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Blue Planet Governance



The era of global *tragedy of the commons* ends.

The new paradigm begins when Interdependent Regional Governments unite!

To form a chaordic organization called,

The **United Regions**

Where coordinated expertise in Earth Science, Human-Nature and Economics Provide Regional Guidance to Maximize *Real* Wealth:

Real wealth is a measurement of a robust ecology and of the general health and happiness of the people!

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Revision J

#### Index/Glossary of Terms

The *Paradigm Junction* presentation is written as a <u>living document</u> in that we anticipate occasional text changes resulting from group discussion and decisions. Chapters have a revision number and date.

<u>Glossary</u>: Paradigm Junction has 6 sections dealing a multidisciplinary issue, using expressions that may be unfamiliar to some readers. For convenience, the Glossary is integrated with the Index, below, which has a return link at the beginning and end of each Chapter.

Some old versions of pdf readers may have issues using hyperlinks to another document. Usually an upgrade will correct the problem.

- 1a: Index & Glossary you are here <a href="http://gaiapc.ca/PJ/1a-Index.pdf">http://gaiapc.ca/PJ/1a-Index.pdf</a>
- 1b: Synopsis http://gaiapc.ca/PJ/PJ-Synopsis.pdf
- 1c: The New Story: Overview & Layout <a href="http://gaiapc.ca/PJ/1d-TheNewStory.pdf">http://gaiapc.ca/PJ/1d-TheNewStory.pdf</a>
  This section has a description of the contents of each chapter and figure.
- 1d: Biography of the Writer <a href="http://gaiapc.ca/PJ/1e-BioOfWriter.pdf">http://gaiapc.ca/PJ/1e-BioOfWriter.pdf</a>
- 2a: The Triad of Human Interest <a href="http://gaiapc.ca/PJ/2a-TheTriad.pdf">http://gaiapc.ca/PJ/2a-TheTriad.pdf</a>
- 2b: Dynamic Systems http://gaiapc.ca/PJ/2b-DynamicSystems.pdf
- 3a: Money Corporations Politics (MCP) http://gaiapc.ca/PJ/3a-MCP.pdf
- 3b: Paradigm Flaws http://gaiapc.ca/PJ/3b-OtherParadigmFlaws&CompoundingIssues.pdf

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4a: Envisioning A Those Who Envision <a href="http://gaiapc.ca/PJ/4a-ThoseWhoEnvision.pdf">http://gaiapc.ca/PJ/4a-ThoseWhoEnvision.pdf</a>

4ba: Envisioning Ba 050APC <a href="http://gaiapc.ca/PJ/4ba-050APC.pdf">http://gaiapc.ca/PJ/4ba-050APC.pdf</a>

4b: Envisioning B Society of 050APC <a href="http://gaiapc.ca/PJ/4b-DynamicSociety050-APC.pdf">http://gaiapc.ca/PJ/4b-DynamicSociety050-APC.pdf</a>

4c: Envisioning C United Regions Wheelhouse http://gaiapc.ca/PJ/4c-UR-Wheelhouse.pdf

4d: Envisioning D Paradigm Junction <a href="http://gaiapc.ca/PJ/4d-TheViewFrom050APC.pdf">http://gaiapc.ca/PJ/4d-TheViewFrom050APC.pdf</a>

4e: Envisioning E Dynamic flows http://gaiapc.ca/PJ/4e-DynamicFlows.pdf

5a: Are we ready to enact? <a href="http://gaiapc.ca/PJ/5a-AreWeReadyToEnact.pdf">http://gaiapc.ca/PJ/5a-AreWeReadyToEnact.pdf</a>

5b: Chapter & Verse <a href="http://gaiapc.ca/PJ/5b-ChapterAndVerse.pdf">http://gaiapc.ca/PJ/5b-ChapterAndVerse.pdf</a>

6a: Appendix – Long Journey to today <a href="http://gaiapc.ca/PJ/6a-Appendix-OurJouneyIntoToday.pdf">http://gaiapc.ca/PJ/6a-Appendix-OurJouneyIntoToday.pdf</a>

6b: Appendix – MCP Long <a href="http://gaiapc.ca/PJ/6b-Appendix-MCP.pdf">http://gaiapc.ca/PJ/6b-Appendix-MCP.pdf</a>

6c: Graphic Illustrations – Before After <a href="http://gaiapc.ca/PJ/6c-GraphicBeforeAfter.pdf">http://gaiapc.ca/PJ/6c-GraphicBeforeAfter.pdf</a>

