

Toward a Unified Field Theory of Behavior

The Socionomics Institute Conference
April 2011

Scott Reamer
sreamer@choracapital.com



CHORA CAPITAL

“We possess ideas, but we are possessed by feelings. They lie too deep for understanding, astir with their own secret life and carrying us with them”

Thomas Flanagan



CHORA CAPITAL

Neoclassical Finance is a Religion

Men are Rational

Non-emotive utility maximizers
Perfect future NPV discounters

Economics is Physics

People = particles
Utility = energy

Equilibrium is Essential

Supply and demand are balanced
Utility is maximized



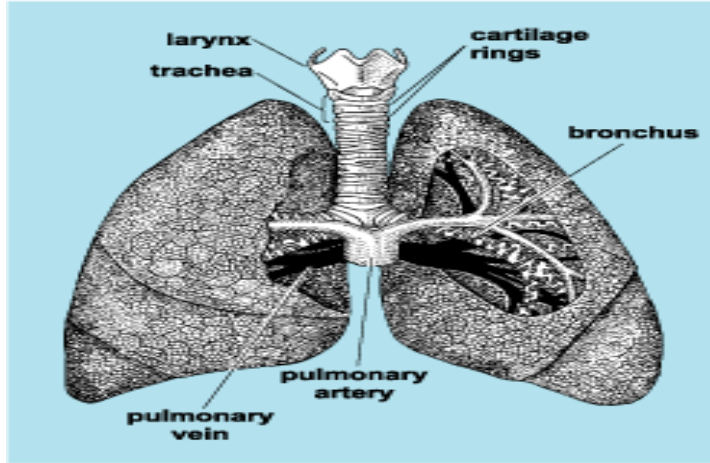
Irving Fisher's Actual Translations

Mechanics

Economics

Space	=	Commodity
Particle	=	An individual
Force	=	Marginal utility
Work	=	Disutility
Energy	=	Utility

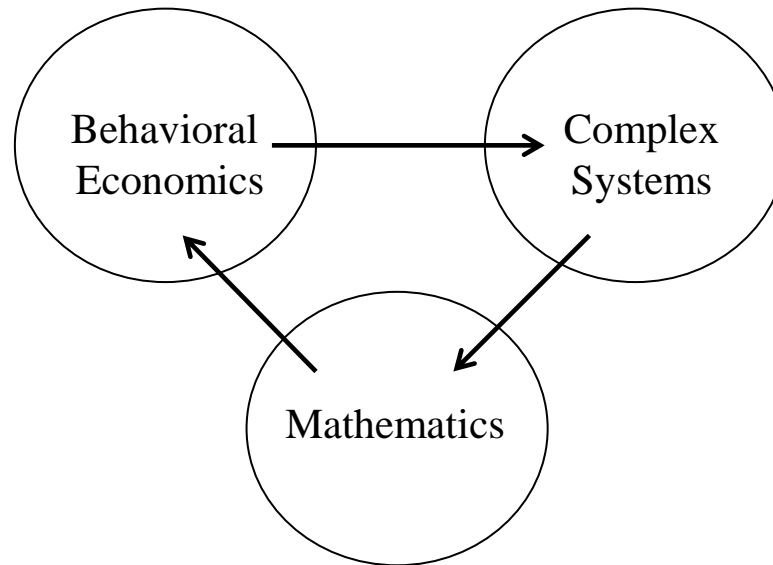




Our View of the 'Markets Problem'

