

ONTA



Composer / Researcher:

Dimitri Voudouris

[*1961]

Composition:

Voice

Alecia Van Huysteen

and

Electronics

Duration:

28 min 10 sec

Composed:

2003-2005

PART A

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Abstract

Exploring the use of public space and everyday behaviours for creative purposes, in particular the city as an interface and mobility as an interaction model for the composition of ONTA. The city is an extension of Man and a comparative study was done placing an inorganic world model [the city] in direct comparison with an organic model [Man] and further noticing the implications involved with micro, meso, macro environments in Man's construction and the city. A multi-disciplinary design process resulted in the implementation of a wearable, context-aware prototype.

Introduction

This project discusses the daily tensions encountered and focuses on the energy building up exploding or imploding from these tensions in the city be it organically or inorganically created this promotes musical creativity integrated into everyday life, of familiar places and natural behaviours. ONTA was constructed in sensing bodily and environmental parameters. Considering the city as an interface and mobility as musical interaction, everyday experiences become an aesthetic practice. Encounters, events, architecture, weather, gesture, (mis)behaviours – all become means of interaction. ONTA is not a precise documentation of a sampled recording of city life rather it concentrates in addressing the psychological encounters experienced by Man in attempting to express himself within these parameters described below. Through the use of voice and electronics. I “created a world” were most of such encounters are addressed. I will first outline the design methods and issues of the comparative study on the subject Man and the City [I used Johannesburg -South Africa being the city I live in, as reference material, ONTA is not a direct reflection of Johannesburg but is a universal generalisation of a personal encounter of a universal city] and the implementation of the prototype to my approach in musical interaction and composition of the city.

