Surface Strategies and Constructive Line:
Preferential Planes, Contour, Phenomenal Body
in the Work of Bacon, Chalayan, Kawakubo

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The paper investigates Maurice Merleau-Ponty's discussion of body and space and Gilles Deleuze's reading of Francis Bacon's work, in order to derive a renegotiated interrelation between habitual body, phenomenal space, preferential plane and constructive line. The resulting system is applied as a filter to understand the sartorial fashion of Rei Kawakubo and Hussein Chalayan and their potential as a spatial prosthesis: the operative third skin. If the evolutionary nature of culture demands a constant change, how does the surface of a third skin, which embodies the generative of stable/ unstable, respond to changes of context?

The fleeting, shifting conditions of contemporary culture/ lifestyle rely upon, result in, and reflect one constant, change: change of working conditions, family structures, modes of inhabitation, relation networks, of user-profile and identity, of social and territorial boundaries. We occupy the shifting spatial parameters of a transitional supermodern environment.[1] Culture, as enacted or embodied through each of these fields, is regulated by a number of abstract and factual variables that interplay constantly: time, space, movement, surface, individual, and data.

Elizabeth Grosz argues that culture is an evolutionary effect: it re-

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generates itself in order to ensure the survival of the species.[2] Each "prosthetic" expression of culture – language, fashion, architecture, etc. – changes repeatedly. Here change is not an end in itself, but a means. And the most successful prosthesis may not be the one that is able to answer the largest number of challenges, but one which itself undergoes a process of learning, self-modification, and differentiation – in short, a process of evolution. Any prosthesis is by nature an extension of the body.[3] In the case of architecture and fashion the prosthesis addressing change is most often external to the body – a "cultural fur" or a surface phenomenon, that is, a highly profiled supplementary skin. As with all prostheses, their respective life-span depends on their ability to reflect a change in context and value systems. They are adapted or updated, if not, they vanish.

Any situation of change is processed as a differentiation between the actual and the virtual of a given context. Grosz identifies distinctions between the actual and virtual, the real and the possible: the possible is a preformed real that has not yet received its final materiality, and thus delineates a range of options of becoming. The real is the blueprint of the possible, negotiated by factual limitations, and it is conjoint with the actual through a process of differentiation and divergence. The virtual comprises alternate variations of the actual, it defines a realm of deviation from the blueprint. In order to be responsive to change, the balance between the actual and virtual thus must be rendered unstable: "The virtual requires the actual to diverge, to differentiate itself, to proceed by way of division and disruption, forging modes of actualisation that will transform this virtual into others unforeseen or uncontained within it."[4] The integration of the virtual allows a re-ordering of the blueprint, a return to the crossroad of possibilities, unlimiting and processing an alternative real, and establishing a state of continual change.

A repeated change – not as a choice between a number of options but as a gradual process – marks the moment of evolution, and requires a dynamic system. Such a dynamic can be rendered as an adaptable, flexible, modular, mobile, or morphing system of change. The key lies with the fluency and ability of adaptation for the proposed differentiation between actual and virtual – thus it is an elastic change that is required. The nature of this elasticity is encoded in a repeated repositioning of the variables: a constant fine-tuning of a maximum number of parameters that engineer, alter and define the blueprint.

When looking for a dynamic system that incorporates a transformation of (sartorial/ architectural) skin or space, we are in search of dynamics through an operative surface, controlled by means of the constructive line. Both operative surface and constructive line are generative methods for the

formation and form finding of the second and third skin of sartorial fashion and architecture respectively, as they both produce inhabitable or wearable envelopes with a specific responsiveness. Both professions share communication, coding and signage, form information programs, pattern charts, volume outlines, texture fields, surface operations, and implement electronic or digital extensions. In both, the constructive line shapes the surface twice: before production and in operation. The surface demarcates space, spatial envelope, enclosing garment, field of action. In which way can an operative system of the surface with stable/ unstable conditioning generate a phenomenological or evolutionary change in the reconstruction of body and context? How do time, space, movement, surface, individual and data interact in this framework? What is the impact of surface strategies and constructive line on that system?

Preferential Plane/ Perceptual Body Surface

Space is body-dependent. Though it has been described as a container for/ of the objects of experience, as a medium or as a representation, the phenomenon of space is more complex. Maurice Merleau-Ponty names properties of space that can be interpreted as prosthetic: “Space is not the setting (real or logical) in which things are arranged, but the means by which the position of things becomes possible.”[5] Furthermore, space is described as neither provided by the act of using one’s senses (subjective), nor is it an intellectual construct (objective), but its main origin derives from the body. The pre-personal body, the body devoid of any subjective motif, defines spatiality between form, movement and content, in correspondence to its environment.

