

Validity and Valuing

'Particularly important is the notion of not blaming the victim.' (Graham 2001)

The effects of attributing values to bodily and mental variables to evaluate 'evidence' of illness can be devastating. The issue of validity in research can also be distressing.

The notion of validity

During my Masters studies, I made a mind-map of many definitions of the word 'science', and of 'scientific method'. I explored the criteria for 'good science' and what is 'valid' knowledge. Various writers have emphasised diverse aspects (eg logical rigour, empirical evidence, reproducibility...) What is valid for one perspective is not necessarily so for another, particularly in the mutual appraisal of physical and human sciences – a problem for the present cross-domain study. I was faced with dilemmas that contributed to motivating my analysis of perspectives. General validation strategies and what constitutes 'evidence' are contentious, and have been the object of large bodies of literature in both philosophy and sciences. They make it difficult to define low-grade medical syndromes and clarify their symptoms

General strategies for validation

Validation procedures differ across the various areas of science: proof is crucial in mathematics, and non-circular logic or reasoning in philosophy. In qualitative sciences, phenomenology of a human experience has to be reasonably widespread in the population, and this often requires long justifications about the existence and reality of experiences for some people. There are countless models for complex mechanisms of validation in qualitative science – almost one per new method formalised – and this causes distress to

many researchers, particularly for innovative approaches. This problem is also no longer limited to human sciences: nutritional research and clinical trials are rife with challenges to methodological validity. Some areas remain unexplored, such as the percentage of failure in a clinical trial, almost never investigated and rarely discussed. These problems are related to epistemology and theoretical assumptions, but also to ontology. Revisiting several times during this project, the diversity of perspectives on validity of explanation and experience did not clarify these problems until the less differentiated model, which provided a topologic meaning, was developed (see chapter <Nexial-topologic deployment>). The most general types of validity and validation strategies I found (not only in academia) can be classified as perspectives (table 6).

Table 6: Validation strategies and perspectival validity			
generalisation:			
internal validity (logical reason or intuition)		external validity (collective consensus)	
confirmed by L-time--Prediction	reliable & 'pragmatic' usefulness verified by M-Replication in spaces	justified by R-time-honoured Tradition	
substantiated existence of 'evidence' = localisation in a collective timed-space			
N2d- 'eSTABlISHED' validity objectively true to brain-interpreted senses ¹ = found in the collective physical reality collective geoMetry of experience		N3p-'STABilised' validity subjectively real to mental sense of self ² = found in the collective human reality collective geoGraphies of explanation	

Internal and external validity are abstract, generalised notions. The first requires non-circular explanatory reasoning, for a logical rigour that has its root in collectively accepted intuition (eg mathematical or spiritual principles). The second requires the consistency between experience and explanation. This is a basic circularity, although necessary for a coherent perspective and a collective consensus on what is 'real'. The second line of the table is based on sequencing: time-prediction (of physical findings), time-series replication (to generalise), and time-honoured traditions (eg defining humans as emotional or energetic or material beings). These strategies aim to compensate for the unreliability of what the senses (outer or inner) show, which many know, can be deceiving. Scientists often speak of 'establishing'

¹ The brain interprets sensory perception (5 senses in Western culture).

² Psychologically or subjectively real experiences are 'sensitive': constructed mentally as sensory models that inform the self, sometimes with several 'extra' senses for the 'psychic'.

scientific evidence or causal correlations, and philosophers of communal processes that stabilise the evidence into a collectively agreed human reality (paradigm) – or unreality. All these arise from *and* produce, circularly, our re-Presentations, the geoMetrics of experience and collective geoGraphies of explanation (see chapter <Many perspectives>). They are the basis for cultural symbols and icons such as the head-centre. More developed forms result in the complex landscapes, abstract and concrete that rule our lifestyles. They ultimately produce ‘syndromes of instability’ (how is demonstrated in <Nexial-topologic deployment>), and knowledges that cannot make sense of them. This project aimed to address this by ‘going back to the drawing board’ for a fresh look.

