

Many Perspectives

The following text may not be very easy to follow because it relates to a number of diverse fields, as well as to a general approach to knowledge and experience and ‘generic’ notions, and a way of organising their diversity. It is only an orienting summary in order to introduce the reader to some issues that are addressed in chapter <Nexial-topologic deployment>. There may also be repetitions, compared to other chapters, necessary to clarify certain concepts. By the general term ‘perspectives’, I mean any and all our ways of representing our ‘views’, whether they be general views on culture, civilisation, on man’s sophistication or evolution, on reality, etc., or particular views on specific topics. These include our explanations, experiences and practices related to health, and our ways of apprehending the body, its environment and the interface between the two, whether we see it as mental or physical.

Vocabularies of the perspectives

In my Masters thesis, I had devised a system of classification using four directions to map learning, personal growth and shifts in experience. It was based on (a) the popular notion of ‘left-brain’ and ‘right-brain’ thinking, (b) the axis suggested by Ken Wilber’s ‘pre-trans fallacy’ (1996), with (c) an added ‘core of self’, an ‘I’ (Bouchon 1998 p.72). Given the nature of the present project, the ‘I’ had to be refined to account for physical aspects, interactions between body and environment, and to cater for much more complexity¹. The first complete classification model I used was a system of 3 axes, each with 2 directions:

¹ The term ‘complexity’ in the human domain does not mean the same as in science: it means diverse, multiple, rather than a formal organisation that is complex.

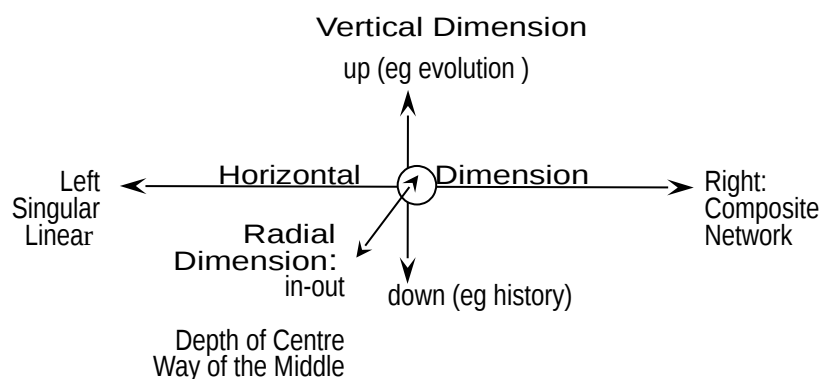


Figure 7 Three bi-directional dimensions of complexity in theory and experience

Linguistic indicators of perspective

I used these axes to collect field-specific words and find cross-field similarities and equivalent theoretical formulations, which come under the guise of various vocabularies and contexts, but with similar essential meanings. The dimensions represent different ways of conventionalising entities observed and this is reflected in the concepts we use. Each axis corresponds to a particular type of perspective bound to a particular way of conventionalising. For example, something observed might be viewed as an object with structure (a thing), a subject with functions (an entity), or a field of interactions and connections (a ‘world unto itself’). Following is a summary of the most common vocabularies used by the perspectives related to the 3 axes, in any field of research.

- **VERTICAL** dyads of words, in general frameworks yield the essential choice of ‘up or down’, such as up in evolution and down in history, up advancement and down to primitive states, up for humans and down for animals, etc. In abstraction, this corresponds to duality: closed-open systems), body-mind, mind-matter, space-time, body-brain, inside-outside, etc. The fundamental characteristics of this dimension are linearity and singularity. The vertical line can also be split into many ‘levels’ that add one onto another. The dyads are used to model functional dynamics and structural binding.
- **HORIZONTAL** triads of words represent 3-modal types, styles, colours, tastes, sounds, etc. that can be multiplied into a diversity of many. The archetypal modal triad is ‘Left-Middle-Right’ – the ‘middle’ is a later addition (a logical integration), and so is derived as (Left-Right-Middle). The triads correspond to different ways of conventionalising an

observation or description, such as (Left-Right-Middle), (singular, relational, connective), (structural, functional, operational), (linear, circular, spiralling), (static, dynamic, kinetic 'motion'), (electric, magnetic, gravitational), (initial, 'boundaried', radial), (radio, chemistry, biologic), etc. In abstraction, they correspond to different logics and frames of reference, such as: (cause, factors, wholistic conditions or triggers), (objective, subjective, direct), (combinations, types, modes), (connection, transformation, operation), (existing, real, actual), etc. The frameworks of this dimension are used to model composite sets and networks.

- **RADIAL** tetrads of words bring a concern with 'in-out' boundary phenomena, based on definitions of the limits of wholes, systems, bodies, objects, subjects, selves, worlds, etc. and the discernment of dual forms (giving a 'systems' view). For example, a body can be cold or hot with respect to an environment (heat activity), and wet or dry (sensory patterns). The in and out are named by reference to learned notions of body or self as systems having a 'within' in relation to a world 'without'. Combinations produce 'advanced' thinking in terms of an integrated or binding 'core' or nexus (the 'nexial' view) or differentiating several modes or types (a 'modal' view), which exist also in refined experiencing. Both build views in terms of extremes, limits, surfaces, edges, or development, binding, history, origination, etc. This kind of complexity deals with the Middle or Centre, with the Sc-broad and H-deep², with differentiation, discernment, discrimination, or subtlety, small details and fine-tuning, with 'hidden' clues or lost wholes, with instinct and intuition, with codes, spirituality, and 'secret' traditions (see <Endnote C6\ Core culture>). The frameworks of this dimension abstract patterns and motions from more habitual views.

Early in my study of perspectives, I started finding practical rules of thumb concerning the way they operate. One of them is that when someone's perspective shifts, the new perspective adopted always appears to be an improvement on the previous one. This is the case even if that means ignoring certain aspects that were effectively mapped by the old

² 'Sc-' and 'H-' are shorthand notations signifying 'scientific' and 'human', the 2 fundamental domains of knowledge and experience.

perspective, because the new one describes additional things the old one could not. The collection of such rules I gathered eventually grew to such large numbers that meta-rules, of a geometric nature began to emerge.

The patterns expressed in words through various dimensional frameworks have a similarity. Each dimension or axis is capable of making distinctions between particular things, of increasing the number of ‘things’ found in ‘reality’, and of reducing the number of elements and abstract concepts necessary to describe or explain them. This is what I call ‘general-specific’ thinking or ‘detail’ experiencing. Some forms of these qualities are listed in table 1.

Table 1: The fundamental symmetry: Specific ↔ General	
General, generalise, generic, genus	Specific, specialise, special, specify, species
discrimination, discernment, distinguish, define	differentiation, individuation
large, long-term	small, short term
simple	complex
general relativity	Sc-special relativity & H-post-modern relativism

Describing experience requires a lot of specific details related into some kind of whole, whereas explanation reduces them to elements related by some kind of logic (eg cause-effect, inside-outside interaction). Explanation and experience are not disjoint or independent aspects: any experiential paradigm has a basis in a culture and civilised techniques, a particular way of explaining that governs what can be described from experience and what can be observed, to draw abstract ideas for theory or philosophy. I simplified and organised the classification by defining a general ‘perspective’ as a general framework that is applied to all three: explanation, experience, *and* observing (or living or acting). These perspectives represent all the ‘ways’ of explaining, experiencing, and observing, in any field (one such ‘way’ is the ‘Way’ of Daoism; another is the way of science). There are two fundamentally different and archetypal general perspectives: the scientific and the human. They correspond to different domains that I symbolise by ‘Sc-‘ (scientific’), and ‘H-‘ (human), with the combination being ‘Sc-H-’. The vocabularies of the 2 domains are different (eg H-experience and Sc-experiment). The Human- also corresponds to perspectival anthropomorphism. By symmetry, the Scientific- also corresponds to perspectival

‘physikemorphism’³ (attributing physical, material, spatial or ‘natural’ form to the observed). For example, ‘sensing’ can be anthropomorphised into mental impression or physikemorphised into ‘internal sensation’ (in the body) – these are limitations. One rule of thumb I found concerning this is that ways of explanation limit what can be experienced, and the correlate ‘observed’ imposes limits on what can, in turn, be explained and represented in theory. Both express a basic perspectival bias. In daily life this bias manifests in personality type, body type, limiting cultural-educational background, and the biased filters of our perspective in communication (eg one says ‘order’ and the other understands ‘organisation’), and perception.