Organic and Inorganic environments

Micro environment

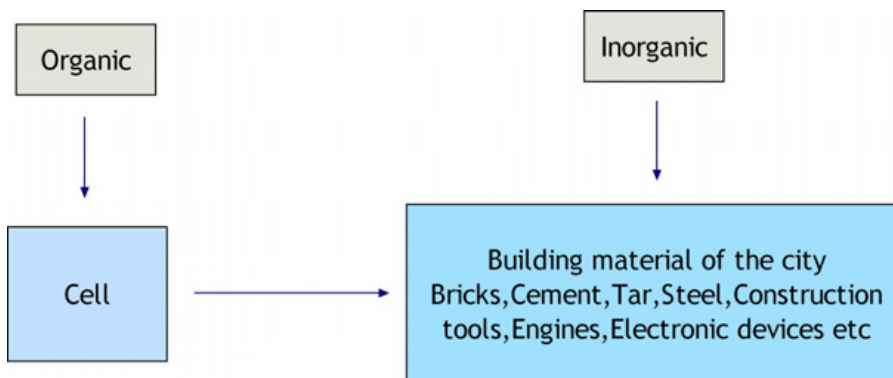


Diagram 1

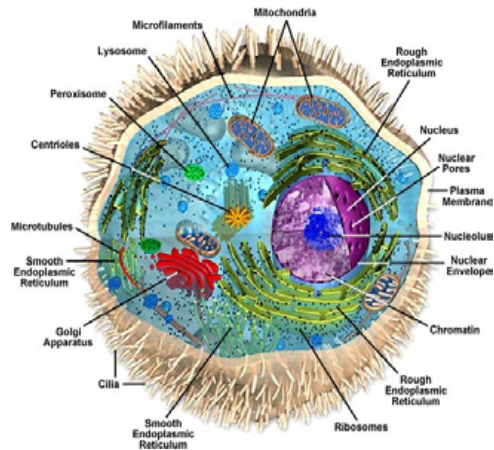


Diagram 2

Organelle	Function	City operators	Function
cell membrane	*support *protection *controls movement of materials in/out of cell	Government offices Private companies	*Protection and support of ministers and CEO's associated with companies who engage in what is legislated
nucleus	*barrier between cell and its environment *maintains homeostasis *controls cell activities	Government Security	*Government Legislation is passed and executed *Allows representatives and affiliates from each party to move in and out of parliament
nuclear membrane	*Controls movement of materials in/out of nucleus	Economy	*monetary system from government that is for support/protection of infrastructure
cytoplasm	*supports /protects cell organelles	Transport services	*transport of material needed to building a city through road, sea and river, air and railroad
endoplasmic reticulum (E.R.)	*carries materials through cell	Industry	*cement, tar, steel and all material necessary for building a city
ribosome	*produces proteins	Powerhouse	* coal to produce electricity for city
mitochondrion	*breaks down sugar molecules into energy	Industrial [dispatch]	*production and dispatch of building material
golgi apparatus	secretory organ	Mining [for raw materials]	*generate sound monetary system
lysosome	*breaks down larger food molecules into smaller molecules selectively		

Diagram 3

The cell in **Diagram 1** and **2** is discussed with all its organelles in detail in **Diagram 3**

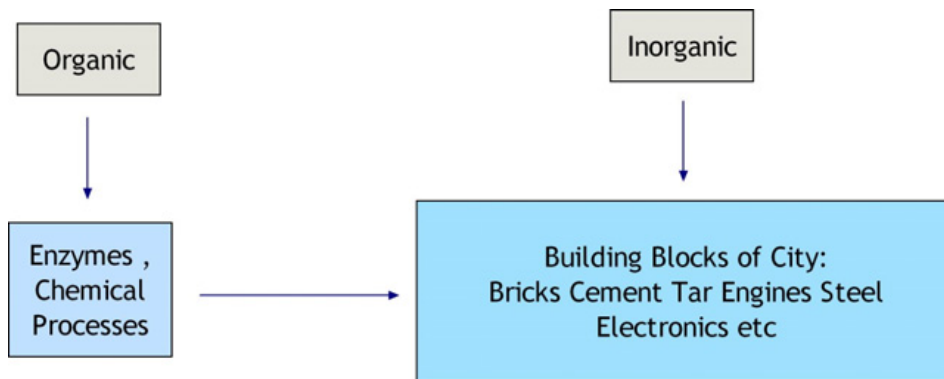


Diagram 4

Diagram 4 indicates how the human body cell enzymes and chemical processes function in energy production in the body through the conversion of ADP to ATP and also in gene formation and how this is extended to the cities building blocks which involves production of bricks, cement, steel, tar for road construction, the building of computer systems which can run industry, banks, traffic, telecommunication, shopping, business, security etc.

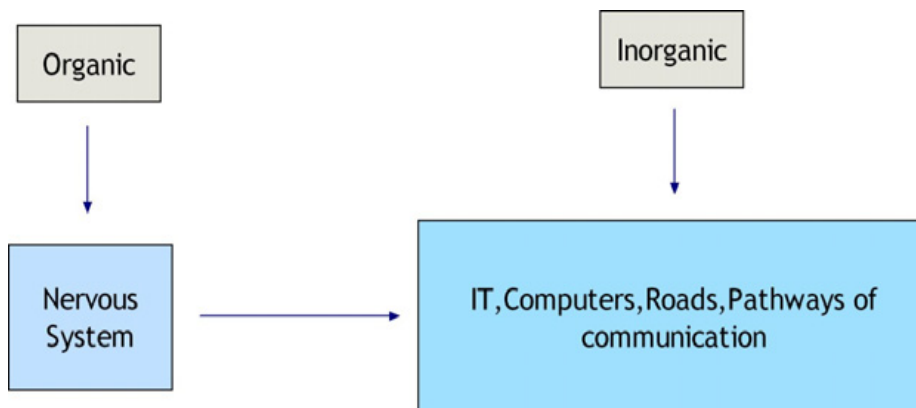


Diagram 5

Diagram 5 shows how the human autonomic nervous system is made up of both the sympathetic and parasympathetic nervous systems and is directly related in the cities communication network with IT- Computer networks systems branching out into all parameters of the city, communication is made easy through phone/Fax and electronic email and intern interact with the community, security, ATM's and banking, in industry, government, transport services, commercial sector, television, radio, traffic lights etc. As in the body the nervous system monitors happenings relating to the functioning of the body, the strategic decisions taken with matters concerning both the internal environment and our immediate surroundings has to do with back and forward communication with the brain, IT has to do with matters of communication both with its internal environment and the surrounding environment of the city.

