At the present cosmic moment, muscle, cunning, fear and selfishness are in powerful control of human affairs. We humans are here in Universe to exercise the Universe-functioning of mind. Only mind can apprehend, abide by, and be led by truth. If human mind comes into control of human affairs, the first thing it will do is exercise our option to "make it".

- R. Buckminster Fuller, Critical Path

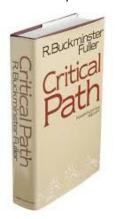


## BFI'S DYMAXION READING GROUP: CRITICAL PATH

Critical Path is R. Buckminster Fuller's masterwork - the summing up of a lifetime's thought and concern - as urgent and relevant today as it was upon its initial publication. Critical Path details how humanity found itself in its current situation - at the limit of the planet's resource and facing political, economic, environmental, and ethical crises. Fuller's analysis has been proven correct in many areas since it was first propounded and the options he presents for the very survival of mankind remain as compelling as ever. Critical Path provides an understanding of the essential dilemmas of our time and shows how each individual can respond effectively to the unprecedented threats of the modern landscape. It is an essential text for any student of humanity.

Greg Watson — former member of the Buckminster Fuller Institute Board of Directors and current Director of Policy and Systems Design at the Schumacher Center for a New Economics — will lead two online sessions discussing *Critical Path*.

With: Linda Booth Sweeney Elizabeth Thompson Pablo Freund Kurt Przybilla Jaime Snyder



Critical Path now available for the first time as an eBook at: http://itunes.apple.com/ http://www.amazon.com/

#### MAKING THE INVISIBLE VISIBLE

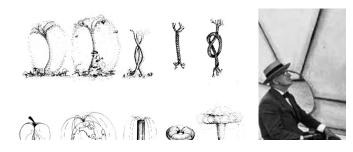
FRIDAY OCTOBER 30, 2015 6:00 - 7:30 PM ET

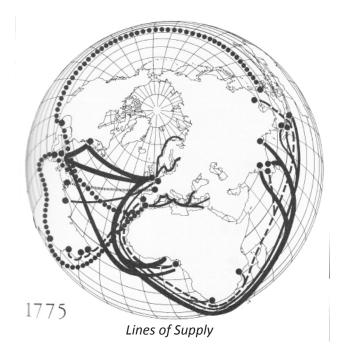
#### SOCIOECONOMIC PRECESSION

TUESDAY NOVEMBER 17, 2015 6:00 - 7:30 PM ET

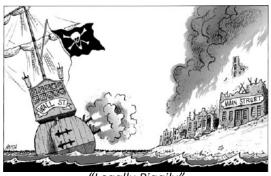
## **INVISIBLE POWER STRUCTURES**

"In our comprehensive reviewing of published, academically accepted history we continually explore for the *invisible power structure* behind the visible kings, prime ministers, czars, emperors, presidents and other official head men, as well as the underlying, hidden causes of individual wars and their long, drawn-out campaigns not disclosed by the widely published and popularly accepted causes of those wars."





"What my experience taught me was that if the physical laws thus far found by science to be governing Universe were intelligently and fearlessly employed in the production of ever higher performances per each pound of material, erg of energy, and second of time invested, it would be feasible to take care of all humanity at higher standards of living than had ever been known by any humans - and to do so sustainingly. Evolution seemed to be operating in such a manner as to drive humans to inadvertent accomplishment of their own success."



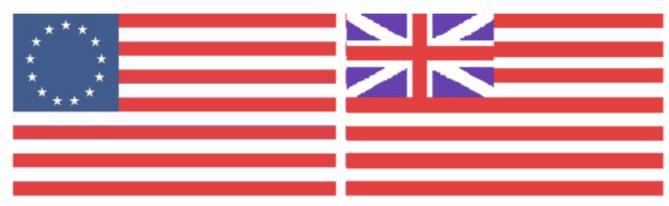
"Legally Piggily"

"Realistic, comprehensively responsible, omnisystem-considerate, unselfish thinking on the part of humans does absolutely affect human destiny."

