Popperian Proof/Disproof

Abstract: Multidirectional, relic, annular (spiralizing) symmetries, and "SERMs" which produce/ explain/ predict them, can be proved real differentially: Perturbations produce diminutions globally, synchronously along full circle arcs, y.01. A "macro" phenomenon (y.02) is corroborative. Rotational macros may be most verifiable meteorologically, as storm fronts, oceanographically as rogue waves, w.3.

Author: Peter Nielsen

Comment: Collates Vol y) proofs, Vols 0-4 and other corroborations.

Journal Reference: Paper y.06 of Vol y of Impact Tectonogenesis, CD ebook ISBN 0-646-40916-6 at www.nodrift.com since 21 Dec 04.

INTRODUCTION

As explained in 0.001, THESIS, Overall Proof:

"This ebook's symmetries of Vols y)-1, many other mutually consistent indications, IHBO- and PIRO-IRO-consistent impacts (3.1) and so on, prove my overall thesis of super huge impact tectonogenesis."

A great strength of my overall thesis is that it lends itself readily to Popperian challenge. y.01 PROOF:

"These symmetries, and the SERMs which produce/explain/predict them, are proved real differentially: Perturbations produce diminutions globally, synchronously along full circle arcs. A "macro" phenomenon (y.02) is corroborative."

Such an important proposal must be subjected to extreme, Popperian challenge, 5.4.

PERTURBATIONS

STATISTICAL PROOF

The statistical levels of confidence required of rigorous scientific verifications can be obtained from the differential methods already alluded to.

Coincidences between key overhead, inverse "potential" and underlying "relic" sets of inscriptional manifestations, rivers, coastlines, oceanic basins and so on could be measured in various ways.

Statistical levels of confidence could be worked out for variation of such measures with perturbations to symmetry superpositions.

Pixelation numbers, luminances and so on could be measured using a wide variety of methods, such as those proposed below for a Synchronicity proof.

My impression of symmetry coincidences is that they are sufficiently strong for confidence levels to be taken as high as necessary, by choosing sufficiently high numbers, sizes, qualities of data sets.

PROOF OF "MACROS"

In such [perturbation/synchronicity] tests, my macro phenomenon would be implicit in higher confidence levels for sets of inscriptions of greater faultline emphasis.

SYNCHRONICITY

Sectoral synchronicity could be similarly confirmed/disproved differentially:

I propose the following procedure to confirm/disprove "symmetry" synchronicity. Fully digital alternatives follow a digital version of a coarse analog experiment:

y.01's manual procedure is mechanised, automated. An annular radial/orthogonal grid is imposed concentric to its symmetry display.

Sectoral/orthogonal coincidence signals are recorded as separate channels and differential statistical analysis done, two samle T tests and so on, to determine Synchronicity confidence limits for Symmetry reality:

APPARATUS

My red-green pairs of transparent map tracings are illuminated from underneath, say on an Overhead Projector (OHP). Illuminated Red-Green coincidences appear Dark Grey, as in y.01, Fig 2, and preceding my Vol y) sets of examples.

ANALOG VERSION

The image is projected onto a concentric array of light detectors, and their signals separately recorded while the upper transparency, y.01, Fig 2, is rotated at a constant angular velocity.

Everything else is kept constant also. Luminance variations, at the photo-voltaic cells or whatever, are thus roughly measures of total areas of Red-Green coincidences, coarse measures of Symmetry for each sector.

STATISTICS: Each sectoral channel will show numerous, sharp, deep dips (negative peaks, Fig 1, below). These channel symmetry signals are analysed statistically to determine Synchronicity confidence limits.