#### <<<=>>>>

Revision Control: Revision change will are made only when meaning is changed or ideas are added. Minor edit corrections may be made at any time. (Please report errors)

| willor edit corrections may |               | ate to Rev C April 6/2013 to include full address hyperlinks |
|-----------------------------|---------------|--------------------------------------------------------------|
|                             | Rev & Date    | Change                                                       |
| Synopsis                    | F Feb 24/15   | Change to, Paradigm Junction Project                         |
| 1a: Cover                   | С             | Note on old pdf readers                                      |
| 1b: Index/Glossary          | J Aug 18/15   | Change to incorporate chapter 4ab                            |
| 1c: The New Story:          | D Feb 20/15   | To launch the Blue Dot Movement (BDC) Chapter header.        |
| 1d: Biography               | С             |                                                              |
| 2a: The Triad               | D Jan 17/15   |                                                              |
| 2b: Dynamic Systems         | C Feb 15/15   |                                                              |
| 3a: MCP                     | C Mar 15/15   | Change header and a few updates                              |
| 3b: Paradigm Flaws          | C April 16/15 | Change of header and several updates                         |
| 4a: Envisioning A           | С             | Note: The following chapters are under review/updated        |
| 4ba: Envisioning Ba         | A Aug 18/15   | This chapter developed after the others                      |
| 4b: Envisioning B           | С             |                                                              |
| 4c: Envisioning C           | С             |                                                              |
| 4d: Envisioning D           | С             |                                                              |
| 4e: Envisioning E           | С             |                                                              |
| 5a: Are we ready?           | С             |                                                              |
| 5b: Chapter & Verse         | С             |                                                              |
| 6a: Appendix – Journey      | С             |                                                              |
| 6b: Appendix – MCP          | С             |                                                              |
| 6c: Graphic Illustrations   | D             |                                                              |

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Page break to Glossary

#### Glossary of Terms

To Index http://gaiapc.ca/PJ/1a-Index.pdf

The Paradigm Junction manual delves into a wide variety of subject areas necessitating the need for expressions that may be unfamiliar to some readers, and there are a few new word sequences, sometimes expressed as acronyms. This glossary is in alphabetical order. Within the chapter text, [GL] following a word or phrase indicates further explanation in this Glossary. There may also be [W], for *Wikipedia* as the source definition, or simply look there.

| Alphabetic Glossary |                                                                                                                                                                                                                               |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3D-Optimum          | The pinnacle goal of the GNP processes is to eventually reduce human activity until it                                                                                                                                        |
| the                 | can be sustained within the Gaian renewing flows of nature. When this occurs, 3                                                                                                                                               |
| Systemic Goal       | <u>Dimensions of human interest will be at either their optimum state or the optimum rate</u>                                                                                                                                 |
|                     | of change.                                                                                                                                                                                                                    |
|                     | 3D-Optimum refers to optimums of human: population; activity and happiness. While                                                                                                                                             |
|                     | evaluation of each of these dimensions is subjective, scientific and statistical guidance                                                                                                                                     |
|                     | will arbitrate.                                                                                                                                                                                                               |
| 00/00               | 3D-Optimum is the goal of the overall dynamic system of human civilization.                                                                                                                                                   |
| 80/20 guideline     | When stating that, <i>under these circumstances</i> , people will do that, generally, the 80/20                                                                                                                               |
|                     | rules suggests that only 80% will <i>do that</i> , and the remaining 20% will not do that.                                                                                                                                    |
|                     | However, the dividing line is fuzzy with sometimes a wide range of overlapping views.                                                                                                                                         |
|                     | It might be 99% to 1% on some characteristics. It applies to both physical and mental                                                                                                                                         |
|                     | characteristics. Quite often these variations are expressed as a bell curve, with the "80" representing those within the bulk of bell, with the 20 being those at the skirt.                                                  |
|                     | See:                                                                                                                                                                                                                          |
|                     | http://www.linfo.org/human_variability.html.                                                                                                                                                                                  |
|                     | Social psychologist Milgrams illustrates this point when he wrote: "We are puppets                                                                                                                                            |
|                     | controlled by the strings of society. Yet what is also true is that not all puppets jump                                                                                                                                      |
|                     | when their strings are pulled."                                                                                                                                                                                               |
|                     | It is genetic variations within species that enables physical and mental evolutionary                                                                                                                                         |
|                     | change.                                                                                                                                                                                                                       |
| Abstract Realities  | Abstract Realities: Refers to human-created systems of beliefs and of agreed ways of                                                                                                                                          |
| AbReality           | doing things: constitutions, religions; corporations, economics and money creation,                                                                                                                                           |
|                     | etc. Gregory Bateson described in illuminating detail, the implications and meaning in                                                                                                                                        |
|                     | his '79 book, <i>Mind and Nature</i> . More details at <a href="http://gaiapc.ca/PJ/2a-TheTriad.pdf">http://gaiapc.ca/PJ/2a-TheTriad.pdf</a>                                                                                  |
| D :                 | All I Diff i DATED IT II I I I I I I I I I I I I I I I I                                                                                                                                                                      |
| Reification         | Alternate meaning Reification [W] "Reification (also known as concretism, hypostatization,                                                                                                                                    |
|                     | or the fallacy of misplaced concreteness) is a <u>fallacy</u> of <u>ambiguity</u> , when an <u>abstraction</u> (abstract <u>belief</u> or hypothetical <u>construct</u> ) is treated as if it were a concrete, real event, or |
|                     | physical entity. In other words, it is the error of treating as a concrete thing something which is                                                                                                                           |
|                     | not concrete, but merely an idea"                                                                                                                                                                                             |
| APC                 | After Paradigm Change: In the new era the dynamic society. The time of PC was in                                                                                                                                              |
|                     | 20?? (yet to be determined). These expressions are used in the backcast section of                                                                                                                                            |