Until such time as all this could be mapped or modelled, one way to avoid complete paralysis and begin to experiment, was to reduce the complicated literature on validity to something workable – a few key guidelines. The following three quotes show that even guiding words do not necessarily express matching models:

‘The entire study’s trustworthiness is tested by four naturalistic analogues to the conventional criteria of internal and external validity, reliability, and objectivity, which are termed “credibility”, “transferability”, “dependability” and “confirmability”, respectively.’ (Lincoln & Guba 1985 p.188)

‘Much has been written, especially within the positivistic paradigm, about the need for *empirical adequacy* in all components of research. Definitions must be operational; methods and conclusions must be objective, valid, reliable, and generalizable, and theories must provide for the possibility of their falsification by subsequently collected data.’ (Braud p.66).

‘...the various procedures that help ensure internal and external validity, generalizability, and reliability, and on intellectual criteria for consistency,’ (Braud p.66).

Many such sets exist and could be devised, so I decided to adopt the simpler general attitudes I had learned a long time ago in physics: Any hypothesis, ‘truth’, or ‘reality’ is a ‘working truth’, liable to be reviewed if it is defaulted by observations that do not ‘fit’ or cannot be explained. It is also only a ‘representation’, adequate ‘for all intents and purposes’ in the situation at hand, until challenged. All evidence, ideas, experiences, models, and other

aspects, are explored systematically, with unbiased rigour, and failsafe mechanisms against bias. I added that findings must be consistent with the global store of both knowledge *and* experience, but not create self-consistent ‘worlds of the mind’ ungrounded in daily living and physical health. The ‘working truths’ drawn from my observations must account for other’s ‘truths’ and ‘realities’, but, inversely, those mapped and modelled from others’ views must also account for the local-case studied, and not exclude the non-‘Human’. All this within the measure of my limited capacities.

This general approach has served me well. It detected that, despite consistency, both internal and external, perspectival maps, as well as their nexial-topologic ‘deployment’³ are incomplete. They ‘turn inside-out’ the ‘native gauging’³ and do not map what it shows. Instead, they focus on finding arcane rationalisations for its being ‘invisible’, ‘hidden’, or ‘lost’ (or on creating correlate iconic experiences). Together, nexial-topologic *deployment* of conventionalised³ perspectives, and *non-deployed* gauging³ provided a new understanding of chronic syndromes, and answered my general research question. The approach also led to defining the domains of validity of the two forms of nexial-topology (see <Conclusions>).

Types of ‘evidence’: ways of ‘valuing’

Validity rests on criteria related to ‘evidence’, whether it is physical existence (eg symptoms, proof) or substantiation of human experience (eg pain, existing description). I approached this by exploring the variable nature of ‘attributing value’. In the particular case of syndromes of low-grade chronic illness (not resulting in life-threatening conditions), some sweeping devaluations are due to the difficulty of ‘proving’ symptoms (signs of ‘illness’ far from evident to the clinician’s senses, medical instruments, and even to the social circle). These rely on the recognition of elements that can be measured, named, ascribed a valance (eg degree), or ‘valued’ in other ways. Perspectival analysis of these ways of ‘valuing’ produced the following table 7. This table can be read downwards, or upwards.

Table 7: Forms of ‘valuing’

³ The terms ‘deployment’, ‘conventionalised’, and ‘gauging’ are explained in <Nexial-topologic deployment>.



⊕ / ⊖ N2d-Binary value (dualist valuing / devaluation) 'good-bad'	N2d-N3p-Evaluation (valance on a scale: usefulness in establishing / stabilising a desirable baseline)	N3p-Modal set of values (‘value-based’ polarisation)
substantiated existence: localisation in the human-physical timed-space (<i>genera</i>):		
measured, numbers COORDINATES of experience	naming, word FRAMEWORK of explanation	
geometric imaging & ‘Number’		

Explanation-down: collective ways of valuing

In the down direction, ‘value’ can be regarded as a graded evaluation (eg of impairment, improvement, dysfunction), a binary sentence (eg ‘sick’ or not), or a modal value (eg polarised comparison to a statistical normality or a standard point or range). These values are based on measures and nosological names, and pose problems. Objective measures are often not enough for the diagnosis of a condition such as the FM-CFIDS-ME syndrome. Moreover, because the condition forces one to slow down (tension, fatigue, brain difficulties), the ‘illness’, in some ways, also feels like a return to some sort of behavioural sanity, making an illness name not quite appropriate. Yet, on the other hand the common verdict of ‘there is nothing wrong with you’ does not suit either, since integrity is drastically reduced and susceptibility is high. Simplistic values such as strong/weak create many paradoxes: reactions can be quite powerful and overwhelming in a weakened state. The forms of ‘valuing’ are inconsistent, and do not adequately make sense of the condition. This begged the question: whence does this confusion and diversity of valuing come from?

