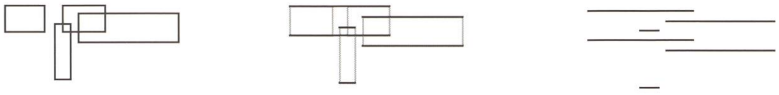
The profile economy : some notes on context, identity and information recombinatorics



Andrew Whiteside

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Through the lens of economics as one of the dominant structures of modern life, collection of observations seeks to pose questions about the relationship of the identity of the individual to a possible relocation of architectural programs. What is the relationship of the individual within the context of consumer culture? What constitutes context and identity within an economic framework and how does human presence consequently become located within the physical structure of the city?

This essay seeks to examine one of the possibilities for the emergence of the individual as a reconstituted reference (i.e. a unit of orientation structure) based upon the increasing hegemony of economic forces and the instruments which are used to focus the energies of the information economy. The individual as an economic construct and the examination of the roots of that new identity, as well as the possible implications for locating that identity within the functional, programmatic and ultimately the spatial structures of the city will be adressed. The identity of the individual, until recently still a humanistic model, has been increasingly undermined by heteronomous forces which redefine the criteria through which we see ourselves: consumer profiles based on predictive modeling and statistical analysis, and the exposure to an evironment that replaces individual identity with those profiles.

A highly precise yet widely applicable model of the individual as circumscribed by massively parallel data modelling had precipitated a shift in our system of orientation as real individuals. An increasing density of information available about us, and the corresponding precision with which the gathering of that data is possible increasingly alters our status as single subjects and replaces it as highly specific statistical and numerical constellations. Our current belief in and dependence upon technological means and the dominance of economic structures as a global reference base has set in motion a hyper-evolutionary technological process which has redefined these cognitive markers we utilize to develope a system of orientation for individuals within the fluid and complex relations of urban life.

The application of criteria used to filter information exposes and isolates specific characteristics. Individuals reveal themselves to contain these characteristics to different degrees. Using these as a measurement reference, the relationship of individuals to each other becomes highly defined. It is the regroupings of information according to specific criteria which produces a data field inhabited not by individuals, but by a model of individual groupings. Is it possible to reconfigure the primary reference as the system as defined by the characteristic rather than by the subject exhibiting that characteristic (i.e. the specific behavior of the system, rather than of an individual)?

digital data modeling

"...With the advent of everyday use of elaborate calculations, speed has become paramount to such a high degree that there is no machine on the market today capable of satisfying the full demand of modern computational methods. The most advanced machines have greatly reduced the time required for arriving at solutions to problems which might have required months or days by older procedures. This advance, however, is not adequate for many problems encountered in modern scientific work and the present invention is intended to reduce to seconds such lengthy computations..."

Military predictive modeling, economic forecasting, weather forecasting, medical treatment and marketing are some of the ways in which large-scale mathematical and statistical modeling have been used to identify and exploit phenomena for specific goals, albeit with mixed results. Despite this, the focus of these analytical operations relies increasingly on access to information and the determination of analytical criteria, specifically on the relationship of specific components to each other.

From the mid 1950's onwards, the complexity of precision tasks performed by computers increased dramatically. Beginning with the military and progressing to other branches, an industry slowly evolved for predictive modeling. The development of mathematical and analytical models led to increasingly sophisticated simulations, which in turn led to a cyclical process of analytical and operative refinement. The gathering of information used as input was taken from a combination of mathematical models and empirical test data, but both methods were slow, costly and lacked accuracy. Gene mapping has begun to describe individuals as biological coordinate systems, the 'addresses' of which are com-