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| BPC                              | the chapters on envisioning.  BPC = <b>B</b> efore <b>P</b> aradigm <b>C</b> hange – As spoken from backcast – describing times before and after paradigm change, that occurred in 20??.                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Backcast                         | There is a useful, broad classification of scenario exercises: whether they are a forecast or a backcast. While both procedures have a similar end product - a future state and a path to reach it - the process for generating the product is very different.  • A forecast starts with the current situation and possible future paths, then deduces an end-state.                                                                                                                                                                                                                                     |
|                                  | <ul> <li>A <u>backcast</u> starts with the current situation and an end-state and then deduces possible future paths.</li> <li>In a backcast, there is usually some judgement about the desirability of the future</li> </ul>                                                                                                                                                                                                                                                                                                                                                                            |
|                                  | state. Because of this, backcasts are sometimes called <i>normative</i> scenarios, while forecasts are sometimes called <i>descriptive</i> or <i>exploratory</i> scenarios. <a href="http://www.scenariosforsustainability.org/scenariosforeback.php">http://www.scenariosforsustainability.org/scenariosforeback.php</a>                                                                                                                                                                                                                                                                                |
| Bottoming-out                    | This term is sometimes used in addiction recovery programs. It means the point of despair at which an addict finally abandons denial and avoidance. S/He then recognises that major personal change is now a do-or-die issue. Our context refers an individual's finally acceptance that industrial civilization's addiction to growth in human activity will bring about collapse.  Growing numbers of individuals and groups have already reached this point, but has                                                                                                                                  |
| Cassandra<br>Syndrome            | yet have no common viable goal to support.  Cassandra was a Homeric mythic character: In the <b>Cassandra metaphor</b> (sometimes called "the Cassandra 'syndrome"), Cassandra was blessed with vision to know what the future holds: And she was also cursed because no one would believe her. The expression is sometimes used today when scientists give dire warnings but they are not believed (or their conclusions will not be accepted, or are avoided or denied for a                                                                                                                           |
|                                  | wide variety of reasons).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Carrying Capacity<br>CC          | The maximum number that can be sustained indefinitely within a specific bioregional system – or in the natural systems of planet Earth. When population is in excess of CC, this is <i>Overshoot</i> – below.                                                                                                                                                                                                                                                                                                                                                                                            |
| Chaordic                         | [W] "The mix of chaos and order is often described as a harmonious coexistence displaying characteristics of both, with neither chaotic nor ordered behavior dominating. Some hold that nature is largely organized in such a manner; in particular, living organisms and the evolutionary process by which they arose are often described as chaordic in nature. Chaordic principles have also been used as guidelines for creating human organizations – business, non-profit, government and hybrids—that would be neither centralized nor anarchical networks                                        |
| Circle Of Issues                 | The convergence of and interacting of issues such as, monetary control, population growth, elements of human nature, energy, ecology, etc., etc.  The expressions, the <i>Human Predicament</i> , or <i>Paradigm Paralysis</i> , describe the outcome of this <i>wicked problem</i> .  The Circle is described in Synopsis <a href="http://gaiapc.ca/PJ/PJ-Synopsis.pdf">http://gaiapc.ca/PJ/PJ-Synopsis.pdf</a>                                                                                                                                                                                         |
| Club Of Romeand Limits To Growth | Club Of Rome's seminal '72 book, Limits To Growth, illustrated civilization's possible pathways into the future. We have followed their business-as-usual (BAU) projection that accurately predicts that civilization's well-being would be on a down-slope leading into collapse early in 21st century.  The Smithsonian Magazine made a study of the graphic projections in, Limits To Growth, and extended the projections from 1970 into 2012. The old projections were remarkably accurate as shown at: <a href="http://www.smithsonianmag.com/science-">http://www.smithsonianmag.com/science-</a> |

