

# *The Inalienable Right*

Jörg F. Wittenberger  
[www.askemos.org](http://www.askemos.org)

# Anything to add?

*A former employee of electronic voting booth maker VoteHere has filed a civil suit against the firm, claiming that the company's digital balloting systems contain error-laden software which has never been properly audited.* 2600 news 27 Feb 2003



# Security: Stability Despite Attack

- Know your enemy
- Values to defend and effective protection
- The Inalienable Right
  - legally
  - technically
- The Future - An Invitation

# Know Your Enemy

There is little hope that you can choose them.

- **Carelessness** (tech nerds and tech-agnostics)
  - the *ultimately foolish user*
- **Vandalism** (script kiddies)
- **Betrayal, Embarrassment** (25% of men and 40% of woman sneak in their partners email, 40/60% in SMS, 35/27% with colleagues and friends - source: der Spiegel)
- **Abuse of Authority**

# 3 Approaches

**advocacy:** teaches moral and pro-social values for online behaviour

**security industry:** seeks mechanical protection for property in cyberspace

**legislative:** articulation of rules and punishment for cyber-crimes

# 3 Approaches

**advocacy:** teaches moral values for online behaviour



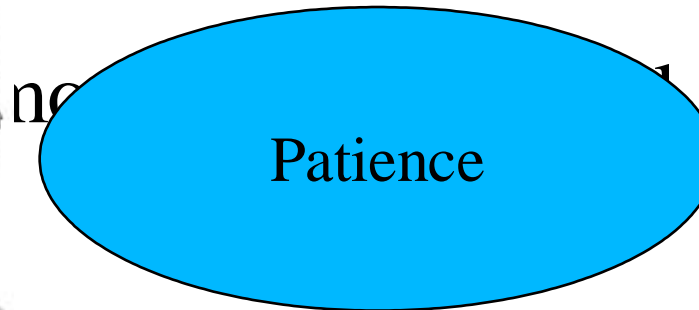
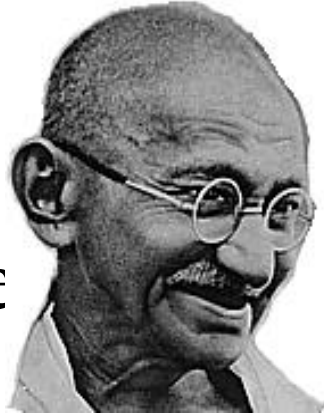
Patience

**security industry:** seeks mechanical protection for property in cyberspace

**legislative:** articulation of rules and punishment for cyber-crimes

# 3 Approaches

**advocacy:**  
online be



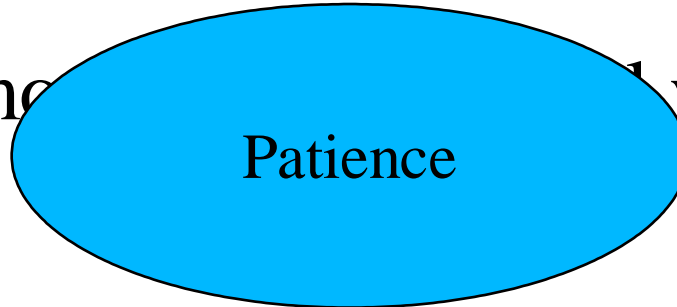
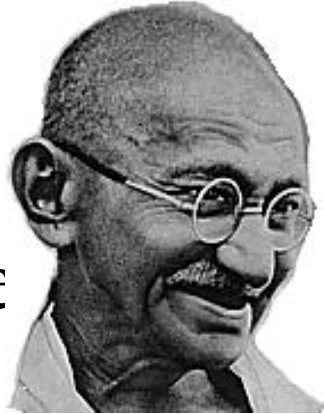
ne values for

