



Essentials of Topologic Ecology



Ease of Health

Findings from The Peckham Experiment (1930's Britain):

"Ease is one of the outstanding action-patterns of health. It appears, for instance in the infant as serenity." (p.188) [...] 'Between the "immune" and the "insusceptible" there is a difference in the body's action-pattern. We do not, however, yet know on what this attribute of insusceptibility rests."

(p.238) Williamson G., Pearse S., Innes H. 1965. *Science, synthesis and sanity*, Scottish Academic Press, Edinburgh, Scotland.

This still salient question is un-answerable by using the conventional parameters of representation that describe 'action patterns'. It is simple to model with a basic geometric topology.

Findings from Topologic Ecology (2006-2012):

Trading unaffected ease for Survival & Recovery

The 'Ease' of health and living has topologic properties that are absent from the deployment of survival mechanisms. These reactions in the common state of health involve adaptive behaviour under physical *and* human pressure ecology. They are activated or induced, up to healing power or overactive 'vitality', but they lose serenity and the ability to remain simply 'unaffected'. Drawing on the body's matter as a 'resource', and driving it to breakdown like a machine, survival processes reduce its physical integrity, structural, functional, and suppress *basic* vegetative functions (e.g. breathing, hydration, metabolic warmth). In the long run, used chronically as it is in normal health, this adaptive mode impairs the body's vegetative function and its very viability. As a philosophy of life, survival drives the historical periodic cultural re-deployment of daily life habits, diets, cultures, civilised lifestyles and habitat modifications that are damaging to human health and the planet. Strategies such as specific targeting to 'balance brain imbalances', general activation, survolting 'higher' functions, inventing things to make life physically/materially 'easier' or to fuel a 'lack of' energy, all lead to costly '*increased physiological needs*' (e.g. nutrients, cooling, heating), to resources over-exploitation, to adaptive exhaustion, vegetative deregulation, and to crises. The survival capacity has benefits, but also the cost of counter-productive effects. The loss of biological integrity in human health is obvious in the drift in human health and susceptibility.

Survival *never quite* recovers the initial state, even with Rest & Recovery.

These two instincts are compatible, complementary and must be combined to ensure health, but this is not enough. Despite the 'easier life' this operational mode fosters, it invisibly drifts away from ease and unaffected state, progressively increasing the state of need rather than reducing it. It is **auto-reinforcing**.

Vegetative ease and not pushing limits are an **auto-limiting** mode like osmosis.



Experimental Foraging Station (2014)



The dominant modelling of 'health' is focused on emergency and disease or adaptive 'wellbeing', which all refer to survival, as do the advanced frameworks driving methods for global problems mitigation. This reinforces *social*-adaptive, self-centred behaviours and anthropo-centric models. The costs for ecology and economy and for daily life and health integrity are increasingly prohibitive. This experiment explores a new approach that could reduce these 'increased needs' (e.g. nutritional treatments compounding the strain on the wild biosphere).

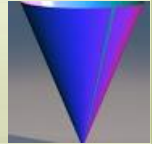
Rewilding foods & soils and a kind of 'Wildlife Care' for the human primate to ease the collective behaviour in facing climate change and ageing population and create a new way of 'societal inclusion' rather than 'social integration'

Instead of conditioned compensations, an 'unaffected health state' not adaptively patterned but fluidly responsive to *very small* distortions, modifies needs and behaviour. Simple (yet salubrious) living conditions that *do not* «activate» *centrally all the time* do not induce the diet-lifestyle-stress-sedentarism related syndromes, diseases, and ill-ageing. *Biological* integrity can be restored through walking in upright posture without load, strain or exertion, defocusing mind and senses regularly (autonomic effect), and eating watery foraged foods. [Gatherer style feeding directly off plants (not exclusively).]