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|                                                     | nature/Looking-Back-on-the-Limits-of-Growth.html Also see:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     | http://www.clubofrome.org/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Compartment-alized mind                             | A term used by psychologists to describe our common ability to time-share conflicting realities. Sometimes we think and function in one mode, sometimes the other.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Complexity<br>Overload                              | When discussing a specific issue that may be interactive with several other related issues (specialty subjects) one will focus on those most familiar, and ignore the rest, even though they may be more important.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Conscious<br>Evolution                              | This expression was used by Robert Ornstein to indicate that a revolutionary shift is needed our operating paradigm if we are to survive. The idea relates to paradigm change or epiphany on a grand scale to see the world anew.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Dynamic System Feedback StabilityGoal               | System: a group or combination of interrelated, interdependent, or interacting elements forming a collective entity; (see synergy) In all cases energy flow is central to things happening. A regulatory system controls the flow using feedback (plus or minus) in order to sustain the system output at optimum level. A viable system has a goal. System-runaway: uncontrolled positive or negative feedback will drive a system to limits. Chapter 2b-Dynamic Systems is devoted to systems and dynamics.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Ecological<br>Footprint                             | Our <u>ecological footprint</u> is a science/data based assessment of the human impact on a geological area. Globally, humans began exceeding Earth's renewing bounty in the 1970s. (This may be optimistic)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Economic Growthincludes both Population & Resources | Growth in both human population and resource throughput translate into economic growth. Today's paradigm, where growth must increase every year, is today's principal paradigm flaw. To address the lack of understanding of exponential growth at all levels of governance has been the 30-year quest of the late Dr. Al Bartlett - <a href="http://www.albartlett.org">http://www.albartlett.org</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Energy<br>Flow energy?                              | Energy is a very large subject, but only a couple of points are raised here. ~Energy flow makes pretty much all things happen on our planet including the living systems of Gaia and civilizations. ~The term "renewable energy" is a misnomer, because the first Law of thermodynamics states that energy or matter can neither be created nor destroyed. However, it is widely used on the understanding that: ~A renewable energy resource is from nature's energy flows, therefore replenishable. Sun, wind, geothermal, tidal energies are considered to be renewable. This manual uses, flow-energy, to categorize all of these sources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Fatalist Denial similar to Group Denial             | "Let us assume that a couple has a problem of escalating debts. They both agree that their prodigal lifestyle is not negotiable. Consequently, there is no practical solution to their problem. As long as they acknowledge the problem, they incur the social and psychological cost of avowal on top of the cost of the problem itself. Not only do they have to service their debt, but they also must acknowledge the uncomfortable fact that they are living beyond their means. At some point, they silently agree to stop talking about their escalating debts. They then feel much better. Their debts keep rising, but instead of lamenting their predicament they have now swept it under the carpet. Initially, this seems to work very well indeed. But over time there is more and more fallout from their skyrocketing debts, and at some point the entire situation is doomed to break down.  "The Figure expresses this pattern of "fatalist denial" in formal terms. There is an escalating problem bound to break down when the total cost resulting from the situation at any given moment hits the tolerance limit. Because acknowledging the |

