



*Phenotypes, Social  
Constructionism, and the Spurious  
Finding*

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# *Two Related Concepts*

**Social Construction**

**Medicalization**

- Leading to the constantly expanding purview of genetics
- Explaining why behavioral genetics searches often fail

# *Social Constructionism*

## The constructionist precondition:

- In the present state of affairs, X is taken for granted; appear inevitable

## The constructionist proposition:

- X is not determined by the nature of things; it is not inevitable

# *The Social Constructionist Method*

Bracketing an idea or concept by a claim that it is socially constructed

- That is, contingent, cultural, historical, a social fact

Undertaking the “ biography” of that idea or concept

- When was it “ born” ?
- What circumstances made this birth possible?
- What effect has it had upon the world?
- How and when and of what causes did it cease to exist?

# *The Example of “ Type A” Man*

The work of Elianne Riska: *The Rise and Fall of the Type A man*

- A particularly good example since its life was short and dramatic (b. 1950’ s d. circa 1970’ s)
- Comprising psychological and behavioral characteristics (e.g. competitiveness; drive toward hard work; general impatience in relations with others; decisive)
- Increased risk of heart disease

# *Basic Precondition of Behavioral Genetics*

The underlying form of the phenotype,  
“ behavior X” is a thing-in-itself in the world

- With an existence independent of the name it is called
- With an underlying form that is invariant and inevitable

The success of any search for the genetic contributions to “ behavior X” therefore depends on its construct validity

# *Categories of Construct Validity Problems*

A trait or behavior which is completely socially constructed

– *Thalassophilia; witchcraft*

A trait the name for which may exist in most cultures, but with very different meanings and associated behaviors

– *Leadership; spirituality; bravery*

# *Categories of Construct Validity Problems*

A trait the name for which changes through time and place, with different associations and meanings, but whose core biology may be the same

- *Neurasthenia; chronic fatigue syndrome; somatizing disorder*



# *Categories of Construct Validity Problems*

A trait whose core is biological but process of cultural construction and labeling expand that core

– *Hyperactivity/Attention deficit disorder*

A trait where the search for a genetic underpinning actually helps distort a normal continuum, pathologizing that trait

– *Impulsivity, Novelty-seeking, Shyness*

# *Medicalization*

Zola: Refers to a process through which an increasing number of aspects of life are brought under the purview of medical science.

Good health as a marker of what led to elevated SES (rather than merely a fortunate outcome of success)

Medicalization pathologizes and reifies what might otherwise be considered variations in normal human functioning.

# *And the Search Goes On....*

Manic depression

Depression

Anxiety

Obsessive compulsiveness

Anti-social behavior

Impulsivity/Risk-taking

Impulsivity/Aggression

Addictive behavior

Shyness

Spirituality

Sociality

Obesity

Alcoholism

Sweet-tooth” gene

Fidelity

Poverty

# *Smoking Behavior:*

## *An Example of Social Construction Missed through Medicalization*

Medicalization of smoking as a behavior.

Conflation of genetics of biological risk of lung cancer  
and genetics of behavioral risk of smoking.

Reification of smoking behavior

- Study design samples of 3 categories of individuals with different relationships to smoking
- Correlations with different alleles
- But latter are biologically discrete
- Former are merely conceptually discrete

# *The Unexamined Effect of Self-Consciousness*

The profound difference between seeking genetic underpinnings to:

- *susceptibility* to lung cancer: a biological process outside our knowledge of ourselves
- *Behavior* of smoking: a consciously mediated process: available for self-reflection and able to be imbued with volatile and profound social meaning

# *Social Class and Smoking*

Cigarette smoking is now a marker of social class

This has happened rapidly

It is something that geneticists interested in smoking behavior must deal with

*“ I always thought I’ d buy a house or some clothes, or plan a vacation, but what I did was, I quit smoking. ”*