**security industry:** seeks mechanical protection for property in cyberspace

**legislative:** articulation of rules and punishment for cyber-crimes

# 3 Approaches

**advocacy:**  
online be



ne... values for

**security industry:** seeks mechanical  
property in cyberspace

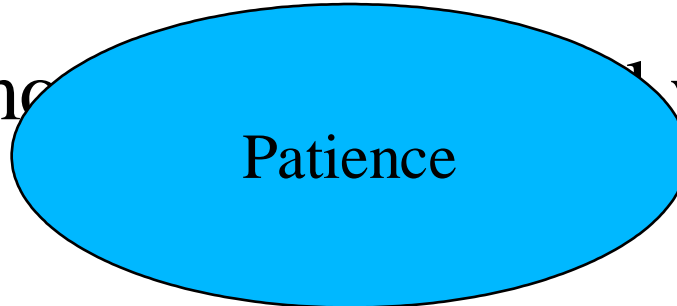
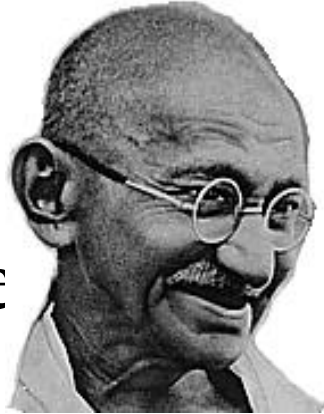


ection for

**legislative:** articulation of rules and punishment for  
cyber-crimes

# 3 Approaches

**advocacy:**  
online be



values for

**security in**  
property



mechan

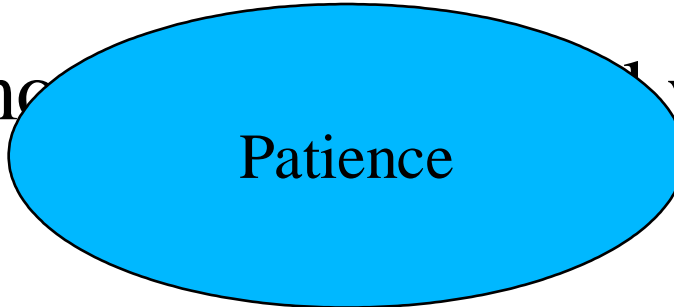
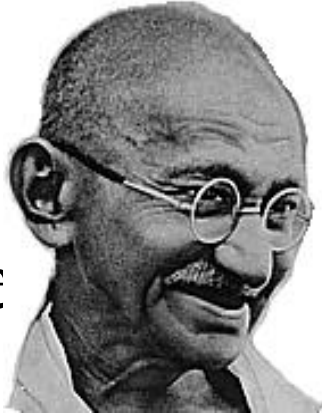


ection for

**legislative:** articulation of rules and punishment for  
cyber-crimes

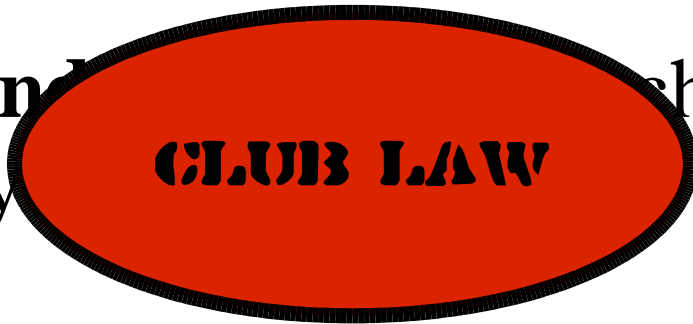
# 3 Approaches

**advocacy:**  
online be



values for

**security in**  
property



mechan



ection for

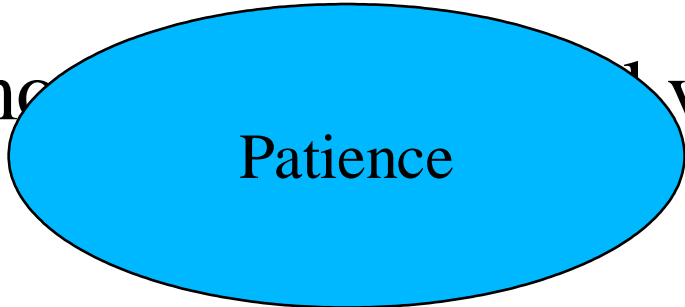
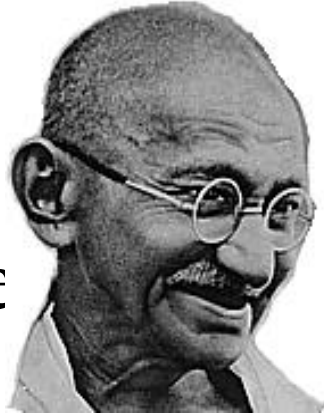
**legislative:** arti  
cyber-crim



