

## Astrology of Sustainability

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## Neptune and Pluto are linked

- The orbital period of Neptune is 164.79 years
- The orbital period of Pluto is 247.92 years
- Three cycles of Neptune take 494.37 years
- Two cycles of Pluto take 495.84 years
- This puts Neptune:Pluto in a 3:2 ratio, a sesquialter relationship
- Practically, this means that every other Neptune cycle will line up with Pluto almost exactly.

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## Why Sustainability Now?

- During Pluto's passage through Virgo, two factors came together to sound a warning:
  - The "birth" of the environmental movement
  - The radical drop in the birth rate in much of Europe
- These messages were largely ignored.

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## ...and Uranus

### 75 ♄ The Dance of Neptune and Pluto

Table 3-4. Invention that Uranus has an orbital period roughly half that of Neptune, by practice, what that works out to is a divergence of roughly 15-22 degrees each Neptune cycle, as shown in Table 3-4.

The numbers are not identical from cycle to cycle because of the retrograde pattern, as well as the fact that the orbits of the planets are not circular, but elliptical.

Expressed in terms of Pluto cycles, the results are shown in Table 3-5.

Table 3-4. Degree position of Uranus at the first entrance of Neptune into the sign of Virgo in each cycle, 1 = 1800 A.D.

Date of Neptune In Aries	Uranus Position
23 May 1812	23 Sagittarius
12 Apr 1824	9 Sagittarius
6 Jul 1837	15 Scorpio
6 May 1850	0 Scorpio
23 Apr 1748	15 Libra
28 Jan 1878	22 Virgo
10 May 1892	4 Virgo
25 Apr 1905	12 Leo
26 Mar 1870	0 Leo
14 Mar 1903	13 Cancer
30 Apr 1697	24 Cancer
13 Apr 1863	0 Cancer
30 Mar 1825	24 Taurus
23 May 1786	10 Taurus
6 May 1868	26 Cancer

Table 3-5. Degree position of Uranus at the first entrance of Neptune into the sign of Virgo in each cycle, 1 = 1800 A.D.

Date of Pluto In Capricorn	Uranus Position
2 Jan 42	4 Libra
21 Jan 257	0 Virgo
22 Feb 822	0 Leo
21 Jan 728	5 Cancer
4 Jan 1054	11 Gemini
20 Dec 1509	23 Taurus
25 Dec 1918	26 Aries
1 Jul 1703	3 Aries
20 Jan 2038	16 Pisces
21 Feb 2524	29 Aquarius

Going back to Figure 1, Table 3-6 tells us that for every year of Pluto, Uranus "lags" about 6 days. In the 1513 year of Pluto in Capricorn, Uranus occupied signs Taurus, Gemini, and Cancer. In the 1703 year, Uranus was in Aries, Taurus, and Gemini. In

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## Pluto through the Elements

- Pluto through the Fire signs brings changes to energy issues
- Pluto through the Earth signs brings changes to the earth itself, and resources
- Pluto through the Air signs brings changes to the air, and to theoretical understandings.
  - In addition, the synodic cycle of Neptune and Pluto has the conjunction in tropical Gemini.
- Pluto through the Water signs brings changes to water usage

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## Pluto and Neptune in History



Source: *Astrology of Sustainability*, pp 69-72

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## Change

- Change should not be understood as good or bad; advance or retreat.
- Each outer planet brings a different kind of change
  - Uranus brings sudden upheavals that are insightful
  - Neptune destroys the barriers we build to hold back chaos
  - Pluto takes matters to their extreme before allowing a new synthesis

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## Saturn's Dignities

### Pluto from Sagittarius to Pisces 2043

Sign	Participating Triplcity-Pull
Aries	Participating Triplcity-Pull
Taurus	Deplora Triplcity
Gemini	Deplora
Leo	Participating Triplcity-Deplora
Virgo	Deplora Triplcity-Deplora
Libra	Deplora Triplcity-Deplora
Scorpio	Participating Triplcity
Sagittarius	Participating Triplcity
Capricorn	Participating Triplcity
Aquarius	Deplora Triplcity-Deplora
Pisces	Deplora Triplcity-Deplora