Meso environment

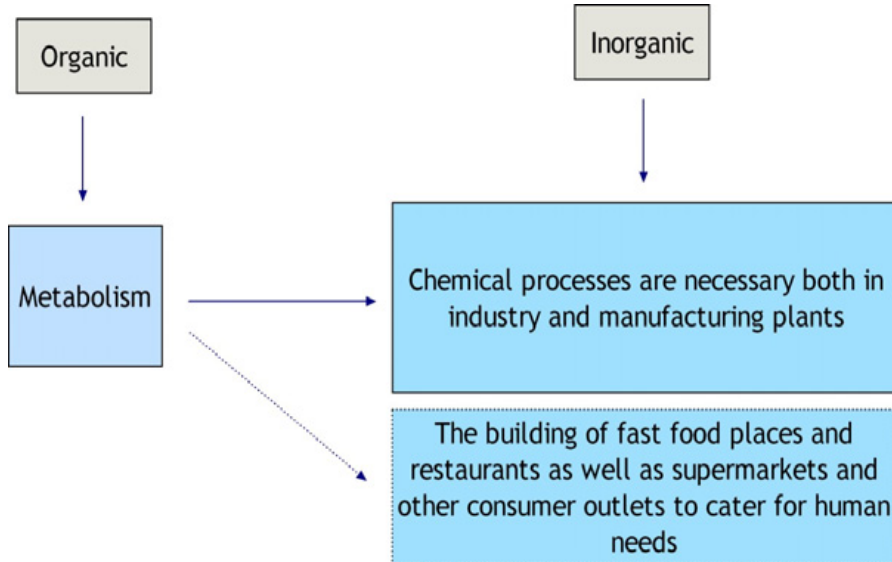


Diagram 6

Diagram 6 metabolism is the chemical processes that makes it possible for the cells to continue to live. Food and liquid beverages ingested by the body are broken down and transported to different areas of the body which can be used for storage or energy production. In an inorganic environment the processes are slightly different were instead of metabolism we refer to chemical processes are present to convert e.g. coal into an electrical energy. In industry and manufacturing plants chemical processes are necessary to produce the end product.

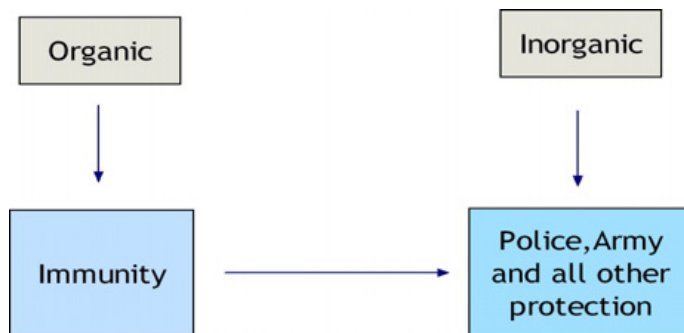


Diagram 7

In **Diagram 7** the police, security, army, navy defend the city by protecting the borders of the country, preventing crime, and patrolling the air and the seas places where an intruder can infiltrate. In an organic environment the immune system protects the body where the defence is prevention of bacterial, viral and fungal infection.