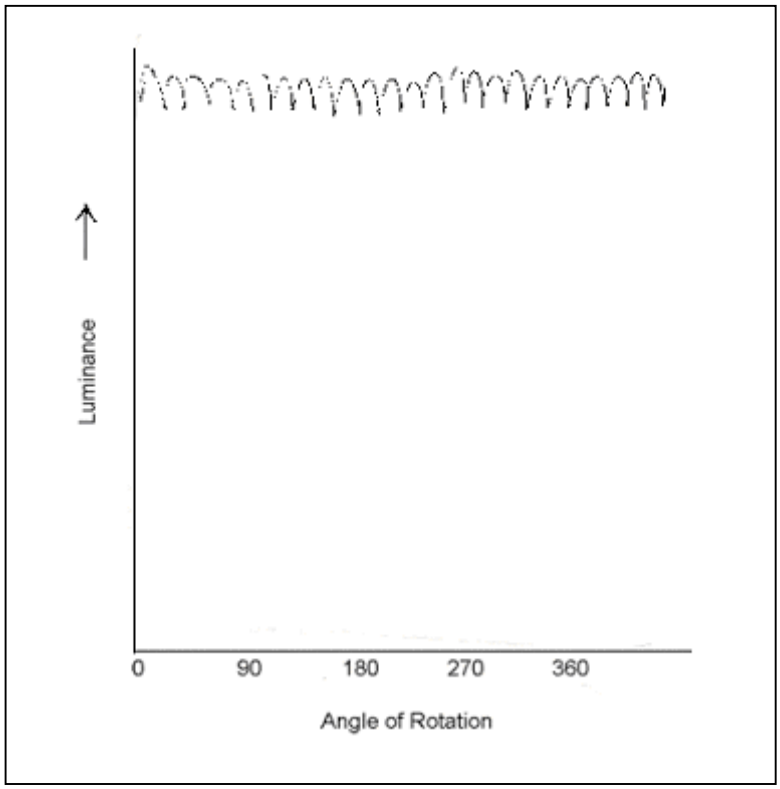

Fig 1. Symmetries manifest as dips.

THEORY: This procedure could be done for a global variety of paired map tracings.

Statistically significant synchronicity of channel symmetries lends itself to one interpretation only: Real, distinctive, multidirectional symmetries.

Such symmetries are powerful indicators of super huge impact tectonogenesis, their having been reasonably predicted as Freeze Effect-ed interference pattern inscriptions in 0.001, THESIS.

Measured existences of distinctive multidirectional symmetries in a fair, global sampling of map tracing inscriptions obviously lends itself to that important interpretation only, y.01.

Super huge impact tectonogenesis is thus statistically provable/disprovable to very high confidence levels.

DIGITAL VERSION

In the Digital Version, each sectoral channel's symmetries are measured and "binned", frequencies of coincidence segment measures accumulated as "Symmetry" length frequency spectra for each channel.

A digital pattern recognition & recording instrumentation front end would "look at" the OHP projected image, or equivalent digital production from Drainage Map data sets.

The front end might be adapted from a commercially available video surveillance or pattern recognition system.

STATISTICS & THEORY: Length frequency spectra for each sectoral Channel would be compared differentially, much as in the Analog Version, to produce Sychronicity confidence levels.

Confidence limits would be higher in the Digital Version because its noises are more accountable and relatively small, and less information is wasted.

COMPUTERISATION

In a Fully Digital Alternative, an Application program commands a PhotoShop-type system to perform equivalent operations on Drainage Pattern/Contour data sets, without recourse to experimental hardware.

ASYNCHRONICITY

I expect asynchronies/ patchiness/ indistinctiveness to be found amongst serm symmetries, consistent with uplift: uplift-produced distortion of symmetries.

This is easily accounted for, hence not a problem. Indeed asynchrony correlations may be one of the best corroborations of my overall thesis.

FREEZE, FORAZE EFFECTS

I have not merged Foraze and Freeze Effect concepts, believing that oceanic Freeze Effect, 3.3, would be much more effective than high altitude Foraze Effect, y.03.

y.01's 2-week super huge earthquake would have been only the start of millions of years of frequent huge earthquakes. Even today, 250 Myr later, we still occasionally experience large earthquakes.

Lubricated by water, Freeze Effect-ed earthquakes would have admitted large volumes, particularly in the immediate aftermath of this ebook's super huge impact (THESHI).

A very wet atmospheric water cycle would have made Foraze Effect quite effective at that time also, even at high altitudes, particularly near impacts, where faultline densities are maximal.

Magmatic uplift would have been most effective antipodally, where faultline densities are minimal; the world's "magmatic provinces" are indeed mostly in my antipodal hemisphere.

PROOF/DISPROOF

The distinctiveness of multidirectional annular (spiralizing) symmetries corresponds to rotational sectoral synchronicity of y.01's segmental coincidences.

Measuring this, finding its correlations with uplift, uplift rates, pre-impact altitudes and so on would be a good way to prove/disprove my overall thesis because it is easily done, and links together many earlier (y.01-2) and later (x.06) proofs into a common THESHI scenario.

ASYNCHRONIES

Uplift-produced distortion of symmetries will be strongly indicated as a general cause of asynchronies/ patchiness/ in-distinctive-ness by correlations between:

1. Indistinctiveness and uplift, high uplift rates and so on;
2. Indistinctiveness and minimal Foraze Effect, pre-impact high altitude;
3. Distinctiveness and maximal, oceanic Freeze Effect.

1ST PREDICTION: I predict that such telling correlations will be found. I have neither time nor resources to do any of the Proof/Disproofs explained above and below.

