

Creativity Across the Disciplines

People, Processes, Products

- Multiple manifestations of creativity
 - Who we are
 - What we do
 - How we live
 - How we work
 - What we produce
- Definition of “creativity”
 - Abstracted from specific manifestations
 - Includes all possible manifestations

Creative People, Products and Processes

- Usually recognize creativity
- Agreement across individuals
- Equally creative but for different reasons

Components: Novelty

- New idea, process, product...
- Unique or unusual
- Context for judging novelty
 - “Novel compared to what?”

Psychological Novelty

- Novel with respect to the **individual** generating the idea
 - “P creative,” “mundane/ordinary creativity,” “little-c creativity”

Historical Novelty

- Novel with respect to all human history
 - “H creative,” “great creativity,” “Big-C creativity”

Components: Novelty + ???

- Novel and **Intentional** (Weisberg)
 - No “creative accidents”
 - Unless elaboration occurs

Components: Novelty + ???

- Novel and **Appropriate/Useful**
 - Solves the problem being addressed
 - Category member
 - Familiar enough to be categorized
 - Different enough to be unique

Components: Novelty + ???

- Novel and **Valuable**
 - Valuable = useful
 - Valuable to individual
 - Judged by self
 - Valued by society
 - Judged by others
 - Positively valued by field (Csikszentmihalyi)
 - Judged by experts

Approaches to the Study of Creativity

- Mystical Approach
- Psychodynamic Approach
- Pragmatic Approach

- Psychometric Approach
- Social Personality Approach
- Cognitive Approach
- Confluence Approach

Non-experimental Approaches

- Mystical (ancient)
 - Creativity as a “gift” bestowed by divine intervention
 - Common perspective of visual/performing arts & some humanities
- Psychodynamic (old)
 - Creativity arising from tension between conscious reality and unconscious drives
 - Common perspective of humanities
- Pragmatic (recent)
 - Focus on application, not research

Applied Fields: Pragmatic Approach to Creativity

- Very concerned
 - With **developing** creativity
- Less concerned
 - With **understanding** creativity
- Not at all concerned
 - With **testing validity** of ideas about creativity

Social Sciences: “Theoretical” Approach to Creativity

- Very concerned
 - With **understanding** creativity
- Less concerned
 - With **testing validity** of ideas about creativity
- Rarely concerned
 - With **generalizability** or **application**

Experimental Approaches

- Psychometric Approach
- Social Personality Approach
- Cognitive Approach
- Confluence Approach

Psychometric Approach

- Intelligence testing approach to creativity
 - All people are creative
 - Creative to different degrees
 - “Creativity” composed of various abilities
 - Develop tests to measure these abilities
- Focus on historical (Big-C) creativity

Social-Personality Approach

- Creativity determined by
 - Socio-cultural environment
 - Personality and motivational variables
- Creative individuals are different from normal individuals
- Focus on both historical (Big-C) and psychological (little-c) creativity

Cognitive Approach

- Everybody has the ability to be creative
- Normal cognitive processes
- Normal knowledge structures
- Focus on **psychological** (little-c) creativity

Confluence Approach

- Creativity occurs at the convergence of multiple variables
 - Environmental
 - Social
 - Personality
 - Cognitive/Biological
- Confluence theories differ in presumed critical variables

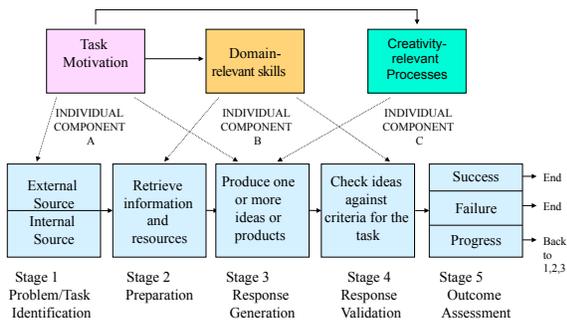
Investment Theory (Sternberg)

- “Buy Low and Sell High in the world of ideas”
- Buying low
 - Pursue unknown or out of favor ideas with growth potential
- Fight against public resistance to idea
- Sell high
 - Move on to new idea