Rather than current disturbing high maintenance methods, a **palaeolithic 'Wild Gardens' approach** (wild foods, leave the best, pick the rest, finding a plant's preferred spot, collaborating with wildlife...), can assist in **rewilding food sourcing** (berries, nuts, non-diabetogenic yakon, etc.) *and* health regulation. Restoring organically soil and its hydrology, fostering a nearly auto-sustaining sparse woodland ecosystem of small trees, bushes, ground plants to produce food, the *station* contributes to rewilding the planet.

Scattered building 150-200m apart, landscape embedding and distance-views for vision de-focus, can address sensory & autonomic needs of the 3 experimenters. Deep restful sleep is encouraged by many '100-paces' walks in sunshine and tracks, for moving & breathing throughout the day. Small components of inventive modular design, outdoors-oriented, climate and energy-wise architecture, can encourage a physically active lifestyle with less adaptive pressure, without abandoning technology (small scale 'grounded') or intellectual activity contributing knowledge to society.

A station 'green', 'blue', without 'red' cost. Resources recycling, 'green' energy, and a no-growth 'maintenance economy' (e.g. local sale of food surplus, a premedical test center, knowledge transfer to the Store of Knowledge and locally) will maintain access to ingenious technology, supporting a *near auto-sufficiency* that does not automatically require growth. **A fair direct exchange** of rewilding labour & expertise contribution for land occupation models in practice a new option for those who cannot fit in large-systems society and with socio-economically blocked access to land and wilderness, yet who need it the most. Allowing participation, and **enabling 'Green Hands' work outdoors**, despite personal limitations, *without worsening them*, can change health and professional outcomes, reduce repetitive treatments, and lighten the economic loads of dependence on collective social, medical/health and financial systems. The benefit to people/society makes this experiment a distributed option to ease the economic cost of rewilding the planet too.



The many common names for the generic Ex-/Up-oriented 'Advancement' vertical axis

The generic oriented axis has ancient roots. This simplistic geometry operates in fields of practice and abstract frameworks alike, as well as daily life, and is a widely accepted cultural bias (Gould 1995, Tversky 2009), that has its origin in the *survival* drive. Its universality is challenged in this work, putting its usefulness into the context of its domain of validity, and a broader domain, equally valuable. It has a variety of formulations such as '*higher*' or more simply 'up', or 'out' or 'forward' (found in common gestures and words). This vertical axis is a generic, culturally pervasive element in organised societies and manifests as a ubiquitous and persistent Human Pressure to give in to an extremely wide diversity of collective tendencies toward rise, increase, expand, spread, advance to high/highest, etc.

From this one-way orientation are derived abstractions, mind faculties toward higher orders of logic, organisation or mathematical dimensions, and correlate technical concepts of development or evolution, advancement or complexification, all of which justify the 'necessity' of practical Human Pressure and the induced needs for material and mental progress, practices of initiating or inducing, physiological conditioning to activate growth or healing, re-activating body sub-systems, and the habit of culturally inducing intrinsically self-centred **behaviours of survival** (at the expense of other behaviours of living), and the wind up which lead to spiralling out of hand, 'spinning out of control'. The current slogan of 'Keep up or be left behind' reformulates popular excluding prejudices: get stronger, bigger, better, more..., follow or 'fall below'. The vertical axis has been given many other names relative to countless perspectives and different historical frameworks, attributed to various human activities, located in various spaces.

Many names

Primary concepts (found in etymology): swell, rise, raise, start, go, initiate, induce, move

Daily life concepts: the way Up, speed up, power up, accelerate, boost, activate, vibrant

In philosophies: extension, localisation, attributions, philosophies of human advancement as being opposed to philosophy of nature (2 philosophies of 'life'; two definitions of 'life')

In theories:

Expansion related to systematic exploitation □ exclusion & extinction, building sprawl

Growth multiply, drive, generate, and de-generate

Improvement survival, adaptation, augmentation therapies for female or low intelligence