SPIRALITIES

y.04 OVERALL PROOF:

"The contrast of coarsely spiralled forms of deeps, larger islands, peninsulas and mountain ranges, compared to finer spiralities of small islands and mountains adds to overall thesis AND subthesis proofs."

CORROBORATIONS

As I explain in 3.4 CONFIRMATION OF OVERALL THESIS: "It was [SE Asia-South America flared] antipodal resonance, after much work on Ghosts and macro-symmetries, that opened up Vol x confirmation of my overall thesis.

An important implication of these and other "Right Way" flares and subflares, consistent with impacts, opposed to "Wrong Way" flares and subflares is ubiquitous antipodal resonances, Vol x".

METEOROLOGICAL OBSERVATIONS

4.14, CYCLONES Weather Fronts:

"Atmospheric planetary, meso and micro-scale waves may be erm equivalents of global, super huge impact serm shock waves.

Weather fronts may be the meteorological erm equivalents of macros in global rotational interference pattern symmetries, y.02.

They look much the same, have similar dynamism, similar, central, vertically directed energisations, consistent with y.02-6 explanation of spiralized serms.

. . . . . The spiralities of these meteorological phenomena are an important corroboration of my serm/erm theory, particularly it's y.04 explanation of spiralities."

I thus propose that we look for Proof/Disproof of macros, by looking for, and finding a rotational "macro" dynamism of symmetries in these atmospheric erm phenomena.

AURORAL OBSERVATIONS

Proposed as end effects of "magnetic bottle" quasi-erms in 4.9, the aurorae may include rotational macros or super-macros of magneto-ionic interference pattern symmetries.

Observations of these more chaotic, upper atmospheric, putatively quasi-erm equivalents of serm mountains and fjords may reveal wave-equivalent phenomena or super-phenomena.

MEASUREMENT DIFFICULTIES: Aurorae are hyper-dynamic in two ways:

The speeds of magneto-ionic waves are faster than serm shock waves; Energisation of magnetic field lines is prolongued, like violin strings bowed by a madman.

So much so that during Solar storms, auroral magneto-ionic quasi-erms may be usually either non-existent or immature, super-transient proto-quasi-erms.

CONCEPTION: At quieter times auroras are more like the weather. Auroral quasi-erms may then be observable, possibly only fleetingly, how I may have seen them . . . .

I looked for and saw the fast electro-magnetic rotational dynamism of the aurora, looked for and saw linkages between this and associated slower, "curtain" movements, couldn't figure out the mechanism.

I never saw any semblance of symmetries because I never looked for them. Only now, in retrospect, does it occur to me that rotational symmetries could be looked for.

Such an idea had to await this ebook's discovery of simpler, percussively energised THESHI serms. A rare visitor, it did not matter that the THESHI Drummer was mad.

I guessed very early, from the extreme global intensity of subharmonics, that this had been an Earth-spanning cometary, hemispheric, super huge impact.

CONCENTRICITY

This Vol y)'s symmetries have shown that symmetries are indeed serm/erm centred.

All attempts to measure them should therefore be concentric with serms/erms, as in y.01's METHOD, y.04's MOUNTAINS, PENINSULAS, Good Test. All my proposals are serm/erm centred.

SIMPLE METHODS

There are many possibilities of Statistical methods looking for symmetries directly. The most successful of these are likely to address serms, look for symmetry differentials between semi-serms, between serms and so on.

Differential studies of semi-serms could determine confidence limits for assuming that symmetry differentials emanate from a common real source, without concern for causal mechanisms.

Simplest of all: One could apply what I have been doing, using y.01's, Vol y) Method, to opposed sets of semi-serms; 1st use a LHS blind, then a RHS blind, then do a Statistical comparison of symmetry angular positions.

Alternatively, one could do a similar comparison of Fig 1 signal minima positions, using my Analog Version apparatus with alternatively blinded, opposing semi-serms.

Semi-serms to either side of dominant serbils, 0.001, may show strongest symmetries. Dominant serbils are easily located: China's Yangstze River, Japan's Inland Sea, Antarctica's TAM, and so on, 4.11, 4.25.

MACRO METHODS

Serm-concentric rotations through y.01's annular (spiralizing), multidirectional symmetries show most emphatic, long lineal morphologies, fjords, coastlines, continental shelf edges and so on, locussing the same potentials of the same set globally, y.02.

This adds to earlier coherent proofs of super huge impact tectonogenesis, y.01 and so on because, while macro explanation of macros is simple, straightforward, they are otherwise inexplicable.

Rotational macros may be most easily verifiable meteorologically, as storm fronts, oceanographically as rogue waves, w.3.