les and punishment for

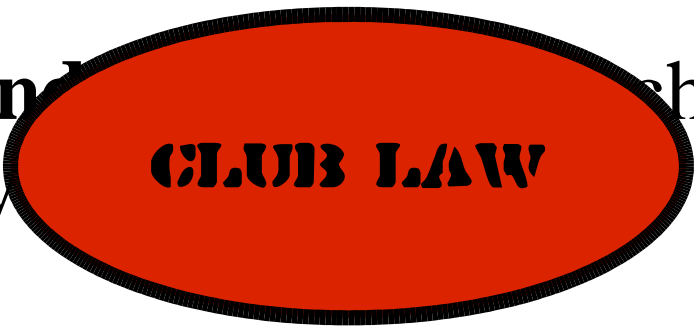
# 3 Approaches

**advocacy:**  
online be



values for

**security in**  
property



mechan



ection for

**legislative:** arti  
cyber-crim



les and p

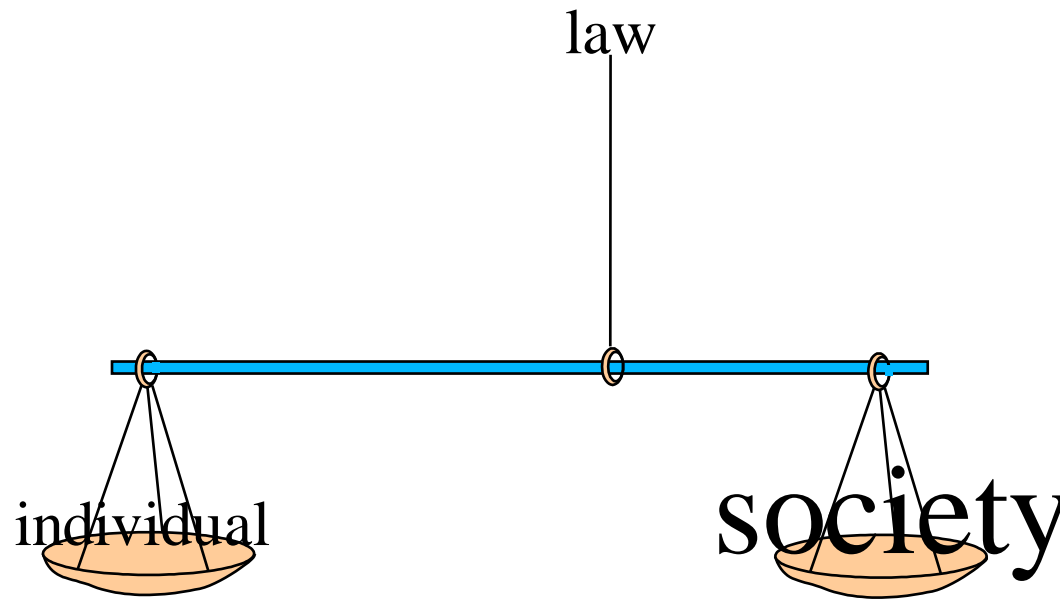


t for

# Values To Defend

truth  
theory  
liberty  
understanding  
veracity

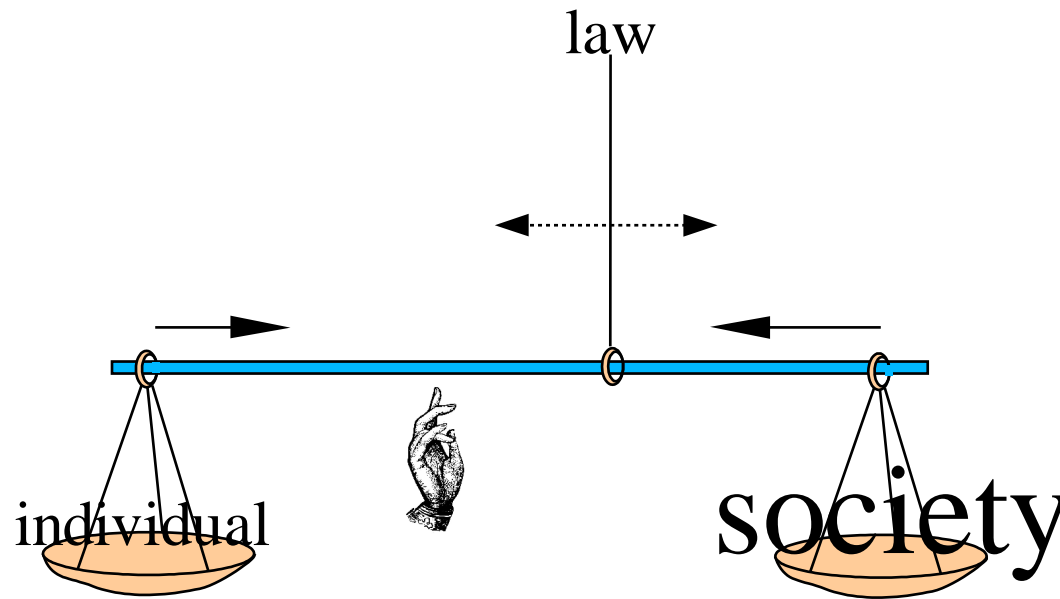
certainty  
reality  
money  
feeling  
benevolence