Explanation-up: individual cognitive process of observing and valuing

This, I explored by investigating the cognitive process of observing and ascribing value. The perspectival classification of table 7 brings out the process I found, which goes from a first logical step of ‘observing’ to ‘valuing’ in various modes. This can be apprehended by reading the table from bottom to top, following one persons’ cognitive deployment (the valuer). A previous step is the ‘native gauging’ that produces an animated-geometry of the situation. It is expressed in gestures (geometry-related) that tell of nexial and topographic elements. This develops into my referring to ‘me’ as a human-sensate observer,-placed at the

centre of the 'space' observed (seen, heard: its centre is in the head). I also refer to this 'world' as physical-sensory evidence perceived at a moment in time. This can be represented with coordinates of experience (eg to measure an intensity or direction), and a framework of explanation (eg naming the origin or cause of my perceptions). Eventually, an evaluation appears (eg 'this isn't normal', 'natural', 'what it used to be', 'not good'...) that betrays an entire set of values... (There would be many other ways of creating a story out of this table, and it might be different for someone from another culture.) I summarise all these forms in the term 'valuing'. 'Valuing' produces at once the 'self' that values, and the 'evidence' it uses to experience and explain. The 'valuing' arises from the brain's interpretation of sensory perception and the concurrent localisation of the 'observer' in my head. This cognitive process is confirmed negatively by the wide acceptance of the necessity or inevitability of having a 'self' (an ego, soul, godly Self...). The vague sensations and 'native sense' do not involve a 'self', cannot be named, measured, scaled, or evaluated by these means. They have no recognised value or validity for health (or other spheres), are ignored.

'Researcher bias' and circumnavigating the perspectives

For perspectival analysis, I 'tried on' others' ways of valuing. I circumnavigated their related abstract explanations of health, epistemological techniques, experiential styles, and ontologies of the body, attempting to 'walk in their shoes' as far as my limitations allowed. This was my understanding of the integral method on which I based my research design

[...] by privileging only certain ways and aims of knowing – and by ignoring or devaluing others – we are unnecessarily and unwisely limiting...' (Braud 1998 p.3).

My analyses of these perspectives involved classifying them and critically comparing the eventual 'valuing' thus produced of physical 'health', to the global image given locally⁴ by the native animated geometry that does not use valuing conventions. In most cases, the result was the inversion noticed by Williamson and Pearse (1980; also see <Health and illness>). The body appears healthy and to feel well while, in fact, affected by disease. Alternatively,

⁴ This 'local' gauging is related to a bodymind affected by chronic damage.

the body is devalued as 'primitive' or 'animal', compared to the mind or brain, because of its apparently inevitable endless demands for attention (food, 'work at' staying healthy...), inevitable pain, and disgraceful ageing. It is considered a mere carrier of its emotions and energies, or an imperfect machine-vehicle-container for the mind and brain.

I cannot embrace this, but always make a point of not devaluing *any* perspective and, instead, 'place' it in the global 'space' of the physical-human world-history (a *topologic* 'space' with a scheme of unfoldment and enfoldment). To me, such views come with a state of emergency, in which the mind-brain 'drives' hard and directs all; it is not a permanent state. I studied the progression into this state (through nexial and topographic indicators), and its stopping into 'ease' (more physical and physiological effectiveness). I compensated for perspectival bias by circumnavigating all perspectives on health ecology and body, by deconstructing the notions of anthropomorphic self, 'physical body', and their integration 'as a whole system' body-mind. 'Gauging' the perspectives (without measure, naming, or other valuings) *showed* them as 'turned-inside-out'.