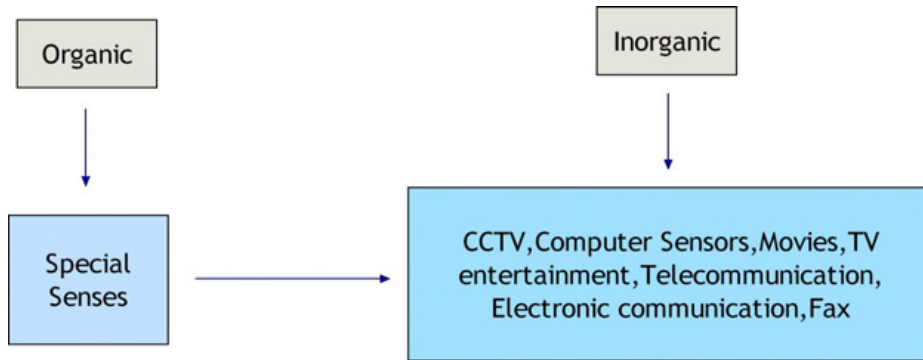


Diagram 8

Diagram 8 focuses on special senses in an organic medium we can reflect to sweet, sour, bitter, salty, touch, vision, smell however in an inorganic environment computerized sensors are present like CCTV, touch screens, telecommunication – voice detection systems and voice recognition systems, electronic communication, etc. These intern stimulate vision, hearing and touch senses.

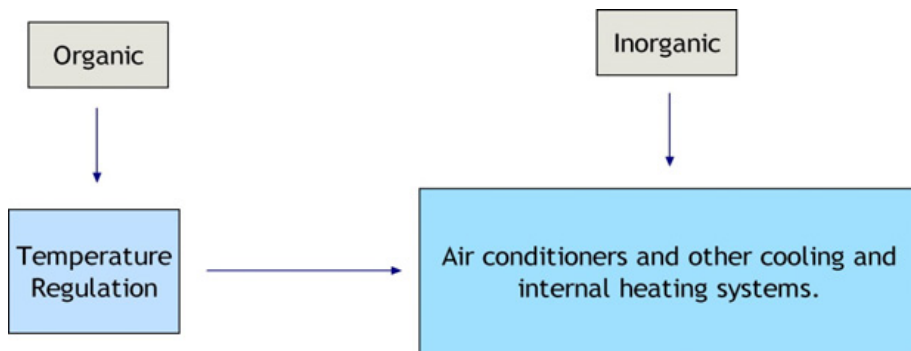


Diagram 9

Diagram 9 shows temperature regulation were in an organic environment it would be controlled by sweating, insulation, the hypothalamic centre in the brain and in an inorganic environment through the use of air conditioners, in well insulated buildings that can store internal heat for the winter months and cool internal temperature for the summer months.

Macro environment

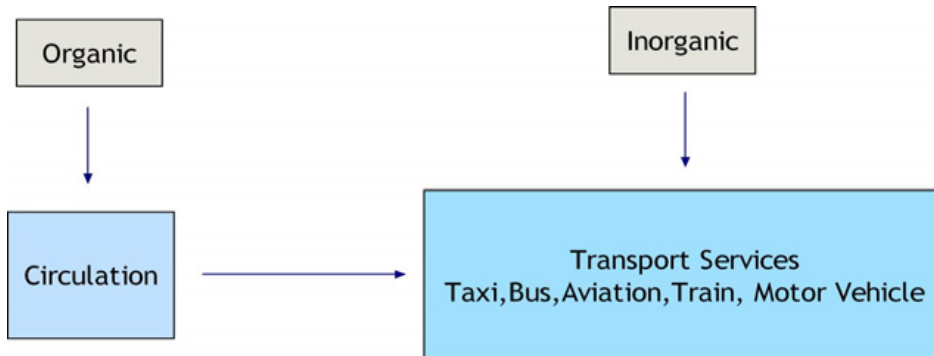


Diagram 10

Diagram 10 the circulation system in the human body acts to transport oxygen , supply nutrients and remove waste material from the body. The circulation is important also in the formation of clots due to injury to the body. In an inorganic environment what circulates is the different transport services using road, rail, aviation and water to supply the different areas of the city with defence and all other communication requirements.