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|                      | problem comes with painful social and psychological cost, the total cost resulting from the situation at any given moment is lower when people are in denial than when they acknowledge the problem [cost denial (t) < cost avowal. It is therefore attractive for people to enter denial at an early stage of the escalation. Without denial, the tolerance limit would be reached at t2. With denial, the tolerance limit is reached only at t3. Thus, denial reduces cost and buys time."  Copy from, Peak energy and climate change: the double bind of post-normal science. Written by Jörg Friedrichs, published in, the journal Futures.           |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gaia                 | The sun-energized interacting system of animal, vegetable and mineral. Gaia was the name of Goddess of the Earth in Greek mythology, coined for Earth's application by James Lovelock.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gaiacide             | Gaiacide is the inevitable outcome of the human predicament if we do not bottom-out, collectively, and <i>consciously evolve</i> toward development of new and practical goals for humanity. Of course we will not kill Gaia, but may extinguish humanity and an evergrowing number of fellow species.  The term <i>ecocide</i> is now used by lawyer Polly Higgins who has a campaign to make ecocide a punishable criminal offence. <a href="http://eradicatingecocide.com/">http://eradicatingecocide.com/</a>                                                                                                                                         |
| Gaian System         | Any dynamic system that humans had nothing to do with. Systems of Gaia, include weather and biological system ranging from cells to internal organs and animals. Gaian Systems are distinct from human created systems (cars, computers, quality-assurance, etc.) but similar principles of dynamics interactions apply to all.                                                                                                                                                                                                                                                                                                                           |
| Golden Rule          | Original meaning: <u>Treat others as you want to be treated</u> Recent meaning: Those with the gold get to rule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Governance           | Wiki: "Governance is the act of governing. It relates to decisions that define <i>expectations</i> , grant power, or verify performance. It consists of either a separate process or part of management or leadership processes. These processes and systems are typically administered by a government.  "In the case of a business or of a non-profit organisation, governance relates to consistent management, cohesive policies, guidance, processes and decision-rights for a given area of responsibility. For example, managing at a corporate level might involve evolving policies on privacy, on internal investment, and on the use of data." |
| GNP                  | Note: GNP was the chapter header until Rev. C, 2015 changed to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Governance by        | Blue Dot Governance (BDC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Natural<br>Processes | Governance by Natural Processes (GNP)  Autonomous Interdependence Regional Global Networks that:  blend Science, Nature, Human-Nature  into a viable social political economy  that can serve human-kind today,  while preserving our natural world  for future generations to experience  the joy of life within nature.                                                                                                                                                                                                                                                                                                                                 |
| Group-think          | [W] "Groupthink is a psychological phenomenon that occurs within a group of people, in which the desire for harmony or conformity in the group results in an irrational or dysfunctional decision-making outcome" It usually applies to a group of skilled specialists dealing with an unusual issue. The <u>Bay of Pigs</u> fiasco was the result of group-think.                                                                                                                                                                                                                                                                                        |
| Spread-think         | When dealing with a specific issue, ideas, beliefs and viewpoints among the public will                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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|                | be spread out the result: A vote, or even consensus over time, may not choose the                                                                                      |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | most or reasonable solution.                                                                                                                                           |
|                | Deliberations about Structured Dialogic Design, Systems Thinking,                                                                                                      |
|                | - by Heiner Benking and Alexander Christakis                                                                                                                           |
| Homeostasis VS | Homeostasis is not at all the same thing as "equilibrium" as it is defined in                                                                                          |
| equilibrium    | thermodynamics. For example, a human being is a complex system. When you are                                                                                           |
| ·              | alive but at rest, you are in homeostasis. If you are in equilibrium you are dead.                                                                                     |
|                | Homeostasis is a dynamic equilibrium of forces.                                                                                                                        |
|                | At 3D-Optimum, human civilization would have reached homeostasis.                                                                                                      |
|                | The Roman Empire collapsed because it failed to use science-based feedback to limit                                                                                    |
|                | growth based on what its resources could support.                                                                                                                      |
|                | See <a href="http://europe.theoildrum.com/node/5528">http://europe.theoildrum.com/node/5528</a>                                                                        |
| Human-         | This expression was coined in the Club Of Rome's '72 Limits To Growth booklet. It                                                                                      |
| Predicament    | refers to humanity's current pathways and obsolete beliefs that drive civilization toward                                                                              |
|                | Gaiacide. As explained in the Synopsis, the Human-Predicament should be seen as a                                                                                      |
|                | package of several multidisciplinary issues, making it a wicked problem.                                                                                               |
|                | It is sometimes called "the problematique".                                                                                                                            |
|                |                                                                                                                                                                        |
|                | Dennis Meadows, one of the researchers that produced limits to Growth, in a recent                                                                                     |
|                | interview stated:                                                                                                                                                      |
|                | You see, there are two kinds of big problems. One I call universal problems, the other                                                                                 |
|                | I call global problems. They both affect everybody. The difference is: Universal                                                                                       |
|                | problems can be solved by small groups of people because they don't have to wait for others. You can clean up the air in Hanover without having to wait for Beijing or |
|                | Mexico City to do the same. Global problems, however, cannot be solved in a single                                                                                     |
|                | place. There's no way Hanover can solve climate change or stop the spread of                                                                                           |
|                | nuclear weapons. For that to happen, people in China, the US and Russia must also                                                                                      |
|                | do something. So on the global problems, we will make no progress.                                                                                                     |
|                |                                                                                                                                                                        |
|                | This issue that is addressed in the envisioned 050APC scenario. Global problems                                                                                        |
|                | here a solve by having Regional and Global governance politics principally guided by                                                                                   |
|                | science.                                                                                                                                                               |
| Human-Activity | This expression is used throughout this manual. It encompasses the idea of human                                                                                       |
|                | population numbers and also our collective resource use and activities that impact on                                                                                  |
|                | the Gaian system. Credible scientists now consider that by today Human-Activity is                                                                                     |
|                | significantly beyond Carrying Capacity – Footprint:                                                                                                                    |
| 15.4           | http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/                                                                                                 |
| IEA            | This graph produced in 2012 accompanied by text indicating supply no longer met the                                                                                    |
| International  | economy's needs in 2008. This is often called peak-oil                                                                                                                 |
| Energy         | World's Liquid Fuels Supply                                                                                                                                            |
| Agency         | 110 110 Non-Petroleum Unconventional Unconventional Non-OPEC                                                                                                           |
|                | Unconventional Petroleum Projects                                                                                                                                      |
|                | Projects - 70 Unconventional Petroleum Liquids OPEC Unconventional                                                                                                     |
|                | 60 Petroleum Liquids                                                                                                                                                   |
|                | 6 40 — OPEC Conventional Projects                                                                                                                                      |
|                | 30 Projects 30 Open Conventional 20 Open Conventional                                                                                                                  |
|                | 10 - 10 Conventional                                                                                                                                                   |
|                | O ————————————————————————————————————                                                                                                                                 |
|                | ባን ተን ቀን                                                                                                                           |

