of the body in motion created a new science of human "labor-power" based on thermodynamics.[82] Charting and representing the movement

81. Anson Rabinbach, *The Human Motor*, pp. 45 - 68.

82. Etienne-Jules Marey, *La Machine animale*, (Paris: Baillière, 1873); E.-J. Marrey, *Le Mouvement* (Paris: Masson, 1874), reprinted in English as *Movement*, trans. Eric Pritchard (New York, 1895); Michel Frizot, *La chronophotographie. Temps, photographie et mouvement autour de E.-J. Marey*, Association des amis de Marey, Ministère de la Culture, Beaune 1984; *E.-J. Marey, 1830/1904*, exhibition catalog, Musée National d'Art Moderne, Centre Georges Pompidou, Paris 1977; François Dagognet, *Etienne-Jules Marey* (Paris: Hazan, 1987), English trans., *Etienne-Jules Marey. A Passion for the Trace*, (New York: Urzone, 1992). See also Hillel Schwartz, "Torque: The New Kinaesthetic of the Twentieth Century," in Jonathan Crary and Sanford Kwinter, eds., *Incorporations, Zone* 6 (New York: Urzone, 1992), pp. 71-126.

of the "animal machine," he invented photographic apparatus to record images of these movements. This cinematic accelerator was itself conceived like a prosthesis, linking sight organs and the motor.[83]

83. Paul Virilio, "Un confort subliminal," *Traverses*, no. 14/15 (April 1979), p. 152.

The association between motor (automobile) and sight is the basis of D + S's Slow House (1989). In a manner similar to Marey's decomposition of "animal movement" into frozen and abstract images, the Slow House is the product of the final slowing down of the drive from New York to a (commercialized) view of a bay on Long Island. Speed is itself frozen and decomposed–first slowed down, then frozen. The images evoked by the multiple cuts in the section drawing lead towards the window (the view), which is itself decomposed and recomposed in association with two of the three windows described by Paul Virilio: the traditional window and the video screen.[84] The Slow House captures the effects of two "media"–automobile and audio-visual. This project operates through decomposition; it analyzes different phenomena and organizes the coupling of dromoscopic and videographic effects without blending them. Examining "vertiginous styles of behavior," Véronique Nahoum-Grappe writes: "The acceleration of the speeds (of objects and of images), its effect on the real, and its historical moorings, prove to be determining parameters of questioning."[85] New technological potentialities (machines, simulation technology) increase "the possibilities of experimenting with coenesthesia arising from accelerated vertigo."[86] "The vertiginous sequence, defined as an imperiled verticality and the hallucination of an accelerated mobility,...[this] coenesthesia of dizziness [vertigo] derives from the anticipation of an accelerated fall, i.e., suspense, hence its plastic efficiency."[87] What the Slow House demonstrates, plastically, is that in addition to the vertigo of acceleration, there is also a more subtle vertigo of deceleration, of slow motion, in the cinematographic sense of the term.

84. Paul Virilio, "The Third Window: an Interview with Paul Virilio," in Cynthia Schneider and Brian Wallis, eds., *Global Television* (New York: Wedge Press, 1988).

85. Véronique Nahoum-Grappe, "Les conduites de vertige," in Georges Vigarello, ed., *Le gouvernement du corps, Communications*, 56 (Paris: Seuil, 1993), p. 163.

86. Ibid., p. 163.

87. Ibid., p. 169.

Movement of "the human motor," as Anson Rabinbach aptly calls it, was captured by photographic framing. In Marey's work, the body was the focal point of the scientific dissolution of the space-time continuum. The body is also the focal point of a

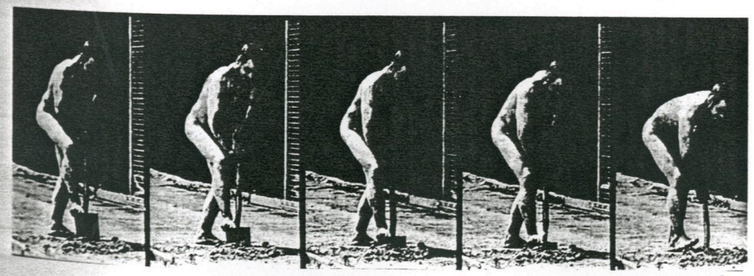

fig. 28

fig. 28. Eadweard Muybridge, *Digging With Spade*, 1901.

