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
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; somatatizing 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.”