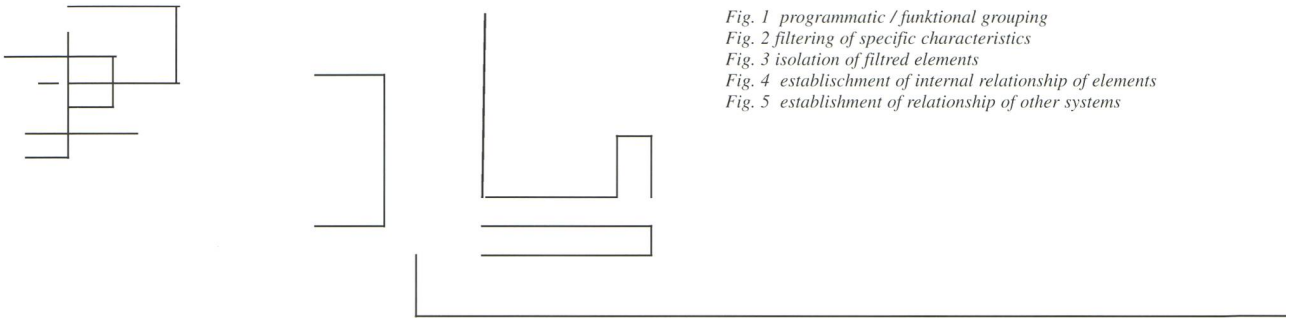


Fig. 1 programmatic / funktional grouping
Fig. 2 filtering of specific characteristics
Fig. 3 isolation of filtred elements
Fig. 4 establischment of internal relationship of elements
Fig. 5 establishment of relationship of other systems

mon to everyone. Early advertising relied on lifestyle marketing techniques, or a presentation of the image of the consumer (desire through association) based on time-consuming customer surveys, image scouts and other methods. A basic limitation of this approach lay in the fact that the specific characteristics of the target group was not as precisely definable on a mass-market scale as commercial margins increasingly demanded. The combination of traditional marketing techniques with modern, large-scale data analysis became possible with the advent of parallel processing which allowed huge amounts of data to be compared and filtered according to complex criteria. Precision targeting, or the locating of market potential made the development of products according to buyer's wants and needs more efficient.

biotechnological recombinanc

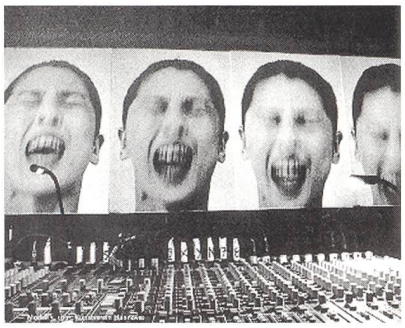
Medicine has made it possible to easily transplant individual body parts. Entire systems, on the other hand, are so deeply 'embedded' within the mass and structure of the body that transplantation is not possible. Technology now makes the full-scale mapping of the common genetic structure possible. Genetic, rather than organic interventions make it possible to intervene in an extremely precise manner, with a theoretically high degree of predictability. Leaving ethical and moral arguments aside, gene therapies will soon make it theoretically possible to separate the constituent genes of individuals and recombine them with those of other individuals, or with altered versions of the subject genes. Although the rules for comination are biologically and genetically only possible within a given set of conditions, the ability to replace the genes of one individual with those of another, or the altering of the genes of a subject, thereby creating another 'individual' is simultaneously provoking a debate about identity and relocating the focus of that debate to the map of each subject as containing the common elements of the gene pool. If we assume for the moment that we can theoretically combine the necessary genes from a multitude of sources to 'construct' an individual which precisely matches our imaginations or desires (e.g. designer babies, organ factories) then the notion of what constitutes an individual is reduced to its definition as the intersection of specific genetic (system) information from within, and the influences which the environment exerts, together with the formative influence of cumulative experiences upon the development of that subject from outside. The construction of the 'individual' is made possible by the definition of the larger matrix of possibilities (genetic technologies), and their focused selection based on the criteria of the 'user' or customer. However, once these initial decisions are made, the construction is exposed to context to which it begins to adapt, leading to a divergence from the originally constructed model.