transformation of architecture through a slow but potent process of domestication of space, which Sigfried Giedion was among the first to acknowledge in *Mechanization Takes Command, A Contribution to Anonymous History* (1948). The body now tirelessly ascends and descends the staircase, from Duchamp's *Nude Descending a Staircase* (1912), to Bruno Taut's *New Habitation*,[88] to Frank and Lillian Gilbreth's chronocyclegraphs,[89] to Lazlo Moholy-Nagy's *Vision in Motion*,[90] to Le Corbusier and Ozenfant's ***objets-types***, objects typified as extensions of the human body: "BIOLOGY! The great new word in architecture and planning!"[91]

If we turn to the question of the "parergonality"[92] of modern architecture, we might ask ourselves: what has been framed? In Marey's "Geometric

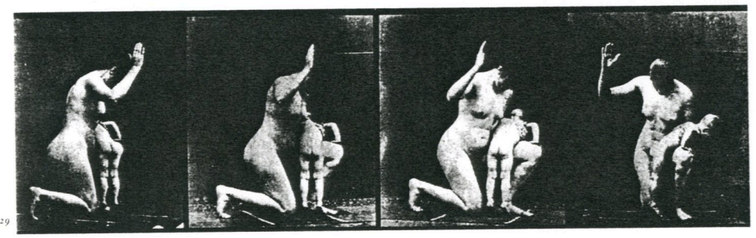

fig. 29

fig. 29. Eadweard Muybridge, *Spanking Child*, 1901.

Chronophotograph," the energy of the body, or perhaps more precisely, the metaphor of the pure energy of the body has been framed. It is probably not by chance that the framing and the squaring of the dynamic body, enacted by the models of Edweard Muybridge in *The Human Figure in Motion* (1887-1901), focuses mainly on domestic activities like, for men, "walking upstairs or downstairs," "lifting log," "digging with spade," "pushing lawn roller"; and, for women, "walking up incline carrying two buckets," "picking up towels or brooms," "pouring water from jug," "standing and ironing," "spanking children," or "falling onto mattress."[93] The body's labor power thus becomes a writing, a notational system that operates as a supplier of what was, what is lacking in the work of architecture. The "framing" diverts the energy of the ***ergon***, the free energy of pure productivity.

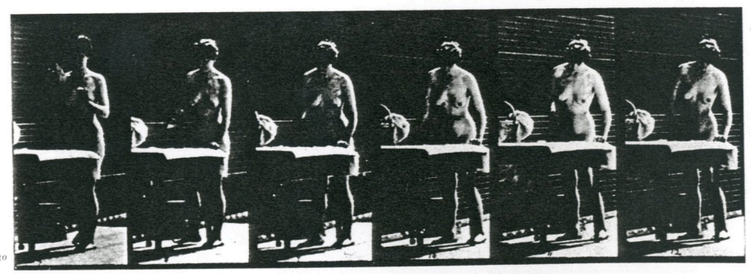

fig. 30

fig. 30. Eadweard Muybridge, *Standing and Ironing*, 1901.

88. Bruno Taut, *Die Neue Wohnung: Die Frau als Schöpferin* (*The New Habitation. The Woman as Creator*), Berlin, 1924.

89. Mike Mandel, *Making Good Time: Scientific Management. The Gilbreths' Photography in Motion Futurism* (Riverside, Calif.: California Museum of Photog. and University of California Press, 1989).

90. Lazlo Moholy-Nagy, *Vision in Motion* (Chicago: Paul Theobald, 1947). See also Nagy's *The New Vision* (New York: Wittenborn, Schultz, Inc., 1947 [1930]).

91. Le Corbusier, *My Work* (London: 1960), p. 155; quoted by Philip Steadman, *The Evolution of Designs: Biological Analogy in Architecture and the Applied Arts* (Cambridge and New York: Cambridge University Press, 1979).