Progress, advancement, development, evolution, complexification, complexity,

In the body: subcultures reduce the topologic axis vertical to the *physical-material* geometric line-axis of the body's shape & the external/sensory. This reduction has major consequences in the long-term effects of theory-governed sensory-motor and psycho-behavioural treatment of children with behavioural problems or

For the mind: Other subcultures reduce the axis to mind-body, and promote activation of will, self, or emotions [think of ' $e=mc^2$ ' energising and 'quantum' personal development]. This has deleterious consequences for people with subclinical syndromes that arise from the already activated *energetic* 'rise' of drive or 'nerves' (associated to the spine in yoga). 1



There are many other specific names for this generalised but biased (oriented one-way) conception of human activity (or 'life').

The Animated Geometry models 2-way

If modelled with topology, the Vertical axis is a 2-way or *double direction* of *topologic* deployments both oriented to *near-at-past limits*. In humans this relates to deploying survival mechanisms for a purpose or goal in an urgent situation, and also un-deploying them for a just as necessary Rest-Recovery. The conventionalised notion of one-way 'direction' ignores the second direction; together they correspond to an 'orienting', an activation and a de-activation. But his orienting *can stop*, stop orienting to limits and stay away from limits.

Consequences

Despite constructive or productive formations created by knowledge fragmentation and limited observations, the more humans 'advance' in any field or endeavour, the more they

(1) create and re-create counter-productive effects (in health for example), and
(2) *at the same time impair* the behaviours *that could help un-deploy* globally. The *short-sighted & long-sighted*, anthropomorphic & individually self-centered, material & physical biases, and separative survival behaviours have a hidden counterpart. The primary role of these other behaviours is to let go of the chronic-acute override of brain central control over physiological mechanisms that damage the integrity and viability, and also erode the survival and healing capacities, overall worsening rather than improving daily life and the planetary situation. We steer *away* from ease, not towards it, despite all the means invented to try for 'the easy life'. So the improvement of the understanding [*Spinoza 1677*] of the Vertical Axis, and finding the common ground hiding behind the unnecessary opposition of the two philosophies of 'life' (Advancement & Return to Nature), is crucial at both local and global levels. A cultural recognition of the non-survival/healing behaviours is needed. These non-compensatory fluid responses to small changes are just as necessary as adaptive, advance & reverse capacities to *maintain biological life*.

Fieldwork findings

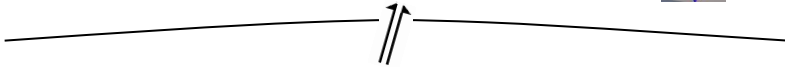
Behaviours and options that help 'un-wind' deployment altogether (different from wind-up/wind-down) are spontaneous (un-triggered) and undo both directions of the 2-way Vertical Axis. They support non-fragmenting processes (including social and less-diminished ageing), and 'care' behaviours (to body and everything around) that are sensitive to actual requirements – *actions* to provide care, not ungrounded emotional 'caring', or just leading its delivery through others, talking or educating about it, *without actually doing anything*. These options show how to care for long-term viability, in one's house, car or town, for others, on the planet, for its biodiverse wildlife, human diversity, starting with the human body, its labour capacity and its health, rather than driving it like a repairable machine... to its grave). The *Foraging Station Experiment* explores these basic options in practice.

Context of the Local Case[®] experimental method

Parameters: **PhysikeMorphism–AnthropoMorphism–SpiroMorphism** (e.g. DNA, spin, caduceus snakes, spirit)
Trans-Form under LARGE distortion: Trans-forming Disturbance \leftrightarrow Deformed Trans-Formation
Non-Biological Complex systems are FRAGILE and often at risk (spin/vibration may appear 'living')
 \Rightarrow deployment is **Auto-Reinforcing:** [endless ∞ constraint limitation] \leftrightarrow [endless ∞ un-limited activity]
 \Rightarrow 'goes off track': general DRIFT with no end (asymptotic, endless)