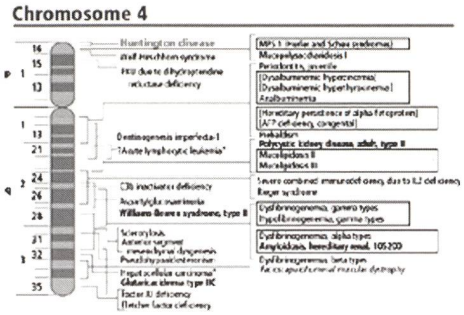
If we say that individual genes ('components') and the way in which they establish the relationships within the body governing our development represent the endogenous basis for identity and context the exogenous basis, we can say two things: the embedding of individual genes or components within the overall framework of the individual will lead to adaptation to the genetic context and the overall evolution of a genetic field which defines the relationship between the parts. Also, this system will again evolve according to contextual forces, developing a unique and specific set of characteristics. If the context is radically altered, the system reacts accordingly, selectively blocking out, adapting, and so on in a kind of biological information/transformation loop. The point defined by the axes of utility, desire and possibility does not explicitly reside within the subject, but has been located there by industrial, commercial and other sectors who have specific interests in these developments. At its most polarized, the discussion is reduced to a debate on progress for its own sake versus an acceptance of the individual as a subject not to be dis- and reassembled by technology.

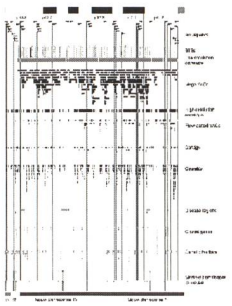
the customer is king

"consumo, ergo sum"

A need to respond increasingly quickly to user demands, and to bring successful products to market has made more effective targeting methods necessary. Access to individual data profiles as a way to develope models for detirmining what people want, how to give it to them, how to evoke desire in images in highly manipulative ways has always existed in different forms. Today, computer technology and modern consumer culture provide both the empirical information and the space within which commercial interests would locate







our identity. Through filtering the data field generated by the behavior patterns of large groups of individuals, these interests can be targeted in a very precise manner. For any given analytical operation, a prototypical profile of the user group is generated. This operation is repeated as long as is necessary to adequately describe the user group for whom, typically, products are produced. The profiling of thousands of (overlapping) user/customer profiles with whom we are associated, and the resulting shift in identity from ourselves to a projection of 'ourselves' means the slow dissolution of a society of individuals and its replacement by an economy of descriptive models, or profiles.

The real individual inhabits this model only in fragments: the recombinatorics of information processing necessary for the generation of commercially usable reference models requires isolating any extraneous data which might interfere with the possibility for practical implementation. Through successive recombinations of data gathered from countless individuals, specific patterns of economic behavior are generated for individual products and services, the contours of which describe a system in a perpetual state of change.

The consumer behaviour of individuals registers as raw information, or information units, and is analyzed according to the criteria determined by commercial economic performance projections. The separation, or decontextualizing of the data units from the original source individual is followed by the recombination those units into a model, or behaviour paradigm which services commercial interests most effectively. It is the emergence of a culture where *" bodies disappear as the recorded motion becomes the evidence of massively complex recombinative operations."* As data units are assigned to locations within the model to form precise profiles, they constitute both the recombinant subject and the receptacle of consumer desire. Projected onto the phosphor plate of society, they constitute a dynamic, seductive, and accessible image which forms in our collective and individual consciousness.

Analytical mapping operations are recursive and respond to changes in behaviour with the current speed of electronic data gathering and analysis, just a step from real time. This provides for the possiblity of adaptation to commercial requirements (profit motive) and human behaviour (psychological manipulation), in an accelerated Darwinian manner: those mechanisms unable to deliver the information necessary for survival will cease to exist, and will be replaced by more capable ones. In doing so, they undermine architecture as a fixed system of reference with one which is able to adapt to complex requirements dynamically and with precision. What was originally a static reference becomes an information trace, the signature we constantly leave behind, precisely readable and usable by others.