Searching the literature for a generalist taxonomy to organise all these perspectival biases or a scheme to classify *general* approaches to any subject in both human and scientific domains, I could find only very limited ones. There are specific growth models, developmental models, and evolutionary schemes that describe changes in perspective. Unitive schemas (eg McArthur 1990, among a large number of authors) seek to simplify, but do not account for the multiplicity of perspectives except as an anti-valuing, post-modernist patchwork, and this simply ignores the details and diversity. Integralist schemas (see <Endnote C1\ New Paradigm> and <C2\ The term ‘integral’>) are interpreted either as unitive-patchwork (but do not usually include *all* types of perspectives), or as simplifying emergence into unitary forms that describe the process of change, but not the diversity it comes from. One scheme (Linstone 1997) embraces the human domain with three modes (“technical/ analytic” perspective [T], “organizational/ intittutional” [O], and “personal/ individual” [P]), but it does not fit the scientific domain. In science, the cognitive creative processes are studied, and philosophy of science classifies the models according to their role

³ This term is meant to show the symmetry with anthropomorphism. ‘Morphism’ means giving form. ‘Physike’ is the feminine of the Greek word ‘physikos’, nature. In Old French, ‘phisike’ meant art of healing. About 1300, ‘fisike’ was a healing potion. In Middle English, ‘phisc’, meant a medicine to move bowels. The root ‘phyein’, to bring forth, gave rise to ‘physics’, science of matter and energy, but also to these notions related to medicine, the art applied to the body considered ‘natural’, currently conceived as ‘physical body’. The word ‘physike-morphism’ is meant to show this reduction of sensory meaning to the ‘material’-‘natural’ sphere.

of specific representation or general theorising ('abstract model'), but at best their organisation is in terms of families of models (Dutra 2006). Popular culture has its distinction of Left-Right logics, and this duality can be extended and deepened with other dyads to find many different logics that I tried to map into a combined L-R-evolution scheme. It is from this that I drew my first mapping dimensions (figure 7), but it left me with a paralysing 'multi-dimensional' diversity. One 3- modal scheme of logic (Hendrick 2002) confirmed the Left-Middle-Right distinction I was beginning to make, but this takes no account of the vertical dimension of development, evolution, or growth. There is, in the literature, a rising sense of need – as yet unsatisfied, it seems – for some sort of generalist taxonomy for all these perspectives. There are difficult problems with 'theory unification' (Rueger 2005), and with matching definitions of words rather than invent new ones for new subtle variations of meaning. Specialisation also wastes human effort by producing similar frameworks in diverse fields, each invented independently and under the guise of different vocabularies that represent the same entities. This creates redundancy. The discussions in physics about the nature of space, those, in philosophy of science about the development of the thinker's ideas, the challenges to evolution (see below), and the philosophers' doubts about their own discipline, are clear indications of this. This was a dire need for me, to understand the many medical theories of chronic illness, of 'the origin of all disease', of ageing. The many models of the body, which are disparate across cultures, and are the object of medical anthropology and history of medicine, added to the need. Models of health-sanity and philosophies of life are even more diverse, many involving spirituality. The closest I could find to a classification of general worldviews is what I call 'ancient perspectivalism', which I detail in chapter <Ancient perspectivalism, The Earth & The East>.

Perspectival analysis: taxonomies by the word

I set out to explore systematically and organise the general frameworks, by collecting general concepts that are context-independent, but in their many forms (eg a 'system' can be a body, self, world, etc.). My taxonomies were based on the wording of the general ideas and descriptions of experience (eg focus, intent, power, energies, will), and I used colour coding

in both my tables and my writings This helped me to visualise patterns, similarities and differences between perspectives, and logical orders of thinking. Patterns, tables and colour coding are common basic techniques, used by other thinkers such as Ken Wilber, or Graves (Spiral Dynamics). Among the countless integrative tables I built to classify the many vocabularies, of the theories and experiential descriptions, both specific and general, a few general ideas came to the fore. They are directly related to complex developments of theory, the archetype of which is a general-systemic view in science, and a world-model in the human domain. They are also linked to complexification of experience (eg refinements of perceptions). Intuitively I focused on notions of integrity and stability (table 2), and this is just one aspect (the symbols N2d- and N3p- are explained below).

Table 2: Concepts of integrity, equilibrium, evenness, and stability		
L-coherence (abstract)	Middle-consistency (general appearance or specific mean, means methods)	R-cohesion (concrete)
L-integrity (structural) N2d-dual binding	M-individuality (operational) degrees of specific freedom (connective) =generalised specificity	R-identity (functional) N3p-polarised bonding
one *	even *	full *
holding, holding together, holding as one	Left-right even, even throughout, or in all directions	soundness
unity	uniformity	union
symmetry, direction	uniform motion kinetic automorphism	harmony (harmonic resonance, harmonies)
L-static equilibrium in closed system	R-L-punctuated equilibrium in informational- physical closed-opening system	R- dynamic equilibrium (cycle, feedback, interaction... loop) in open system
N3p-N3p-kinematic resonance	N2d-N3p- quantisation, emergence integration into 1 new, non-linear behaviour of a 'self'-system	N2d-N2d- dynamics entangled dependent-arising. co-evolution
... for Sc-perturbable 'life' and H-disturbable 'existence' to not be affected, to be:		
L-maintained N2d-established	made L-true-M-actual-R-real N2d-N3p-substantiated	R-sustained N3p- stabilised
N2-steady 'within sphere' (eg holding a steady course, 'keeping on track', staying 'what one is')		N3 -smooth 'under operations' (eg 'holding it' under stress or pressure)
* One, even, and full are sophisticated integral notions found in texts arising from the traditional 'core of culture'.		

Fundamental parameters: N2d-dual and N3p-polar

The cycles of the inquiry in any area kept bringing up the same fundamental distinction between 'N2d-dual' and 'N3p-polar' ways of conventionalising (further explanation to

come). These parameters are most obvious in the *general* models that describe the development or 'origination' (process of creation) of our realities. These general explanations govern our civilisations and cultures, our descriptions of experience, and even what most of us *can* experience or feel. They also create new realities, and so, inversely, the nature of the most special experiences that humans have (often the most extreme, for example in mysticism, sport, or healing), is what governs the arising of new explanations and the validation or invalidation of old ones. These 2 parameters also drive the paradigmatic changes of experience and changes of general perspective that authors undergo – and bring to culture and civilisation –. They come to be through their structures of analysis and experimentations, through the developing concepts in their writings and the fields they explore, through the stories of their lives and the perceptions they describe when they share their special experiences. I mapped the careers of a few of them, as well as my own path.