An absolute perpetual ground within a field of relativity receives the body impact through which the body anchors itself on the world, as “[o]ur perceptual experience discloses that to be is to be situated.”[6] The perceived body is an assumption in reference to a specific plane (the operative surface), which is isolated from a general context (perpetual ground) and establishes a first situationing (as placement) of the body. The trajectory of movement is the construction of the body within a relational field on the reference plane. It is the immaterial but registered pattern chart of space. Usually the positioning occurs unregarded, the habitual body does not consciously register a body movement previously recognized. Presumed body and context space fade into the background, rendered invisible to leave room for information to be processed as priority. When the estimated preferential plane is disturbed, the former generalized, pre-reflective self is abandoned in favour of an experience. A re-balancing of the variables oc-

curs, which is consciously perceived. This is a striation that isolates the infinite field of action to a specific frame, and at this moment the body and its reference plane become one organisational complex.[7] Merleau-Ponty describes the act of rebalancing as the main cause for phenomenal space, in the articulation of spatiality, depth, distance and temporality.[8] We sense, constantly processing stimuli through the cognitive systems that connect us with the world, estimating and confirming information, cross-referencing between the possible and the real, and reacting upon the data given. We make sense.

Merleau-Ponty further argues that it is not our actual, own physical body, which is sensed, but the body as sufficient for inhabiting the preferential plane.[9] The combination of sense and sensing therefore frames an extension of the phenomenal body as a spatial or surface extension. In this, the fine line between the actual and the virtual becomes congruent. A surface as prosthesis, attached to the body, becomes part of the body, evidences this congruence and operates according to principles of body technology: restoring, normalizing, reconfiguring and enhancing it.[10] The prosthesis or addition amplifies the set of variables with each new property it introduces, un-limiting the potentialities of body, space and context.

Preferential plane and surface volume are prosthetic devices, operative elements of a spatial context. What becomes then of a re-direction and re-coding of phenomenal space or habitual body when a reset through addition or alteration through a surface prosthesis occurs? Does such an action not evoke an unprecedented motility of the body, an unexpected space, and a new sensation?

Logic of Sensation/ (De)Constructive Lines

Merleau-Ponty's definition of the respective roles of the preferential plane, habitual body and surrounding space are cross-referenced and extended with Gilles Deleuze's reading of Francis Bacon's work. The intersection between Merleau-Ponty and Deleuze reveals so far 'hidden' parameters in a dynamic system network: Deleuze identifies three shared elements of the system, as referenced in the paintings: 1. the large (operative) field of a material structure; 2. the figure or figures and their fact; and, 3. the additional element of the contour, which is the common limit of the figure and the field.[11] (Fig. 1)

Again, the defined zone of the material structure isolates a field within the infinite, as a first preferential plane. At the same time, it delimits the area of attention: the field resembles an arena, circus, stage, though no show is ever on. On the contrary, the sole reason all three major elements

are established is to eliminate spectacle and spectator. The material structure is no background story, it does not provide the representation of a fact: any narrative is disposed in favour of a genuine experience, the sensation. The preferential plane works similar to the Duchampian programme surface – a non-descriptive surface that carries a content, which can only be understood in the process of unfolding and is incorporated in the act. The observer witnesses a spectacle of effort, the figure in waiting position, or the spasm of dissolution in the sensation.[12] Effect and affect are set into motion in the observer's perception/ imagination while entering the programme surface. The referential plane becomes an operative field.

Fig. 1. Francis Bacon, "Study for a Bullfight No 1" (1969). Source Deleuze, Francis Bacon, n.p.

The contour acts as a mediator between the material structure and the figure. It is a method of confinement as it delineates the range of the figures, it holds them in place, and gives them their corporeal and spatial sense. Within the specialisation of the referential plane, it is a functional

sub-group, active as a separation, but not yet material. The contour is also the main agent in a process of transformation. Deleuze variously defines it as an isolator, a de-populator, a de-territorializer, a deformer, a trapeze apparatus. On another level, the contour is the limiting line of an experimental setup, introducing a duration, climatic, numerical, growth zoning. At the climax of metamorphosis, it becomes a spatio-temporal prosthesis, when the figure passes through a hole or a vanishing point.[13] The contour is the constructive line of the operative surface.

The figure finally is the non-subjective image of a body that no longer represents a story, but demonstrates a process. The consigned figure is not immobile, but rendered twice in progression. First, when an energetic flow moves from material structure, the field, onto the body, and secondly, when a tension develops and culminates from within the cerebral plexus.[14] The movement engenders a deformation that constitutes the sensation: the "[f]igure is no longer simply isolated but deformed…What makes the deformation a destiny is that the body has a necessary relationship with the material structure: not only does the material structure curl around it, but the body must return to the material structure and dissipate into it, thereby passing through or into these prosthesis-instruments which constitute passages and states that are real, physical and effective, and which are sensations and not imaginings."[15] The sensation is the moment of dissolution of the body in the trajectory of motion, or of becoming. The defining line of the contour establishes a framework that assists both figure and preferential plane, in fact generates their realities. At the origins of sensation stands a message or information that passed through various media in a transformation of coding and communication, and is affected by the way it is processed. It receives its materiality and phenomenal properties by the way it is constructed. This is the hidden power of the constructive contour line, which interpolates between movement, figure and field, and shapes the Deleuzian sensation.

