



MarikaBouchon.com

## Topologic Ecology Research Program



# 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 Trephina 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**. <sup>1</sup>



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 19<sup>th</sup> 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: (H<sub>2</sub>O 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.