The same concepts are named differently in the Sc- and H- domains, the evaluations are often inverted, and the definitions can be confusing. For example, the Sc-'dimension' is a H-logical 'order', and the many H-dimensions are Sc-variables or parameters (of the same logical order), and the latter are interpreted as H-details (of lower order than generalisations), etc. The only way to bypass the divergent naming and the ordinal classifications, for cross-domain analysis, was to reduce the various guises to basic parameters in an underlying domain. The parameters had to be applicable to language, but also to the mathematical descriptions of science. Various parameters yielded some simplification, but did not apply to all the fields reviewed. More abstraction eventually yielded a set of two parameters. All the perspectives I studied used a fundamental way of explaining based on some form of: (1) pattern or direction, and (2) motion or activation; and this can be reduced to a set of two parameters of a geometric nature. In table 3 are listed some of the names given to these 2 fundamental parameters.

Table 3: Fundamental parameters of perspectival analysis		
<i>the fundamental parameters of perspectival analysis</i>		
human domain: formation	patterns	activation
scientific domain: localisation	direction or projection	motion
primary Sc-H- parametrisation	N2d- dual binary, stereo	N3p-polar polarised
wholistic derived perspectives	2-nodal	3-modal
<i>the primary generic parameters of perspectival mapping</i>		
Sc-H-combinations of space-time explanation and sensory-sensate modelling	patterns of activity or directive activation (eg wave)	active patterns or active patterning (eg path)
geometric parametrisation of models of development or origination	synMetrics dyNamics of orientation	harMonics kineMatics of resonance

Armed with the 2 abstract parameters that I denote with ‘N2d-’ (dual) and ‘N3p-’ (polar), I could detect similarities (and differences) with much more ease, and I developed perspectival analysis into a more technical method. This is more methodical than merely collecting and classifying words, and could help a more systematic investigation. Such perspectival analysis can be conducted on a short piece of text or discourse, as long as it contains an explanation or description of experience. We do that intuitively when we apprehend the hidden implications of what someone says. We fail to do this, however, when we ‘twist their words’, and interpret them according to our own framework or perspective.

Source of the notation ‘N2d-’/‘N3p-’ and geometry

In the ‘advanced’ knowledges (see <C6>) of the scientific and human domains, the general notions attached to the parameters take many shapes. Geometrically, they all come down to what I summarised as ‘synMetrics’ for N2d- and ‘harMonics’ for N3p- (this came as an alliteration – see other examples in <EE9\ Alliteration>). These words mean that, from the Sc- and H- viewpoints, we measure (metrics) or name monads such as bodies, objects, systems, selves, worlds, through dual or polar techniques, and we localise them by using orientation (direction) and movement (motion).

- ‘Orientation’ is directly related to duality, and a simple way to represent it by 2 dots with a line, with ‘direction’ being 2 dots with an arrow of motion (figure 8).
- ‘Movement’ is directly related to polarity, and a simple way to represent is by 3 dots with a directed circle (figure 8).



Figure 8. Direction (orientation) and movement (motion)

In the notation I devised, the ‘N’ is the initial of ‘nexus’ (see <Endnote C5\ Nexus, nexial, and nexialism>). It aimed at reminding me to not split, divide, and reduce the ‘field’ I was studying, and yet be aware of the way in which other do that. The word ‘nexus’ is not quite adequate, but it is useful to describe wholistic realms such as the human nexus of experience, or the scientific nexus of physical existence. The numbers, 2 and 3, could be, I think, likened to the mathematical concepts of numbering according to the ‘base 2’ and the ‘base 3’. What these can do in mathematics, duality, and polarity can do in language and perspectival description.


The notation ‘N2d-‘ is a shorthand to denote the ‘base 2’ (eg in dynamics or binary relations) and the duality between ‘2 things’. The 2 dots encapsulate a linear geometry linked to an oriented line. For example, a ‘Left-‘minded person uses intellectual linear thinking, seeks targeted goal in experience, speaks of the arrow of time, sees evolution as a ladder, judges truth in binary terms of good-bad, defines systems with binary means of within-without, observes preferentially through the filters of stereo vision, finds the ultimate source of reality in the duality of male-female, etc.

The notation ‘N3p-‘ is a shorthand way to denote harmonics and resonance. The 3 dots encapsulate a flat geometry linked to an oriented circle on a plane, and the polarity of movement (from here to there). For example, a ‘Right-‘minded person uses the multi-dimensionality of the psyche, seeks inter-personal relations in experience, speaks of human spaces, physical (3D space) or of the mental space of the psyche, sees evolution as a tree, evaluates in modal terms of sets of values, defines systems with 3-modal elements of resonance, observes preferentially through the filters of volume-localising audition, finds the ultimate source of reality in the polarisation of 3 fundamental processes, etc.



Please note that these examples relate to a model that only has 'left' and 'right' (the 'middle' is in the processes or transformations they describe).




Diagrams and sketches

At the time, I was scribbling little drawings for everything, to understand the way others (and

myself) think and experience. For example, an 'in-coming influence' I represented by ,

out-going action, focused or powerful was , interaction , closed system ,

vectorial focus or directional intent , numbered scale , alternance or oscillation

, bipolarity , spiralling -up , bifurcation or separation (division)  (compare to

the 'Y' of Yahweh in Hebrew), direction , circulation , etc. It is thanks to these

schemas that I realised how much my understanding and learning have always been governed by these mental images, and that they allow me to bypass the different wording to access more directly the divergent meanings. What this does for me is best expressed by mathematician Korzybski (1933 p.664):

'We would evaluate the terms "matter", "space", and "time" as forms of representation, and non-objects, and we would describe events in a functional, operational, behaviouristic language of order...Diagrammatizing and even following with one's hand, the visualized order of occurrences, helps enormously. [...] We shall also be greatly helped in our power of visualization when we become acquainted with the structure of the Minkowski four-dimensional worlds.'

This habit of sketching my understanding helped me realise that my conscious Left-minded intellect, focused on language as a precise tool, French-educated into Cartesian doubt, and imprinted with a deep interest in logical rigour, had a more unconscious symmetric realm. The 'depth' of my thinking or intuition sees the practical, operational and nexial (eg awareness of 'twisting' or distortion). This gave me a means to study my 'epistemological

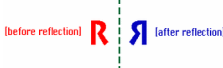


learning' (comparing the drawings I did for the same thing after trying on different ontologies, for example), and follow my paradigmatic shifts. This developed into making theoretical diagrams, and comparing them to those I found in the literature: I sometimes found striking inversions.

Model-making

Creating Sc-abstract models is an intellectual activity that is studied in philosophy of science (eg Nouvel 2002, Nersessian 2002), and cognitive science (for the creative process). Thinkers who attempt to use scientific knowledge and methods to model human experience create H-'meta-models' (a term drawn from philosophical jargon). In the human domain, critical and 'meta-thinking' are stages 'beyond Piaget' (Lauer 1983), and what the Buddhists call the discerning mind is used extensively in theoretical 'model building'. The abstract activity of allowing the visual productions of graphic models to emerge seems to be known, in this domain, only as learned symbols, rather than as an intellectual creative development (and possibly a sensory complexification). The images are attributed to visionary intuition, the psyche's archetypes, learning of 'sacred geometry', or to dreams and shamanic or religious visions. To me, this is a mental-experiential activity that allows linguistic deconstruction of explanations and descriptions (see Spinoza 1901 and Husserl 1939). It simply is an algorithmic activity: patterns can be described by using information, colour, or sound in alliteration (see <EE9>), can describe harmonics, and both create transformations that can model animation. In archaic stories, model-making is a known technical function of the mythical builder of civilisation, of the socio-cultural innovator (eg agriculture, irrigation, religious ritual), of the hero who helps beat Nature's disasters. For me, as for Korzybski, the 'order of occurrence' and representation are 'non-objects', neither real things (eg objects or human processes) nor 'pure abstractions'. This is the basis of the nexial-topologic imaging I used in my study of the 'global field' of health (conventionally, 'non-local'). The images are neither naturalistic nor realistic for human experience. They are just a geometry of changing shapes (I call this, 'shaping'). Scribbling was not active only for theoretical work, or generalising experience. I made drawings of what my gestures showed when I spoke of the

state of my health and life, or those of the world, and did the same for other's gestures. I also used anatomical pictures to sketch sensations inside my body.