92. Jacques Derrida, "Le Parergon," in *La vérité en peinture* (Paris: Aubier-Flammarion, 1978); English trans., "Parergon," in Jacques Derrida, *The Truth in Painting* (Chicago: University of Chicago Press, 1987).

93. Eadweard Muybridge, *The Human Figure in Motion* (New York: Dover Publications Inc., 1955 [1901]).

Modern/modernistic architecture suffered/suffers from an internal infirmity in its own thesis, which demanded/demands to be supplemented by prostheses.

During the twentieth century, paralleling the total "medicalization" of the human body, medical technology openly informs the arts, from painting to film and literature. In a 1924 letter to Jacques Doucet, written when he was preparing *Rotary Demisphere* (*Precision Optics*), Marcel Duchamp announced: "Today, I found a base at Ruppaley's–a medical electrical apparatus dealer."

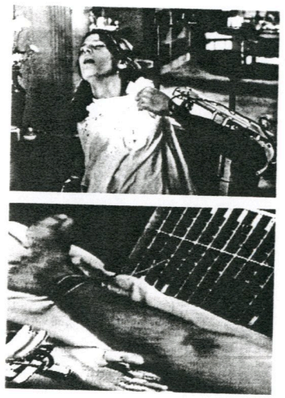

fig. 31

fig. 31. Donald Cammell, *Demon Seed*, 1977.

The prominence of medical devices in recent films confirms that directors are playing on a growing anxiety. The medicalization of life and death is frequently evoked by emergency room images. Often, a crisis situation opens with the installation of a make-shift hospital. Think of the operating room in *Demon Seed* (1977), directed by Donald Cammell, where Proteus IV, a computerized domestic robot, with a huge mainframe situated in the basement, takes over a suburban home and inseminates Julie Christie, the housewife, by force (a film produced with the collaboration of the University of Utah and Wang Laboratories)[94]; or the emergency rooms in *The Andromeda Strain* (1971) by Robert Wise, and *Starman* (1984) by John Carpenter; or even the conversion of an American suburban house into a small hospital in Steven Spielberg's *E. T. The Extra-terrestrial* (1982). As for so-called science-fiction literature, we cannot ignore J. G. Ballard's warning: "Science and technology are proliferating around us. They increasingly dictate the languages we speak and think. Either we use these languages, or we remain silent."[95] With Sci-Fi, a tradition of imaginative response to science and technology is transmitted in a direct line through H. G. Wells, Aldous Huxley, Ray Bradbury, Jorge Luis Borges, Adolfo Bioy Casares, the American Sci-Fi authors, and writers like J. G. Ballard and William Burroughs. After all, Huxley, author of *Brave New World* (1932), was the grandson of Thomas Henry Huxley, naturalist, friend of Darwin, and author of *Evidence as to Man's Place in Nature* (1864).

The bio-physico-anatomical sciences, reinforced by the theory of evolution, provided the basis for a true "biocracy," and have engendered a vision of the body which

94. Dennis L. Dollens, "The Storefront for Art and Architecture. 1987-1988," in *Sites* 21-22, pp. 50 - 51.

95. J. G. Ballard, quote from the introduction to the French translation of *Crash* (1974). See J. G. Ballard, "Motel Architecture" and "The Intensive Care Unit," in *Myths of the Near Future* (London: Grafton Books, 1984). On J. G. Ballard, see Colin Greenland *The Entropy Exhibition: Michael Moorcock and the British "New Wave" in Science Fiction* (Boston: Routledge, London: Kegan Paul, 1983). David Pringle, *J. G. Ballard: A Primary and Secondary Bibliography* (Boston: G. K. Hall, 1984). Peter Brigg, *J. G. Ballard* (Mercer Island, Wash:, Starmont House, 1985). See also Jonathan Crary "J. G. Ballard and the Promiscuity of Forms," *Zone*, 1/2 (New York: Urzone, 1986), pp. 158-165.

operates through the dissection of both organs and functions. Functionalism and then organicism in architecture were inspired by this development, not directly but through a process of osmosis of thought that Judith Schlanger identifies as ***analogon***[96] (a concept similar to Thomas Kuhn's "paradigm"): a type of the intelligible furnished by the dominant discipline, which can come to be considered for the whole of what is knowable, both as an ideal and a criteria. In fecund and innovative historical periods, at least one privileged analogon comes to the foreground. In the nineteenth century, it was chemistry and biology; today, it is computer science and micro-molecular biology–which have a tendency to conflate in any event.