Table 3-6. Saturn's major dignities to signs, Deplora Triplcity

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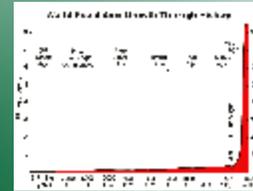
## Jupiter's Dignities

Axis	Significative Triplcity
Mercury	Participating Triplcity, Demise
Venus	Exaltation
Mars	Significative Triplcity
Jupiter	Exaltation
Uranus	Participating Triplcity
Neptune	Exaltation, Significative Triplcity
Pluto	Fall
Aquarius	Participating Triplcity
Pisces	

Table 8-4 Jupiter in Home Sign: In sign, Exaltation, Demise

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## World Population



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## Pluto and Neptune in History

Year	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	
In sign																					
To sign																					
From sign																					
By sign																					

Source: *Astrology of Sustainability*, pp 69-72

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## How did this happen?

- The massive increase in population could only occur because of a massive increase in food production.
- The increase in food production required the utilization of fossil fuels, which are necessary to:
  - produce fertilizers
  - allow irrigation
  - provide mechanized farming methods

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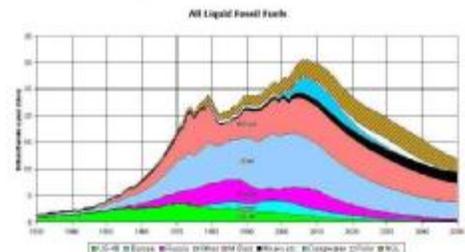
## Roughly every 500 years...

- The cycles repeat.
- While the social issues will differ greatly in 500 years, certain trends will repeat
  - Pluto in Sagittarius does show expansion
  - Pluto in Capricorn does have "reasoned" revolutionary potential
  - Pluto in Aquarius revolutions are much more violent, even if starting reasonably
  - Pluto in Pisces can be violent, reminding us of Mars' Triplcity rulership of the water signs

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### Retrospecting the Hubbert Curve to the Whole Earth

This graph shows past and projected oil production for the whole Earth. It was published in an ASPO Newsletter in 2004. [X] Hubbert model predictions are included. Natural gas condensate (NGL) are lumped together with oil. This ASPO graph says we are right at the peak in 2006.



The part before 2007 is historical fact. The part that comes afterward is an ASPO extrapolation.

This graph is worth careful as a bit of world history is written into it. Note the steep rise in oil production after World War II. Note that 1973 was the peak in oil production in the United States (over 40). There is a silver sliver of what's called Arctic oil. That is mostly Alaskan Prudhoe Bay oil, which peaked in 1980. Prudhoe Bay was almost big enough to counteract the lower oil peak of 1973. The oil is very scarce now. The OPEC oil embargo of 1973 is very visible. The oil produced by non-OPEC countries stayed nearly constant while OPEC production nearly halved. The embargo caused the world economy to slow, but the high cost of energy

<http://www.planetforlife.com/oilcrisis/oilpeak.html>

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## So this time...

- Why assume that this Pluto pass is literally about resources this time?
- The answer is: last time, the human footprint on Earth was much less than it is now.
- Last time, the main sources of human energy consumption were human power, animal power, windpower, and waterpower.

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## How controversial are these graphs?

- These type graphs were originally proposed by M. King Hubbert in the 1950s, and have proved historically predictive.
- The International Energy Agency claims that crude oil production peaked in 2006.
- It is estimated that per capita oil consumption peaked in 1979.

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## So...?

- With Pluto transiting an earth sign, can we reasonably expect that a major resource past its peak is *not* going to be a major theme?
- The USA Pluto ranges from 27 Capricorn (Declaration of Independence), to 6 Aquarius (Treaty of Paris), to 17 Aquarius (New Hampshire ratified the Constitution, putting it into effect).
- Thus, the USA will be experiencing its Pluto return during this period.

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## Enter Peak Water!