These sketches showed that human and scientific domains did not view things in the same way, although we ignore this because most of us have a bias to one of the two domains, usually developed from school years. This can be used to classify the general perspectives across both domains. For example to organise the varied interpretations of a general notion such as 'symmetry', I turned to definitions, but in words they are confusing, so I had recourse to definitions in geometry (table 4). This helped me organise the many notions derived from them.

Table 4: The 3 fundamental types of symmetry		
<i>Classic symmetries in geometry:</i>		
reflection 	translation 	rotation 
<i>The symmetries and asymmetries in human thought and experience:</i>		
opposition	complementarity,	inversion,
The human-scientific complexes of symmetry and asymmetry:		
symmetry, combination	conversion equivalence	circularity permutation transforms

Circularity and symmetry

I symbolise symmetry, as a general property, with the sign: \square . It manifests, for example in the geometric symmetry of the notions used by L- and R- perspectives, whether evaluated as opposed or complementary: L- \square R-. Another symmetry is simple \square complex, despite the evolutionary models that place one above the other. It also manifests in the practical cohesion between Explanation \square Experience. This is a fundamental duality that pervades languages and culture, but also science and daily life (eg the modern mind-body). This consistency also manifests as a logical coherence: what cannot be explained is sifted out of experience (selected perceptually), and what cannot be experienced is sifted out of explanation (biased interpretation). There is a circular consistency between explanation and experience that produces a logically self-consistent entity with a special bias – a perspective.

Getting out of this circle requires deconstructing explanations and accessing aspects of experience that are not recognised. I express such circularity with the sign: \square , as in:

Explanation \square Experience.

Types of perspectival models

There are many types of perspectives and of general models, and different ways of organising them into taxonomies and typologies. Some are presented below; others are represented as images, in <PPT2 Models collected>.

Taxonomies by the Name

In this category I place the general perspectives that arise from the dimensions defined in figure 7, and the classifications based on linguistics. The 3 categories of symmetry represent general categories, based on different logics, and offer a means to classify ideas and perspectives, for example the Left-Middle-Right basic distinction. The 3-modal taxonomy is as common as duality (eg body-mind-spirit, physical body -behaviour-person, within-between-without, square-triangle-circle in graphic models, the 3 stages of the General Adaptation Syndrome, 3 meals a day, percept-concept-recept [for 'percept', see Romanes 1888], etc.). This tripartite way of classification corresponds to three stages of my exploration of specific perspectives (of explanation, of experience) and of the models created by generalist perspectives (with their theories about observation, experiential or experimental). One example of archetypal

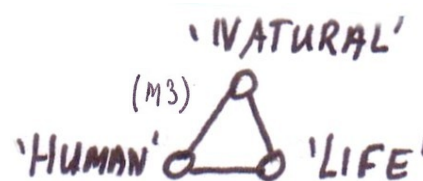


Figure 9. Modal taxonomies

3-modal distinction (figure 9) is found in all the general perspectives on human behaviour, whether physical (heath), mental or otherwise. It is particularly relevant to understanding explanations of the behaviour of the brain-mind ('human' and 'not animal'), of the personal body (survival is 'natural'), and of the internal-physical 'body' (animated with 'life' rather than being 'dead') – a body that is a lowly machine, vehicle, temple, or container for the 'human' nature or driven by the brain-mind. These definitions are domain-specific interpretations of 'existence' or 'reality' (eg survival of personal body belongs to the Sc-H-

domain). They also vary in detail with each particular perspective (eg the philosophico-scientific problem of what it means to be ‘human’). These notions are an underlying basis of medical theories, practices for healing, and the clinical encounter, whether in Western biomedicine, Eastern, ‘alternative’, or traditional core of clinical help.

Another very common approach to health is to ‘take to the power’ the fundamental parameter chosen. For example, seeking patterns of patterns lead to N2d-N2d- strategies of focused intent, lifestyle ‘choice’; seeking changes of activity leads to compensating reductions by a reactivation of N3p-N3p-willpower, spirit, or sexual drive. In practice, these representations lead to statistics of normality and probabilistic risk of disease, and leave many unexplored corners and anomalies. For example, the percentage of statistical error in medical trials is normalised rather than studied, and the failure of health strategies in certain improbable cases is simply ignored.

Typologies by the ‘Number’

Certain models represent dimensions, logical levels or orders, by the number of basic elements needed to represent them (eg 2 for duality or dynamics, 3 for circularity or boundary phenomena). For example, many models are quadratic (eg Wilber’s 4 quadrants, the 4 forces of physics, etc. – see <PPT2 Models collected>), and triangles with a central point, related to a pyramid). These will be addressed differently in <Nexial-topologic deployment>. I symbolise the ‘Number’ of a model (eg number of categories) by calling the model ‘Mn’: for example, M2 symbolises a dual model, M3 a modal one (eg figure 9). In modern thinking, there usually is no conscious reason for choosing one ‘Number’ rather than another for a categorising model. In antiquity, however, this was an intentional practice (Feuerstein 1994). Some examples are: 2 for Male-Female (or dark-light), 3 for primary colours, Father-Mother-Child, sky-sun-moon and other trinities, the bodily systems (neuro-endocrino-immune) or the simplest Elements (Earth, Water, Fire), 4 for cardinal directions of the Earth (see chapter <Ancient Perspectivalism>), the Egyptian pyramid (square basis), and the quadratic models so common (see below), 5 for the senses, colours, tastes, the Chinese Elements, or the basic chakras (India), 7 for the stars (astrological cosmologies or chakras of

the 'subtle' body) or the modern cosmetic '7 signs of ageing', 8 for the 8 trigrams of the I Ching (Chinese 'Book of Changes'). Other popular numbers are 9 ('many rivers' or colours), 10 and 11 (in modern physics), 12 (eg 'twelve steps' in AAA, twelve disciples), and even up to 64 (in Feng Shui). Knowledge of 'Number' is part of the modern 'mysteries' of culture and religion, but it is common and part of daily life in ancient texts:

'...the Yi and the Ch'i, the four quarters, the five colours, the six pitch-tubes, the five notes [determined by them]. [...] I assisted in completing the five Tenures, extending over 5000 li; (in appointing) in the provinces twelve Tutors, and in establishing.' (Legge 1879)

'Number' is an important element in esoteric knowledges. Many have tried to explain the cultural developments from one model to another (with changing Number) in terms of combinations and permutations of 3 and 2 (eg 3 elements with 2 types, or 2 types and 3 stages), through geometry (sacred or not), or as certain special mathematical series. It seems that each system finds a block with one or another Number framework that does not fit. There is also the problem that '1' appears as first, yet 'One' appears last. In any case, this approach confirms my analysis of perspectives in terms of N2d- and N3p- as the fundamental parameters of both explanation and experiential description. The mapping system in figure 7 is based on this too: 3 axes with 2 directions. The ancient Chinese already traced the historical development of their perspectives to them:

'1. In ancient times the holy sages made the Book of Changes thus:

They invented the yarrow-stalk oracle in order to lend aid in a mysterious way to the light of the gods. To Heaven they assigned the number three and to earth the number two; from these they computed the other numbers. [...] They put themselves in accord with Tao and its power, and in conformity with this laid down the order of what is right. By thinking through the order of the outer world to the end, and by exploring the law of their nature to the deepest core, they arrived at an understanding of fate.' (*I Ching, Shuo Kua* section, in Wilhelm 1989 p. 262)

M6, the 'ideal' model: perfection and completion

The number 6 for modelling 6 categories or describing a single shape is a direct result of these parameters. It represents a 'complete' model (in the Human- domain) in which all

combinations of 2 and 3 are represented. As such, it tends to be considered an ideal model, or a model of the ideal way of living. From a Scientific viewpoint, it represents 'perfection'. Geometrically, it can take several shapes, such as two opposed triangles, or cones, a hexagram, a shape of star, a snow-flake, crystal, or a mathematical knot drawing. Some examples are included in the Power Point presentations, including some of mine. This model is of importance for classifications of details of physical-human realities such as the body (eg 3 systems, nervous, endocrine, immune, which interact between body and head). Here is an example of its appearance as an underlying structure of culture, not explicit for the writer (3 chains, left-right), together with some other developments (helicity, or chirality that will be explained later):

'The synthesis and deposition of collagen is a critical event in the proliferative phase and to wound healing in general. Collagen consists of 3 polypeptide chains, each twisted into a left-handed helix. Three chains of collagen aggregate by covalent bonds and twist into a right-handed superhelix, forming the basic collagen unit. A striking structural feature of collagen is that every third amino acid is glycine. This repeating structural feature is an absolute requirement for triple-helix formation.' (Romo & Pearson 2005)

The (2,3) and (3,2) descriptions

This notation comes from mathematics (combinatorics). I also use: N2d-N3p and N3p-N2d. The M6 models (discussed further in <Ancient perspectivalism>) are concerned with beginnings (or origins) and ends (think of 'the alpha and the omega'), and so the order of the notation ascribes one parameter to beginnings and the other to completing to ends. The kinds of 'big picture' produced can display drastically opposed views, depending on which of 2 or 3 comes first, the other coming last. It is in this realm that sciences resolve mind-body problems by using the brain, and the human practices resolve brain-body problems by using the mind. These (2,3) or (3,2) descriptions are the fundamental structure of mathematical formulation, as well as words. They are, as far as I can tell, the source of 'languages'. They are found in the highly simplified concepts taught at school, such as the 2 ends of a line, the 2 sides of an equation, equivalence or equilibrium, and the 3 basic forms of symmetry. Highly developed into topology (with higher numbers of dimensions than 6), they produce

sweeping models of spacetime or of reality that claim universal application. The system of description based on 2 and 3 can be considered the simplest to describe all perspectives. The human domain considers it ‘complete’, but not science (since Gödel’s theorem), which, on the other hand, tends to see it as mathematically perfect. Either way, it is the basis of our collective reality (see <Nexial-topologic deployment\ Virtual reality>), and it is no wonder, to me, that it is ‘unreasonably effective’ (Wigner 1960) in describing its physikemorphic, anthropomorphic, and systemic realities of ordinary and extraordinary experience, as well as the fine-tuning of the body’s health. The appearance that this is ‘the’ best way to view what is ignores that it is most ‘complete’ or ‘perfect’ only within the range of these common normalities, ordinary or not. Its validity depends on remaining, experientially, in that sensory-based range. This leaves out, as ‘not well understood’, the aetiology of syndromes in which ‘illness’ is difficult to pinpoint with either senses or to explain with N2d-N3p concepts. Such modelling provides only two solutions: become normal, regulated, or push to extremes and ‘sublimate’. If neither solution is practicable, a disheartening verdict falls: ‘learn to live with it’. These perspectival models leave a paradoxical situation in which others’ human (subjective) and scientific appraisal (objective) of ‘sickness’, and the patient’s are at odds. The latter feels a developing, progressive illness that appears non-existent to others, and whose manifestations appear impossible to medical theories (eg extreme difficulty in recovery from exertion while still being capable of great pointed effort, an apparent healthy appearance with fast internal or systemic wasting and a greatly slowed healing capacity).

Shapes: models by the Image

Intellectual development into meta-models and experimental development of pictorial models come together in the M6 models that suggest many forms. Imaging is the third major way of creating models. They are built by using N2d- as topographic synMetrics (1-way or 2-way oriented lines) and N3p- as nexial harMonics (eg sound-word, colours, song, etc.). They are detailed in <Nexial-topologic deployment>), and constitute the underlying core of modelling that governs developments of culture (see <C6>), mind and experience, and

civilised living. Imaged models are found in ‘advanced’ knowledges, whether scientific or human. Most often, the image is a flat geometric picture, but sometimes it is a 3D-animation that represents ‘the world in changing’. The most common types of topographic models produced are:

1. flows, whether directional (eg time, the ladder or tree of evolution) or circular (eg time, native spiritual wheel).
2. landscapes: The image is that of a flat land or ‘field’ (square or round), or of a ‘flatland’ with a depth (basin or pit) or a height (eg mountain, island, pyramid), in models of complexity (the topographic vocabulary of landscape is obvious in some section of the literature – see <F7\ Landscape vocabulary> and images in later chapters and Power Point presentations).
3. ‘onescapes’: The image is that of a circle, sphere, or cube (eg ‘body’, building, house, temple, experiential ‘world’...).

These models can also be viewed as the basis for our geographies of explanation, and our geometries of experience (see below). This imaging is apparent in the gesturing that accompanies speech, and constitutes a kind of ‘meta-space’.

The workings of perspectives: geometry

The following section would be easiest to formulate through images, but I will attempt to provide explanations as well.

Geometric properties of framing and conventions of representation

The Power Point presentation <PPT3 Geometry of perspective> is a collection of some discoveries I made, concerning all our perspectives, general or specific, which find their clearest explanation through geometry. Whether human or scientific, all our perspectives of explanation and of described experience are based on the two fundamental parameters. The descriptions they produce are related, geometrically, by a simple conversion of coordinates (see <PPT3\ slides 3 and 4>), yet such a shift in one’s experience or intellect can feel like a deep transformation. In describing, in <Validity and valuing>, the cognitive process of

deriving representation and ‘valuings’ from observations involves a ‘frame of reference’. This would be a familiar idea to a physicist: it consists in framing geometrically, using coordinates relative to the self-centre. For a human scientist, this is related to the idea of ‘psychological projection’, but rather than from one person ‘onto’ another (which topologically is a ‘turn-around’), it applies to one person’s own various ways of apprehension and representation. The term ‘projection’, as I use it, refers to ‘projecting’ what is observed into ‘spheres’ of experience or explanation ruled by conventions such as time and space, or self and world, producing ‘conventionalised’ perspectives. This idea of perspectives as ‘projections’, can be translated in geometric term (figure 10).

