#### E-Business Ethics Part 2

## Virtual Money Ethics

#### **Economic Evolution**

## Thesis: Virtual money recreates quality.

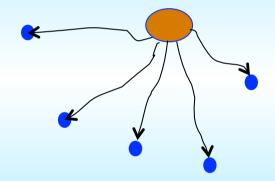
#### Increasing Rate of Value

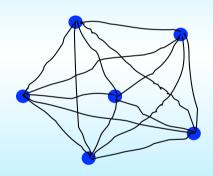
- Economies of Scale
- Learning Effect
- Network Effect

#### **Actors on the Internet**

#### **Exponential Growth of Value**

Sender: 5 CP Network: 15 CP





#### generally

$$CP = A-1$$

$$CP = (A^2 - A)/2$$

CP:= Communication Possibilities – A:= Actors

#### **Virtual World**

Virtual Community

Virtual Identity

Virtual Goods

Virtual Money

# The Evolution of Money is Virtual Money

### Postindustrial Economy (Ronald Coase)

Production Costs
(Seller)

Total Cost of Products

Transaction Costs of Seller

Transaction Costs of Buyer

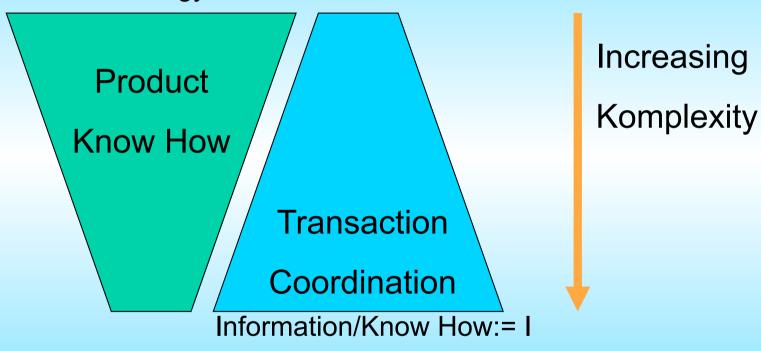
Internet Saving Potential

#### **Transaction Costs**

- 1. Search- and Retrieval Costs
- 2. Negotiation- and Decision Costs
- 3. Controlling- and Enforcement Costs

## Substitution leads to Postindustrial Economy

Labor/Energy:= E



### Economic Principle: Minimizing Cost Under Technical Constraints

$$O = aE^{\alpha}I^{\beta} \qquad \text{With } a,\alpha,\beta>0$$

$$K = p_E E + p_I I$$

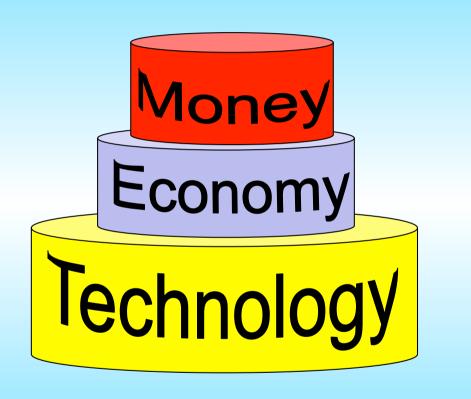
$$\min\left\{K = p_E E + p_I I \middle| O - a E^{\alpha} I^{\beta} \equiv 0\right\}$$

#### **Economic Theory**

### Omniscient Actors in Simple Decision Situations

- No Adaptation Period
- No Quality Differenciation
- Total Information
- Decision only Price Based
- Closed System
- Equilibrium