Investment Theory: Resources

- Resources function interactively
 - Intelligence
 - Knowledge
 - Styles of thinking
 - Personality
 - Motivation
 - Environment

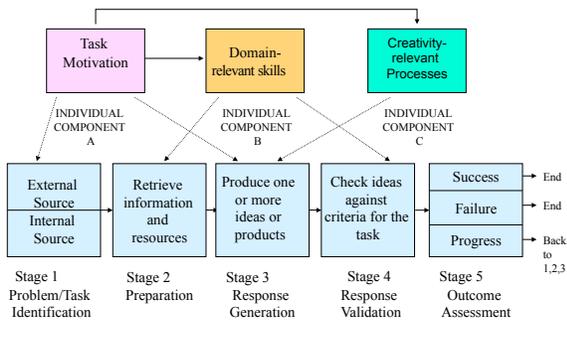
Componential Model (Amabile)

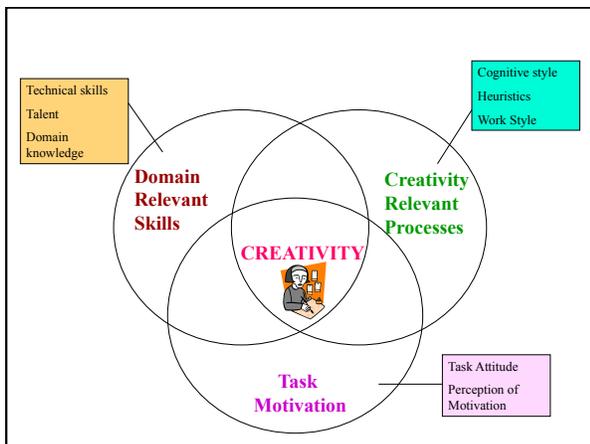


Importance of Motivation

- Motivation needed for engaging in creative process
 - Depends on **social-environmental variables**
 - Intrinsic motivation
 - Increases likelihood of engaging in creative processes
 - Extrinsic
 - Decreases likelihood of engaging in creative processes

Amabile's Componential Model





History of Creativity

- ### Why Study History?
- Provide context
 - Understanding of creativity constantly changes
 - Shaped by our concept of self
 - Shaped by our concept of society
 - Many conceptualizations of creativity
 - Simultaneous

- ### Historical “Landmarks” of Creativity
- Influenced discipline-specific perspectives
 - Assumptions about the nature of creativity
 - Methods for understanding/enhancing creativity
 - Landmarks
 - Biblical
 - Ancient Greek
 - Renaissance
 - Enlightenment
 - Romanticism
 - Psychodynamic View

Biblical Conceptualization

- Divine instruction necessary for human creativity
 - Noah's ark
 - Ark of the Covenant
- Creativity only valued when used to serve God

Biblical prohibitions

- Human creativity should be limited
- Moral prohibitions
 - Second commandment
- Bible argues against curiosity
 - Humans should believe and obey

Biblical Conceptualization

- Affects current acceptance of creativity
 - Acceptable domains
 - Unacceptable domains

Ancient Greek Conceptualization of Creativity

- Classical/“Mystical” View of Creativity
 - Creativity enabled by the Gods
 - Muses are creative
 - Inspire all artists

Greek Valuation of Creativity

- Most important activities not considered “creative”
 - Philosophy, politics, military prowess...
- “Creative” activities (poetry, painting, sculpture, drama) viewed as skills
 - No social status
 - Valued
 - Through writing
 - Annual celebrations and competitions
 - Describing as divine
 - Inventors of arts or founders of cities

Greek Conceptualization

- Affects understanding of creativity in humanities
 - Poetry, visual and performing arts
- Affects approach to enhancing creativity
 - Skill-based training

Renaissance

- Noticeable advances in all human endeavors
 - 1500 seen as turning point in Western History
- “Tipping point” of creativity
 - Seen as something to strive for
 - Creators respected
- Arts and innovation supported