Social Causation
K-T Value function
Overconfidence

Emergence, Adaptation
Self-organization
Feedback loops



Scale invariance
Non-linearity
Fractal dimensionality



CHORA CAPITAL

Socionomics

Behavioral
Economics

Complex
Systems

Mathematics



CHORA CAPITAL

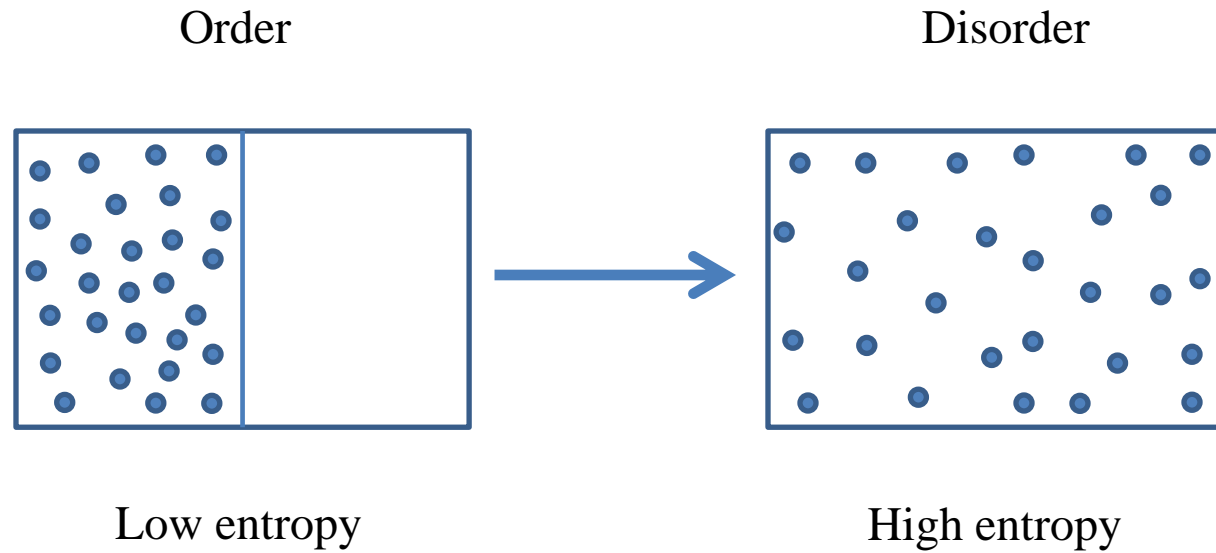
Part II

Uncertainty, Disorder, and The Unified Field

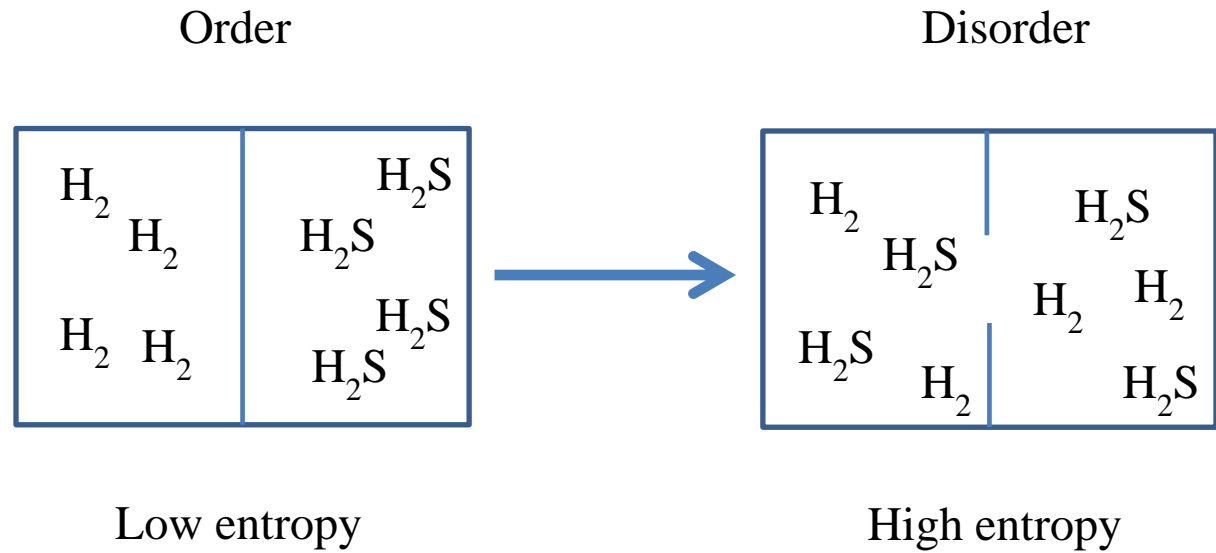


CHORA CAPITAL

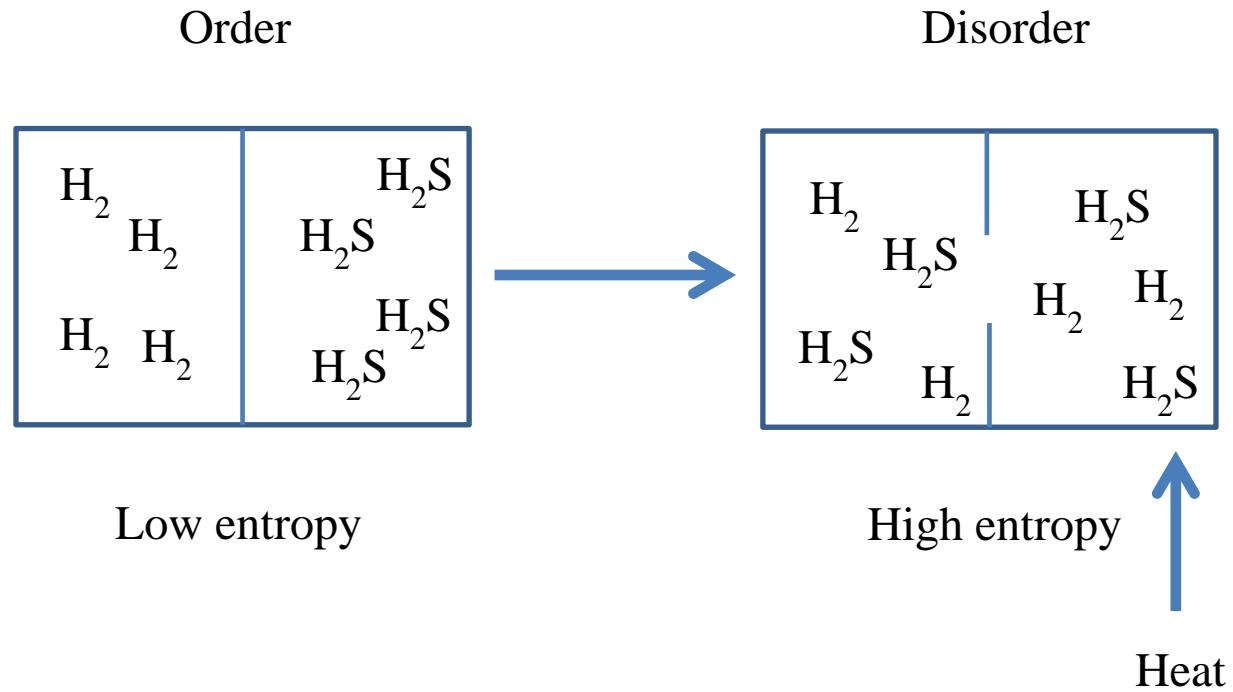
The Classic Entropy Example



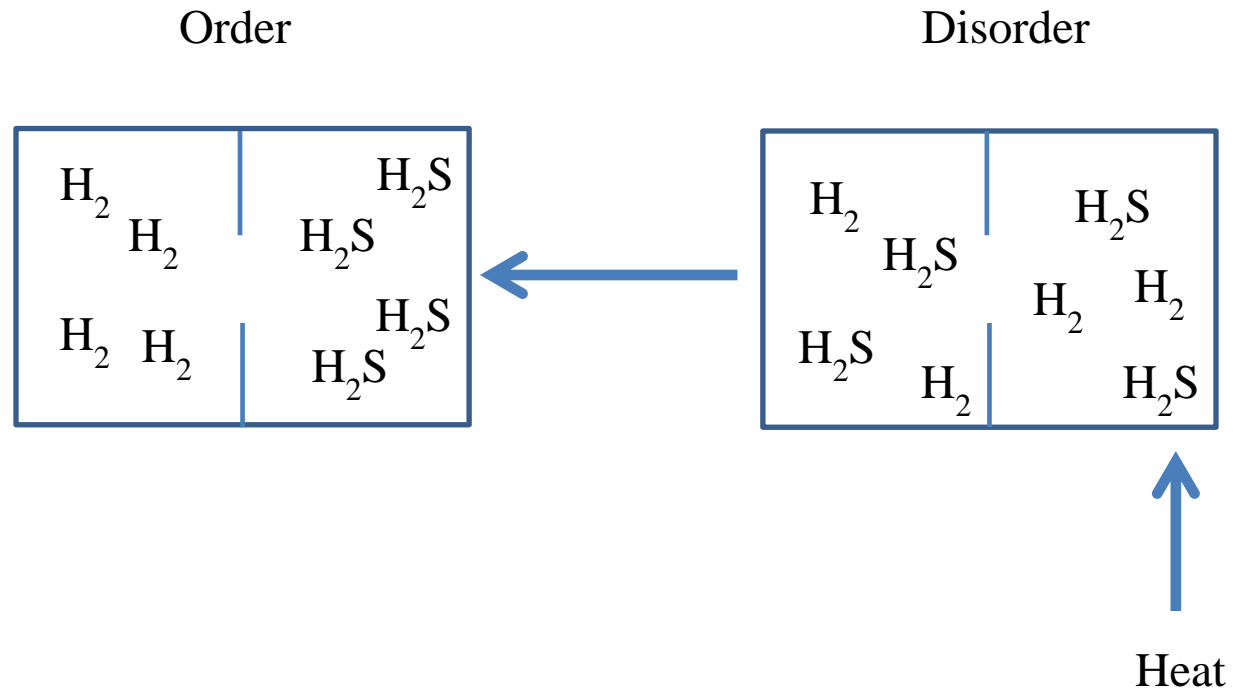
Hydrogen and Hydrogen Sulfide Gases



Hydrogen and Hydrogen Sulfide Gases



Hydrogen and Hydrogen Sulfide Gases



Order is created from disorder



Video



CHORA CAPITAL

We live in a complex, dependent world subject to large risks

Humans relentlessly try to reduce the inherent uncertainty in their environment