'Soma-Analysis and the Vertical Axis

The 'soma-analysis' performed in Phase one brought to light the importance of the localisation of the point of reference in the head, brain, and mind, and the consequent dualism [brain-mind]→body. Many tend to consider that this dualism is characteristic of Western culture, but Eastern culture has its own version. The dominant Western version tends to be more structural and connective (self and body things), the Eastern version more functional and operational (energies of the emotional or sexual self and flows of life). All forms actually operate in both general cultures, some being more dominant. In Eastern as in Western traditions, from antiquity (at least about 650BC) to modern times, the collective 'core' framework of explanation and experience, including medical, always considers, it seems, that the mind or brain affect and control the body or fail to do so (see <Extract F6>): the head rules the body vertically. This view seems to be a collective constant in most stages of cultural / civilised development (reexpressed through long periods). It places more value

on the ‘life of the mind’, its social or mental self, its driving spirit for survival or sexual power, on brain-organised behaviour of person and ‘physical’ body-system, than on the brain-body’s insusceptibility (*not needing to* entrain these or, in turn, entrain aggressive-defence behaviour of the body-system – see <Health and illness>). This is not consistent with the basis of ‘native gauging’ in non-entrainment, nor with what some people actually do in their daily living in certain conditions.

In my experiments, the ‘needs’ of emergency/critical conditions entrain head control temporarily, for targeted benefit, but at a cost for insusceptibility and ‘ease’: There is hidden low-grade damage to ‘integrity under operations’ (an ‘exhaustion of resources’). In a few archaic remnants of earlier myths of ‘The East’ (see <Ancient perspectivalism>), the stories are less differentiated and mention the same global damage, affecting children most, and the baseline of critical response. This corroborated my sense of ‘turned-around’, and the ‘gauging’ for which this critical basis of perspectival valuing constitutes a modelling of ‘limit’ and extremes (small or large).

H-‘researcher orientation’ and Sc-‘local orienting’ in observation

[These two names are H- and Sc- interpretations of the same projection of the topologic ‘vertical axis’ (explained in other chapters)]. Both the critical benefit and devaluation of the body-container are valuings, and other practical evaluations are often justified by using them. They arise from the vertical axis, whether its ‘direction’ becomes set ‘up’ or ‘down,’ or both. Valuings are perspectival differentiations, related to the reference localisation in the head, and so to this vertical ‘orienting’ in critical state. They are ‘turned inside-out’ because they consider some degree of criticality as a primary baseline, and describe only deployments (eg nature \square nurture). The ‘self-evidence’ that philosophers who evaluate works in physics often mention, is of the same nature – an unchallenged acceptance of the baseline of critical deployment, boundary phenomena, definition of systems, and conventionalised valuing.

I construe this tendency to deploy as a ‘local’ topologic ‘orienting’ (creating an axis) of both observer and observed. In human terminology, it is a ‘researcher orientation’ to degrees of criticality. The H- and Sc- vocabularies are here difficult to manipulate⁵. My own ‘researcher orientation’ is opposite. It acknowledges the mental realm (used to report on my research) and primacy of the head over the ‘physical’ body-system (used to make the body sit long hours at the computer), as *deployments* rather than as primary. It tends to stopping deployment, non-criticality, and not discerning mind from body or from world. The non-deployed state can be described as global ‘ease’, ‘integrity under operations’, ‘proto-health’. I cannot change or compensate for my H-orientation as I can for bias, cannot ‘turn-around’ my Sc-‘local orienting’ (shifting my apprehension of spontaneous ‘ease’ into something to be worked at, grown into, chosen, deployed), but I observed it, and can disclose it. I did this by investigating experimentally the mutual ruling of brain-mind-head and rest of the body, and disclosing (a) <EEs> concerning my experience related to criticality and lack of it, (b) a wholistic ‘view of the world’ apprehended locally – the phenomenological portrait ‘Physical wasting’ in <Conclusions> (obviously coloured by my current critical health ecology.), (c) the discussion of domains of application in <Conclusions> and (d) attempting to express ‘non-deployment’ or non-differentiation. What allowed me, however, to *offset* this H-‘researcher orientation’ and Sc-‘local orienting’, was to take the ‘native gauging’ as a