Datamining as a relocating of identity removes the individual from the specificity of its own experience and replaces it within the register of common behaviour (by disassembling the individual through the reduction of the individual to singular, irreducible analysis-specific bits of data), thereby generating a model of the individual which suppresses the real. Through the perpetual locating and relocating of this model, the individual is constantly reprojected onto itself, through the filterloop of an economic context. Distinctions between original and projection become increasingly blurred, as the composite image or model evolves, absorbing traces of individual human behaviour but describing a large-scale human condition. Despite the artificiality of the model, it becomes the field through which individual behaviors become sited, and which, at any single phase, can define the relationship between individual data units. This relationship of units to each other (adjacencies, overlap, resistance or adaptation to exogenous and endogenous forces) defines the context or 'loaded' field within which context emerges. It is within this context that adaptation occurs, warping the original, pre-contextualized characteristics of individual data units. All data will be kept strictly confidential and will only be used for statistical purposes.

data filters - establishment of profiles as locating strategy

Profiling has practical applications not just for modeling the masses through selective data, but as a method for locating specific individuals within specific contexts. Let us take terrorism as a related example. In a manner similar to that of the Israeli national airline EL AL, profiling is used in commercial marketing as a way to iden-

tify and distinguish between possible recipients or users from those individuals who do not exhibit a statistical predisposition to certain predictable behaviour.

Based upon multiple factors extracted and analyzed from all that is known about specific (i.e. terrorist) activities and modes of operation (behaviour), models are developed which exhibit an array of characteristics. The establishment of plausible matches based on a comparison of the specific characteristics of an individual with these profiles (target accuracy) suggests a high statistical probability of locating a specific individual. Again, individuals are regarded as the intersection of different informations whose specific combination determines an address or identity. The information loop of empirical data and analysis resulting in strategies for locating these 'intersections' (the terrorists) is constantly updated and re-tested, based on success or failure of the system (evolution). The specific nature of the activity of terrorism requires a knowledge of the goals of that behaviour to be able to develop an information system which exposes it before destruction occurs. It is precisely this capability to predict behaviour, through the analysis of empirical data according to specific criteria, and the subsequent projection of the resulting profile or template onto individuals that determines the precise constellation of function and program, and the spaces within which they locate themselves.

The loaded field

Traditionally, program and function and space have operated within the metaphysics of humanism, that is to say, anthropocentrically. We now live in a real-time, interactive, flex-staffed, non-territorial, on-demand world in a constant state of local and global flux, not bound by traditionally fixed points of reference. Recombinant operations redefine identity within an economically dominant system. Through the process of simultaneous description, i.e. the continual reprojection of the model of the individual onto previous models in an iterative process of superpositioning and the adaptation of individuals to that projected model, the absorption of the individual into this reality signals a shift from our bodies to the information generated by our bodies and our actions. When the primary identity of the individual becomes redefined through the economy, the spatial coding system (as a function of programs and functions) with which it has traditionally been identified might also transform. The individual as traditionally understood within the city does not exist within this model. Consequently, the space of the city as we have learned to understand it must be relocated as a highly complex operative field whose structural basis is the information generated by individual behaviour, but formed into highly precise yet widely applicable paradigms of identity. The traditional conception of the distribution of autonomous constellations of data (programs, functions and ultimately space) or of components of our physical environment might also be replaced with a redistributed model of individual units (we might call them microprograms) whose combinatoric potential would suggest the principle identity of the city not as a built environment, but as a loaded field within which architectural programs could become located based on exogenous forces such as economics (a situation which, given the current status of programmatic and functional identity, is increasingly incompatible with architectural agendas). Through a re-reading of the possible emergent identity of the city as a dynamic field of functional, programatic and spatial negotiations, the structural underpinnings of these sets of relationships will be considered. That is, it is the speculative assumption that these developments in technology and the resulting capability to precisely analyse massive amounts of data about individuals is leading to a reconception of the notion of the individual, and subsequently to an analogous change in the way in which the space of the city is thought about, intervened upon, coaxed out of the urban context, perceived and used.