# The Powers That Be

truth  
theory  
liberty  
understanding  
veracity

certainty  
reality  
money  
feeling  
benevolence



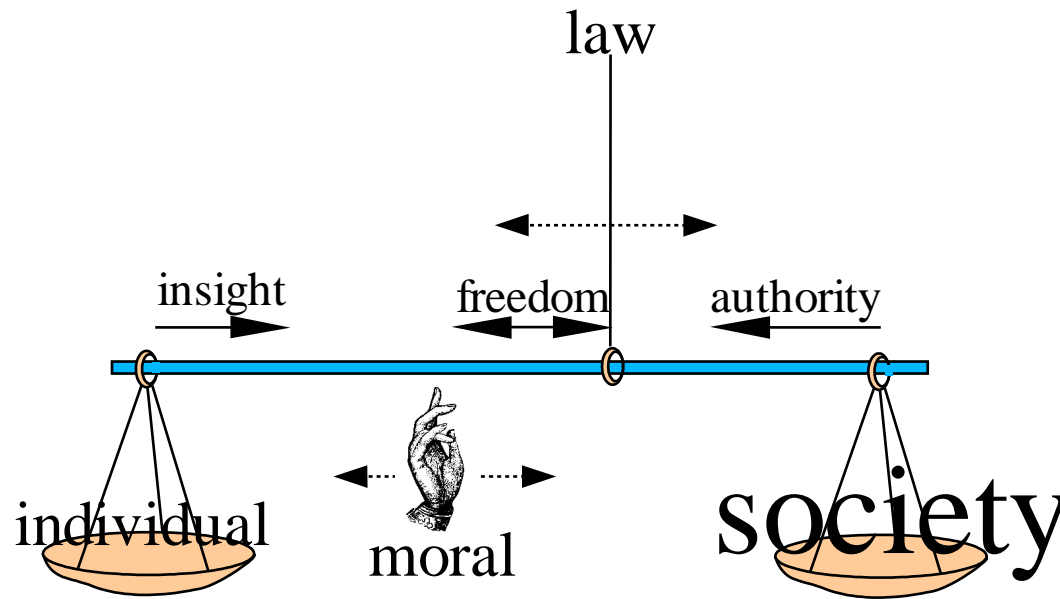
universal scope,  
virtual subject information,  
automatically abides  
timeless mechanism,  
rational

local scope,  
actual subject matter,  
current policy  
enforced,  
empiric

# The Powers That Be

truth  
theory  
liberty  
understanding  
veracity

certainty  
reality  
money  
feeling  
benevolence



universal scope,  
virtual subject information,  
automatically abides  
timeless mechanism,  
rational

local scope,  
actual subject matter,  
current policy  
enforced,  
empiric

# Hacker Ethic

Stephen Levy's Hackers in "Heroes of the Computer Revolution":

**"Access to computers - and anything which might teach you something about how the world works - should be unlimited and total...Hackers believe that essential lessons can be learned about the systems - about the world - from taking things apart, seeing how they work, and using this knowledge to create new and even more interesting things. They resent any person, physical barrier, or law that tries to keep them from doing this.... Rules which prevent you from taking matters like that into your own hands are too ridiculous to even consider abiding by...."**



# Monopoly On Ideas

A federal judge ordered Ebay to pay \$29.5 million for infringement a patent for fixed-price payment features.

As a result, EBay said it will likely change the way it conducts sales of fixed-price merchandise.

-

Patent monopoly on business methods?

Freedom of contract anywhere?

No contract, no business!



# Compromise

- All information should be free! - Really? Privacy? Confidence?
- Freedom of contract: available under the attached rights.
- Liabilities associated with activities (mutation).
- Moral requirements for scientific knowledge: eventually publicly available. (But moral is never enforceable.)