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|                                                       | Updates available: http://www.eia.gov/forecasts/aeo/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interdisiplinarity                                    | Wicki: "Interdisciplinarity involves the combining of two or more academic_disciplines into one activity (e.g., a research project). It is about creating something new by crossing boundaries, and thinking across them. It is related to an interdiscipline or an interdisciplinary field, which is an organizational unit that crosses traditional boundaries between academic disciplines or schools of thought, as new needs and professions emerge."  An example is that most economists have little understanding about energy supply                                                                               |
|                                                       | issues or ecological issues, therefore they discount their importance. Or a biologist will often consider their specialty to be of more important than that of an archaeologist.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Jevons Paradox<br>Observation of an<br>1865 economist | The Jevons Paradox: any increase in energy supply from any source or by any method, such as improved efficiency, will cause the economy to grow; and this will further increase the economy's energy demand.  With our current paradigm, this is sometimes considered to be a "wicked problem" – a multi-disciplinary issue wherein corrective action would need to be taken in several regulatory jurisdictions, perhaps even a constitutional amendment would be needed. The holistic dynamic nature of Governance by Natural Processes (GNP) eliminates wicked problems such as <i>Jeovns Paradox</i> .                 |
| Mutual<br>Coercion                                    | Mutual Coercion by Mutual Agreement. This was Garrett Hardin's suggested formula for dealing with the <u>tragedy of the commons</u> , as described in his well-known essay by that name. It is a way of reaching consensus on a thorny issue as an effective form of democracy. And it may apply to a few, like a family protocol for the use of the family bathroom.                                                                                                                                                                                                                                                      |
| Optimum<br>See<br>3D-Optimum                          | Optimum expresses the best possible condition under the circumstances. When the optimum is not possible under today's circumstances, optimum becomes a goal to guide dynamic processes in order to achieve that <i>optimum</i> in the future.                                                                                                                                                                                                                                                                                                                                                                              |
| Optimum<br>Population (OP)                            | The human population of a region that provides maximum human well-being of present populations, and of future generations. OP will be somewhat below regional maximum CC (Carrying Capacity)                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Optimum<br>Human Wealth<br>(OHW)                      | See Wealth below. In the GNP context, OHW today is balanced with scientific and economic measurements that result in regulatory control to guidance and adjust human activity levels toward 3D-O.                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Optimum<br>Rate of change                             | Since it may take several decades to reach OHW, the optimum amount of regulatory pressure will be delicate balance. All parameters will be continuously measured and adjustments made. The monetary system will be the primary regulatory control device.                                                                                                                                                                                                                                                                                                                                                                  |
| Overshoot<br>(See Carrying<br>Capacity)               | This is when a species population has grown beyond Carrying Capacity (CC). When caused by a rich niche in supply of food or energy, a very large condition of overshoot can devastates the environment during the die-off phase. While in overgrowth, the system's original CC (Carrying Capacity) may be drastically reduced to the point that the species may become extinct. <a href="http://davidmdelaney.com/overshoot-in-a-nutshell.html">http://davidmdelaney.com/overshoot-in-a-nutshell.html</a>                                                                                                                  |
| Paradigm<br>Junction<br>Project                       | From <u>Synopsis</u> : "Paradigm Junction is written specifically for individuals who are alarmed by what their future appears to hold and who may consider participating in a collective effort to break paradigm paralysis. The Paradigm Junction text suggests the creation of an expandable sociopolitical economic infrastructure that could bind together many of today's localization initiatives and other compatible social change efforts, utilizing many of today's institutions, corporations and laws, but using them differently, while conforming to well-established cybernetic management principles that |

