

PLANETARY SUSTAINABILITY AND THE SOCIO-DIGITAL SPACE



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The foundation of the IS discipline (in the late sixties) is built on the proposition that any artefact on which we turn an IS lens cannot be seen as hardware, software, or human-based in isolation.

ECIS 2018

Agenda

Analytical exploration of the sustainability of the human habitat

From telescope to microscope;

The whole Earth to a family of four.

Artifacts unique to the Socio-Digital Space

Assignment:

Create artifacts necessary for evolution of a sustainable society

**Only
a
Ten
Hour
Week**

*Architecture for
a Sustainable
Society of Plenty*



ELI BERNIKER
Practical Utopian

Systems as Lenses

A system is a Point-of-View

Every way of seeing is, necessarily, a way of not seeing.

- The cost of focus
- System as whole
- Multiple lenses

The Socio-Digital Space

The IS Lens

Not technological;

Information – Amorphous construct

Digital Systems

Governed by limitations of logic

A Sustainable Human Society on Planet Earth

A well-understood crisis:

*The sustainability of the natural environment
that is our human habitat.*

Our present view is telescopic

What becomes visible via a microscopic view?



We begin with a moral principle:

We cannot morally obligate a family to act to save the human habitat and protect our natural environment unless they can assure their own survival.

Family Economics: The Monetary Lens

Smith Family Interest Flows			Net Income	%
			\$ 52,384	
Mortgage Loan			\$ 17,431	33.3%
Car Loan			\$ 800	1.5%
Oregon Debt Service			\$ 1,000	1.9%
Federal Debt Service			\$ 980	1.9%
Credit Card Purchases		3%	\$ 750	1.4%
				40%
Supply Chain Embedded Interest				
			30%	
Purchases		\$25,000	\$ 7,500	14%

Interest portion of median family take home income 54%

The Microscopic View

Americans meet their needs with 20 hours of work a week.

We rent the money we earn.

Value created to pay interest must be wasted to maintain scarcity.

Thus

Human consumption does not drive environmental degradation.

Economic waste is the largest component of our ecological footprint.

Our Economic System

We live in a world of plenty that must be experienced as scarcity for the economy to function.

Clouded Lenses: *Cataracts*

Capitalism

Socialism

Market Society

Economic Efficiency

Capitalism?

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Capitalism

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Productive Capitalism

Produces goods and services to meet human needs with ever decreasing hours of work.

Financial Capitalism

Creates money out of nothing and charges interest for its use.
An exclusive entitlement

Who will pay?

“Nearly 800 million people worldwide suffer from hunger. But, according to the Food and Agriculture Organization of the United Nations, we squander enough food to feed every one of them more than twice over.”

Elizabeth Royte

Who will pay?

Social Security and pensions?

Too many retirees

Too few workers

The Answer: Jobs

So economic growth is a dominant pressure the world over, while ecological concerns all suggest that we limit economic activity.

What is Money?

98% of all money is debt-money

Fiat Money is issued by governments

Who will pay? becomes

Who will assume debt to pay?

Who will assume debt to pay?

If some families, or nations, are paying their debts with interest, other families, or nations, are necessarily losing some of the principle they are obligated to repay.

The monetary system is designed so there must be losers.

What is Money?

If some families, or nations, are paying their debts with interest, other families, or nations, are necessarily losing some of the principle they are obligated to repay.

The monetary system is designed so there must be losers.

We live in a world of plenty with the resources and capacity to meet all of humanity's needs at a fine standard of living in an economic system that requires large parts of this humanity to be hungry losers.

How is debt-money created?

Refinance a mortgage - \$300,000

Qualify as borrowers

Lender sends a check to an escrow company

Documents are signed

Checks are circulated in the banking system

What is concrete here? What is real?

Debt-money only exists in the Socio-Digital Space

We must believe that it is real.

What is a bank?

Banks are brokers between two sets of beliefs:

Savers – Deposits

Borrowers – Loans

John Maynard Keynes

The symbol economy of money and credit.

Economics is a symbolic system.

Money is only real because we believe in it.

Economics might best be understood as a religion.

How shall we name the *Economic Deity*?

REALITY

We are all commanded to be *realistic*.

Reality and hunger

Reality and homelessness

Reality and the Greek people

Reality and German debt

Reality and democracy across Europe

Reality is hopeless.

We live in a world of plenty that MUST be experienced as scarcity for the economy to function.

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Socialism? Painkillers.

Hope? Marxism?

The ongoing development of the means of production drives history

Bus Tokens

Recycling mountains of garbage

Financing? *Bus Tokens*

What happened in that town?

Garbage recycled

Bus Tokens became “money.”

The Assignment

Innovation in the Socio-Digital Space

The ECIS community has the competence

Given,

Debt-money is responsible for the largest
part of our ecological footprint.

We need a complementary means of exchange.

Token Money as distinct from *Real Money*.

They both can “coexist” in the Socio-Digital Space.

Some Tentative Recommendations

- Local Labels
- Smart Money
- Voluntary
- Community Trust – Members
Local Businesses?
- Token Money is not fungible

Token Money Creation

- Community Work
- Member Initial Allotments
- Debt-Money Exchanges

Token Money Value

Pegged to food basket

Work required to feed a family of four

Purpose

Eliminate food insecurity in the community

Success?

Communities are able to mobilize locally available resources to meet local needs.

Economic Efficiency

What is efficiency?

$$\text{Output/Input} = \$/\$ = \text{€}/\text{€} = \text{£}/\text{£}$$

What is efficiency of Token Money food production?

$$\text{Output/Input} = \$/\text{tm} \text{ or } \text{€}/\text{tm} \text{ } \text{£}/\text{tm} = \$/0$$

Token Money is not fungible

Conclusion

Demonstration of the application of multiple lenses to complex challenges.

Demonstrated the *Socio-Digital Space*

Assignment to ECIS community

My agenda:

Hope

*Hope is the projection of intentionality
on a horizon of possibilities.*

*My purpose has been to expand that horizon of
possibilities.*

Thank you.