The background of the slide features a soft, textured landscape. In the distance, there are rolling hills or mountains under a pale sky. In the foreground on the right side, a willow tree with long, drooping branches and small, dark buds is visible. The overall color palette is muted, consisting of light beige, tan, and soft green tones.

*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

Construct Validity

- ❖ Basic proposition 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” 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*

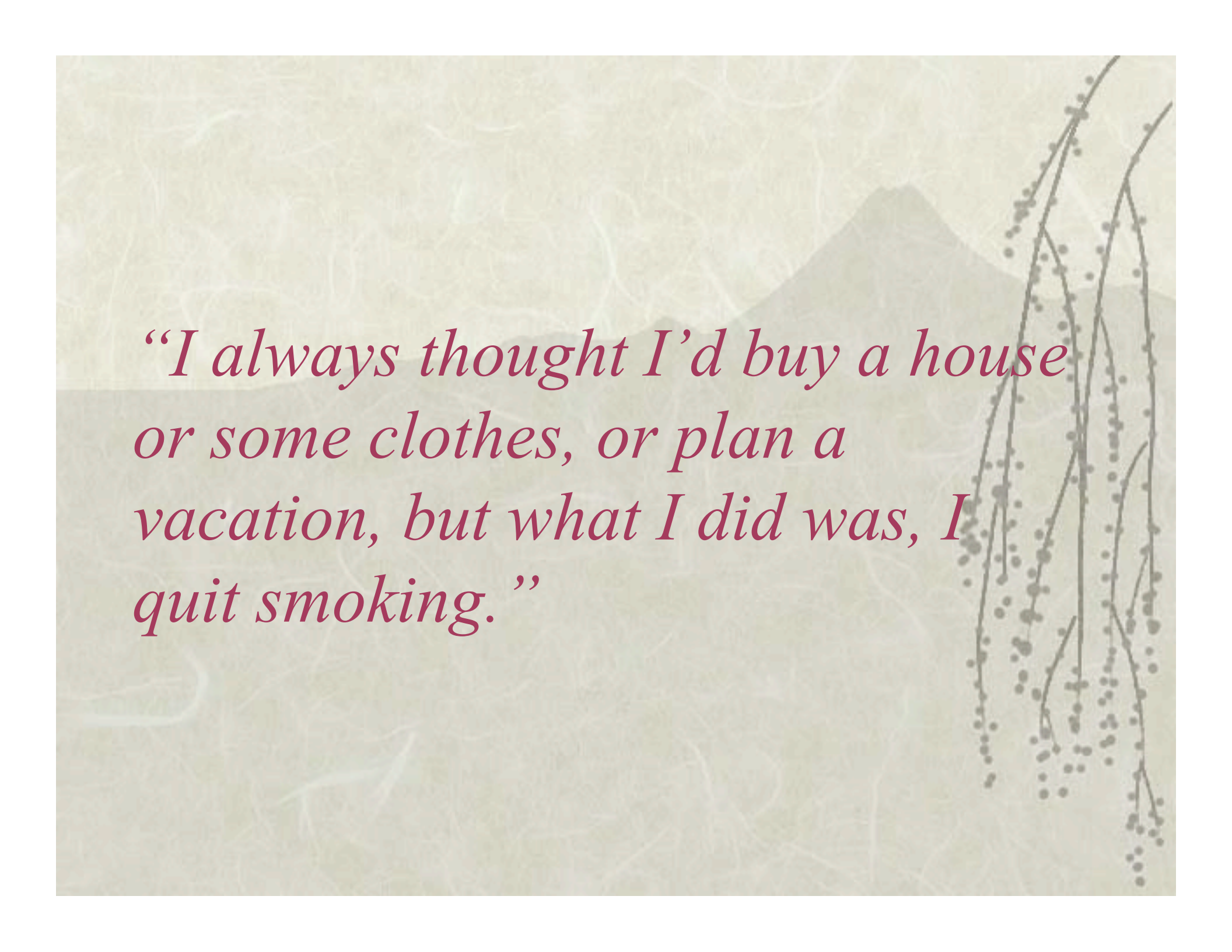
- ❖ Medicalization of smoking as a behavior.
- ❖ Conflation of genetics of biological risk of lung cancer and genetics of behavioral risk of smoking.
- ❖ Reification of smoking behavior
 - Study design samples of 3 categories of individuals with different relationships to smoking
 - Correlations with 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
- ❖ To acknowledge it is to move in the direction of a social constructionist inquiry

The background features a light beige, fibrous paper texture. A faint, dark silhouette of a mountain peak is visible in the upper right. On the right side, there are several thin, dark branches with small, dark, round berries or buds hanging from them.

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