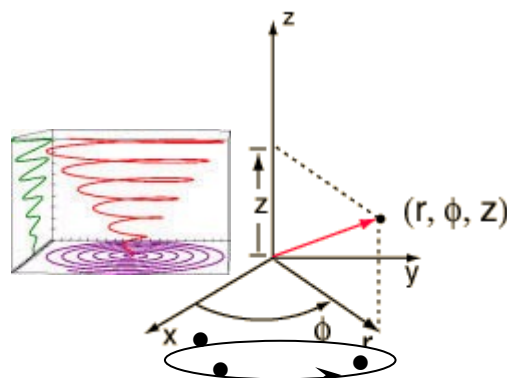


Figure 10. geometric projection

I realised that the sketches I made to summarise essential notions, the drawings of theoretical models, and images such as in figure 8 constitute geometric 2D projections of what the 2 fundamental parameters are able to represent. The perspectival representations are naturalised, physicalised (‘physikemorphed’), or made real (realistic, ‘anthropomorphed’) by attributing conventionalised meaning to the parameters. This, however, also limits what they can ‘show’. One of my early ways of summarising notions of projection is shown in table 5:

Table 5: Framing and conventions		
Framing:	<i>Frames of Reference</i>	Conventions: sensory coordinates
	 Integration & differentiation	 Point Fulcrum Field
abstract paradigms: exPlanation	systemic compactions and division of ‘one’, multiplication to ‘many’	concrete world-views: EXPERIENCE or EXPERIMENTATION

The perspectives are mental, frames of reference in which the framing can be intellectual or perceptual, and require interpretation (with a bias). Their symmetries are similar, for example, to the graphic symmetry in architecture (Darva 2003).

Perception-based perspective: vision-audition-based models

The number of modes of ‘sensory perception’ varies in different cultures (3 to 6, usually). A textbook of functional anatomy (Marieb & Mallatt 2003) describes 5 ‘special senses’: taste, smell, sight, hearing, and equilibrium rather than ‘touch, which is a large group of general senses’ (Marieb & Mallatt 2003 p.466). The senses are governed by ‘special sensory receptors localised and confined to the head region’ (ibid. 5 p.466) ‘General’ visceroreceptors and other interoceptors and proprioceptors are considered ‘peripheral’ with respect to the head (ibid. 5 pp.337, 411), which interprets them. In other words, ‘sensory perception’ is ‘brain-central controlled’. It is also correlated with a self having sensate experience (psychic or psychological, constructed according to sensory modal parameters). As a result, our scientific and human models originate mostly with two senses, and which are constructed according to the corresponding ‘Number’: 2 for the stereo of vision and 3 for the volume-localising capacity of audition, or their combination.

The most general idea that pervades scientific studies of cognition and perception, as opposed to human cognitive sciences, is that scientific instruments are built on the model of perception (mostly vision and hearing), which we describe with geometry.

Moreover, the ‘geometry of experience’ (Husserl 1939), or cognition’ (eg CNRS 2006) is conceived as either a Euclidean geometry of normal perception (eg Todd et al. 2001, Todd et al. 1999, Baird & Noma 1978), flat or spherical (or geocentric), or as something closer to hyperbolic geometries for visionary experience. These correspond to ‘extra-ordinary’ perceptions, in shamanic or psychic styles of extra-sensory perception (eg Krippner 2000a,b and other authors in transpersonal and paranormal fields, who now use general, complex, systemic, and emergent approaches such as in Tart 1978). Yet the many studies are not put together to notice that both are based on what the brain-mind constructs on the basis of sensory perception, whether in the intellect or psyche. These are all located in the head and

reflected directly in the geographies of our explanations, most visibly in our theoretical and experiential ‘landscapes’ (see <F7\ Landscape>). The mutual influence of mathematics and word language and their relation to ‘advanced’ knowledge and refined experience is clear in the following statement:

‘That this subject [imaginary numbers] has hitherto been surrounded by mysterious obscurity, is to be attributed largely to an ill adapted notation. If, for example, +1, -1, and the square root of -1 had been called direct, inverse and lateral units, instead of positive, negative and imaginary (or even impossible), such an obscurity would have been out of the question.’ (Quotations by Gauss 2006)

The very practical aspects of direction, inversion, and lateralisation are directly involved in health (for example the mind-brain, vertical H-P-A axis and brain lateralisation) and do not necessarily involve the habitual geometric descriptions.

Framing systems: the view from the head

The problem of the geometries of perception is that the origin of the objects, subjects, wholes (complex or not) – in short, systems – that they see appears to be a great mystery to all but a few. It has plagued both science and philosophy for centuries. Satprakashananda (1974 pp.163-70) summarised the problems of perception of wholes under the term of ‘non-existence’. This can be (a) the absence of a thing to perception, (b) of a thing in its components, (c) of a thing in a particular locus, or (d) a thing not being separate or different from the not-the-thing. This is similar (and symmetric) to the Western notion of a ‘thing in itself’ ... as a whole [This is a perspectivalist classification]. Satprakashananda concludes, as does Spinoza (1901), that this ‘non-existence’ (or ‘existence in itself’) is known by ‘appropriate’ (or ‘adequate’) knowing that does not rely on the differentiating mind and the locating sensory perception. But then, there is the problem of the seeming self-evidences:

‘ It is a general conviction that geometry... is valid with unconditioned generality for all men, all times, all peoples ... The presupposition of principle for this conviction have never been explored ... But it has also become clear to us that every establishment of a historical fact which lays claim to unconditioned objectivity likewise presupposes this invariant or absolute a priori. Only through the disclosure of this a priori can there be an a priori science extending beyond all historical facticities...Only on this fundament is

based the secured capacity of inquiring back from the temporarily depleted self-evidence of a science to the primal self-evidences.’ (Husserl 1939 pp.179-180).

‘Self-evidences’

The animation <trefoil> (see chapter <Perspectival observation>) helped disclose how perspectival viewing operate a framing that results in geometric projections. To oversimplify what this means, in the context of health, we could say that we look *down* on the body as an object, *out* onto the environment of the self-&-body through the senses, and *inside* our living existence through indirect operations of observation that frame various types of spaces, which we interpret mentally and perceptually. In other words, all the ‘aspects’ that we explain, experience, and describe with our various languages (including mathematics) are based on ‘systems’. For example our historical facts concern people, cultures, objects, countries, environments, and we even justify historical catastrophes and suffering (Eliade 1954). Our spatial realities concern objects, subjects, things, bodies, worlds, and other systems. One of them integrates both space and time, and is particularly the object of all sorts of justifications: the body’s ‘natural’ ageing, diseases, and childhood illnesses. The ‘existence’ of all these, proven or ‘self-evident’, is not primary, but relies on geometry and projections which, circularly, arise from our perceptions, abstractions and concretions with the self-centre of reference.

The result, for health, is the view of the lowly body, as a machine, vehicle, temple, or container for the self-mind-brain that is the centre of projection residing in the head. This view seems to transcend the boundaries and differentiations of culture and geography and to be universally accepted. Even when we praise the body, we anthropomorphise it as a ‘being’ that ‘knows’ and is not the self – it is ‘another’ self, still a system. The invisible activity of the head-centre transforms all observing into representations of systems with boundaries, of all kinds. In ‘advanced’ frameworks, the systemic notions are described more simply, through combinations of patterns and activities (the 2 fundamental parameters) that are directly related to the brain-mind and the various forms and images it produces. For example, Stanley Krippner (1996, 1998) discusses

‘shamanic epistemology’ in terms ‘neurognostic frameworks’ that can be viewed as “image-schemas” (see Mandler, 1988), a ‘calculus” of archetypal processing’, ‘neuro-algorithmic space-time simulations’. These are ‘needed to coalesce human neurophysiology with human epistemology. Now may be the time to reconsider.... their sources in imagination, intuition, visions, dreams, the senses, and the body.’