In his *History of a House* (1873), Eugène Viollet-le-Duc developed the following organic theory: "We will make a building, however modest, in which every single detail will be the consequence either of a structural necessity or of the inhabitants' needs. It will cost us no more, and once finished, we will sleep soundly because there will be nothing hidden, nothing fictitious, nothing useless, and the ***building-individual*** we have built will always let us see its organs and how they function."[97] This passage, as well as Viollet-le-Duc's studies of Gothic architecture, were informed by Georges Cuvier's *Lessons of Comparative Anatomy*, from which he borrowed the idea of the correlation of parts.[98] In the 1920s, Le Corbusier, with Amédée Ozenfant, advanced the notion of ***objets-types***, imagined as extensions of the human body or substituted organs. For Le Corbusier, it was still a case of establishing possible equivalences between body organs and parts of a building. What happens to this organicism–this biological functionalism–today, when prostheses, organ transplants, etc., give birth to a hybrid being, coupling flesh with apparatus? Who, in this instance, is the parasite–the body or the apparatus?[99] D + S's projects and theorizing activity demonstrate that we are witnessing an erasure of what used to form the basis of architectural metaphors and representations from the early Middle Ages through modernism.

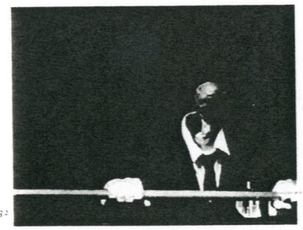

fig. 32

The realm of contemporary teratology (i.e., the study of animal or vegetable monstrosities) is being extended–at least in the imagination of the artist–to the analysis of mutations of the female reproductive apparatus (David Cronenberg's *Dead Ringers*, 1988), and

96. Judith E. Schlanger, *Les métaphores de l'organisme* (Paris: J. Vrin, 1971), p. 27.

97. Eugène-Emmanuel Viollet-le-Duc, *Histoire d'une maison* (Paris: Hetzel, 1873; reprint ed., Brussels: 1979), p. 117.

98. See Philip Steadman, *The Evolution of Designs: Biological Analogy in Architecture and the Applied Arts* (Cambridge and New York: Cambridge University Press, 1979).

99. Michel Guillou, "Le corps et l'appareil," p. 132.

fig. 32. David Lynch, *Eraser Head*, 1978.

to the appearance of deformed fetuses. All of this can lead to atrocious visions.[100] Pains of childbirth,[101] foreign organ transplants, and the "incarnation" of media are among the themes of Cronenberg's film *Videodrome* (1983), in which Max (played by James Wood) is reluctantly drawn into a secret organization, Video Arena (a so-called "Cathode-Ray Mission"), which "programs" him through a videotape implanted in his belly. His every subsequent action is guided by pre-recorded messages from the deceased Dr. Brian O'Blivion.

fig. 33

Is it true that for us, as participants in a computerized society with cybernetic potential, history and theory must begin again with "writing"? After all, Western architecture does begin with a text (Vitruvius). The question could be reformulated thusly: does history and theory (of architecture) have to be properly directed towards the formal and formalizable status of the world, introducing what could be called a post-structuralist "formalism"? Or, do they have to be directed towards the body that, by itself, speaks and writes? As suggested by Charles Levin, the "body" is tentatively introduced here as being irreducible to formalization. True, deconstruction of the sign engages us in a discourse of the body. However, isn't a body here considered as a signifier that must be punctuated by phallic inscriptions producing meaning (Lacan's mirror stage)? In this view, the body could be thought of as the place of writing–that is, thought again as a formalization, the blank page on which to write the linguistically structured concept of the symbolic.[102]

Doubtless also, it doesn't seem difficult to question "the plugs and ducts"–in Charles Levin's terms–of Deleuzian libidinal machinery. The im-mediated translation of all desiring-production into the socio-political field only leads to abstractions of other sorts: "the question itself is a process of abstraction."[103] Nevertheless, the question addressing the "desiring-machine" and the "body without organs" seems relevant, and remains to be answered, because of the close connections established in theory between architecture and body, either analogically or "really," from Vitruvianism to seventeenth-century mechanicism, to eighteenth-century sensualism, to nineteenth-century organicism, to twentieth-century "celibate machines" and "dwelling-machines."