- The Dust Bowl corresponded to the development of drilling equipment of sufficient power to utilize fossil groundwater.
- However, this level of drilling required significant capitalization, driving the agricultural sector away from the smaller family farms.
- The understandable desire to never again repeat the dust bowl has led to seventy years of utilizing another nonrenewable resource: fossil groundwater.

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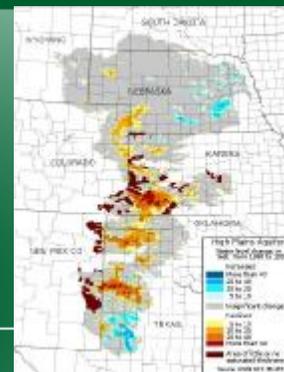
## What happened at the Pluto opposition?

- In 1935, when Pluto stationed at 27 Cancer:
  - It was the year of the Dust Bowl
  - Social Security went into law
  - Hoover Dam dedicated

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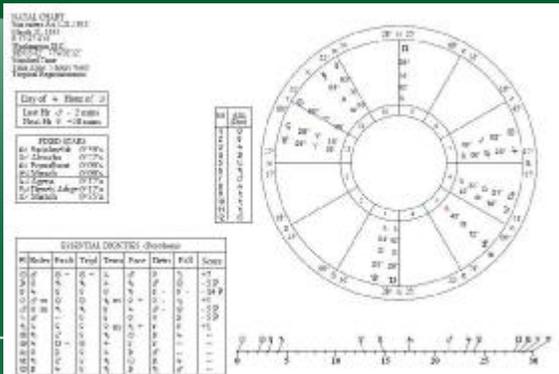
## Ogallala changes 1980-1995

Data: USGS, reported in Wikipedia



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## 1935 Aries Ingress - Washington



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## With each additional advance...

- As each advance in agriculture has occurred, what it has meant is that governments have not had to face the fact that a growth in production will result in a growth in population, which will rapidly outstrip the production.
- Governments historically have all viewed population growth as unequivocally positive.

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## The Pluto opposition Themes

- All three themes of the Pluto Opposition are still in play:
  - The Dust Bowl was the impetus to major changes in irrigation
  - Social Security is already in the process of being destroyed, or at least, curtailed
  - Hoover Dam is representative of infrastructure challenges

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## Population Growth as Good

- The growth in population of a political entity has always been viewed as increasing the strength and wealth of that entity.
- But even in historical times, this has not always been true.
- This is *only* true when a population has not yet reached its carrying capacity in an area.

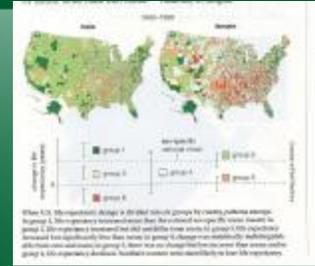
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## Carrying Capacity

- The population level of a particular species where a stable population results. This may vary from ecosystem to ecosystem, and over time.
- In humans as other species, this would mean that the species is not degrading the environment, nor creating toxic by-products that would reduce the population at a future date.

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## Life Expectancy



Source: American Scientist November-December 2008, p 463.

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## The Politics of Population

- Historically, the size of a country's population was also reckoned *relative* to the size of one's neighbors or enemies.
- Thus, it was always considered advantageous to have a larger population than one's neighbors, because one could then field a larger army.

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## If Ecologists cannot pinpoint the point of collapse...

- Can we as astrologers expect that this imminent collapse will *not* occur when Pluto is in one of Saturn's signs?
- If not now, when??

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## Population in an Era of Peak Resources

- Jared Diamond's book *Collapse* itemized the experience of societies in the past that ran up against resource limitations.
- In the past, these limitations have occurred on a local scale.
- Peak oil and peak water suggest that sometime in the next fifty years, these factors will occur on a global basis.

Diamond, Jared M. *Collapse : How Societies Choose to Fail or Succeed*. New York: Viking, 2005.