This sort of approach still assumes the separation of mind-body, even if it aims to integrate it.

The representations are algorithmic ‘image-schemas’, which come down to N2d- and N3p-parametrisation, and which, for all intents and purposes, can be qualified as ‘simulations’ (see <Nexial-topologic deployment\ virtual reality>). Whether they be mental or perceptual interpretations and constructions, their most abstract form comes as geometries. ‘Where’ the apparent universality of these geometries of perspective and framing comes from has been the object of deep questions, but no commonly acceptable answer has emerged.

The ‘idealizing primal establishment of the meaning-structure “geometry” (Husserl 1939 p.180) appears as the corner stone of the ‘problem-horizon of reason’ (p.180), but ‘what we learn [in text books] is how to deal with ready-made concepts... substituted for the actual production of the primal idealities’ (p.169). ‘This production is the ‘*animal rationale* in every man’ (p.180) and requires ‘the capacity for reactivating the primal beginnings... [which] has not been handed down with it [the learned geometry].’ (Husserl 1939 p,170)

The animal rationale

Geometry is sometimes considered as a realm of abstractions or primary ‘Ideas’ (referring to Plato), and sometimes as a realm related to the physical nature of the body, of the ‘animal body’ of ‘humans’. This ‘animal rationale’ is different from normal human ‘reason’, and what such an ‘animal body’ sees, it seems, is known only by imagining what and how animals can ‘know’ through ‘instinct’. Romanes (1888, pp.49-59) describes the ‘animal rationale’ as ‘recepts’:

‘[...] Recepts are *received*: [...] How far this process of spontaneous or unintentional ... combining go without the intentional co-operation of the conscious agent? [...] animals display generic or receptual ideas of Good-for-eating, Not-good-for-eating, &c.; [...] How far, then, can this kind of unnamed or non-conceptual ideation extend? Or, in other words, how far can the mind travel without the vehicle of language?’ (p.49-51)

‘[...] these facts cannot be ascribed to “instinct”, seeing that tram-cars could not have been objects of previous experience to the ancestors of the ants; and therefore the degree of receptual intelligence, or “practical inference”, which was displayed is highly remarkable. Clearly, the insects must have appreciated the nature of these repeated catastrophies, and correctly reasoned out the only way by which they could be avoided.’ (p.53) ‘ [...] this practical knowledge in the case of animals enables them to form a generic idea, or receipt, of the equivalency between causes and effects....’ (Romanes 1888 p.59)

The ‘unnamed or non-conceptual receipt’, as a ‘generic’ idea is here related to a location of learning in the spatial environment, or in experience past, in time. This brings us back to the two fundamental parameters that are the source of descriptions based on sequences and ‘spaces’. They primarily express geometry (of one kind or another), and develop into all our other views, which are rooted in framing and perspective. The ‘receipts’, in this passage, are ‘received’, but they are also learned. There are various kinds of ‘received’ knowledge, in the literature, all characterised by the fact that whence they originate is not clear. The notion of ‘receipt’ does not suggest to me the same elements of experience as Romanes describes. In my cognitive investigations, I have detected two sorts of ‘receipts’. To me, ‘receipts’ are induced in my head, in various forms such as the automatic, learned reactions that are often called ‘instinctive’ and considered ‘animalistic’ (eg habitual reactions), which I find driven by brain-central-control, and knowledge, which involves the neocortex and thought.

- Sometimes they constitute simplified ideas that are related to solving thought problems of abstraction, such as alliterations (see <EE9>), iconic images (see topographic dreams <EE13> and <EE14>) and images related to numbers from 1 to 6 (beyond requires voluntary and organised thinking, as do 0 and ∞). These are intuitive, and have guided my classification work. In this case, I understand them as ‘my brain talking to my mind’: If the manipulation of ideas is a construction of patterns of neural activity (Laughlin, McManus & d’Aquili 1990), then the ‘unconscious’ work on thought problems during sleep translates back into solutions coming ‘not from my self’ and received in the mind – receipts. This is the best known process.

- The ‘recepts’ can also constitute practical warning or guidance (rather than ‘practical inference’ – there is no ‘reasoning’ although it ‘makes sense’), often directly related to health. Some dreams simply ‘show’ (eg <EE11\ Dream2: gluey road tar>). I construe them as ‘my body talking to my brain-mind’. Some of the visions of Teresa of Avilla (see <F20\ published EEs>) are an example that seems flagrant to me. Yet, they have been interpreted in psycho-spiritual terms, although her own first interpretation related to health and physical pain ‘here-now’. These sorts of receipts are governed by the separation self/not-self, of mind (identity)/body. The symmetry, appearing in the word ‘equivalency’ used by Romanes, relates to this separation. It is also linked to what I will call ‘covariance’ in my explanation of the ‘deployment’ of perspectives. This separation is, again, rooted in the 2 fundamental parameters of perspectival representation of experience, and in the major senses, stereo-vision (ruling N2d-) and hearing harmonics (ruling N3p-). The ‘animal rationale’ explanations, therefore often denote our own geometries of representation and the present study suggests that the geometries are the result the brain-mind-head basis of the perceptual and perspectival framing we use for rePresenting both knowledge and experience.

The problem of describing the undifferentiated

Describing another way of ‘looking’ that does not involve boundaries (structural, functional, connective, or operational), real or naturalistic space(s), and systems of various types, or repeated experience and recognition remains a problem. The N2d-and N3p- parameters always result in some form of perspectival view, and pose an insoluble problem for the description of a domain that is undifferentiate. The term ‘generic’ is often used, but it does not resolve the problem because it still implies patterns (those of genera) and elements of geometry (types):

‘For a receipt is the kind of idea the constituent parts of which – be they but the memories of percepts, or already more or less elaborated as receipts – unite spontaneously as soon as they are brought together. It matters not whether this readiness to unite is due to obvious similarity, or to frequent repetition: [...] In animal intelligence... [observations] imply a faculty of forming generic ideas of a high order of complexity.’ (Romanes 1888 p.49-51)

‘To attain a general idea of causality ...demands higher powers of abstract thought than are possessed by any animals, or even by the great majority of men; but it is no less clear that all men and most animals have a generic idea of causality, in the sense of expecting uniform experience under uniform conditions.’ (Romanes 1888 p.59)

The ‘native gauging’

The other somewhat global ‘looking’ is not a ‘general (complex) or ‘generic’ idea (stable forms), nor ‘a receipt’ (received from whatever is ‘not-self’), because there is no part speaking or showing to another part, nor objects and relations. It uses imaging but is neither imagination nor geometry (classic, or hyperbolic...). It can arise from physical sensations but not from a ‘physical body’ (a spatial system), or from mental general or generic impressions (eg general mood), but it does not fit the definitions of ‘human thinking’ found in the literature (it is not algorithmic). I prefer to call it a ‘native gauging’. This mode of apprehension appears to govern the processes of apperception, induction, intuition, instinct, and global orientation, which are still considered obscure. I drew the description of ‘nexial-topology’ in <Nexial-topologic deployment> from a non-conventionalised, non-framing cognition (see <Endnote C11\ Non-algorithmic> that is this ‘native gauging’.