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|                                         | are in wide use by today's leading corporations."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dorodiam                                | Webster Online dictionary defines this usage as "a philosophical and theoretical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Paradigm                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | framework of a scientific school or discipline within which theories, laws, and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | generalizations and the experiments performed in support of them are formulated;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Dana di ama                             | broadly: a philosophical or theoretical framework of any kind.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Paradigm                                | Paradigm Paralysis represents the difficulty in changing a long held world view of how                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Paralysis                               | things should be: Even though strong evidence indicates it would be wise to change.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                         | This is related to <i>Tyranny of the Tools</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Paradigm                                | Strong scientific evidence indicates that the growth era of human-activity is over: We                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Junction (PJ)                           | are at a junction, from growth to a descent phase – one way or another!                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Paradigm                                | It is the intent of the <i>Paradigm Junction Project</i> (PJP) to offer the draft of a dynamic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Junction                                | interactive association between the hundreds of regions of the world that recognize                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Project (PJP)                           | that localization present better heading opportunities. See Localization below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | separatist movements throughout the world, and to provide a dynamic interactive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | global monetary system to facilitate essential trade.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                         | See Synopsis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Peak-Oil                                | This graphic is from the '92 book Beyond The Limits to Growth, by the same team that                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| (see IEA above)                         | prepared the '72 report to the Club Of Rome, Limits To Growth.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| (************************************** | 1900 you are here 2100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | Youngquist, 1998                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                         | natural resources and the expectance of the expe |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | life expectancy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | We be stated to the state of th |
|                                         | food food                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                         | population output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                         | pollution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                         | This video describes the convergence of the issues within the <u>Circle Of Issues</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                         | http://www.clubofrome.org/flash/peak_oil.html                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| PorConito.                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| PerCapita                               | The term <i>Dynamics</i> is used because we know that Human-Activity can be influenced                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Dynamics                                | by wealth today suggesting that in future, feedback data about Regional Wealth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                         | Factors (WF) will influence individual human choices with regard to procreation or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                         | resource throughput. It will be expressed in a per capita basis suggesting that the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                         | fewer people there are in a region, the greater the wealth of each person, and vise                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                         | versa.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Personal Transition                     | This expression applies to individuals who have absorbed enough information about                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                         | ecology, and/or economics, and/or many of the other converging issues that clearly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                         | indicate the growth paradigm cannot continue. They have gone through a form of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                         | bottoming out (as related to addiction recovery), and are now receptive to initiating or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                         | following a new heading. To have an epiphany is similar. Dictionary: " a sudden                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | intuitive leap of understanding, especially through an ordinary but striking occurrence".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Problematique                           | Alternate meaning for the human-predicament.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Relocalization                          | Relocalization is about the possibility of building resilient community and stronger local                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                         | economies now, where you are. They range from small community efforts to state or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                         | provincial separatist movements worldwide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                         | http://www.energybulletin.net/50750                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                         | http://www.theoildrum.com/node/3541                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                         | http://www.transitionnetwork.org                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                         | · <del>· · · · · · · · · · · · · · · · · · </del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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|                                              | http://en.wikipedia.org/wiki/Lists of active separatist movements  It is the hope of the <i>Paradigm Junction Project</i> (PJP) to offer a framework for an interactive association of such initiatives to establish a chaordic association.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Post Normal:<br>Science;<br>Economics        | The idea of <i>Post Normal Science</i> was suggested by T.S.Kuhn, <i>The Structure of Scientific Revolutions</i> , 1962 with various articles written since. The idea suggested is that normal science is based on known facts where certainty of outcomes is high and the associated risks are not high. Post normal extends what is known into areas that are quite uncertain and associated risks that are quite high.  Uncertainty of outcome and high risk are definitely associated with design speculation of changed social governance systems with a form of economics that could correct or support those systems we consider normal today. <a href="https://en.wikipedia.org/wiki/Post-">https://en.wikipedia.org/wiki/Post-</a> |
| Quality Assurance<br>QA                      | normal science  QA is a systems-based corporate tool to ensure product or process continuously meets the design intent. The process is about management of largely autonomous communities. See <i>Dynamic Systems</i> section for greater detail. <a href="http://gaiapc.ca/PJ/2b-DynamicSystems.pdf">http://gaiapc.ca/PJ/2b-DynamicSystems.pdf</a>                                                                                                                                                                                                                                                                                                                                                                                         |
| Region<br>&<br>Bio Regions                   | In the envisioned sustainable society, the world will be divided into dozens of regions that operate relatively autonomously but are part of a cooperative dynamic interactive system. APC, when referring to a region's government, Regions will be capitalized when it represents the local top-government of the people. Regions would likely grow out of today's small countries, states or provinces.  Large National governments such as Russia, Canada or USA are too large to govern well. A few refernces, The New Scientist, Wikipedia, Gar Alperovitz points out that large nation are too big to govern well.                                                                                                                   |
| Renewable                                    | Renewable energy - see Energy above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| SCSyndrome (The Elephant in the living room) | Sacred Cow Syndrome = Issue avoidance: An inhibition, or taboo against thinking about or discussing certain issues that may lead to an individual's increase in anxiety or uncertainty. Some areas may be: the inevitable results of human population beyond CC; or that infinite economic growth not possible; or connecting the dots from now into the future when speculating on the results of issues like peak-oil, or global warming, or atmospheric tipping points, or of an increasing national-debt to GDP ratio. I don't want to think about it! The SCSyndrome expression is the Used by Don Chisholm in the '95, A 21st Century Steward's Handbook.                                                                             |
| Scientists<br>Warnings                       | Scientists' warnings to humanity:  Professor Frank Fenner, emeritus professor of microbiology at the Australian National University, has predicted that the human race will be extinct within the next 100 years. He has claimed that the human race will be unable to survive a population explosion and 'unbridled consumption.' Sir Martin Rees: Our Final Hour is a 2003 book by the British Astronomer Royal Sir Martin Rees. The full title of the book is Our Final Hour: A Scientist's Warning: How                                                                                                                                                                                                                                 |
|                                              | Terror, Error, and Environmental Disaster Threaten Humankind's Future In This Century - On Earth and Beyond. It was published in the United Kingdom under the less dramatic title Our Final Century: Will the Human Race Survive the Twenty-first Century?. <a href="http://en.wikipedia.org/wiki/Our Final Hour">http://en.wikipedia.org/wiki/Our Final Hour</a> and In 1992, the, Union of Concerned Scientists', Warning to Humanity, which called for "fundamental change" to address a range of security and environmental issues. The document was signed by 1700 scientists, including a majority of the Nobel prize winners                                                                                                         |