100. The newborn has a nightmarish appearance in constant metamorphosis–or rather, reaching total metastasis–like the creature with a goose head in David Lynch's *Eraser Head* (1978); this evil being literally erases the head of its parents with its unbearable crying. The erase-head wipes out recorded sounds exactly like a tape-recorder's erase-head. The disincarnation of the little monster, covered with feathers and secreting a thousand unnameable things, finally provokes erasure of incorporated memory. Such fears are even more spectacularly dramatized in scenes where a monster erupts from the bleeding abdomen of an unwilling host-body, harboring the foreign parasite in spite of itself, as in Ridley Scott's *Alien* (1979).

101. "The patient in the next bed is an emaciated woman, a Filipina in the sixth month of pregnancy. There is a frost of ashes about her mouth. Each night she is swept clean by a fever that has burnt up every bit that is not essential–blood, saliva, tears, tissue. Only the mighty fetus, raving to be born, is not touched. Even as the child buds and splits and specializes, the woman grows daily less differentiated until she is something rudimentary, a finger of flesh, unfulfilled, unformed, that will surely die of its one achievement. She resembles a snake that has swallowed a rabbit and is exhausted by her digestion. Through the translucent, dark-veined belly, the legs of her meal, moving." Richard Selzer, *Letters to a Young Doctor*, (New York, 1972), a book to which D + S frequently refer.

fig. 33. David Cronenberg, *Videodrome*, 1983.

102. Charles Levin, "Carnal Knowledge of Aesthetic States," p. 108.

103. Deleuze and Guattari, *Anti-œdipus*, p. 8.

We are confronted by two hypothesis which are most likely mutually exclusive: on the one hand, a ***body without organs***–i.e., a notion of the body that does not hinge on the singularity of each organ; on the other hand, the organic organization of organs, called the ***Organism***. According to the latter, the organism would be conceived as a fixed hierarchy organized by an internal functional logic. These two approaches to the explanation of the corporeal are clearly opposed: the body-without-organs considers the body in its *exteriority*, in its relation to other bodies, perceived through relations, affects, desires; the other–that of the organism–conceives the body only in its *interiority*, as an autonomous entity belonging to a singular self.

As Deleuze and Guattari point out in *Anti-œdipus*, we must refer to Lacan for a theory of passive desire, which Charles Levin has defined as "denatured psychoanalysis."[104] "For Lacan, the body exists in biological fragments, it is a shattered *tabula rasa* to which one must 'guarantee an image'"–whence the well-known interpretation of the mirror-stage in the formation of the self. "On this body of absence, Lacan superimposes a quasi-linguistic model of the adapted personality. The body is a void (a desire) waiting to be filled, a body-without-organs awaiting the phallic punctuations of signification." This vacuity, as Levin points out, subtends the marking practices of power, and thus the desiring body offers itself, almost ecstatically, to the inscriptions of power. "This discursively positioned subject is the perfect material for a neodisciplinary extremist society." According to Levin, "It is precisely the 'volume in perpetual disintegration' which Foucault so gingerly describes, that 'inscribed surface of events…traced by language,' a docile receptacle to be 'totally imprinted by history.'"[105]

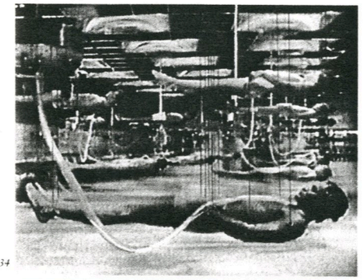

fig. 34

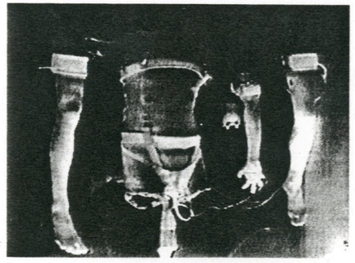

fig. 35

Foucauldians, on both sides of the Atlantic, accuse Lacan of conceiving a smooth body without organs, a tabula rasa composed of a patchwork of pieces, a kind of slate on which "Power" can write the text of the law. Now, the body-without-organs[106] is confronted by the disturbing prospect of an organ without a body–that is, transplants,

