Chapter 7

Excellence, Aesthetics, Creativity, and Genius



The Foundations of Excellence

Innate genius theory

- Excellence is genetically determined and, therefore, experts basically are born but not made
 - Think Mozart

Learning excellence

- Learning more important than biology for the acquisition of extraordinary skills
- Child prodigies learn same way, but start their craft earlier and work harder at perfecting their skills

The Development of Excellence

Superior memory abilities?
e.g., for chess players?...really
it's meaningfulness that
counts

Grandmaster chess player



The Development of Excellence

Cognitive skills

 Large knowledge base of chosen domain with wellorganized cognitive schema

Commitment to domain

Extensive and consistent practice**

- Often begin to practice early in life
- Practice more hours (each day/week)
- Consistent practice
- Deliberate practice: focused, planned, concentrated, effortful

The Development of Excellence

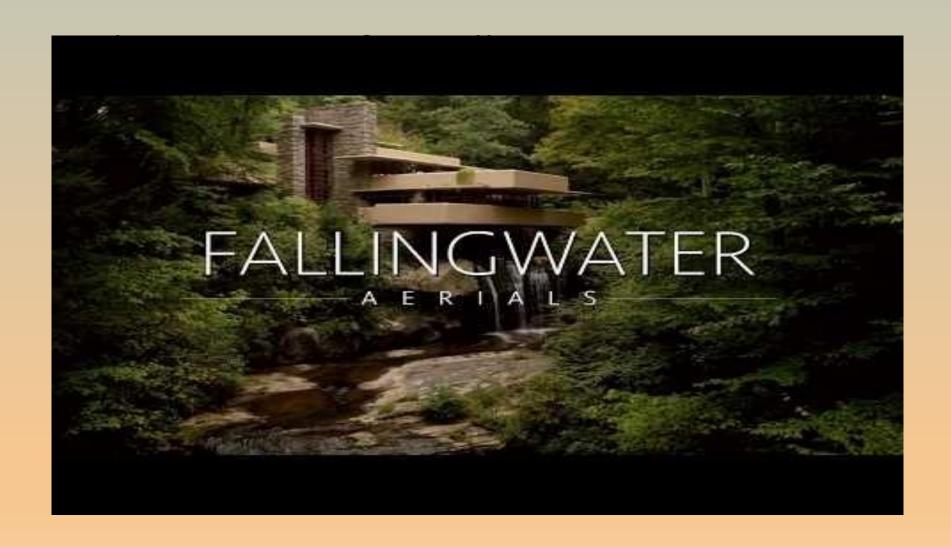
10,000 Hours Claim

- Ericson has said this is untrue and an inaccurate representation of his research
- Excellence in some skills may take more than 10,000 hours, other less than 10,000

The Development of Excellence

Over-practice is harmful

- Recognized danger to what is known as overtraining
- Excellence requires a sensible balance of hard work and rest (practice about 4 hr/day by those who achieve high level of excellence)



Resonance

Cyclical process that guides development of excellence in many areas of expertise

Performance excellence byproduct of living life:
Living life in a way that people are fully
engaged in what they do

Resonance

Four stages of Resonance Performance Model

- Dream: the feelings a person experiences when engaged in an activity
- Preparation along with consistent engaged practice
- Obstacles that people encounter inevitably
- Revisit dream or reconnect with feelings that sparked dream. This reconnection with original feelings allows a person to embrace the obstacles, avoid the trap of trying harder and enjoying it less, and thereby move forward

Passion

Intense interest and personal commitment to an activity regarded as central to one's self

Dualistic model

- Harmonious passion
 - Result of autonomous motivation
 - Freely chosen
 - "Fits" identity
 - is engaged in joyously and effortlessly
 - Flow is often experienced
- Obsessive passion

Passion

Dualistic model

- Harmonious passion
- Obsessive passion
 - Results from feelings of being controlled
 - Often involves rigid persistence
 - May create conflicts within one's identity and life, as well as feelings of anxiety and even shame.
 - Examples: Gambling, Internet preoccupations

Passion

Dualistic model

- Harmonious passion, Obsessive passion
 - Harmonious passion has positive effects on health and well-being
 - Harmonious passion in sports: greatest effects if it helps meet one's needs for autonomy, competence, relatedness, and achievement

Grit

Duckworth's definition

Combination of passion and persistence



Better predictor of academic performance than both IQ and SAT scores

Increases with age

Effortful persistence

 A meta-analysis by Credé, Tynan and Harms (2017) concluded that "the primary utility of the grit construct may lie in the perseverance facet."