Data fields, created through the traces we leave (e.g. transaction records), are subjected to highly specific filtering criteria or classification with the goal of identifying and isolating target group behaviour. Mapping operations performed on these vast fields are perhaps only intermediate steps in the cycle of comsumption, behaviour evaluation, product modification and representation. By considering the dynamic nature of these cycles, and the requirement to eventually provide a physical model which can accomodate and absorb these requirements, we must necessarily also consider a variety of conditions and environments.

The definition of the individual as autonomous could be regarded as a culturally determined interference to be eliminated. The process of elimination occurs through the de- and reconstruction of the individual, or the data marking the presence of the individual within the economy. Through this data-based set of operations, an emergent, perhaps system-immanent structure becomes visible: de-naturalized, post-human space which no longer responds directly to humanistic or symbolic requirements, but rather to the adaptive capacity of urban spaces to become reorganized, rezoned, reprogrammed according to user needs.

Economic criteria have long been a major determinant in the deployment of space, program and function at all scales: the evolution of cities as economic zones for trade, etc; the distribution of functions within individual structures to maximize the efficiency with which specific tasks can be accomplished; the immediate realm of the individual (i.e. the workspace) to maximize productivity.

Functional and programmatic structures will necessarily stretch throughout the city, congruence with the needs of local residents being the primary determinant of location and orientation, representing the replacement of a fixed coordinate system with a dynamic, information-based structure.

Determining which functions and programs will occur where, and with which other functions and pro-

grams they will be combined to create a constellation which will precisely service the needs of a defined user group, have been notoriously inaccurate, as partly demonstrated by the high rate of business failure.

In a similar fashion, few new products survive the introductory period, even with the massive pre-launch psychological massaging the defined target or user group is subjected to. Therefore, identification of possible 'sites' for autonomous products, programs and functions is still bound to the traditional cycle of introduction, observation and modification.

Despite this, the classical fixed structural relationships of function, program and space within architecture still dominate the decision-making process. As William Mitchell notes, historically *"buildings were distinguished from one another by their differing uses, and the inventory of those uses represented social division and structure."* By questioning the inseparability of these elements, and by creating a fluid relationship be-tween their possible constituent elements, a much higher degree of adaptability to context could be realized. Functional and programmatic coordinates, determined by the intersections of these 'microprograms' could define the site within which the architecture of the city is located. Distributed spaces, functions and programs as a pattern able to adapt in a much more complex, precise and detailed manner to new requirements (i.e. a constantly shifting context) suggest a separation of autonomous programmatic and functional groupings into criteria-specific reductive elements which can be combined to form complex and responsive fields. This de-naturalization of space corresponds to the increasing disembodiment, or removal of the individual from a social or humanistic environment and its increasing absorption into an economic context defined by highly specific registers of behaviour.

From this process of data filtering and redistribution of identity, there are three likely scenarios for a possible structure of function and program (and ultimately space?). The first is a highly defined but sparsley inhabited structure designed for maximum flow upon which exogenous forces can freely exert pressure without altering its basic structure. The second is a heteronomous architecture whose location could be said to be defined not by space and form, but by the intersection of superposed fragments of multiple programs and functions, and the subsequent 'embedding' and deformation within the 'context' of other programs and functions. The third is the spontaneous emergence or evolution of program and function within this loaded field according to specific events or a combination of conditions.

Bernard Tschumi's project at La Villette successfully disperses program and physical mass across a grid structure laid over the site, but resists any programmatic deformations within the context, emphasizing mainly the artificial, somewhat self-referential character of the project and the formal characteristics of the individual pieces as fragments. Additionally, there is no immediately apparent contextual rationale for the specific location of individually paired program elements.