This Vol y)'s macroed symmetries are disprovable also via similar procedures using paired transparencies inscribed with y.02's "most emphatic, long lineal morphologies, rivers, coastlines and so on . . . .".

I had intended to include rotations of Federation Peak, Tasmania, Mount Elburz, Caucasus, many Arctic & Pacific coastal Contour-Drainage patterns, have not done so due to time constraints.

Vol 0 symmetries are obvious rotational macro candidacies also. The only rotations I have time to work on so rigorously however are those already prepared as transparency pairs.

2ND PREDICTION: I thus turn that plan into a prediction: Vol y) Method rotations of topographic maps will reveal the same symmetries, macro genesis of spiralities, cliff faces and so on as my Drainage Map rotations.

Topological maps of Federation Peak and other Tasmanian mountains, indeed most of Tasmania would be a good place to start.

I have seen this myself in a few Vol y Method, many Sketch Method, y.01, rotations, as background observations while pursuing mainline, most obviously Freeze Effect-ed Drainage Pattern inscriptions.

SPIRALITIES: Such corroborations would support my overall thesis via macro, y.04, y.02 FINESSE-SPIRALITY DISPERSION explanation:

Fine fringes of end resonances must thus become more spiralized, more rotationally dispersed than the coarser, more energetic fringes of early resonances.

This Vol y)'s macros, macro explanation, y.04's MOUNTAINS, PENINSULAS explanation have already proved this idea in a sketchy, morphological way.

Japan examples sketchily illustrate Jig Saw Patterns. SW Sweden examples illustrate macros. These and NW Pacific Ocean, SW Tasmanian examples illustrate macroed spiralizations, 1.01.

These corroborations could all be strengthened, turned into Popperian tests in various ways. Further corroboration:

PARADOX

4.17-8 SUBCONCENTRICITIES, Figs 2-5 and explanation seem to contradict rotational aspects of y.04's MOUNTAINS, PENINSULAS and other macro explanation:

Mountain arc and lake span fundamentalisms, hexagonally detailed crustal and mantle proto-serms, hexagonally distributed peaks, lakes of crustal serm central features and so on.

It is difficult to see how 4.17-8 Figs 2-5 features could have been rotationally macroed. Their hexagonalities imply non-rotational genesis.

EXCEPTIONS

These important morphologies are obviously exceptional. I propose that they are examples of an "exception that proves the rule":

EXPLANATION

Recall y.01's RETROSPECTION, Ocean-Continent Re-Configuration: " . . . . . Impact shock wave losses occur mostly in fracture-melt. . . . .

A large portion of delivered cometary kinetic energy may have been converted into ¼-wave mantle resonances before much melting had occurred, enabling ocean-continent re-configuration.

Consistent with "100-350 distinctive candidate symmetries", such sustained ¼-wave mantle resonances may have numbered ~400 inscriptive resonances, a 2-week super huge earthquake."

. . . ." 4.9, WAVE COARSENING, Genesis, Point 4 explains how crustal serm resonances are essentially parasitic to long-lasting ¼-wave mantle resonances:

"These most extensive, longest lasting ¼-wave resonances subsume many low-order sub-etalon resonances, including crustal resonances, energising them as sub-resonant high-order mantle resonances."

Crustal serm resonances were thus free to produce and sustain the "non-rotational" forms described in 4.17-8 under SUBCONCENTRICITIES, Figs 2-5, as solid crustal phenomena in regions of low crustal melt.

The contrasting spiralities of SW Tasmania, most obviously of the Spiro Range and Mount Anne, are thus probably due to extensive melt of this region of spectacular, quartzite mountains.

Corroboratively, 4.17-8's Tasmanian examples of "non-rotational" forms are all beyond this SW quartzite region. Crustal proto-serms would have retained their "non-rotational" forms for the same reason.

Both crustal and mantle proto-serms have retained "non-rotational" forms also because proto-serms are sub-threshold resonances, as explained in 4.17. Etalon resonances were simply unsustainable here.

The apparently non-rotational forms described in 4.17-8 under SUBCONCENTRICITIES, Figs 2-5 are thus good examples of "exception/s that prove/s the rule".

SEGMENT-SERBILS

y.01-3 implies a correlation between macroed symmetry coincidence segments and the serm cluster bisectional faultlines (serbils, 0.001) of my original explanation of fringe inscriptions, 4.5-11.

This new, Vol y) idea that fringes (nested serbils of 4.5-11) originate as macroed serm symmetries implies a segment-serbil correlation that could be usefully looked for, starting with my 4.26.

This should ultimately, or initially, also be fully computerised, make use of digital data sets.