Aesthetics is an appreciation of the beautiful and the sublime

- Why is this a section in this chapter?
- Relationship between beauty and creativity
- A way to conceptualize aesthetics is in terms of an appreciation of excellence
- One of 24 virtues listed in VIA
 - Appreciation of beauty and excellence

Appreciation of Beauty and Excellence Scale (ABE)

Why Is the Aesthetic Sense Important?

Desire to stimulate the aesthetic sense since beginnings of humanity

Art and creativity increase sense of well-being, life satisfaction, and happiness







Art as a tool for social change

 One of the first changes that dictators often initiate is to suppress forms of art unacceptable to their political ideology

Four Attributes of the Aesthetic Experience

Pleasure

- Gazing at attractive object increases sense of well-being
- Artwork serves as reminders of places visited, or things and people loved
- Also serves as a stimulus for positive emotions
 - Putting pictures of family, pets on our desk

Four Attributes of the Aesthetic Experience

Absorption

- Appreciation of art builds on experience which intensifies the sense of immediate living
- Aesthetic sense necessary for well-being because it creates a heightened vitality that is restorative

Four Attributes of the Aesthetic Experience

Intrinsic interest

- Aesthetics helps us learn about the world around us
- Stimulates sense of curiosity
 - Fosters intellectual development
 - Mozart effect
 - May be that those who are more educated are the ones who are most likely to play Mozart for kids

Four Attributes of the Aesthetic Experience

Challenge

- Aesthetics a pathway to greater personal growth
 - Art can be used to express emotions, intuitions, meanings
- Helps us look deeper within ourselves:
 - To search for new ways to express emotions, and to help us step outside our personal comfort zones to experience life in fresh ways
- Stimulates people to think and feel differently
- Profound impact on sense of identity and emotional security

Music and Well-Being

Effective way to induce certain moods

- Positive or negative/sad
- Ability to recognize distinct emotions in music relates to EQ



Music and Well-Being

Effects of listening to classical music or meditation/relaxing music (mood, mental clarity, tension, cardiovascular health improvements) versus heavy metal, grunge rock, and techno music (physiologically harmful)

• Fans of music with death themes/torture/warfare may think it gives them freedom to express feelings in safe environment, but this type of music tends to reinforce one's violence and despair

Music and Well-Being

- Seligman and PERMA
 - Positive emotion (prior slide)
 - Engagement with music
 - Can engage in flow, savoring when listening to music
 - Social relationships
 - Can enhance relationships (romantic song, similar musical tastes, music festivals...emotional contagion)
 - Meaning (e.g., "Deadheads")
 - Accomplishment

Music and Well-Being

Music and health

- Helps patients heal faster after surgery
- Helps cancer patients with healing process
- Boosts immune system
- Helps children raise scholastic scores
- Improves well-being of hospitalized children
- Use of music therapy as part of healing process
- Singing increases oxytocin levels
- Music-making increases well-being and neuroplactity in older persons

Music and Well-Being

Music and the brain

- Music leads to increased brain size (but, scope of research is limited...compared musicians to nonmusicians...rather than a longitudinal study)
- Stimulates dopamine release
- Benefits of playing music
- Activates regions of the brain involved in experience of pleasure, euphoria, and craving

Art, Dance, Crafts, and Well-Being

Artistic expression increases feelings of well-being

Helps to deal with emotions associated with cancer

Helps adjustment to dementia, chronic disability, enhances stress reduction

Tool for older persons to adjust to aging and increase life satisfaction and sense of meaning

College students and "beauty log" (beautiful events in nature, or objects made, or events morally beautiful/inspirational) related to increased hope and WB

Finding Beauty Outside the Arts

Beauty in many guises

Suggestions that scientific theory be judged partially on its elegance or aesthetic appeal

Origins of the Aesthetic Sense

Kaplan's savannah hypothesis...evolutionary significance in interest and curiosity surrounding landscapes

Emotional responses to certain forms and images a result of innate responses from deep collective unconscious

Aesthetic sense evolved from early attachment between mothers and infants

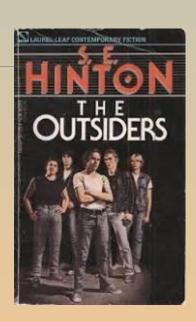
Judgment of what is beautiful learned from culture and historical period

Can Tragedy and Sadness Be Beautiful?