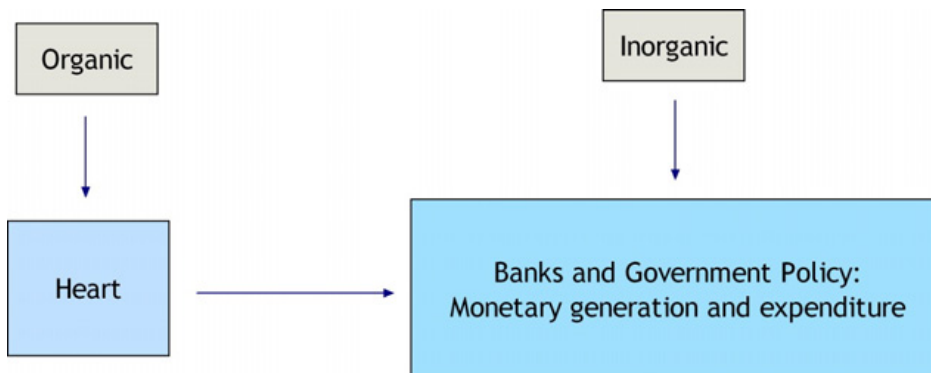


Diagram 11

Diagram 11 the heart functions as a pump, pumping blood to the different locations in the body. In an inorganic environment the heart of the system is the financial sector of the economy, a healthy economy together with healthy government policy can only benefit the system.

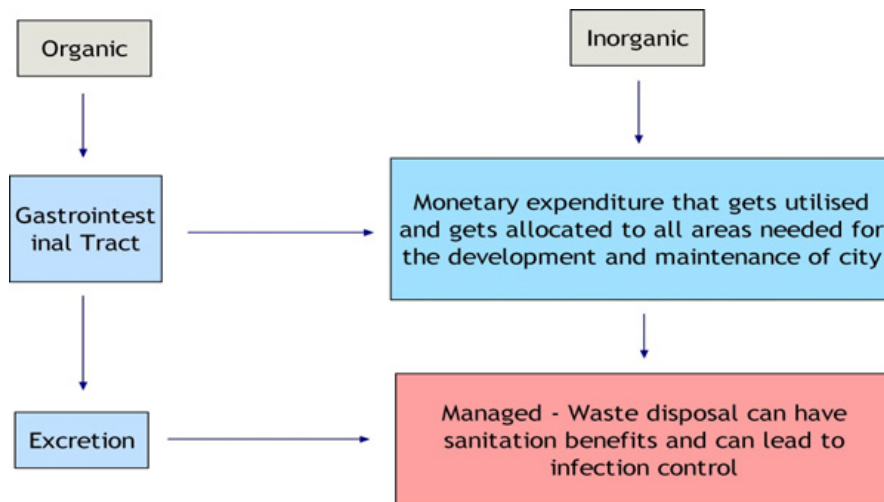


Diagram 12

Diagram 12 in the Gastrointestinal Tract absorption and excretion of different food stuffs occurs thus in a person eating and drinking the ingested beverages pass through the Gastrointestinal system and from there can go in a variety of forms as fuel for the body or are converted into fat for fat storage. In an inorganic environment proper managed waste disposal can have far reaching benefits in sanitation for the city and a good infection control, thus monetary expenditure produced by different institutions for the cities needs must get properly allocated in areas were they are desperately needed e.g. for salaries of workers, building, poor areas, for the development and maintenance of the city.