#### **Economic Power**



Quantity vs.
Quality

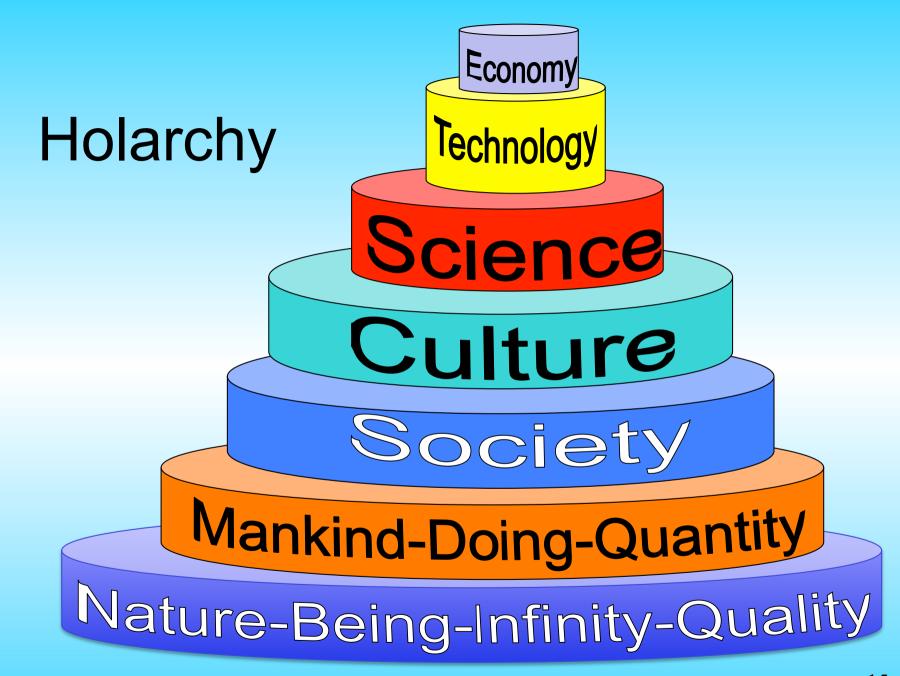
#### **Economic Crisis**

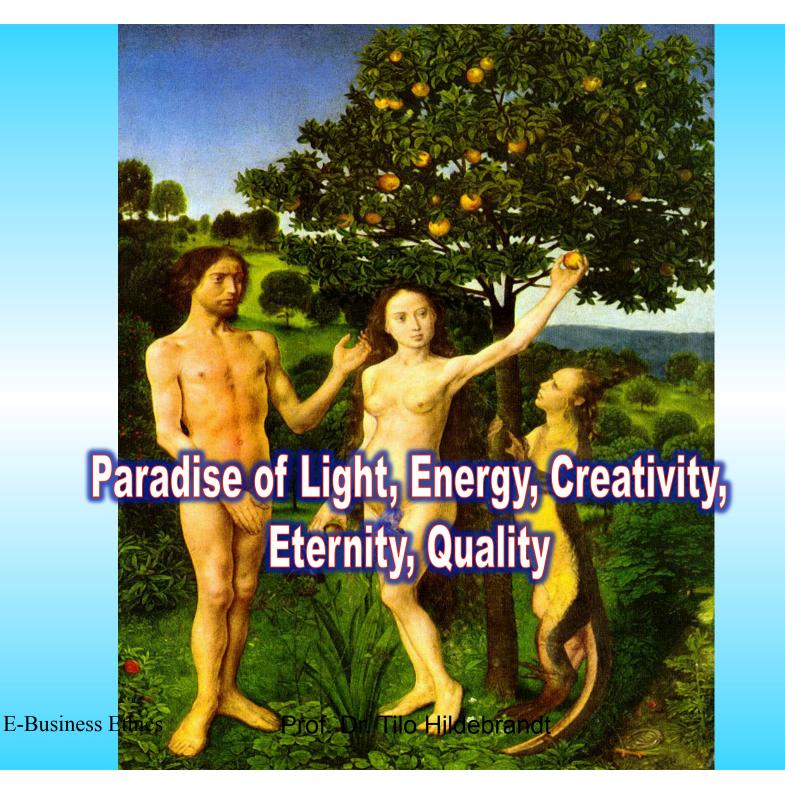
#### Money dominates capital.