Tragic events are part of life

Power of artistic tragedy is paradoxical

- Experience tragedy but gain benefits
 - Leads to experiences of emotions of compassion, hope, relief, empathy, and courageous resolve
 - Compassion makes us want to prevent future tragedies
 - Helps us experience tragic moments and feel emotions through a substitute



What Is Creativity?



Difficult quality to pin down

Defined as "adaptive originality"

Should make a meaningful contribution to culture

 What's considered meaningful? Think Van Gogh who only sold one painting in his lifetime

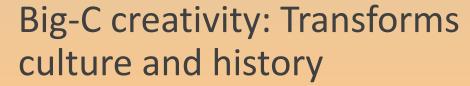
Assessment of creativity applies to wide range of behaviors



Little-c and Big-C Creativity

Little-c creativity enhances life by finding unique solutions

 Referred to as everyday creativity for routine or common problems



Associate with genius



Research Perspectives on Creativity

Difficulty of measuring creativity quantifiably

Creativity can be recognized...in general we recognize things as creative

Creativity in one domain only moderately associated with creativity in a different domain

 Artistic excellence in one area does not translate into excellence in another

Research Perspectives on Creativity

Four research traditions dominate studies of creativity

- Person: Investigate personality traits or other attributes associated with individuals
- Process studies look at how creativity happens
- Press the environmental influences that may help or hinder creativity
- Product approach focuses on actual outcomes of creativity

Research Perspectives on Creativity

The Creative Person

- Personality traits overlap with those who achieve excellence
- Consistent traits of creative people
 - Openness to experience...highly flexible in thinking, tolerant of ambiguity
 - Independent (resist conventions, work alone
 - Intrinsic motivation

Research Perspectives on Creativity

The Creative Person: 3 Broad Characteristics:

- Is an expert in his or her chosen field or artistic medium
- Possesses and utilizes cognitive skills and personality characteristics (mentioned above)
- Is intrinsically motivated

Excellence vs Creativity

EXCELLENCE

Large knowledge base

Commitment

Practice

- Consistent
- Deliberate
- 10-year-rule

CREATIVITY

Large knowledge base

Commitment

Practice

- Consistent
- Deliberate
- 10-year-rule
- Openness to experience
 - Flexible thinking
 - Tolerance for ambiguity and frustration
 - Independent
 - Intrinsically motivated
 - Willingness to restructure problems

Research Perspectives on Creativity: *Process*

- Convergent thinking
 - One correct answer
- Divergent thinking
 - Ability to produce many different solutions to same problem
- Neither convergent nor divergent styles highly correlated with creativity

Research Perspectives on Creativity

The Creative Process: 4 Stages

- Preparation
 - Info is gathered, initial attempts to solve a problem are attempted, a variety of ideas are tossed around, and in general the stage is set for a creative solution
- Incubation
 - Attempts to find a creative solution are handled at an "unconscious" level of processing
- Illumination
- Insight

Research Perspectives on Creativity

The Creative Process: 4 Stages

- Preparation
- Incubation
- Illumination: When a creative solution often emerges rapidly and unexpectedly as an insight
- Insight: It is not a special unconscious process but rather involves the use of ordinary cognitive skills at a preconscious level
- Verification: creative breakthrough worked with to give it final form...turn an insight into practical application

Left Brain/Right Brain and Creativity

Left brain: Logical and rational thinking

Right brain: Creative, holistic, and artistic

processes

Both hemispheres involved in both styles of thinking, difference between the two is a matter of emphasis

Creative Environments or *Press*

- Creativity correlates with supportive environments
- Families of creative people share characteristics
- Little or no genetic influences on creativity
- Work environments that encourage exploration and diversity of thinking foster creativity
- Certain places foster more creativity than others
- Certain settings more conducive to creativity than others
- Certain historical periods nourished creativity
 - E.g., Italian Renaissance

Creativity

The Product Approach to Creativity

- Focuses on the outcomes of creativity
- Objective if products are quantifiable

Genius

Denotes person of extraordinary creativity and inventiveness

Howard Gardner's 1993 study

- Geniuses intensely dedicated and committed, extremely motivated, willing to work long and hard in search for deeper knowledge
- Showed geniuses as loners, arrogant, and ruthless
- Many creative geniuses make Faustian bargain (sacrifice some important to become creative and famous)
- Genius has both costs and rewards

Genius

Genius and Madness

Cost for some highly creative people is mental illness

Relationship between creativity and madness...a MYTH