Topologic Situation Modelling[®]

Topologic properties: 'gauging'
Reasoning in Dimensional geometry \Leftrightarrow Logical orders



deductive
reasoning



General
Principle

Special
Case

inductive
reasoning



Objective observation [sensory, measure instruments]
 Subjective observation [self, word tools]
 Behavioural observation [external to system observed]



Parameters:
of Re-Presentation

Physical \Leftrightarrow Human

Material \Leftrightarrow Mental

Forgotten in mathematics

1D vertical

generic symmetry

Hidden in culture

Direct Observation
of *very small* distortions

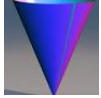
Neither object nor subject 'inner':
the observing body is affected & affects

Local
Case[®]

Topologic **Animated Geometry: Generic gauging of small distortion & Grav-Intensity**
NO Parameters of Re-presentation but generic gauging of the situation that presents, without separating
 Biological Complex Systems in Nature have STABLE ORGANISATION, maintain viable integrity
 \Rightarrow deployment is **Auto-Limiting** and 'stays on track' (no drift). **remains Safe & Sound**

Local-Case[©] experimental method

The *Local-Case*[©] method is an original experimental research design validated by the award of a Ph.D. (Bouchon, 2008). It is used informally by certain doctors (without defining a method, but guiding their use of conventional methods of enquiry).



Different from conventionalised approaches

This experimental method studies *topologic* properties of both a local case — a particular situation — *and* a global case, of which it is *an expression*. It does not use conventional parameters such as systems, physical parameters, or human/mind parameters. There are 3 differences, compared to conventional experimental designs.

Both global and local situations display the *same* topologic properties, 'work the same way'. The difference from a conventional design studying a particular case of a general case is that *both local and global situations are studied simultaneously*, as they are considered to undergo the same evolution or deployment. This is not taken into account in a conventional study of a specific case, which is then generalised. For example, these properties are found in both the physical and human general domains at different scales (e.g. physical health, cognitive elements; civilised behaviour, cultural influences; body, mind).

Another difference is that *the researcher is considered part of* the experimentation, since it is the researcher who observes, but not in a 'first person' manner. The more subtle the observations, made directly, without instruments, tools, or self-world system, the more important it is to include the 'sensitive' researcher in the experimental design.

This also allows formulating a topologic baseline that is inherently characteristic of *the researcher's* life and action – observation is a cognitive action –. This influences analysis and is never clarified in research, but taken for granted.

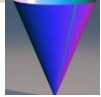
Topologic Situation Modelling[©] is an animated 'dimensional' geometry that describes *very small* distortions. It is demonstrated through videos containing computer animations. It is applied, in field work,

- ◆ through monitoring properties found at both global and local levels (of health for example). The researcher is also an expression of both local and global levels (or collective and individual).
- ◆ at the level of *the instrument of observation for very small distortions* (for topologic properties). The 'sensitive' researcher is able to observe the *smaller distortions* that objective instruments (material), subjective interactions and external behavioural observation, cannot detect, as well as the observer's topologic state of deployment, which is baseline to experimentation.

This way, in the *Local-Case*[©] experimental method, the *observation biases* introduced by mind but also the baseline state of the researcher's body and his *modus operandi*, can be taken into account and formulated clearly as with assumptions and physical presuppositions. This approach is particularly suited studying influences in the case of 'sensitive' or neuro-A-typical

Topologic Situation Modelling[®] method

The *Topologic Situation Modelling*[®] method studies the topologic properties of a situation (e.g. swelling, expanding), rather than represent causes & effects on objects or statistical correlations, or formulating explanations and descriptions of human experience.



- Topology is a kind of geometry in motion, a 'rubber sheet geometry' of *small* distortion. In this work it is used without numbers, equations or algorithms [If curious, see the article '*A Biased Little History of Topology*'.]