Preferential plane and constructive line constitute a departure point from the limitations of spatial and corporeal perception. Applied to the prosthetic device of a second or third skin, they can initiate a transgression that neutralises a presumed context. As control mechanisms, they re-balance a differentiation of virtual and real and delineate a reconstruction of both body and space, in a physical and phenomenological manner.[16]

Reference Plane, Preferential Plane, Operative Field

It is important to note here that there is a basic distinction in intentionality between Merleau-Ponty and Deleuze, in terms of the framework intro-

duced by the preferential plane versus the operative surface: Merleau-Ponty denominates the "preferential plane"[17] as an already specified area within an infinite field, a preferred or recognized selection that is already programmed through preference. This consequently diminishes the potential of the virtual of this plane, it becomes a preformed real. Through the preference, the blueprint is already defined, and so any change is determined, therefore loosing its elastic capacity. Deleuze on the contrary negotiates the differentiation between the virtual and the actual from the other end of the range as the dissolution of facts, as a becoming. Deleuze's "operative field"[18] is closer to a (neutral) reference plane without intention or applied/ processed information. It inherits a status of re-enacted coding, it is ambiguous in intention, open for an alternate real. Merleau-Ponty uses the preferential plane as an element of control to inherit the world, to factualize the possible. Deleuze establishes a process of becoming that renegotiates differentiation and divergence in order to integrate genuine experience, sensation, and the unforeseen. The main correlation of figure, contour and operative field is to be utilized, to be suggestive, and process-oriented.[19] This distinction between preference plane and operative field reveals a direction for a dynamic system that can incorporate a constant change as negotiation between actual and virtual.

Given this distinction: when the operative field is understood as surface prosthesis, what coding is processed and in which way is a communication between body and space engendered?

Cultural Fur/ The Re-Programmed Body

When clothing is understood as a mediator between the body and its environment, it supplies the extension of an operative surface, thus reconstructing the body according to context. Clothing is a second skin, a cultural fur, it is an operative surface that is generated by and consequently signals information. When the extended skin is translated on various levels, what are its references to inherent codes and affects? And furthermore, does this skin engineer spatial implications?

On an indicative and representative level, the second skin of contemporary clothing is not predominantly a means of protection but an instrument of communication. Mary Shaw Ryan identifies a series of inscribed codes, which determine factual or suggestive information.[20] Clothes worn give data on the user's respective gender and age; specific cuts like uniforms or work-wear communicate terms of occupation. Clothes translate as socioeconomic status, they outline the user's marital status or preference of sexual orientation, or inform the environment of a membership in special

groups or organizations. Ephemeral data such as lifestyle attitudes, personal interests and values, or temporal moods find their material expression in clothes. An image of personality or the quotation of a stereotype are yet another aspect for communication in the textile coding of a garment. Clothing is already a spatial prosthesis as the codes enable access to selective preferential planes.

Apart from sole representative aspects on an impulse level, a garment might become essential to focus on the way the code is initiated/ enacted, and indicate how the medium generates the message. Medium, message, and massage are one and the same.[21] The content of a code or information, its message, is dependent, related, it is in fact the physical matter or effect. And the medium through which the code is demonstrated both contains and generates the manner it uses to express itself. Beyond a resulting effect, an affect is addressed. Malcolm Barnard suggests a second layering of clothing, in which aspects of camouflage, distraction of attention or disguise initiate and re-direct an interaction with the context. [22]

Yet apart from coding or affect, clothing/ fashion/ garment offer a literal exploration of interrelations between body figure, phenomenal space, preferential plane and constructive line. The dimensions of clothing, like the dimensions of space, define the perceived body.[23] Enhanced body, clothes and space are participants in a reciprocal relation network through which information is constantly signalled, processed, evaluated, reacted upon. In turn, each medium is adapted and re-enters the information cycle. In fashion and architecture, the clothes and the surrounding wall of a habitation, the distance between texture and body defines the interstitial, predetermines the functional character and makes sense of matter. Generated by the constructive line of the pattern chart, the interstitial space interpolates the distance between the user's body and the enclosing operative surface. Neutral, restrictive or supportive in character, the limits of movement range and therefore spatial exertions are further dependent on material properties and form design, texture, elasticity, generosity of cut, or overabundance of material of that surface.

The latest reconstructions of the technologized body use clothes as a prosthesis, as an engineered and informed surface that becomes a performative device, or a pleasure instrument. In the transitional environments the urban nomad inhabits, a garment's equipped surface connects to information interfaces, enabling a constant adaptation to the changing contemporary environments and thus delineating a psychological form of armour.[24]

As the various levels come into play, the body is re-contextualised, enhanced or restricted, and thus space is consecutively reassigned with

fashion prosthetics.[25] Following the parameters of preferential plane, operative surface, constructive line, habitual body, phenomenal space and process of differentiation as discussed in relation to Merleau-Ponty and Deleuze, a direct impact on spatial conditions can be identified, as explored in the experimental array of sartorial fashion couture, especially in the work of Rei Kawakubo and Hussein Chalayan. Clothing becomes a site for manipulating the sens(e)ation of space. Comme des Garcons/ Kawakubo demonstrate a hybrid between figure and dress, when the body reads as part of the spatial framework it inhabits. Chalayan negotiates the invisible boundaries of space and fashion surface. These explorations use explicit forms, structural textiles such as elastics/ polymer, or performance applications with the insertions of technological gadgets and electronic devices in combination with delicate fashion garments to communicate actively between environment and human figure.