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## After our break, we will consider

- Some charts to understand how we got here
- Some ideas about synodic cycles to show how things may progress
- Some suggestions to help you plan your life long term to minimize the effects suggested by these ideas

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## John Calhoun and Overpopulation

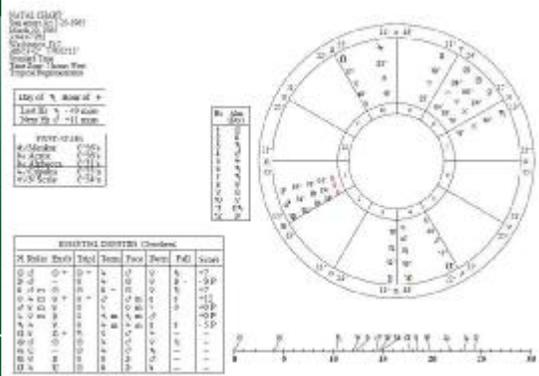
- Ecologist John Calhoun studied the behavioral effects of overpopulation in Norway rats in the 1940s, by allowing unlimited access to food.
- He found that stress and aberrant behavior within these populations resulted in die-offs, with the population eventually dropping back under the carrying capacity.
- He reproduced this work in mice during the 1960s.

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## How did We get Here?

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## Uranus-Pluto Conjunction in Virgo

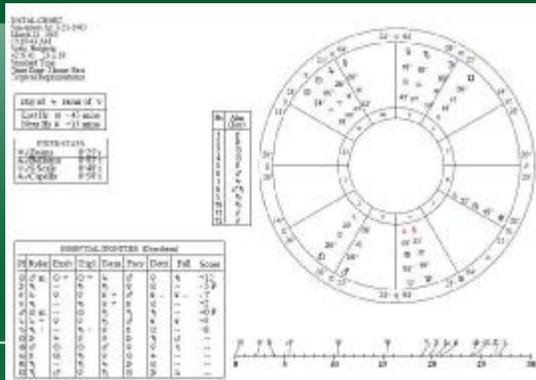


## Synodic Cycles 101

- In *Mundane Astrology*, the authors reported Leyla Rudhyar's classification of the outer planet synodic cycles as major and minor.
- The minor cycles are:
  - Jupiter-Uranus: 14 years
  - Jupiter-Neptune: 13 years
  - Jupiter-Pluto: 12 years

Baigent, Michael, Nicholas Campion, and Charles Harvey. *Mundane Astrology: An Aquarian Astrology Handbook*. Wellingborough, Northamptonshire: Aquarian Press, 1984.

## Population Drop in Europe



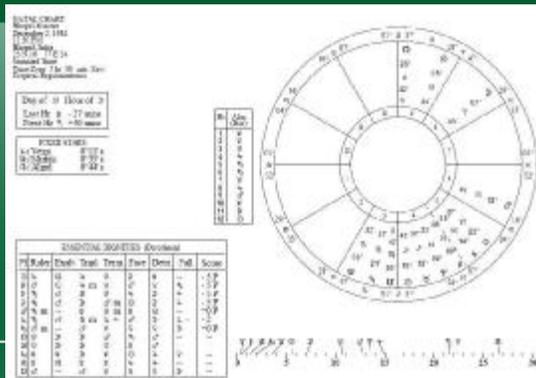
## Synodic Cycles Upcoming

Summary, Dignities and Conditions 275

	PL in SC	PL in KP	PL in AQ	PL in PT
1st Phase	1800-1218 Sat q ♈ (2001)	1340-1202 Sat q ♈ (2148)	1020-1508 Sat q ♈ (2222)	1550-1270 Sat q ♈ (2302)
2nd Phase	1840-1307 Sat q ♈ (2008)	1260-1177 Sat q ♈ (1902)	1170-1207 Sat q ♈ (1902)	1780-1200 Sat q ♈ (1802)
3rd Phase	1895-2078 Sat q ♈ (2006)	2000-2023 Sat q ♈ (2020)	2020-2043 Sat q ♈ (2020)	2040-2080 Sat q ♈ (2020)

Table 104. Minor conjunctions from Saturn and Pluto. The table shows the conjunctions of Saturn and Pluto in the signs of the zodiac. The first column shows the conjunctions of Saturn and Pluto in the signs of the zodiac. The second column shows the conjunctions of Saturn and Pluto in the signs of the zodiac. The third column shows the conjunctions of Saturn and Pluto in the signs of the zodiac. The fourth column shows the conjunctions of Saturn and Pluto in the signs of the zodiac.