- This method can model how the **situation deploys from 'state' to state (or stages) and back**, thus allowing to understand both the 'whence' and 'whither' of a situation, *simultaneously*, and to obtain a more complete picture than system theory can offer.

- It allows '**gauging**' the '**shaping**' of a situation generically, its '**orienting**' or tendency of baseline observations (e.g. do they tend to increase or decrease?). Typically, cultures use only one of two directions, as philosophies of 'life': either a philosophy of human advancement (increase) or a philosophy of nature (or 'return' to previous states). Topology enables to **model simultaneously both directions of orienting**, and thus to understand their connection and common ground, and find how to operate with both of them.

- Topologic modelling **apprehends local-global situations simultaneously**, and permits to use a local exemplary and its evolving properties to gauge a global property and its changes, or to use a global situation's 'big picture' to take actions to resolve the deployment of a local situation that has complex, multi-factorial or multi-modal aspects (described in conventional methods). This is particularly useful for issues that affect both the global human world and the individual, in too many ways to apprehend even with a multi-factorial approach.

- **This method apprehends a situation «as it presents» directly**, independently of valuing (measurement, evaluation: valuing requires a reference point, center or frame of reference), of defining systems and dualistic inter-actions. That is, it models the situation *independently of representations* or any filtering framework of understanding or framing for perspective – which do also have their uses –. Perspective and valuing introduce bias and prevent a direct gauging without bias of a situation as it *presents*, and of its deployment, independently of time or energy frameworks.

- This topologic method is less differentiating, more generic, but provides a more complete picture than even the largest systemic 'big picture'. However, direct gauging of the shaping of the situation or *Topologic Situation Modelling*[®], can still be declined into various perspectives, for communication, to construct representations according to conventional parameters of representation, maps or word explanations. This gives access to the perspectives on the same situation given by the known methods.

- *Topologic Situation Modelling*[®] is an animated & dimensional geometry that produces a geometric «imaging», imaging that 'looks like' or has a geometric similarity (not physical) to the way the situation deploys and distorts. This can be used as a **«Geometry of Mind»**, an intellectual tool for modelling that includes a dimensional logic of orders. The simple **Animated Geometry** is also a **«Geometry of Sensation»**, a cognitive kinesic-spatial sensitivity.



Research Program Development



Exploratory field testing of the *Topologic Situation Modelling*® method

2008. Ph.D. award validates modelling & *Local Case*® experimental methods' rigour.

2009. **Oxytocin experimental treatment.** *Case Report: 'Low dose oxytocin stops unexplained 'burning pain''* [physician supervised] Oxytocin acts as a primary 'strain system' for the body-brain, at 3 orders: birthing, social effects (conventional research), but also more basic: **regulating** hydration. This led to the '*Water Strain Hypothesis*' [to be tested in the *Foraging Station Experiment*].

2005-2011. Seeking to communicate, collaborate, contribute (conference China 2006), contacts (researchers, ecologists, NGOs, community, 'green-hands' and orangutans volunteering) led to the conclusion that nobody knows about the dimensional geometry of topology: «*interesting, but we have our own framework*». Modelling situations with topology is an «alien language» to people.

2010. **Designing the *Foraging Station Experiment*** to explore the topologic reduction of Human Pressure on health/planet ecologies and on societal behaviours, also to test energy & hydration **deregulation**. Basis: food sourcing according to *prehistoric 'wild gardens' & foraging*; land occupation exchanged for contribution to knowledge and «*green-hands*» labour for 'rewilding' of human/planet health.

2010. Preparations for fieldwork expeditions while looking for land to establish it.

2011. **Prepared a 3-months 'walkabout'** for issues awareness. Floods aborted plans: post-menopausal **de-Regulation** stifles trekking without sufficient life supports.