The reciprocal system between body, form, constructive line, operative surface and phenomenal space will be evidenced in examples taken from Tatsuo Ebina's work and Francis Bacon's paintings, and from fashion designs by Rei Kawakubo and Hussein Chalayan. These examples show different stages of negotiation between the actual and the virtual, and the processing through a dynamic system.

The first set of images (figures 2-4: Tatsuo Ebina, [no title] and Francis Bacon, "Two Studies of George Dyer with a Dog" and "Study For A Portrait") illustrates the abstract setup of the dynamic system: optional strategies of formulation and form-finding/ -programming, the blueprint of the operative surface and line construction, and the Deleuzian process as instruction manual. These systems negotiate an unlimited number of options as superimposition, and differentiate between virtual and actual through a shift between parameter characteristics and their relationships in a network. Both explain a conceptual change, an imagined processing as they are confined within the two-dimensional framework of the medium they operate with/-in the two-dimensional surface of the image.

The second set (figures 5-8: Rei Kawakubo, "Dress Becomes Body Becomes Dress" and Hussein Chalayan, "Aeroplane Dress" and "Remote Control Dress") explains a dynamic system in operation: the application of surface and line, after construction in use, and their spatial/ corporeal results. These dilated operative systems process a modification in the three-dimensional, material and spatial domain of the real, engineered through both a shift between the parameters, and a character change of the parameters themselves. The change is conducted and embodied by both user and spectator.

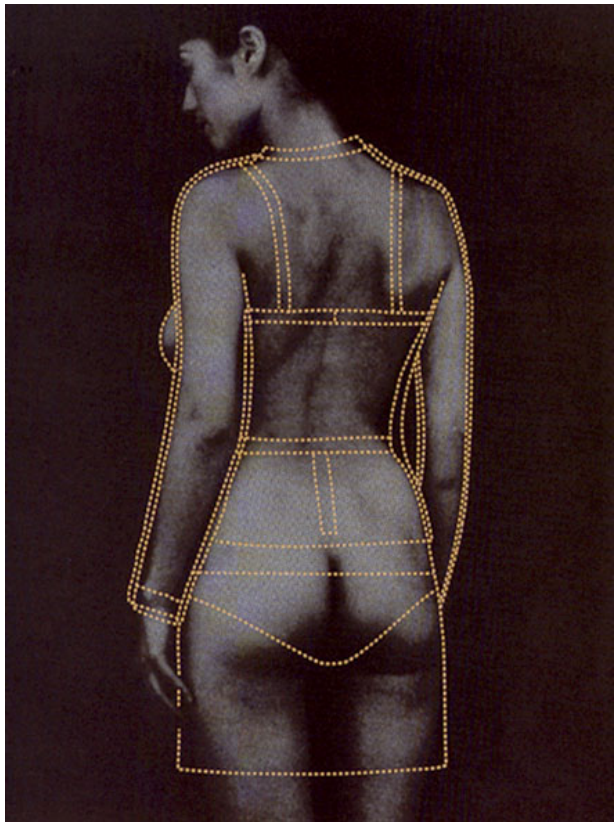

Fig. 2. *Tatsuo Ebina/ GGG, no title, Ginza Graphic Gallery (1998). Source Alexander Gelman,* Substraction.

Line

Tatsuo Ebina flaunts the image of an Eurasian woman (Fig. 2), displaying her back, the head turned sideways in profile. Superimposed on the naked body are the contour lines of her clothes, indicated as dashes: the underwear of shirt and pants, and the dress. Eliminating the physicality of the cloth, and representing the garment as a potential, Ebina "amplifies their subservient existence."[26] But rather than being of service, the lines indicate the sum of all seams, blurring the strata of textile and layers between, to form up the blueprint of dress and body. A building plan where the constructive line inherits all potential of material and behaviour. The line still requires to be determined, to find a programmatic precision between cut, construction and operation. The interstitial space between skin and superimposed line is inactive. The absence of a physical surface materiality focuses the attention on and codes the body zones. The constructive dashed line is a potential, still virtual as it does not refer to a distinct preferential plane, and suggestive as it frames future operative surface and pro-

gramme.