## Money might devalues the capital strength.

#### Fiction vs. Reality

# Homo oeconomicus converts money to capital. The people defend quality against economy.





#### **Economic Reality**

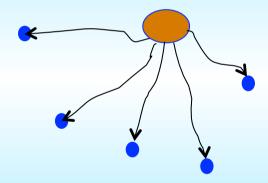
## Nescient Actors in Complex Decision Situations

#### **Actors on the Internet**

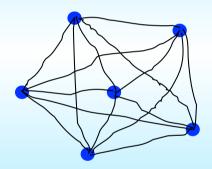
#### **Exponential Growth of Value**

Sender: 5 CP

**Network: 15 CP** 



Might



Strength

CP:= Communication Possibilities – A:= Actors

## Transcendental Creativity

Might

Science

Culture

Society

Mankind-Doing-Quantity

Nature-Being-Infinity-Quality

#### Virtual Economy

# Virtual Money Translates the Quality Potential of Technology

#### **Functions of Money**

- Exchange Medium
- Capital Reservoir

#### **Virtual Money Rules**

No Money Import

Virtual Money is Value

Virtual Money Carries its Origin

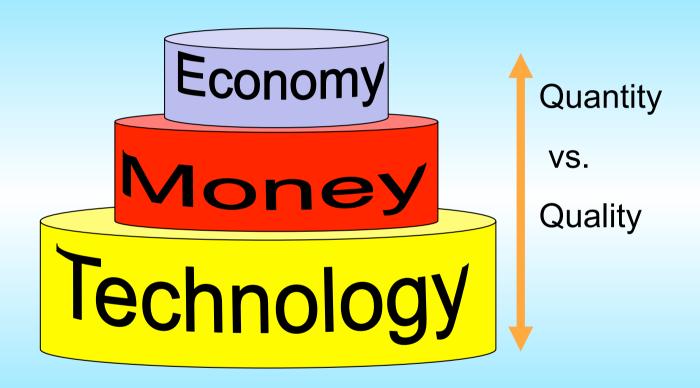
Players are Anonymus

No Money Export

#### **Economic Evolution**

## Virtual money is the predecessor of virtual economy.

#### Technological Strength



#### **Economic Evolution**

Virtual Money
is Capital
is Value
is Quality.

#### Free Money – Virtual Money

(Silvio Gesell)

International: Special Drawing Rights

National: Baktreaten (Middle-Age)

USA: Stamp Scrip (Irving Fisher)

Liquidity Trap (J.M. Keynes)



Stamped Money - Bancor

#### **Advantages of Virtual Money**

**Nearly no Transaction Costs** 

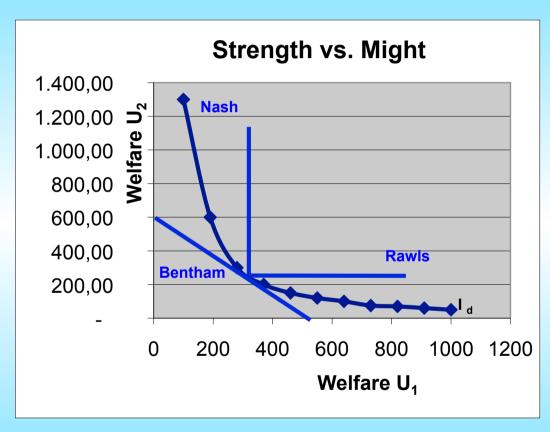
Symmetrical to the Parties

Clearing between Anonyms

Independent of Currencies

Worldwide Usage

#### Welfare Economics



$$W_B = \sum_{i=1}^n U_i$$
 Bentham

$$W_R = \min\{U_1,...,U_n\}$$
 Rawls

$$W_N = \prod_{i=1}^n U_i$$
 Nash



"You'd better start swimming or you'll sink like a stone, cause the times they are a' changing."