"There is not a chapter in any book in economics anywhere about doing more with less. Economists traditionally try to maximize what you have, but the idea that you could go from wire to wireless or from visible structuring to invisible alloy structuring did not occur to them at all. It was outside their point of view - beyond their range of vision. Economists are specialists trained to look at one particular thing."



**Thomas Malthus** 



#### **United States Colonial Flag**

"While the British government lost the 1776 war, the East India Company's owners who constituted the invisible power structure behind the British government not only did not lose but moved right into the new U.S.A. economy along with the latter's most powerful landowners.

The supreme leaders of the American Revolution were of the southern type -- George Washington and Thomas Jefferson. Both were great landowners with direct royal grants for their lands, in contradistinction to the relatively meager individual landholdings of the individual northern Puritan colonists.

With the Revolution over we have Alexander Hamilton arguing before the Congress that it was not the intention of the signers of the Declaration of Independence that the nation so formed should have any wealth. Wealth, Hamilton argued — as supported by Adam Smith— is the land, which is something that belonged entirely to private individuals, preponderantly the great landowners with king-granted deeds to hundreds and sometimes thousands of square miles, as contrasted to the ordinary colonists' few hundred of acres of homestead farms."



#### East India Company Flag

"In 1810, only five years after Malthus's pronouncement of the fundamental inadequacy of life support on planet Earth, the telegraph was invented. It used copper wires to carry messages. This was the beginning of a new age of advancing technology.

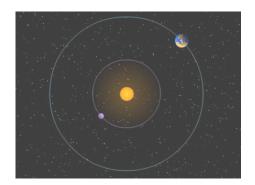
The development of nonrusting, hermetically sealed tin cans made possible preservation and distribution of foods to all inhabited portions of our planet Earth. All the new technology of all the advancing industry, which was inaugurated by the production of steel in the midnineteenth century, required the use of all the known primary metallic elements in various intercomplementary alloyings.

It was the high-seas, intercontinental trafficking in these metals that made possible the life-support effectiveness of both farming and fishing... Because the world-around-occurring metals were at the heart of this advance in standards of living for increasing numbers of humans all around the world, the struggle for mastery of this trade by the **invisible**, behind-the-scenescontending world power structures ultimately brought about the breakout of the **visible**, international World War I."



### SOCIOECONOMIC PRECESSION

"Ideas are easy to come by; reduction to practice is an arduous but inspirationally rewarding matter."



"Precession is the effect of bodies in motion on other bodies in motion. The Sun and Earth are both in motion. Despite the 180-degree gravitational pull of the in-motion Sun upon the in-motion Earth, precession makes Earth orbit around the Sun in a direction that is at ninety degrees -- i.e., at a right angle -- to the direction of the Sun's gravitational pull upon Earth.

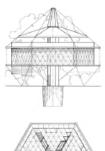


The successful regeneration of life growth on our planet Earth is ecologically accomplished always and only as precessional --- right-angled -- " side effect" of the biological species' chromosomically programmed individual-survival preoccupations -- the honeybees are chromosomically programmed to enter the flower blossoms in search of honey. Seemingly inadvertently (but realistically-precessionally) this occasions the bees' bumbling tail's becoming dusted with pollen (at ninety-degrees to the bee's linear axis and flight path), whereafter the bees' further bumbling entries into other flowers inadvertently dusts off, pollenizes and cross-fertilizes those flowers at right angles (precessionally) to the bees' operational axis.

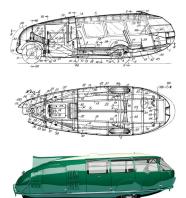


Humans, as honey-money-seeking bees, do many of nature's required tasks only inadvertently. They initially produce swords with metal-foraging-developed capability, which capability is later used to make steel into farm plows. Humans -- in politically organized, group-fear-mandated acquisition of weaponry -- have inadvertently developed so-much-more-performance-with-so-much-less material, effort, and time investment per each technological task accomplished as now inadvertently to have established a level of technological capability which, if applied exclusively to peaceful purposes, can provide a sustainable high standard of living for all humanity, which accomplished fact makes war and all weaponry obsolete."