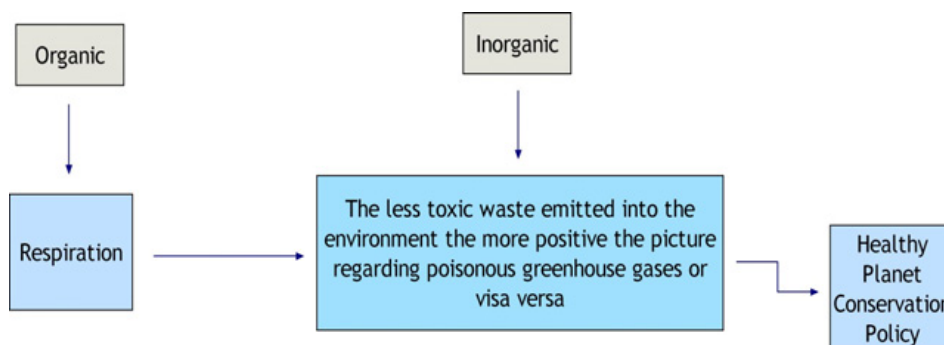


Diagram 13

Diagram 13 through respiration in an organic environment oxygen gets supplied to the body and carbon dioxide gets removed from the body, without oxygen this can lead to death of organic matter. In a city proper management of toxic fumes produced by motor vehicles, steam engines, aeroplanes, industry etc. The continuous consumption of these toxic fumes can lead to respiratory disease and other irreversible ailments. Healthy Planet Conservation Policy has to do with less toxic waste emitted into the environment the positive picture regarding greenhouse gases - could be prevented through strong law enforcement policy by governments. Allowing emission of greenhouse gases could result in climate change increasing the temperature of our planet resulting in devastating consequences.

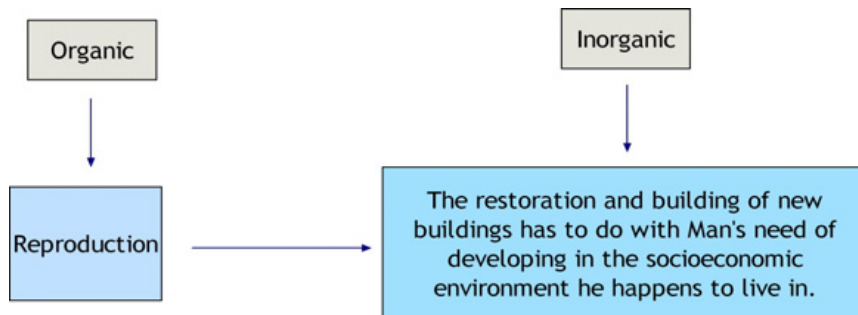


Diagram 14

Diagram 14 reproduction in an organic environment has to do with Man's basic need for survival thus through reproduction his needs are temporarily fulfilled. Inorganically however the tearing down of older less functional buildings because of fashion or due to an abnormal setting [building of a road that goes through the house], restoration of older buildings [fashionable or not] and the building of new buildings has to do with Man's socio-economic need to develop.