## Neptune in Capricorn: Bhopal



## Selected Meanings of Synodic Cycles

- Saturn-Pluto: "very deep cultural transformations, and 'resurrections'"\*
- Saturn-Neptune: democracy and spirituality issues, also economic depression

\* Harvey, pp 183-184

## Pluto and Neptune in History

Year	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	
♃ to ♈																					
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Source: *Astrology of Sustainability*, pp 69-72

## Cyclic Aspects

- The important point to remember is that it is with the conjunction part of the cycle that new ideas come into play.
- At the other hard aspects, conflict, redefinitions, and reactions are dominant: stress, in other words.

## *Synodic Conclusion*

- Much of the decade of the 2010s is likely to be the **Decade of Denial**, because Pluto in Sagittarius is still considered normative and everyone wants to go back to it.
- This situation consists of many cases of “going to the well” too many times.
- In the meantime, the absence of major outer planet conjunctions means that there will be more talk than constructive action.

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## *If the Convergence is the Meaning of Pluto in Capricorn...*

- If both resources and population are limiting factors together, then countries will experience direct competition for resources while their citizens find that they cannot achieve what they want because there isn't enough to go around.
- The market in its traditional form breaks down as the driving force in economic activity, because its premises include infinite growth in resources.

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## *Personal Choices*

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## *Incomplete Agendas...*

- And this analysis doesn't even include:
  - Infrastructure breakdown, which is definitely a Pluto in Capricorn issue
  - The water crisis with return to dryland farming, which is likely either Pluto in Aquarius or Pisces
  - The water crisis with respect to toxic waste

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## *If Resource Limitation is the Meaning of Pluto in Capricorn...*

- Peak oil will likely produce large fluctuations in oil price, because the issue of peak oil is part of the denial part of this decade.
- We will be in and out of recession (or maybe just in), and oil prices will be part of what drives us into recession, or into worse recession.
- All those economic activities most dependent upon oil will also experience price fluctuations, or simply significantly higher prices.

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## *Future Planning for Individuals*

- If this analysis is correct, then by 2016-2020, one should:
  - Move from any part of the country which is heavily subsidized by fossil water
  - Move from any part of the country whose water supply is also used by mining interests, or industrial processes
  - Be making moves to become less dependent on petroleum

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## *If Overpopulation is the Meaning of Pluto in Capricorn...*

- Those countries or families which limit population will find themselves economically stronger over time, although it may not look so on an interim basis.
- The use of foodstocks for fuel (biodiesel, gasohol) will drive up food prices
- The competition for food and/or fuel is likely to fuel warfare over then next 5-50 years

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## *2016-2020 Planning*

- Assume that infrastructures such as roads, electrical power lines, water pipes, and bridges may be less dependable that we currently assume
- Assume that coal stocks are not likely to become scarce in our lifetimes
- Assume that transportation is likely to become much more expensive

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## *The Economic-Environmental Conundrum*

- The markets of the 20<sup>th</sup> century created a form of consumerism driven by desire, not necessity
- The desires, driven by marketing, have produced a glut of waste and toxic by-products that will far outlive us
- We are about to confront the reality that maintaining an energy-intensive lifestyle is only possible with a radical drop in population.

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## *The Economic-Environmental Conundrum*

- However, creating a lower-energy lifestyle will also necessitate a drop in population as well!
- Conservation in order to reduce pollution reduces market activity, and thus, economic activity.
- The decline in consumerism for environmental reasons will be taking place in a recession, which is economically depressed anyway.

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## *Pluto in Saturn's Signs*

- The ultimate meaning of Pluto in Saturn's signs is that we human beings do not have (and never have had) total control of our lives.
- Charles Harvey referred to Capricorn as stripping us down to the bare bones. This is a good metaphor for the period.
- But we can survive.

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