2011. **Accompanying a bipolar patient** [5 months live-in] Observed her social and cognitive changes during shift to new living conditions, healthy diet, physician nutrition formula (confirmed inadequate) meant to reduce risk of 'high'. Her *unwilled* appetite drift preceded a mania phase: folic acid induced glucose intake can **de-regulate** the bipolar mind. In Ph.D. studied syndromes, this **de-regulates** physical energy and stress state susceptibility. The 'flaring' pattern occurs in 2 different 'orders' of «activation» (i.e. geometric dimensions of 'up and down').

8 years of field research in Topologic Health Ecology

2011-2018. Most time spent in isolated areas and observing people who seek nature, enquiring into their motivations, health state, sense of pressure. Studying elements of Health Ecology, actual needs & specific requirements (e.g. sensory, autonomic) for sensitive & reactive physiologies. This led to the societal ecology approach derived from veterinary & wildlife care: «**Wildlife Care 4 Humans**».

- Submitted to conferences: *Modes of Thinking* (2013); *Complex Systems* (2014).
- Photographs for a book: ingenious nomad living conditions to seek nature & walking.

2011. **The Trepina Gorge National Park test** [NT, 5 mths] Nature living conditions (ecologic factors, less crowding) reduce survival reactions, stress/strain states and 'metabolic needs increased' under pressure. Daily walk 4-5 hours **regulates** physiology. Emergency fire fighting engagement: confirmed role of **survival «activation»** (AAA®); discussion of 'the beast' behaviour. Nearly dying of hypothermia **de-activated** survival mechanisms, resulting in sharp, immediate reduction of physiological struggle, stiffness, improved breathing & **regulation**. 1



2012. **Lake Atkinson scout camp** [QLD, 4mths] Role of high-energy states in metabolic pathways reinforcing high need, *unlike* low-energy basic activity.

2010's. **3 'sleep cure' attempts**: post-menopausal weakened state requires more biological recovery, but deep rest is interpreted as socially 'self'-destructive, or medically irrelevant and not offered (despite 19th century medical literature).

2014. **Cape Range N.Pk.** [WA, 4 months]: Reduced mental/social/brain activity, but 4-5h daily physical activity (low-energy) plus wildlife presence (hence smile), restored physiology from dehydrated heat stress, improved breathing, digestion, even blurry vision – an enlightening example of **Respite-Rest-Recovery** (RRR®).

2014. **Surviving winter sleeping rough** [4 mths] in a mouldy box-trailer with no facilities, heating or water. Waiting is a cause of agitation. Primitive harsh 'outdoors' and socially isolated conditions have the same effect as normal urban civilised/social busy conditions. Pressure remains high. Conclusion: a paddock or city park does *not* reproduce the **biological auto-regulation effect of nature**.

2014. **Acquired micro-camper**. Aged body temperature **regulation** requires protected, flexible shelter. Less compensation/effort-intensive living reduces adrenaline induced damage, and eases the «in-dying» physiological sensation.

2015. **Start identifying land restoration techniques**; compare to human health.

2016. **Camp hosting at Grampians N.Pk.** [VIC, 4weeks]: Conditions: *low-crowding* daily human environment, with respectful park rangers welcoming cooperation on maps, looking after people & new planting in camp, sharing maps & local knowledge, fire danger retreat room ("your safety & comfort matters") improved the sense of belonging: being asked to do *what one can, not pushed* to fail at *what one cannot*, reduces the activation of chronic-acute effort. *Impressive physical results*: (lost once out of nature, due to human pressures and unsuitable physical ecology) *Staying* in nature (at night too), exploring all tracks, 4-5 hours walking daily, kayaking, better eating, improved physiology and built a 500m walking limitation up to a 10km uphill day capacity in 1 month.

2017-Present. **Topologic study of the physiology of Regulation** in syndromes, autonomic function, and cognitive differences. Pushing to 'higher' nervous/brain function is the civilised way of *internally 'balancing'* states to prevent dysfunctions in body organs, person & mind activity. This is a *directional «activation»* to 'Up' or 'High', productive short-term, but with many long-term counter-productive effects. Nature's less activating (orienting) environment supports *inherent biological auto-regulation without* entraining high or central functions. Water is a core issue: (H2O in cell high-energy production).