It is both the volume and type of information about the individual which, when filtered, locates those functional and programmatic types with a high degree of precision. While Greg Lynn argues for the hyper-evolutionary potential of structures which have not been predetermined but are rather able to respond precisely to external forces, it is suggested here that the determination of those forces themselves could be based upon data which itself has been exposed through analytical processes and that the formal construction which inhabit those processes are not necessarily homeomorphic. That is, these forces constitute a set of parameter which are not explicitly related to form, but to the organisational structures within which form seeks to locate itself. The evaluation of data generated by users could provide the criteria for programs, which in turn results in the generation of further data. As the cycle accelerates, space with which we identify ourselves dissolves and gives way to the evolution of functional and programmatic eco-systems which interact with and alter their environments. In contrast to Peter Eisenman, who seeks to relocate architecture within a metaphysically non-reconstitutable, dislocative set of forms, and Greg Lynn, who proposes the use of animate design techniques to relocate the generative basis of form, it is a question whether the configuration of the relationship of program and function to each other and to their respective contexts will detirmine the overall conditions (the loaded field) within which spaces could possibly become located. Where Lynn's models rely on the modeling of dynamic physical or perceptual contexts to generate fixed physical structure, context here is understood as a function of empirical data evaluation leading to programmatic adaptations, and finally to a spatial, but not necessarily a linear recordings of that condition. The reference system of economics represents an existing, undeniably strong 'force' in our society, and serves as an available reference.

The determination of a set of relationships (space/program/function) as opposed to a determination of form which might constitute a practical basis for orienting ourselves as individuals and understanding and intervening upon the city as its functional and programmatic elements slowly leave their shells and expose themselves to the filters of recombinant statistical modeling to 'prepare the ground' for locating possible architectures, a ground characterized by *"pressure and mass composed of drifting, shifting, or evolving, devolving consistencies"*. This constantly changing field is creating zones and corridors, enclaves and clouds of dynamic mass and consistency, (i.e. context as a field of negotiations and transactions to be navigated) and is constituted by transforming and internalizing changing behavior patterns into the organizational structure of functions and programs.

The intersection of statistically determined microzones will eventually lead to a highly complex and responsive matrix of programs and functions. These zones

will exert influence upon and in turn be influenced by other zones according to their integration into databank information. The resulting grounding within the specific information context will lead to programmatic and functional adaptation (warping?), a type of integration into the functional and programmatic context which exists apart from the urban spatial context of the city and is distinctly different from the original structure defined by the datafilters (ie the pure model is transformed within the context of other pre-contextualized models which exert force on each other). Unprogrammed space in this sense cannot exist within the city. However, the conditions which constitute programming are much more discrete and could possibly allow a re-reading of existing 'dead' spaces as highly loaded. This is less a *"paradigm-induced gestalt switch"* used to identify *"conservative physical systems isolated from their surroundings"* as Thomas Kuhn theorized than an examination of elements which exist together in dynamic equilibrium.

The transformation of identity from individual self-awareness to a reading of our (distributed) identities located within statistical profiles based on economic data and a possibility to use such a structure to inhabit architecture and to orient ourselves within the city describes a modern technological and social condition, "a mentality resulting from a reliance on instruments" which has relocated our identity from a socio-cultural and exposed it to a techno-economic framework.

It is an open question regarding the tolerances of our perceptual apparatus whether economic information will detirmine how we conceive, perceive and use space, or whether the increasing divergence between the spaces we occupy as individuals and the information spaces we cohabit as manipulable volumes of data could provoke a counterdevelopment. But as a structural model based upon patterns of behaviour which are culturally and commercially defined, the reorganisation of those functional and programmatic models does not contain the forced hierachies of meaning that would otherwise result. *"We are left with our senses confident only in that we know what it is like to be human, fundamentally, inherently, far better than any machine, no matter how complex or well-aimed or expertly applied that machine may be - and yet more and more frequently we find ourselves relying on machines for self-awareness or a reflection of ourselves that permits us to recognize and appreciate our now essentially unnatural features, the nature of our essentially unreal selves."*

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