Fig. 3 *Francis Bacon, "Two Studies of George Dyer with a Dog" (1968). Source Deleuze,* Francis Bacon*, n.p.*

Contour Line, Preferential Plane

In comparison, Francis Bacon's "Study for a Portrait" and "Two Studies of George Dyer with Dog" demonstrate the Deleuzian process of differentiation between actual and virtual. Both show the image of seated figures, positioned on the operative surface of the preferential plane, simulating a zone of action and sensation. Both confine the figure in the abstract quote of a spatial enclosure, a quadrangle defined by the constructive line of the contour, which is a mere suggestion of a space, not its represented materiality. "Dyer with Dog" (Fig. 3) stresses the presence of the preferential plane as an area of attention; here it has a strong texture and a boundary. The field retraces its sensational origins to the bullfight, to the conjunction of man and animal, unified in the central, waiting figure. Programme and geometry of the preferential plane are undermined by the contour line: the

circular open stage of the arena is converted into an ordinary cubicle of domestic space, privatising the former public sphere. Again, the contour line does not so much delineate a contour as it rather sets a process into motion, frames a field, and is thus constructive.

Fig. 4. *Bacon, "Study For A Portrait" (1971). Source Trucchi, Francis Bacon (London: Thames and Hudson, 1976), n.p.*

In "Study for a Portrait" (Fig. 4), the preferential plane is also part of the constructive line framework. Figure and chair are held within a spatial frame, which might define a physical boundary, or an organisational field. A second, slightly shifted enclosure contains the head and shoulders as an inscribed window. Again, the constructive line is not determined by materiality, but by its effect on programme and function. The interstitial space is the potential of the figure, and the potential of a spatial separation. It is outlined as an ambiguous entity, a hybrid between the second and third skin, being both part of the body surface, garment and architecture. It is an instruction manual on the use of space. This blur defines the virtual, potential

differentiation in the infinite field as the constructive line reaches beyond the restrictions of a factual spatial and sartorial division. Again, the interstitial space between the figure outline and this framework becomes a zone of ownership within transitional environments, or a reversion of the infinite undefined to a functional individualization.[27]

Fig. 5. *Rei Kawakubo, "Dress Becomes Body Becomes Dress" (Spring-Summer 1997). Source France Grand,* Comme De Garcons *(London: Thames & Hudson, 1998), n.p.*

Excess Material, Interstitial Space

Rei Kawakubo extends the parameters of the body in "Dress Becomes Body Becomes Dress" (Fig. 5), Spring-Summer 1997. The body here becomes a site of interaction between its envelope and the surrounding space. One version distorts the body margins with padded packages inserted in stretch fabrics, placing "lumps" in unexpected locations, in an asymmetrical and body contradicting manner as these lumps diagonally

cover the shoulders, extend on the back or coil around the torso. The lumps affect the presumed habitual body and the reference plane as they renegotiate formerly recognized relations between body and surface in the moment of a non-deliberate touch. So the protruding surfaces introduce a phenomenal space, they effectively become sensors of space. Kawakubo's sartorial explorations reconstruct the dress as spatial prosthesis, an extension for the body that mediates the environment.[28] Depending on the nature of the environment, the operative surface could be translated as a damage prevention buffer. When the overabundance of material is producing an interstitial zone between body and space, a programming of the deformation might be read as secret insertion, or as a temporal zone of private property.

Fig. 6. *Rei Kawakubo, "Dress Becomes Body Becomes Dress" (Spring-Summer 1997). Source Grand,* Comme De Garcons*, n.p.*

In this version of “Dress Becomes Body Becomes Dress”, the elastic nature of the surface texture is crucial, as the insertion of a former alien volume – a pad – is temporary and can be undone. The lump-prosthesis is a dependent addition, submissive in hierarchy. The constructive line is determined by the body margins and not affected by the insertion. The change of body outline is predominantly engineered by the surface properties.

In a second version (Fig. 6), not the material properties but the constructive line itself provides alterations of the envelope and thus the habitual body. The proposal reconfigures the body with a similar extension by lumps, but the checkerboard pattern reveals the homogenous interplay of operative surface, line and insertion. In contrast to the previous dress that operates with a stretched surface material, no distortion of the pattern is apparent. The change of elastic to a comparatively stable material alters the nature of the constructive line; it becomes an interface between insertion, surface, body and environment. The operative surface contains depth; it includes specific programmatic fields. This version addresses permanence of structure, fields of varying properties and dominance of form definition.

In both cases, the lumps are part of the support, but also render the overall system as independent. Effectively, body becomes dress becomes space becomes body. The overabundance of simulated skin acts as a spatial connection, rendered not as representation but as actual explorative capacity of a phenomenological space. Caroline Evans suggests these surfaces identify a new subjecthood as they register “an early foray into space, or a probe.”[29] The new organisational surface may reveal an independent programme application; it may even have distinguished functional zones within, a specification such as a sub-system of elastic areas. Independent yet responsive, it is a hybrid between second and third skin and can variably connect to preferential plane or body, and it is already a relative of architectural space. This is one direction for a context responsive system that introduces a continuous differentiation of actual and virtual, enabling potential alternatives.