104. Charles Levin, "Carnal Knowledge of Aesthetic States," p. 100.

105. Ibid.

106. See bibliographical sources listed in note 109. Also of great interest is Patricia C. Phillips, "Hinged Victories," *Art Forum* (June 1988), pp. 106-108; and Robert McAnulty, "Diller + Scofidio," *Investigations* no. 23 (10 June 10-31 July, 1988), exhibition catalog, Institute of Contemporary Art, University of Pennsylvania.

fig. 34. Michael Crichton, *Coma*, 1978.

fig. 35. Eric Red, *Body Parts*, 1991.

preserved in "organ banks" (aptly named), hybrid, almost monstrous species born out of coupling flesh and apparatus, which are "free," in other words, available, on the market like any other commodity.[107] Transplant surgery introduces a caesura between organ and body. In a heart transplant, "the heart is no longer innervated, since the intervention irreversibly severs cardiac nerves linking the organ to subcortical cerebral centers; consequently, it suppresses reflex adaptation circuits."[108] The patient is deprived of any immediate physiological translation during emotional outbursts which may accompany feelings like joy or fear.

This "liberty" of the foreign organ can be illustrated paradoxically by the following quotation from *Anti-œdipus*: "everything functions at once, but in hiatuses and interruptions, breakdowns and failures, fits and starts and short-circuits, through distances and disaggregations–in a totality which never unites its parts in a whole. We live in the age of partial objects….We no longer believe in an original totality, nor in the totality of a final destination."[109] For Deleuze and Guattari, cuts are productive and are, themselves, joinings. *Anti-œdipus* is a celebration of divisions, splices, cuts, partial objects, conjunctions and disjunctions, connections and recordings[110]. Lacan's mirror no longer succeeds in reassembling the parts of the "body in pieces" through reflection, representation. The mirror can no longer piece together the fragmented phantasms of the pre-narcissistic body. Instead, the mirror stage becomes the repression of fragmentation, and all that remains is the fetishization of the lost object of desire.

What emerges then, is an outline of the two hypotheses on the fragmentation of the body. The first is defined by the formulation ***organ-without-body***. This organ can be inscribed by the multiple texts of the law, as well as "grafted on" to another body, another organism, be it living or not. Insofar as the term graft derives etymologically from ***graphein***–the Greek word for writing–every graft becomes a writing, and every writing, every graph, becomes a graft. The second hypothesis defines the ***body-without-organs***. The body becomes liberated, libidinal, desiring. It would be incessantly traversed by ephemeral inscriptions that give rise to artificially induced vital effects: flux, contacts, sensations, vibrations, momentary satisfaction, fleeting pleasures. After these digressions, we can, in the light of these redefinitions of the notion of the body, return to architecture and measure new relations established between the project and dis-incarnation. In short, the question is as follows: between the notion of ***graph*** and that of ***graft***, where are we to "place" the phenomenon of the disembodiment of the body in/of architecture?

107. Michel Guillou, "Le corps et l'appareil," p. 138.

108. Jocelyne Vaysse, "Coeur étranger en corps d'accueil," in Georges Vigarello, ed., *Le gouvernement du corps, Communications* 56 (Paris: Le Seuil, 1993), p. 176.