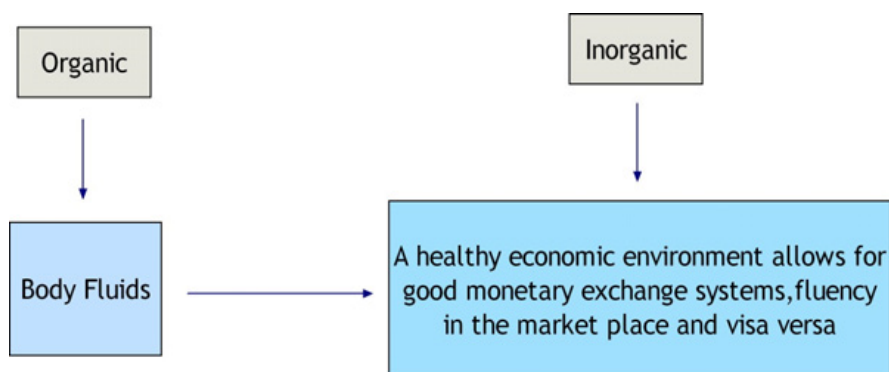


Diagram 15

Diagram 15 it is in the capillaries that the most purposeful function of circulation occurs, namely, interchange of nutrients and cellular excreta between the tissues and circulating blood. In an inorganic environment this is envisaged a little different in that in a healthy economic environment good capital growth, good monetary exchange systems within the city adds possible dynamics to a healthy economic environment where poverty eradication is possible, building, industry, side street pedlars, from the rich to the poor could make a living, almost everyone will have money and could afford good living conditions [education, owning a motor vehicle, live in decent suburb, earn decent salary, entertainment, purchase clothes and other commodities etc.] this however could go the opposite way.

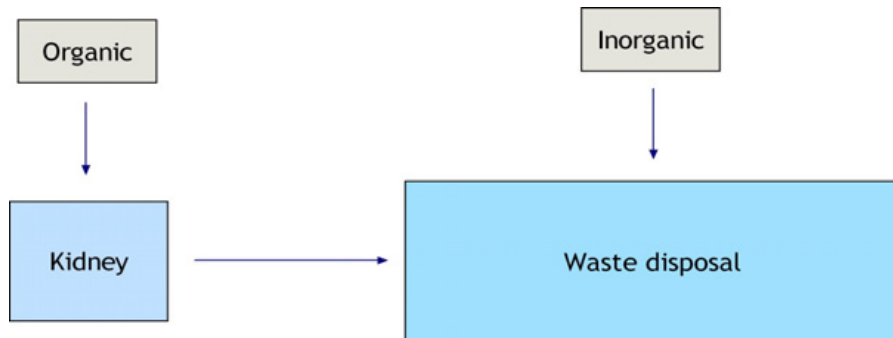


Diagram 16

Diagram 16 the kidney's functions are two fold they excrete through metabolism most of the end-products and second, they control the concentrations of most of the constituents of the body fluids. In an inorganic environment what gets used up in manufacturing of building material, medicine, petroleum products, steel, coal, rubber etc. as in any manufacturing process there is inevitably going to be waste products that get produced that could negatively and irreversibly effect the environment thus through good law reinforcement a lesser amount of these waste products would be manufactured.

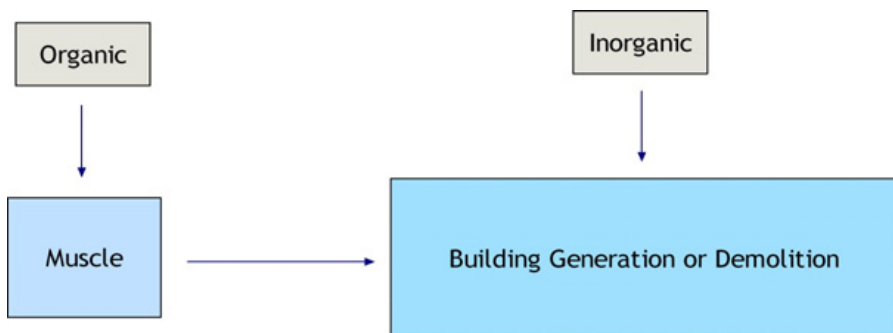


Diagram 17

Diagram 17 through amino acid production and introduced protein synthesis muscle is built, other nutrients such as e.g. carbohydrates, various salts are needed for muscle to contract, the muscle gives shape to the body and this is made possible through anabolism and catabolism. In an inorganic environment muscle could be associated with the action of building and demolition of the raw material, in this case could be bricks, cement, steel, wood, tar, gravel etc. - Material necessary for the construction of buildings, roads, railway lines, vehicles, trains, aircraft etc.