Modular Formation Control

According to Bradley Quinn, Hussein Chalayan considers fashion, architecture and urbanism as part of one modular system, varying only in scale and proportion.[30] In Echoform, Autumn-Winter 1999-2000,[31] Chalayan instrumentalizes technology to generate an operative surface as a connective part of the cultural context. The “Aeroplane Dress” (Fig. 7) is

machining the body, using as a constructive line not the body margins but invisible forces, in a superimposition of alternative data. The dress resembles naval, aeroplane or automobile design that in a reversed process has become a second skin. Its streamline form is created from composite materials of glass fibre and resin and abstracts the figure. But the constructive line can also be manipulated, it becomes operative by an internal switch. The concealed battery, gears and wheels shift fragments of the formation – flaps move, sections slide to dissemble the body and expose various parts. Activated through the line, the surface is both independent in form and responsive in behaviour to its environment. In fact, here the line is in correspondence with its preferential plane, translating information directly onto the body, reconstructing the surface in a presumed number of options and modes of alteration.

Fig.7. *Hussein Chalayan, "Aeroplane Dress", Echoform (Autumn-Winter 1999-2000). Source Evans,* Fashion at the Edge*, p.271.*

The "Aeroplane Dress" is part of the modernist ideal of progress

through travel, technology and aerodynamics; it is part of a context of prefabrication, standardisation, modularisation and such; it shares the culture of industrialisation.[32] This exploration is a non-subjective, functionally oriented proposal that produces a fragmented body inside a Cartesian machine. The control over this technologized, performative body lies with the wearer who links with the context, through the dress as one module.

Parametric Surface

In a later version, Chalayan sharpens the transgression of body/ machine boundary. Where the ”Aeroplane Dress” is a simulation of industriali-

Fig. 8. *Hussein Chalayan, “Remote Control Dress”, Before Minus Now (Spring-Summer 2000). Source Colin McDowell,*

Fashion Today *(London: Phaidon, 2000), p.386.*

sation, the "Remote Control Dress"/ Before Minus Now, Spring-Summer 2000, has already entered the twenty-first century environment of artificial intelligence. This dress uses intangible forces such as gravity, radio waves,weather forces etc., to create the form.[33] It expresses the relationship of these forces to the body.[34] And its enclosing surface enables the body to survive in transition precisely through a spatial awareness with forms that incorporate speed, contradiction of the body, or revelation of positive/ negative space.[35] The dynamic change system incorporates parameters such as data processing of temperature, speed and duration, which are immaterial in themselves and thus by nature already within the realm of the virtual. So this operative surface is more than a spatial device; it can be understood as an intelligent artificial skin that incorporates network connections – a surface that becomes an interface.[36]

The "Remote Control Dress" (Fig. 8) both constitutes and operates an independent and responsive form, and here an external directive of remote control operates the subjected self. The constructive line of form is also an operating line, it opens up to reveal the underlying surfaces: a striation into different materials, which are a part of the same enclosure, but have different properties and programme. The hard shell of the composite material that defines the external form is bifurcating to extricate the soft, skin-responsive interior covering of pink tulle. The body surface as suggested is part of the same operative system as the preferential plane, drawing information and deducing behaviour from its context, transferring it on the operative line and thus delineating a trajectory of spatial inhabitation. And since the line is not self-controlled, the implications cannot be foreseen, so any operation becomes a sensation. This is a second direction for a dilated context responsive system that processes a modification of virtual and actual through both a parameter shift and character change of the parameters themselves.

Tiziana Terranova terms this reconstructed body as one "thoroughly invaded and colonized by invisible technologies.''[37] But the "Remote Control Dress" opens a discussion of context: the operative surface might not enable/ adapt to a limited number of presupposed situations, but reflect a biomorphic behaviour precisely because it can adjust to singular parameters, not complete sets of conditions. Along this line, the prosthetic body as constructed by intimate electronics senses, communicates, and transmits information.[38] Then, the operative surface and constructive line redirect adaptation or camouflage, deliver biofeedback, render memory, or display moods; connecting to an artificial natural environment. In fact, the "Remote Control Dress" already reveals an uncanny equivalence between human

and animal, nature, technology and alienation. It identifies them all as belonging to the same cultural context, answering to one underlying set of rules. In this line, the proposed system diminishes the traditional dichotomy or polarisation between nature and technology as it produces a commutation between them.

Context Responsive/ Dynamic Systems

Body figure, constructive line, operative surface and phenomenal space are redefining each other constantly. Negotiated space results from the habitual body results from the experienced space. Body and space can be reconstructed through the sartorial and spatial surface prostheses of second and third skin. As the cultural context repeatedly changes, both skins are required to negotiate between alternate versions of the real – a constant shift in the parameters of time, space, movement, surface, individual and data. The method by which the dynamics of such a change might be addressed becomes the key question. A dynamic system incorporates changes reflected in construction and operation successively in an unlimited number and mode of alteration.

As a method of control, operative surface and constructive line have been introduced for the formation of second and third skin. The setup/ construction of the system, strategies of formulation for constructive line and programme on referential plane, referenced blueprint, interstitial capacities and instruction manual have been reflected to give a potential. In summary, the system has been described in operation as the application of both constructed and operative surface and line, and with the resulting spatial/ sartorial/ corporeal phenomena.