Renaissance

- Conscious effort to return to Classical models
- Recognition of past – Appreciation of new
- No distinction between divine and human doing

Renaissance: Technological Creativity

- Innovative individuals recognized and rewarded
- First formal patent law created

Split between Art and Technology/ Craft

- Prior to Renaissance
 - Art, technology and craft grouped together
- During Renaissance
 - Art seen as separate from technology and craft
 - Painting, sculpture, poetry
 - Reflects greater value given to “artistic” creations over crafts

Renaissance: “Creative Genius”

- Artistic creativity analogous to divine creativity
- Artists see “essences” not visible to others
 - Belief in “creative genius”
 - Creative individual different from normal individual
 - Driven by “intense and terrible passion”

Renaissance: “Creative Genius”

- “Creative genius” includes scientists and inventors
- Impacted conceptualization of creativity
 - Creativity concerned with discovery rather than imitation
- Assumption underlying Psychology’s Psychometric Approach to studying creativity

Age of Enlightenment (1700 – 1800)

- Valued
 - The strange
 - The novel
 - The innovator and his/her innovations
- Believed
 - Human reason and action can transform the world
 - Understand the universe
 - Direct their own destiny

Age of Enlightenment

- Directing energy and effort
 - Political systems
 - Discovering natural laws
- Creators and discoverers honored
- Standard for patents established in 1710

Age of Enlightenment

- Discovery, art, science
 - Considered to be creative endeavors
- Creation is methodical, purposeful, logical
 - Inspiration important for generating idea
 - Structured process important for bringing idea to fruition

Backlash to Enlightenment The Romantic View of Creativity

- Enlightenment approach
 - Characterizes modern view of creativity in natural science, (some) social science and economics
- Romantic view
 - Characterizes modern view of creativity in the arts (some) social sciences, humanities
 - Sources
 - French revolution, industrialization, mechanization

Romantic View of Creativity (1800-1840)

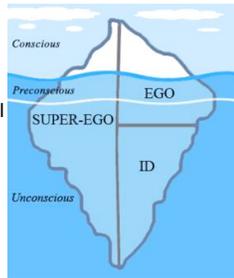
- Poetic and artistic creation
 - Outpouring of emotional energy
 - Inspiration found in nature
- Identifying with nature = strong emotions = great art
 - “Creative Genius”
 - Beyond conscious control of creator
 - Goal is creative expression

Two Strands of Creative Genius

- | Romantic View | Enlightenment View |
|---|--|
| <ul style="list-style-type: none">• Creative individuals different from others• Focus on inspiration, imagination, self expression | <ul style="list-style-type: none">• Creativity is methodical, persistent search for “truth”• Focus on ingenuity, invention, problem solving |

Psychodynamic View (1850-1950)

- Ego transforms threatening id impulses
 - Creativity is a defense mechanism
 - Origin in unconscious
 - Symbolic satisfaction of sexual and destructive impulses
- Creativity is rooted in pathology
 - Characterized by greater reliance on primary processes



Primary and Secondary Process Thinking

- Processes differ in content and form
- Secondary process thinking
 - “Ordinary” everyday thinking
 - Second to develop
 - Abstract, logical, reality-oriented
- Primary Process thinking
 - More basic form of thinking
 - Primitive, irrational, need-based thinking
 - Driven by Id impulses

Primary Process Thinking

- Serves as basis for our fantasy life
 - Includes dreams, fevered states, daydreams
- Also arises from stress or great emotional arousal
- Differs from Secondary process thinking in content and form
 - **Content:** libidinal or aggressive material
 - **Form:** deviates from logical thinking or involves deviant language

Primary Process Thinking

- Differs in creativity enhancing ways
 - Uses nonverbal imagery
 - Freedom from previously established associations
 - Loose, flexible
 - Uses special mechanisms
 - Verbal puns
 - Optical puns

Psychodynamic Conceptualization

- Affects modes of creativity in the arts
 - Surrealism
- Influences approaches to analyzing creative works in humanities
- Influences social science research
 - Unconscious processes
 - Biological and psychological