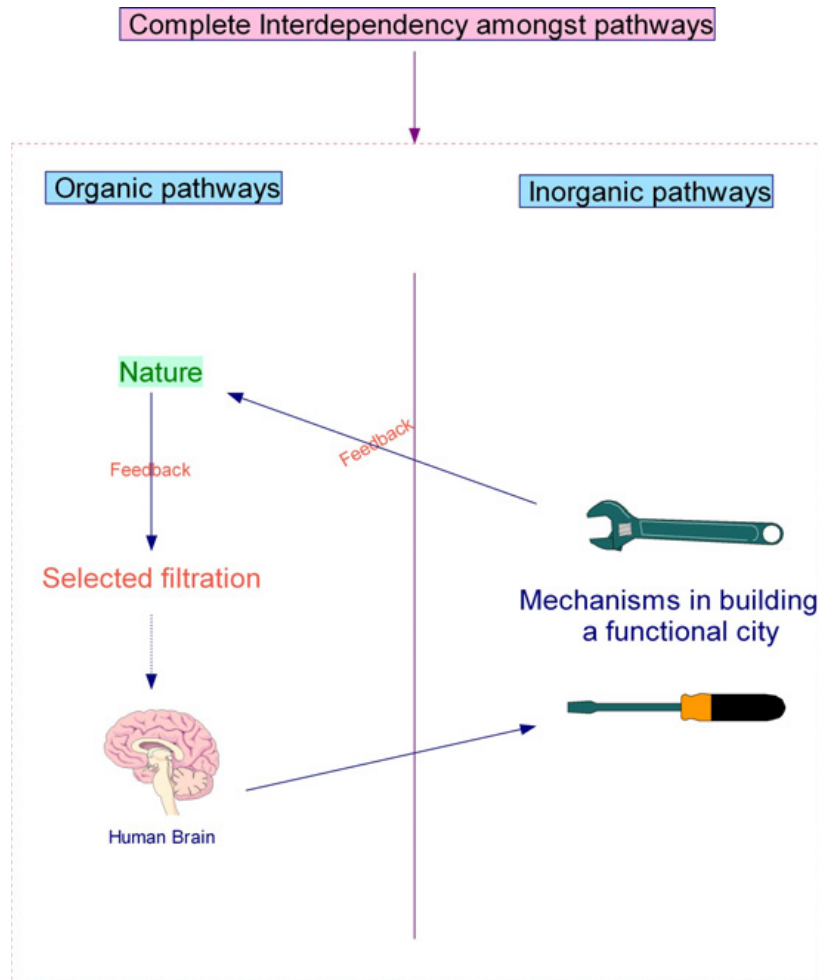


Diagram 18

Diagram 18 Possibly the world of external facts is much more fertile and plastic than we have ventured to suppose; it may be that all these cosmologies and many more analyses and classifications are genuine ways of arranging what nature offers to our understanding, and that the main condition determining our selection between them is something in us rather than something in the external world.

The human species has modified our global environment at wide regional and global scales. Global warming, biodiversity losses, ozone and freshwater depletion, to name a few, are now recognized as human-induced wide-scale environmental transformations. In spite of admirable efforts to arrest some of these processes and restore environmental vitality, the pace at which humans modify their environment continues with considerable intensity. The future health of the biosphere for sustaining all life may be drifting close to the margins as environmental crises increase within a single generation. These destructive propensities have deep cultural and psychological roots that divide us from the rest of the environment. Significant social change is needed for improving our collective relationship with the earth. Humans, with our unique capacity for self-reflection, are beginning to understand that the underpinnings to our current ecological problems lie within our attitudes, values, ethics, perceptions, and behaviours. New ways to re-conceptualize our unity with the biosphere, understand downstream impacts, and link social behaviour with environmental transformations are increasing with corresponding intensity. Community-based restoration is a powerful means for facilitating this trend, by reconnecting communities with their landscape, empowering citizenry, and fostering an environmental ethos based on ecopsychological health. In our attempts to construct a city it is important to keep in mind the inorganic implications have on the environment and to try and eliminate the Selected filtration as much as possible, reducing the detrimental impact on the way we live.

Continued

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