Within the application in sartorial fashion, a line of descent is deduced for the operative systems that demonstrates how an evolution of the third skin is derived: firstly as an evolution of surface texture and structural properties (as in the “Dress becomes Body becomes Dress” by Kawakubo), and secondly as an evolution from modularisation or industrialisation to an parameter responsive surface, resulting in an interface (as featured in “Aeroplane Dress” and “Remote Control Dress” of Chalayan). Both approaches reveal distinct concepts for a development of the third skin: as a homogenous system with active fields or neutral zones operated from within, or as the behavioural interface of a fully defined and equipped surface. Both suggest context responsive systems that establish the elastic change between actual and virtual as a character change of and shift between parameters.

The phenomenological dress and space are not solely dependent on

the form creation as generated by a grid or cutting pattern, but rather understand the form and operative surface as articulated through a programme insertion. The solutions negotiate form not as shape but active matter, when materials interact, consolidate, become form, and change in the process.[39] This approach of parameter conditioning for constructive line and operative surface then could result in elastic structural properties, or enable network connections to computational, digital, information sources, which thus regulate and engender contextual adaptations.

In an extended architectural application, we might therefore be able to condition, construct and finally inhabit a third skin that negotiates a repeatedly phenomenal space, a spatial enclosure that no longer represents a specific cultural condition but initiates dynamics of change.

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NOTES

[1] Marc Auge, *Non-Places: Introduction to an Anthropology of Supermodernity* (London: Verso, 1997), p. 35.

[2] Elizabeth Grosz, *The Nick of Time* (Lecture at University of Sydney, 24 November 2004, unpublished).

[3] "Prosthesis: 1a .an artificial part supplied to remedy a deficiency, e.g. a false breast, leg, tooth etc." Australian Concise Oxford Dictionary, Fourth Edition (Melbourne: Oxford University Press, 2004).

[4] Elizabeth Grosz, *Architecture from the Outside* (Cambridge, Mass.: MIT, 2001), p. 129-130.

[5] Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London: Routlege & Kegan, 1962), p. 284.

[6] Monika M. Langer, *Merleau-Ponty's Phenomenology of Perception: A Guide and Commentary* (London: Macmillan Press, 1989), p. 83.

[7] "Instead of a mechanistic deterministic relationship of causality, we have an organic relation of motivation between subject and world, such that the body possesses the world in a certain way while gearing itself to that world. [When that relationship is unbalanced, it is] revealing simultaneously that direct power which the world holds over our body and the reciprocal power which the body has in anchoring itself in a world, in demanding 'certain preferential planes'." Langer, *Merleau-Ponty's Phenomenology of Perception*, pp. 82-3.

[8] "The birth of movement for us is part of the genesis of the phenomenal world." Langer, *Merleau-Ponty's Phenomenology of Perception*, pp. 86-7.

[9] Langer, *Merleau-Ponty's Phenomenology of Perception*, p. 82.

[10] "Technologies of the body can enhance it in four categories: 1 restorative = replacing lost functions, 2 normalizing = imposing technologized bodies as new social/aesthetic norms, 3 reconfiguring = changing the contextual relations, 4 enhancing = increasing body functions/properties." Bradley Quinn, *Techno Fashion* (Oxford/New York: Berg, 2002), p. 52.

[11] Gilles Deleuze, *Francis Bacon: The Logic of Sensation* [1981] (London: Continuum, 2003), p. 12.

[12] Duchamp's use of a two-dimensional surface as four-dimensional prosthesis (initiated and witnessed by the spectator) has been discussed in my previous paper: Reinhardt, "(Un)Limited Privacy – (Un)Limited Identity/ The Individual on the Border of 4-dimensional Space: Between Domesticity, Information Screens, Digital Work Surfaces and Representation", in ed. Helene Frichot, *LIMITS* (Melbourne: SAHANZ XXI, 2004). For a description of these processes and their temporal aspects, see Calvin Tomkins, *Duchamp: A Biography* (New York: Holdt and Company, 1998); and Jerrold Seigel, *The Private World Of Marcel Duchamp: Desire, Liberation, and the Self in Modern Culture* (Berkeley and Los Angeles: University of California Press, 1995).

[13] Deleuze, *Francis Bacon*, pp. 32-3.

[14] "The source of the movement is not in itself. Instead, the movement goes from the material structure, from the field, to the figure…Now it is inside the body that something is happening, the body is the source of movement … It is the body that attempts to escape by means of a spasm. The body as plexus and its effort or waiting for a spasm." Gilles Deleuze, *Francis Bacon*, pp. 14-5.

[15] Deleuze, *Francis Bacon*, pp. 18-9.

[16] The contour or constructive line becomes at this point the spline description of space. It has magnetic handles with which the geometry can be controlled and is in itself a denominator.

[17] Quoted in Langer, *Merleau-Ponty's Phenomenology of Perception*, p. 83.

[18] Deleuze, *The Logic of Sensation*, p. 2.

[19] An indication of this different status of the plane might be found when Deleuze links Bacon's painting to the diagram. "The diagram is thus the operative set of assignifying and non-representative lines and zones … The operation of the diagram, its function, says Bacon, is to be suggestive." Deleuze, *Francis Bacon*, p. 101.