The problem of domain transfer (Sc-, H-)

The profound differences of interpretation of the graphic models we make and turn to scientific and human images, explanations, and experiences, leads to creating deep problems that involve anthropomorphism (a known issue) but also physikemorphism. I noticed such problems in comparing three things: the effects, described in the literature, of the strategies of ‘activating power’ in the physical body (eg hormones, or work); the vortex effects of adding more or less water in my kitchen blender when making the ‘Budwig spread’ (see <Appendix D\ Research materials & techniques>), and the effects of dehydration on my degree of feeling ‘in survival mode’ and my cognitive styles. I found the problem of domain transfer in many other situations, in which simplicity and complexity are evaluated in inverse ways. For example, a scientific Sc-broad approach to detail may be considered, by the human domain, to remain on the surface of things, ignoring general ideas and truths, or

lacking in direction. Conversely, a human H-deep approach to internal subtleties may be considered by the scientific domain, to limit itself to a small core of self-centredness, ignoring many small empirical anomalies, or lacking in operational understanding. Following are two other examples of the problem of transfer from the scientific or physical to the human and psycho-social, and vice versa:

‘The Ladder or Linear March of Evolution: ...The most serious and pervasive of all misconceptions about evolution equates the concept with some notion of progress, usually inherent and predictable, and leading to a human pinnacle. Yet neither evolutionary theory nor life’s actual fossil record support such an idea. Darwinian natural selection only produces adaptation to changing local environments, not any global theme of progress. (Gould, 1995 pp.42-43)

‘Why do scientists grasp the importance of visual imagery, while most humanists accept the hegemony of the word?’ (Gould, 1995 p.40)

‘I know of no other subject so distorted by canonical icons [than] evolution and the history of life: the image we see reflects social preferences and psychological hopes, rather than paleontological data or Darwinian theory. This theme of constraint by standard pictures is particularly important in science, where every major theory has a characteristic icon... [for example] the Bohr atom.’ (Gould, 1995 p.42)

‘The study of art has been plagued by our desire to see this essentially human skill in a progressive evolutionary context: simple artistic expressions should lead to later, more sophisticated creations. [...] Yet... the evidence increasingly refuses to fit. [...] for example,... from the first charcoal animal drawings to the more recent multicolour animals drawn with a clear sense of perspective at famous sites such as Lascaux and Altamira... And yet the beautiful multicolour horses, lions and mammoths at the Grotte Chauvet,... dating from 32,400 years before present, are now thought to be the oldest examples of cave art in the world.... The archaeological evidence is now forcing us to come up with new timescales for cultural change and innovation. This is a challenge that makes the smallest finds of archaeology as important as the largest.’ (Sinclair 2003)

The problem of reification

In science, model-making is viewed in two ways, as a basic activity of concrete modelling of physical objects or bodies, or as a creation of abstract models by analogy. The models are attributed to either something real to the senses, or considered ‘pure abstractions’, whether logic or analogic. In the human domain, models are mind representations, real to the mind or

self, and represent objects or subjects that ‘exist’ in time, or are material or spatial. They can also be productions of the imagination, still real to the mind, or even real to the senses (eg visions). These views may be considered as sensory-derived (geometric) ‘projections’. They are also ‘reifications’, objectifying or subjectifying what is observed, or turning it into entire worlds, all of which are systems. They are anthropomorphised (realistic or imaginal), or ‘physikemorphed’ (naturalistic), or considered ideal descriptions of the appearance, occurrence, or arising of these realities and spatialities. This requirement imposed culturally on imaging forces the models to make use of the 2 parameters we use to describe reality through the many perspectives that constitute culture:

‘The Googly problem: [...] Although all this was remarkably satisfying, a definite problem began to loom large. The problem of introducing SD Weyl curvature into the geometry of twistor space has been referred to as the (gravitational) *googly* problem of twistor theory—in reference to the cricketing term “googly” for a ball that spins in a right-handed sense even though the bowling action suggests a left-handed spin. Taking the cricketing analogy further, I now refer to the original “non-linear graviton” (mentioned above; as given in (Penrose 1976) as the *leg-break construction*. [...] If twistor theory is to be taken to be a *physical* theory, the gravitational field as it is *actually* understood, must be described by a (Weyl) curvature for a space-time which possesses *both* an SD (self-dual) and an ASD part [anti-self-dual]...’ (Penrose 1999)

Thus, the models and images can only build on previously accepted images, and become ever more complex – and oversimplified –, and cannot describe anything *but* what our biased perspectives apprehend. With this limitation comes the deepest failure of perspectival framing and geometry-derived mapping with dual and polar parameters: their incapacity to explain the origin of value and validity, which they define. Consequently, they ignore properties that can be ‘observed’ (but not described conventionally or described in the N2d- and N3p- terms), and in particular some that eventually lead to disease occurring suddenly, apparently ‘out of the blue’ – one does not ‘feel it coming’. One such property is ‘swelling’. This results in the medical helplessness for sufferers of chronic syndromes, but also for all the ‘little discomforts’ and small deformations of the body that we habitually attribute to personality or body type, gender, ageing, or life stages. These receive no explanation from

medicine, apart from ‘it is not going to kill you, so nothing needs to be done about it’. This attitude is difficult to accept for a mother who wishes to keep her children’s health, sanity, and life in the human world ‘on track’, and who senses physical deformations, personality distortions, mental and social limitations that loom in a child’s young existence. A patient may also sense such small changes in their own health, although most do not. Another consequence of the ubiquitous hegemony of the N2d- and N3p- parameters and their imaged productions is the progressive deformation of new ideas or approaches to the realities they produce. These are evident when reading entries in an encyclopedia of philosophy. The explanations of the work of a ‘deep’ thinker shift the ideas through changes in vocabulary or definitions. This is visible also in the development of an author’s thinking throughout a career. One example of the effects of linguistic derivations is provided in <Endnote C12>, concerning aquatic biologist Rachel Carson.

Implications

The general approach of perspective cannot describe anything *but* what is conventionally framed as systems, represented in terms of time-space, or of self-world, with boundaries (of various perspectively defined kinds). Since boundary phenomena (eg reactions, extremes, recurrence) are a major aspect of the chronic low-grade syndromes, it is no wonder that conventionalised explanations in medicine cannot make clear sense of them, in particular, with respect to causality. Perspectival analysis and mapping also explain why the general-systemic and integral approaches to methodology were not sufficient to understand the syndromes. Even this most ‘advanced’ approach (combining Sc- and H-) does not allow the description of an undifferentiate domain (eg global correlates of health) and non-local phenomena. These can be apprehended directly through animated imaging, but not appropriately described with conventionalised means. In particular, using words to ‘lay out’ this undifferentiated situation, and its countless non-local implications, produces complicated texts, like this thesis. It also forces the reader into the details of unfamiliar fields that are unnecessary and which hide the simplicity of what the animated imaging shows more directly. Explaining my findings in words is inherently inadequate.

The present work proposes another way of interpreting the ‘animated geometry’ style of imaging that can be ‘sensed’, but does not involve sensory or ‘sensate’ representation. In chapter <Nexial-topologic deployment> I attempt to explain with images how ‘nexial-topology’ provides a means of modelling an undifferentiated situation and its impact on particular conditions that arise anytime and any place in the ‘physical world of humans’, such as the syndromes studied. The impact also concerns all the perspectives we use in explanation and experience description, as do our cultures and civilisations in general. These are involved in the medical and body domains, but also in all the other aspects that influence our attitudes to health and body. This chapter is also fairly difficult to follow, because I am limited to flat images to convey my findings in general terms, with specific examples (perspectival limitation), as well as to give a sense to the non-specialist, of what ‘topology’ means.