"My half-century experience also discovered the natural unacceleratable lags existing between inventions and industrial uses in various technical categories which occur as follows: in electronics -- two years; aerodynamics -- five years; automobiles -- ten years; railroading -- fifteen years; big-city buildings -- twenty-five years; single-family dwellings -- fifty years. Clearly these lags have consistently characterized the lengths of gestation periods in the different arts with which I was concerned."







## **HUMANITY'S SYNTROPIC FUNCTIONING**

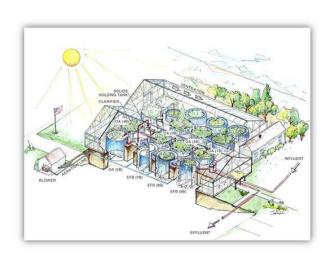
"We've talked in this book about entropy and syntropy: The entropic stars exporting energy as radiation and the syntropic loci in Universe where energy is being imported and converted from radiation into matter. We noted how, despite Boltzman's brilliant reasoning, the syntropic importing loci of Universe have not been scientifically accreditable as existing because they are astronomically invisible. We noted that the planet Earth is one of those syntropic energy-importing places -- the only one we know of -- where the entropic Sun radiation is constantly being impounded by the syntropic photosynthesis of the vegetation and converted from random radiation receipts into beautiful, orderly molecular structures (matter) with other living creatures and organisms in turn consuming the vegetation-produced molecules and thereby "growing" physically by themselves, producing large numbers of chemically orderly molecules. We observe this great syntropic operation pattern to be manifest in the natural ecology of our planet."





"By and large the function of life on the planet is designed to be syntropic -- to impound the radiation, conserve it, and use it to produce further syntropic functioning in overall support of the syntropic integrity of eternally regenerative Universe. The tendencies of many human beings -- wanting to cultivate the soil, to care for the animals, the drive of artists to create, of artisans to build, of inventors to invent and develop time- and trouble-savers for others -- are all manifests of the designed-in syntropic propensities of humans. The generous, compassionate propensity of humans is primarily syntropic. The selfish are "entropic." In order to keep Universe regenerative nature has placed human beings on this planet for their syntropic functioning."

## **CRITICAL PATH**



"It is a fact that we can now technologically recover and sort out the valuable chemicals in all the chimney-escaping or sluiceway-escaping "wastes" which, though unwanted by the local manufacturers, are necessary chemical-element components in the overall syntropic success of eternal regeneration of Universe. Nature has no pollutions -- it has very valuable chemistries that function only under special conditions, so the critical-path strategy is to get all the money-maker-unwanted chemistries shunted into all their syntropically functioning routes. Pollution is simply energy -- in the form of unfamiliar matter -- which the timing of the omniregenerative cosmic system cannot immediately use but must use later."

## **LEGALLY PIGGLY**







"As recounted in our "Legally Piggily" chapter, during the time of the 1926 "bad hog market," which led to the 1929 Great Crash, which led in turn to the 1933 New Deal after all the farmers had been displaced by the banks foreclosing on their farm mortgages and their farm machinery, the no-longer-worked-and-irrigated land dried out, and the wind-storm "dust bowls" began to grow and to blow away the topsoils; this sequence, followed by heavy rains, brought about vast land erosion.

The 1933-inaugurated New Deal instituted a program to rebuild the soil and get the farmers back on the land. They erected what they called "shelterbelts," produced by high hedges initially produced with swiftly and thick; y growing Osage orange trees augmented progressively with other varieties of slower-but higher-growing bushes and trees. These high hedges enclosed square "sections" -- quarter square miles -- of potentially rich farmland. These shelterbelts wrought miracles in recapturing the as-yet-wind-borne soils and new, daily, stardust receipts of our planet. Altogether they rebuilt the soil throughout the last flat plains and prairies of the United States."