What's the optimization?

diminishing the probability of and effects from black swans/tail events



CHORA CAPITAL

Human behavior is an entropy reduction process

Human behaviors are attempts at uncertainty reduction

Religions, governments, agriculture, negotiated markets

They serve to reduce day-to-day uncertainty



CHORA CAPITAL

All human action contains information about this entropy reduction

Voting, media, fashion, war, skirts, financial risk preference
All are rich sources of information on entropy reduction

The tools to measure this uncertainty reduction process are secondary
fractal analysis, statistical physics, etc.



CHORA CAPITAL

Socionomics describes this entropy reduction process

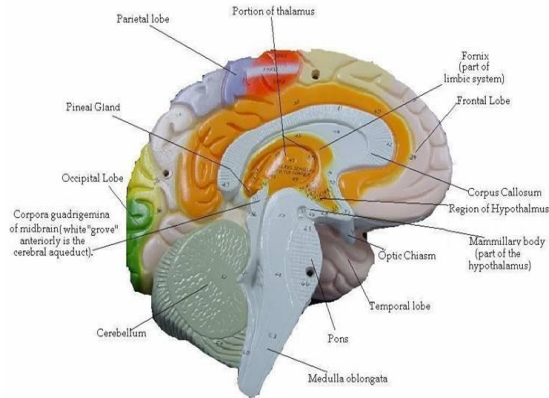
Socionomics is a description of the complex interaction of individual entropy reduction processes by large numbers of people