[20] Mary Shaw Ryan, "First Impressions/ What Do Clothes Communicate to the Observer about the Wearer?", in *Clothing: A Study In Human Behaviour* (New York: Holt, Rhinehart and Winston Inc.: 1966), pp. 14-23.

[21] "Medium = Message = Massage" is an equation I have extracted from different quotations in various publications of the terms and cross-combined (such as "the medium is the message," or "the medium is the massage"). For original sources, see Marshall McLuhan, *The Medium is the Massage* (London: Penguin, 1967) and Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw Hill, 1964).

[22] Malcolm Barnard, "The Functions of Fashion and Clothing", in *Fashion as Com-*

munication (London/ New York: Routledge, 1996/2002), pp. 49-70.

[23] Ryan discusses the somatic self as "[t]he self as a body or the physical characteristics which are perceived … the limits of the body seem to be extended or contracted by the clothing. Most of us have noted that if the clothing is padded or extended we feel that the body itself is larger in that dimension or if the clothing is smug we feel smaller." Ryan, *Clothing*, p. 83.

[24] "Clothing … is a response to a physical need for protection and shelter [as is the tent, apartment, umbrella] … Clothing protects the body from the cold, the heat, accidents, human or animal enemies, and physical or psychological dangers." Barnard, *Fashion as Communication*, p. 51.

[25] Compton describes how "[m]ental patients with weak body-image boundaries preferred clothing fabrics of more saturated colours and strong figure-ground contrast which would tend to help define body limits." Norma Compton, "Body-Image Boundaries in Relation to Clothing Fabric and Design Preferences of a Group of Hospitalized Psychotic Women", *Journal of Home Ecology*, 65 (1964), pp. 40-4.

[26] Description of Ebina's work in Alexander Gelman, "Substraction: Aspects of Essential Design", *Design Machine*, 2002, date of access: 10.1.2005, <http://www.subtraction.org/082_083.html>

[27] Terence Riley, *The Unprivate House* (New York: MOMA, 2003), p.5.

[28] "These extended bodies, provisionally connecting with the built environment through fashioned points of contact, highlight the fact that spatial experience is mediated through dress." Rebecca Sinclair, "Dressed in Space: The Sartorial Architectures of Rei Kawakubo and Hussein Chalayan", in ed. Frichot, *LIMITS*, p. 432.

[29] Caroline Evans, *Fashion at the Edge* (New Haven and London: Yale University Press, 2003), p. 269.

[30] Chalayan states the following in an interview: "Everything around us leads to the body or the environment. I think of modular systems where clothes are like small parts of an interior, the interiors are part of architecture, which is then a part of an urban environment. I think of a fluid space where they are all part of each other, just in different scales and proportions." Quinn, *Techno Fashion*, p. 30.

[31] Hussein Chalayan/ Echoform: Autumn-Winter 1999-2000/ "Aeroplane Dress" in collaboration with industrial designer Paul Topen, published in Caroline Evans, *Fashion at the Edge* (New Haven and London: Yale University Press, 2003), p. 272. The images are stills from a film by Marcus Tomlinson (Hyeres Festival, France, 1999).

[32] "Chalayan took the tropes of the modernist progress (travel, technology, aerodynamics)." Evans, *Fashion at the Edge*, p. 275.

[33] "[U]sing intangible forces as means to create form. The intangible forces included gravity, expanding forces, the weather, technological forces, and wave and wind detecting objects." Evans, *Fashion at the Edge*, p. 271.

[34] The dress "expresse[s] the body's relationship to a lot of invisible and intangible things – gravity, weather, flight, radio waves, speed." Quinn, *Techno Fashion*, p. 51.

[35] Andrew Bolton, *The Supermodern Wardrobe* (London: Victoria & Albert Publications, 2002), pp. 120-1.

[36] "An interface carries information processes not only between the interior and exterior, the body and the world, but rather between the material and the immaterial. It is an almost cybernetic process. Thus, three points need to be considered: a transparency, which becomes translucent, a surface, which becomes the interface and an interface that constitutes an information process. Within this lies the depth of skin." Marc C. Taylor, *Surface Consciousness/ "Ueberlegungen Zur Haut"*, NO 129 / 130 Arch+, Symposion Discussion/ Columbia University 1995/ Exhibition "Light Construction"/ MoMA [original source published in German, author's translation], pp. 85-87.

[37] Tiziana Terranova, "Posthuman Unbound: Artificial Evolutions and High-Tech Subcultures", in ed. George Robertson, *FutureNatural: Nature, Science, Culture* (London: Routledge, 1996), p. 166.

[38] Joanna Berzowska, "Intimate Electronics: Wearable Computers, Electronic Textiles, and Reactive Fashion", *HorizonZero*, issue 16, Date of access: 20.10.2004, <http://www.horizonzero.ca/textsite/wear.php?is=16&file=4&tlang=0>

[39] Active matter and its relevance on resulting form ("Formgebung versus Formfindung") as discussed by Lars Spuybroek/ NOX (Lecture at University Technology Sydney, 03 December 2004, unpublished).