"During the half-century since 1926 another set of events occurred which often seemed to be only-humanly-planned-and-contrived class-two evolution. In the "Legally Piggily" chapter we noted how the farmer' machinery was seized by the banks when the banks foreclosed on the farms. When the New Deal arrived, the banks owned vast quantities of farm machinery. It was rarely sold back t the individual farmers. They had no money or income enough to warrant a loan to them. Private-enterprise mobile brigades for mechanically planting, cultivating, and harvesting were formed and bought much of the bank-replevined farm machinery, which they transported by trucks from state to state, town to town and farm to farm...They travel together in caravans, with human mechanics aboard to operate the machinery which they unload at their local stops. Their crews occupy all the motels in the small farm towns along the way. Plowing and sowing seeds all the way northward, they turn around at the northern borders of the U.S.A. and return to the South to progressively reap the now-ready harvest with their CB



radiotelephone-interlinked reaping-machinery crews. The grain harvested is now stored in the former "ever-normal-grainery" bins. The mobile-harvesting teams' managers then go to the local banks and are given certificates of receipt, which they then forward to the offices of the no-longer-locally-resident owners of the farmlands. These owners are no longer "farmers" or even non-farmer individual humans. They are great business conglomerates."

### **CLASS-ONE EVOLUTION**



"Talking about scrap, which is more accurately to be called recirculation, is analogous to talking about the bloodstream or other circulatory systems of humans and other organisms. We are at an integral stage in an omniregenerative cosmic system. The Universe is 100-percent regenerative. Terrestrial ecology has been but is no longer 100-percent regenerative. Recirculation is regenerative. Blockages in that recirculation occur when money-making people, seeking special economic advantage for themselves, hold back the flow of regenerative essentials to increase their prices.

chemicals they recover by fume precipitation or filtered sluiceways condensations. Hoarding of any kind must be banished from human affairs.

All special-interest lobbies are entropic. Class-one

culatory integrity of our planet. All corporations are

going to have to turn over to the government all the

All special-interest lobbies are entropic. Class-one evolution is progressively eliminating all blockages to recirculation. Regenerative circulation of metals has the unique function of realizing the twenty-two-and-one-half year recirculation cycle."

Governments are going to have to take over the function of eliminating any and all stoppages in the

# **NATION-STATE BLOOD CLOTS**

"We have reached the class-one evolutionary point now in the last half of the twentieth century where the largest and most powerful abstract institutions -- religious, financial, and political -have all become transnational. Humans trapped in 150 nation-state pens, are being manipulated from outside the nations by big ideological, religious or big-money interests. The power of lobbying imposed on local governments by big-money or big world ideological systems is incredibly corrupting. Preemption of the metals supply by the expanding arms industry plus the trade barriers prevent the free circulation and recirculation of metals. This means we have 150 sovereign blood clots interrupting our recirculating metals, which would otherwise serve as the industrial, productive lifeblood with which we might realize our class-one evolutionary gains."



# BFI'S DYMAXION READING GROUP: CRITICAL PATH

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1. Register by click the link to the webinar of your choice. You must register for each individually:

#### **SESSION 1: MAKING THE INVISIBLE VISIBLE**

FRIDAY OCTOBER 30, 2015 6:00 - 7:30 PM ET

https://attendee.gotowebinar.com/register/6421280216886081281

#### **SESSION 2: SOCIOECONOMIC PRECESSION**

TUESDAY NOVEMBER 17, 2015 6:00 - 7:30 PM ET

https://attendee.gotowebinar.com/register/6153906476802598402

- 2. A link will be sent to you in a confirmation email; this link will be unique to you and should not be shared with others.
- 3. When you are ready to join the webinar the day of, use the link in your confirmation email and enter your name and email to be directed to the discussion. You may need to download the software which can take a few minutes. We highly recommend logging in 5 minutes before the start time.

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- 5. If you prefer to use your phone, you will be in listen only mode. Should this be your prefernce, you must select "use telephone" after joining the webinar and call in using the number provided. If you choose to use a telephone instead of computer audio, we will not see you as an attendee and you will not be able to participate in sending questions or being asked to join the conversation.

Should you have any questions, please email contact@bfi.org.