# Property On Information

rational facts are  
**common goods**

**private property** on  
empiric objects

truth

certainty

theory

reality

liberty

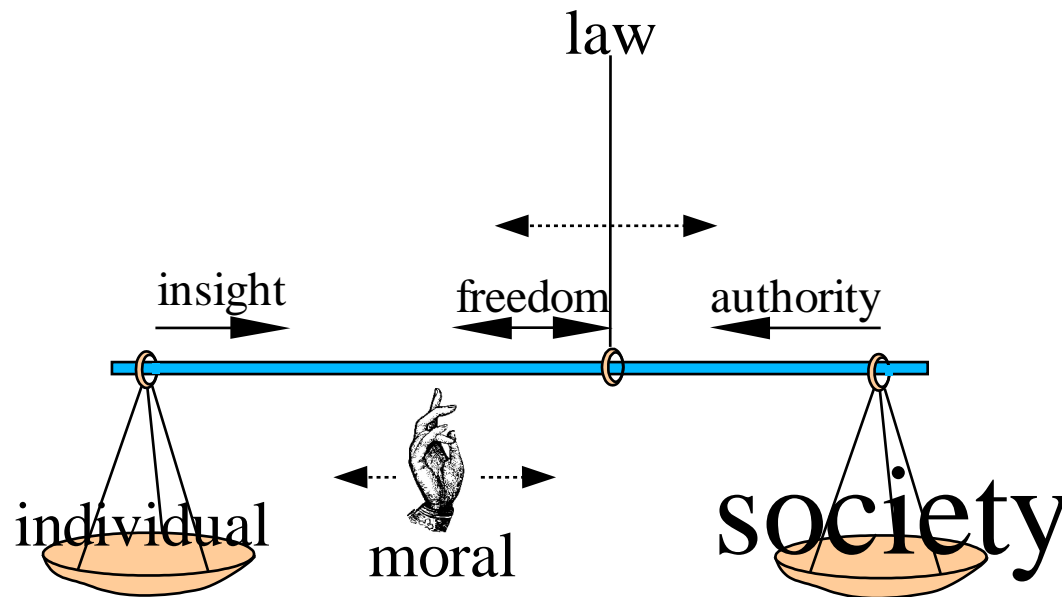
money

understanding

feeling

veracity

benevolence



How can I give you my information for one purpose but keep you from using it for another?

# Freedom

- is the space for contracts
- creates the rules of legal certainty (including anonymity and commitment)
- to express (speech); information-sharing is a powerful positive good, and that it is an ethical duty to share expertise
- never ever blame the tool (i.e., compensate for broken tools by means of legal sanction), it **only** hurts the honest
- the most exciting area to work in

# Commitment At Stake

- If user could ultimately abandon a personal right.
- If the systems grant rights under an unfulfilled condition.
- No business without commitment.

# A Recipe For Malicious Logic

- Derive a right by implication from false premise:

$$P \rightarrow R : P = P' \wedge b \forall b \in \{ \mathit{false} \}$$

- Derive arbitrary consequences from this false statement.
- Askemos would get patent protection for all business methods involving mutual agreement.
- Absurd, irresponsible consequences.
- Becoming law; legal system instable.



# *The Inalienable Right*

For each right a user grants,  
the right to revoke it is retained.

# Theory

- Valid for artificial (virtual) and legal systems.
- Encompasses existing permission management systems.
- Basic axiom for Askemos.
- Proofs Askemos system incorruptible.
- Backed by important ethical value: liberty.  
Not a technical accident.
- End of Askemos-imposed policy restrictions.

# Reality

- Formal approach not always applicable. But if, it eventually wins.
- Certainty replaces the truth. (byzantine agreement)
- Parties are bound by contracts, authority and physical threads. Conflict possible.
- Conflict resolution strategy: surrender, break local system and trust in intrusion resistance.

# “Legal” Abstract Machine

- Infrastructure for documents and communication.
- Formal semantics in order to be fully understood and decidable in case of dispute.
- Intrusion resistant and incorruptible.
- Grounded in ethical values and age old knowledge with high confidence.
- The rule is simple enough to emotionally agree with. User feel they express their relationships, not match them with predefined roles.



# Real World

- Implemented twice, to be executed by:
  - network of computers
  - network of subscribers
- Provides legal certainty under any social contract the network has chosen initially.
- Safe harbour in fragile legal environment. (No technical references, no physical location, no dependency on inventions and IP claims.)

# *Invitation*

Join The Askemos Network!  
All the Web + Freedom & Certainty.

[www.askemos.org](http://www.askemos.org)

+

[www.softeyes.net](http://www.softeyes.net)