⁵ The following is unavoidably complicated (the imaging shows the same, more simply). My focus on physical health ecology during this project was placing primacy on the body. This bias was inverted during my Masters study of the mind. My ‘orienting’ is something different. It would be an inadequate conventionalisation to interpret my ‘local orienting’ or ‘research orientation’ as considering the physical realm (or ‘body’) as more primary than the mind realm. It just happens that ‘ease’ manifests more readily in physical sensations than mental impressions in my local case. The non-deployed state can be described as ‘ease’, but also translates as ‘physically insusceptible’, ‘mentally unaffected’, behaviourally ‘effortless’ (not straining or stressful, ‘easy’), etc. Such words are liable to drastic inversions and drifts of meaning rooted in conventionalised valuing: see ‘materially easy’ in <Conclusions\ figure 44>, think of mental detachment, ‘follow your bliss’, ‘don’t work hard, work smart’, etc.). It is my current bias (health, body) that focused on the physical effect. None of these explanations make it clear that I cannot embrace *criticality* as ‘primary’ or as a ‘*natural*’ baseline of experience (eg the recurring but not quite permanent pains and instability of a female body-mind) – and this does not mean that I devalue critical phenomena altogether. Hence the necessity to use imaging rather than words to express such things.

permanent benchmark throughout the project. This paves the way for possible generalised use of nexial-topology by others.

Rarely is the basis of criticality made apparent. In <F20\ Published EEs>, are examples of disclosure, but these are not academic publications and do not make the 'local' orienting of ideas clear. The non-critical in daily life is 'invisible'. We dismiss many unremarkable sensations and vague moods that are neither exceptional nor habitual. We simply tend to consider them 'natural', universally 'human', 'self-evident', and 'the same for every body' as in ourselves, even though they may differ with individuals and groups (think of the speedy physical healing in 'primitive' tribes, which astonished so many anthropologists). Yet, these unremarkable 'givens' – the very practical basis of daily living, betray the unnoticed baseline that remains unchallenged. Neither this baseline nor 'researcher orientation' are taken into account in research. (The perspectival forms of 'researcher bias' are derived from this.)

Findings of research, I propose, (and those of daily life accumulated 'experience') are relative to a domain of criticality that can be modelled through 'researcher orienting', denoted by the 'unremarkable' of daily living. They are relative to this 'local orienting' and state of criticality, to the observer's state of 'need'. The attendant generalisations and specification of practices can have deleterious effects on daily living that is 'oriented' differently (eg non-critical, without special need or generalised survival imperative). This remains a blind spot, and a hidden aspect of research.

Predictable valuing and deployment

Although details of valuing vary with context and perspective, 'valuings' have global properties of deployment that are modelled by nexial-topology and therefore their deployed 'placing' is 'predictable' – that is, the 'placing is a built-in part of deployment (see figure 11), For example:

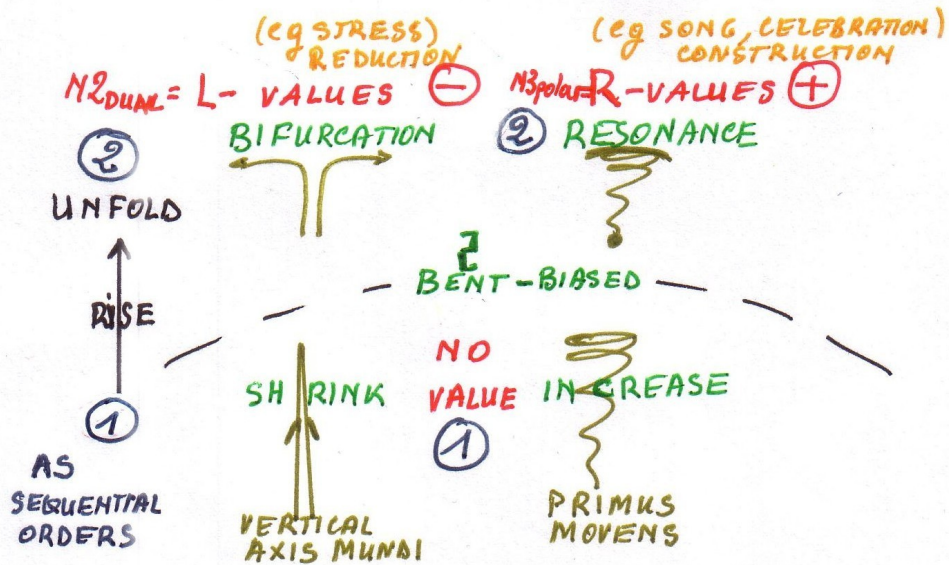
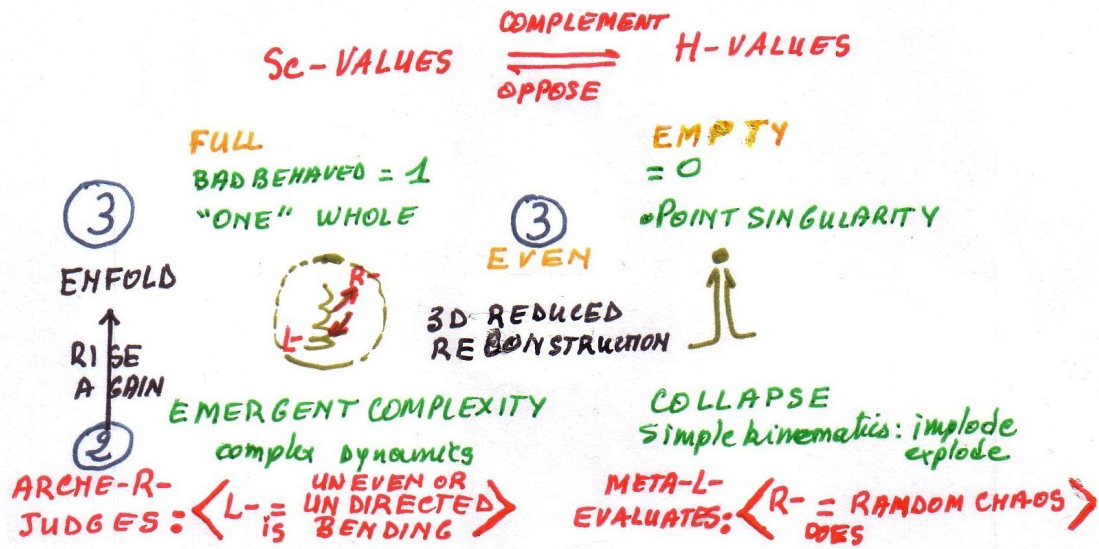
(a) The scientific and human valuings are symmetric, viewed as either opposed (at order 2) or complementary (order 3), and transfers between the two can create conflicts of valuing that are endemic in all aspects of culture.

(b) At the order 2 in this image, a person whose perspectival bias is toward the Left- tends to collect intellectual information about what is wrong \square ('monitor our demise', Hill 2001), and be pessimistic \square . A person biased toward the Right- tends to look for the 'good side of life' \oplus experientially, and be optimistic. Resonance may be seen as R-creative chaos or L-catastrophe. I symbolise this as L- \square and R- \oplus , in general. At order 3 in figure 11, the paradigmatic position shifts, devaluing the other side's perspective as a 'previous' or less complete stage. In more developed stages, the positive and negative can be evaluated as complementary, and either a benefit or a hindrance. In 'gauging' these binary values are irrelevant unless there is emergency or critical conditions.

(c) A number of other remarks could be made, but these are sufficient to show that the deployments of validity and value are predictable. They do not, ultimately, alter the global course of deployment, but participate in it. They locate or place differently the causes and blames, solutions and improvements, *only shifting* them from one expressed sphere to another. The 'orienting' to criticality remains the same, and the conventionalised 'valuings' maintain the same baseline hidden costs to human physicality.

I will show that 'valuing' also interferes with 'gauging'. Thanks to 'gauging' the perspectives globally, I discovered topology as a method applicable for a cross-domain study of health ecology and un-deployed nexial-topology to describe health without hidden cost. The account presented in these pages would not have come to be without my attempt, purposeful during this research project, at following in the footsteps of Spinoza:

*'I have made a ceaseless effort not to ridicule,
not to bewail, not to scorn human actions,
but to understand them.'* (Spinoza 1901)



- VALUING TYPES (PERSPECTIVES)
- EXAMPLES of NAMED VALUE
- GEOMETRY - GEOGRAPHY
- NEXIAL-TOPOLOGY
- ① 'STAGES' of SEQUENTIAL DEPLOYMENT

Figure 11. Valuing