2021: **Seeking collaborations to establish the Foraging Station Experiment** to help rewild human and planet health and with health monitoring specialist physicians, technologists and thinkers to reconnect the two human *orientations*: 'Human Advancement', 'Return to Nature', Boundary parameter; share findings.

Another possible development: Computerising *Perspectival Mapping*® was not feasible in 2006. Parameters of representation and their derivatives could be used to help find trans-disciplinary similarity of frameworks, and for AI automated text analysis to detect biases, general perspective and orientation, human assumptions and physical presuppositions.



The Water Strain Hypothesis



'Water of Life' - Not a metaphor
Not just a carrier or H2O to break or
Planet water (drink, rain):
Ground of health (Proto-Health)

In & Out of cells, Fluid, Serous, Viscous, Mucus, Stiff, Fibrotic, Sclerotic, Necrotic
[Proto-Health] **Ground Substance: a Hydrating Gel made by Fibroblasts**
...if they are not activated to make Scar Tissue & repairing connective tissues
with Elastin (sagging), Collagen (wrinkles), Fibrin (stiffness, plaque)

The «**Water Strain Hypothesis**» of health deterioration. 'Water stress' or 'drought stress' is a plant biology term. This hypothesis was inspired by the similarity of the human spine & discs to the «hydraulic frame» of plants. It attributes to dynamic water redistributions throughout the body an *initiating* role in the development of behaviours driven by survival activation, to physiologic dysfunctions found in chronic flaring syndromes, and to Neuro-A-typical states that lead to cognitive changes. The dysfunctions are characterised by difficulty in **general REGULATION**, manifest in diffuse symptoms such as body temperature & sleep disturbance, pain, fatigue & cognitive fog (which can be viewed as energy shutdown), appetite shifts, spinal posture alterations, stress states, swelling & shrinking, stiffness generally high reactivity (e.g. to foods and environmental, humans, daily-living conditions), recurring instability states, and by a slow *vegetative* deterioration, a drift not detected by medical instruments or objective/subjective observation of the 'person'. Yet these can be sensed from a 'nexial' observation viewpoint.

The hypothesis implicates **the hypothalamic Osmostat**, a 'first strain system', its activity most detectable in sensitive individuals, more women than men. Physiologic effort (straining) initiates the deployment of complex survival mechanisms and a «state of need» for 'resources' (in medical jargon: 'increased physiological needs' and 'lack of' cofactors/nutrients/metabolic enzymes). The Osmostat also acts as **Thermostat** and **Rheostat** of reactions.

The hypothalamus affects water, the regulation of vegetative functions such as nutrient assimilation and the most basic role of Dopamine and Gaba. It «activates» physiology (Autonomic Nervous System, Reticular System, mitochondrial production of «EnErgo» high energy), and affects functions such as breathing, eating, sleep, much before it entrains the neuroendocrine HPA axis (stress hormones, cortisol). It also influences directly the brain, thus changing behaviour as well as the mind. Its role in governing water movements is neglected: low-grade dehydration, congestion or swelling (before any inflammation), irritation reactions (mechanical, chemical...), changes in fluid properties and composition (e.g. saliva, synovial, in bursae, in spinal discs), and mucus (e.g. nose, lungs, vagina), thus altering vegetative functions such as digestion. It also induces Fibroblasts to heal/repair connective tissues and produce scar fibres instead of **Ground Substance**. Fibroblasts are also involved in overgrowth processes.

The chronic high-energy functioning required to adapt and activate brain or mind in normal societal situations, alters this system of systemic **pressure regulation** and **osmotic stress**, bringing counter-productive effects of 'feeling pressured' and in cellular functions, nutrient assimilation, energy.