...a 'unified field theory' of human behavior...



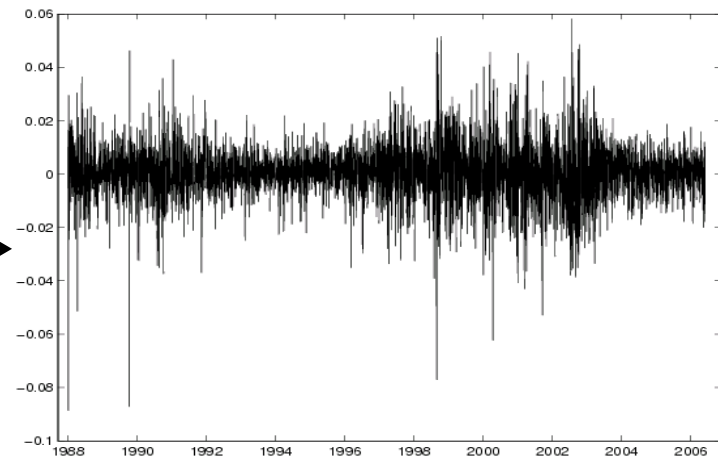
CHORA CAPITAL

Human Behavior is an uncertainty reduction process



Uncertainty reduction
Poor information
Feedback loops

Black swans, volatility clustering



Financial markets are simply a special case of entropy reduction

Market anomalies are explained by the complex interaction of individual uncertainty reduction efforts

Volatility clustering, power law distributed booms and busts

The fractal, adaptive, self-organizing, herded aspects of negotiated financial markets are the result of entropy reduction efforts

Trends in media, politics, economics, literature, and academia



CHORA CAPITAL

‘All one market’ = ‘All one process’

To paraphrase the good folks at Elliott Wave International...

“It’s all one process”



CHORA CAPITAL