109. Deleuze and Guattari, *Capitalisme et Schizophrénie. L'anti-œdipe*, p. 51. See also Deleuze and Guattari, *Mille plateaux* (Paris: Minuit, 1980); English language ed. *A Thousand Plateaus. Capitalism and Schizophrenia*, Brian Massumi, trans. (Minneapolis: University of Minnesota Press, 1987), pp. 30-35, esp. p. 30: "A multiplicity of pores, or blackheads, or little scars or stitches. Breasts, babies, and rods. A multiplicity of wolves or jackals…first something plays the role of the full body–the body without organs…it is also the skin as envelope or ring, and the sock as reversible surface. It can be a house or part of a house, any number of things, anything….A body without organs is not an empty body stripped of organs, but a body upon which that which serves as organs…is distributed according to crowd phenomena, in Brownian motion, in the form of molecular multiplicities….Thus the body without organs is not a dead body but a living body all the more alive and teeming once it has blown apart the organism and its organization…the full body without organs is a body populated by multiplicities." On the BwO, see also pp. 149-166. See Alice A. Jardine, "Becoming a Body without Organs," *Gynesis: Configurations of Women and Modernity* (Ithaca: Cornell University Press, 1985), pp 208-223. For Jardine, the most radical promises offered by the BwO theory (i.e. the attempt to invent new kinds of subjectivities), "when enacted, when performed,…are promises to be kept only between bodies gendered male." (p. 223) The notion of the BwO as the unattainable, unreachable limit of the subject, becomes the conclusion of Scott Bukatman's book, *Terminal Identity*: "Deleuze and Guattari are cyberpunks too, constructing fictions of terminal identity in the nearly familiar language of techno-surrealism–note that the body is described biologically (an appendix) and mechanically (a spare part). The subject is always on the periphery: on the verge of the BwO, but always in a state of continual passage." pp. 326-328. See also Gilles Deleuze and Claire Parnet, *Dialogues* (Paris: Flammarion, 1977), pp. 107 and 127-131; English trans. Hugh Tomlinson and Barbara Habberjam, *Dialogues* (London: The Althone Press, 1987).

110. Guillou, "Le corps et l'appareil," p. 139.

Among the numerous literary sources cited by Deleuze and Guatarri in *Anti-œdipus* (Artaud, Proust, Joyce, Lawrence, Miller, Beckett, Michaux, etc.), the theoretical work of Maurice Blanchot must be singled out. In it, the problem of literary production by fragments is rigorously examined. According to Blanchot, the fragment should not simply evoke the fragmentation of a pre-existing reality. It is generally thought that knowledge can only be of the whole, just as a view is always an overview. According to this approach, when there is a fragment, there must be an understood designation of something whole, which was so previously or will be so subsequently. Blanchot conceives the production of the fragment without referring either to an imaginary totality–even to one that has been lost–or to a resulting totality–even to one which is yet to come. The fragment is neither privative nor positive; on the contrary, it identifies itself in pure multiplicity, in an affirmation which is irreducible to One, to unity.[111]

111. Maurice Blanchot, *L'entretien infini* (Paris: Gallimard, 1969), pp. 451-52.

A fragmentary work–like that of D + S, marking a predisposition for "detail," for the art of demontage and remontage–is not an incomplete work, but instead, leads to another operative mode. At once explosion and implosion, it leads to an experience of splitting up–i.e., of separation and discontinuity. This in turn leads to the definitive relinquishing of notions of "composition" and "type" in art and architecture. Such relinquishing is already foreshadowed in John Hejduk's architectural work. On the subject of D + S's *Plywood (Kinney) House*, Hejduk writes: "This house inquires into the way the very nature of 'window,' not as an opening to the outer world, but as an opening into our inner core. The house facade acts as a mask which hides a depth (a depth of eight inches, the depth from the surface of our eye-balls to the rear of our cerebellum)." Further on, he adds, "Our thoughts are the contained rehearsal for our impending implosion."[112] Since the classical age, "composition" imposed a heuristic of the project, a course starting from a vision of a whole leading to the parts, the "details" (distributive, constructive, ornamental). Now, (architectural) practice is heading towards an organizational mode which does not compose, but rather juxtaposes–it authorizes the terms of a relation to remain ***exterior*** with respect to one another. This exteriority, this distance, is respected as a principal of any signification.[113]

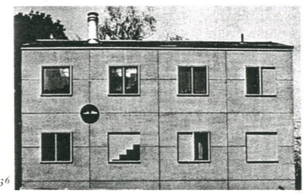

fig. 36

fig. 36. D + S, Plywood (Kinney) House, 1981.