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|                                        | in sciences                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | http://wikien4.appspot.com/wiki/Union_of_Concerned_Scientists#Publications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| World Scientists', Warning to Humanity | "Human beings and the natural world are on a collision course. Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not checked, many of our current practices put at serious risk the future that we wish for human society and the plant and animal kingdoms, and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about." World Scientists' Warning to Humanity (1992) <a href="http://www.ucsusa.org/about/1992-world-scientists.html">http://www.ucsusa.org/about/1992-world-scientists.html</a> |
| MIT                                    | MIT scientists predict economic collapse about 2030 <a href="http://www.smithsonianmag.com/science-nature/Looking-Back-on-the-Limits-of-Growth.html">http://www.smithsonianmag.com/science-nature/Looking-Back-on-the-Limits-of-Growth.html</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Planet Under<br>Pressure Group         | Welcome To The Anthropocene <a href="http://vimeo.com/39048998">http://vimeo.com/39048998</a> A 3-minute journey through the last 250 years of our history, from the start of the Industrial Revolution to the Rio+20 Summit. The film charts the growth of humanity into a global force on an equivalent scale to major geological processes.  The film was commissioned by the Planet Under Pressure conference, London, 26-29 March, a major international conference focusing on solutions. <a href="http://www.planetunderpressure2012.net/">http://www.planetunderpressure2012.net/</a>                                                                                                                |
| Silo Effect                            | The silo effect is the result of specialization. It limits our scope and resourcefulness. It is currently a popular expression in the business and organizational communities to describe a lack of communication and common goals between departments in an organization. It is the opposite of <i>systems thinking</i> .  The silo effect gets its name from the farm silo, which stores only one product.  -Universities can be considered as a group of silos of learning.  -NGOs generally attempt to bring change on only one or two silo issues.  -But the human predicament is a multi-subject issue that can only be dealt with in a multidisciplinary approach.                                    |
| SOS Team                               | See UR-SOS below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Spirituality                           | An inherent human characteristic, a part of our biological nature. It can make us feel that we commune with nature. Some religions associate spirituality with their deity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Sustainability                         | Websters: " of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged".  Closely related to Carrying Capacity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Synergy                                | When a group of separate components are formed into a functioning system, the usefulness of the total enterprise is greater than the sum of the individual parts. This value gain, or gain in usefulness, is call synergy. As an adjective it becomes synergetic. See <i>dynamics</i> above.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| System Types                           | see dynamic  Hard Systems are systems human create like engines, temperature controlled heading systems, cars, television, etc.  Soft Systems are human-made systems to achieve a result over time, such as governments, quality assurance systems, etc.  Gaian systems are natural systems such as plants, animals, or mother nature.  Energy flow is essential to all systems, and they have many other common attributes.                                                                                                                                                                                                                                                                                 |

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| See Dynamics <a href="http://gaiapc.ca/PJ/2b-DynamicSystems.pdf">http://gaiapc.ca/PJ/2b-DynamicSystems.pdf</a> (See <a href="Ch. 4d page 8">Ch. 4d page 8</a> ) As envisioned, this debt is a loan to provide well-being today as an investment toward a sustainable future. It provides essential money per capita to keep essential industry functional during change toward 3D-Optimum, when the debt would be paid back. The name is intended to convey the idea of ominous results if we fail to pay it back as quickly as possible during change toward 3D-Optimum, when the human ecological footprint becomes less than 1, and a condition of sustainability is reached.  The group of three primary subject areas, Gaia, Human Nature and AbRealities (Abstract Realities - human created institutes).  When humans become enslaved by institutions or beliefs that we have created: |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Abstract Realities - human created institutes).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| When humans become enslaved by institutions or beliefs that we have created:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| AbRealites. See 2a: Triad Human Nature.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| A shadow government of the United Nations – for now (;-) <u>UR-S</u> hadow <u>Of Sanity team</u> . Chosen name for members of a global effort to document the foundational framework documentation for a sustainable civilization, as sketched at <a href="http://gaiapc.ca/PJ/4c-UN-Wheelhouse.pdf">http://gaiapc.ca/PJ/4c-UN-Wheelhouse.pdf</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| In GNP context, wealth equates to human happiness. Human happiness consists of health and general well-being. This cannot be achieved without robust and naturally-renewing systems of Gaia.  This view of wealth is vastly different from today's common usage that refers to accumulation of fiat money.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Wealth factors are items measured in each Region to assess its overall wealth.  Details in 4e: Envisioning E Dynamic Flows.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| The label Wicked Problems is given to cross-disciplinary issues because of the apparent impossibility of solving them within the current socio-political and economic paradigm.  [wicki] "Wicked problem" is a phrase originally used in social planning to describe a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. Moreover, because of complex interdependencies, the effort to solve one aspect of a wicked problem may reveal or create other problems."                                                                                                                                                                                                                                                                                                                       |
| Wicked Problems  Structuring Social Messes with Morphological Analysis  "If you work in an organisation that deals with long-term social, commercial or organisational policy planning, then you've got wicked problems. You may not call them by this name, but you know what they are. They are those complex, evechanging societal and organisational planning problems that you haven't been able to treat with much success, because they won't keep still. They're messy, devious, and reactive, i.e. they fight back when you try to deal them." <a href="http://www.swemorph.com/wp.html">http://www.swemorph.com/wp.html</a> >>  Wicked problems used in discussing fragility of civilization <a href="http://aidontheedge.info/">http://aidontheedge.info/</a>                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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Next to, The New Story <a href="http://gaiapc.ca/PJ/1d-TheNewStory.pdf">http://gaiapc.ca/PJ/1d-TheNewStory.pdf</a>