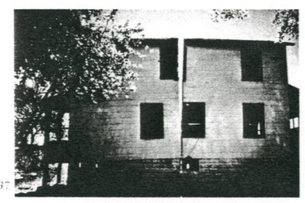

fig. 37

112. John Hejduk, "Kinney House," *Lotus International* 44 (1985/1986), pp. 58-63.

fig. 37. Gordon Matta-Clark, *Split House*, 1973.

113. Blanchot, *L'entretien infini*, pp. 451-452.

These exteriorizing tactics, operative in D + S's work, put into question the aesthetic conception of the human body as an archetypal figure. The Minimalism of Robert Smithson, Bruce Nauman, and Richard Serra has already questioned the traditional artistic mode, according to which the surface of the artwork is perceived and understood as the external reflection of an internal pre-existing framework, i.e., as the externalized reflection of a rigid internal "structure." Consequently, art and architecture no longer refer to underlying principles like harmony, balance, proportion (classicism), or cohesion, order, tension (modernism).

Art activity now addresses the pure exteriority of meaning.[114] Such exteriorizing tactics are at work in a whole series of experiments by artists such as Gordon Matta-Clark (*Split House*, 1973), Vito Acconci (*The Board Room*, also titled *Where We Are Now (Who Are We Anyway)*, 1976), Dan Graham (*Mirror Window Corner Piece*, 1974-76), Kate Ericson and Mel Ziegler (*Rock Extension*, Houston, Texas, 1980), David Ireland (his own house on Capp Street, San Francisco), and D + S (the *withDrawing Room*, 1988).

fig. 38

114. Rosalind E. Krauss, *Passages in Modern Sculpture* (Cambridge, Mass., MIT Press, 1985 [1977]), pp. 266-270.

fig. 38. Vito Acconci, *The Board Room*, 1976.

In this series of works, and especially in the *withDrawing Room*, there is a disjunction of metaphysical, traditional and fallacious oppositions such as interior/exterior, public/private, organ/function. The *withDrawing Room* culminates in a "project," a prediction, and also in a productive prefiguration: to render visible the shattering of conventional domestic space, through the dis-embodiment of place and the dis-placement of body. The situation of architecture–between ***graph*** and ***graft***[115]–tends toward a ***displacement*** of the idea of construction. This "displaced" situation leads to a displacement of the notion of place, with all that this term implies regarding norms that govern building: the idea of foundation, the juridical establishment of property, the community of bodies. Every place, every possibility of placement, is rethought in relation to the notion of replacement.[116] Conceiving the site or the place as a scene of ***replacement*** obliges one to think of architectural practice as an abyssal possibility of re-building, where the open quality of replaceability takes the "place" of original unity.

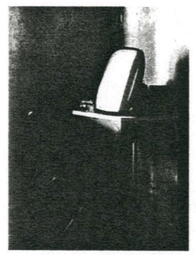

fig. 39

115. The notion of graft permeates Derrida's writings: see "Grafts, a Return to Overcasting" (1969), in Jacques Derrida, *Dissemination*, trans. Barbara Johnson (Chicago: The University of Chicago Press, 1981), pp. 355-358: "To write means to graft. It's the same word. The saying of the thing is restored to its being-grafted. The graft is not something that happens to the properness of the thing. There is no more any thing than there is any original text." (p. 355) Also "Signature Event Context" (1972); in his, *Margins of Philosophy*, trans. Alan Bass (Chicago: University of Chicago Press, 1982); now also in Jacques Derrida, *Limited, Inc.*, trans. Samuel Weber and Jeffrey Mehlman (Evanston, Ill.: Northwestern University Press, 1988), pp. 1-23: "One can perhaps come to recognize other possibilities in (a written syntagma) by inscribing it or grafting it onto other chains. No context can entirely enclose it. Nor any code, the code here being both the possibility of writing, of its essential iterability (repetition/alterity)." (p. 9)

fig. 39. David Ireland, *Private Home*, Capp Street, San Francisco, 1985-1994.

116. Jacques Derrida, "Faxitexture," in Cynthia Davidson, ed., *Anywhere* (New York: Rizzoli, 1992), p. 24.

translated by Jeanluc Svoboda