

UNDERSTANDING CREATIVITY

WHAT IT IS, HOW IT WORKS, AND
WHY IT MATTERS.

BELINDA TOBIN



Understanding Creativity

Belinda Tobin



UNDERSTANDING PRESS

Understanding Creativity
Copyright © 2024 by Belinda Tobin

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations and certain other non-commercial uses permitted by copyright law.

Published by Understanding Press



Paperback ISBN: 978-1-7637246-9-3

E-Book ISBN: 978-1-7638596-0-9

For permissions or enquiries, please contact:

Understanding Press

Email: up@heart-led.pub

Website: www.heart-led.pub/understanding-press

First Edition: January 2025



A catalogue record for this book is available from the National Library of Australia

Other titles in The Understanding Series:

Understanding Violence

Understanding Monogamy

Understanding Addiction

Understanding Sexuality

I acknowledge the Yuggera and Ugarapul peoples as the Traditional Owners of the lands and waterways where this book was written. I honour the wisdom that lives within the cultures of our First Nations peoples and celebrate its continuity. I pay my deep respects to Elders past, present and future and send my greatest gratitude for all they do for the life of this land.

Always was, always will be.



Contents

<u>Introduction.....</u>	1
<u>Chapter 1 – What Is Creativity?.....</u>	10
<u>Chapter 2 – What Makes A Product Creative?.....</u>	15
<u>Chapter 3 – What Makes A Process Creative?</u>	20
<u>Chapter 4 – What Makes A Person Creative?</u>	29
<u>Chapter 5 – Creativity as a System.....</u>	35
<u>Chapter 6 – Creativity as a Philosophy.....</u>	43
<u>Chapter 7 – The Benefits of Creativity.....</u>	53
<u>Chapter 8 – The Cons of Creativity</u>	74
<u>Chapter 9 – Creativity in the Brain.....</u>	87
<u>Chapter 10 – Creativity in the Body.....</u>	109
<u>Chapter 11 – Creativity as a Spiritual Practice.....</u>	121
<u>Chapter 12 – Creativity as Integrated Intelligence.....</u>	139
<u>Chapter 13 – The Creative Process</u>	146
<u>Chapter 14 – The Internal Conditions for Creativity</u>	161
<u>Chapter 15 – Measuring Creativity.....</u>	183
<u>Chapter 16 – The Impact and Influence of Technology ...</u>	211
<u>Chapter 17 – Creativity Through the Natural Laws</u>	223
<u>Chapter 18 – What Helps the Creative Process?.....</u>	243
<u>Conclusion.....</u>	257
<u>References.....</u>	265
<u>About the Author.....</u>	278

Introduction

"There is no doubt that creativity is the most important human resource of all. Without creativity there would be no progress, and we would forever be repeating the same patterns." ~ Edward de Bono

Indeed, creativity—the ability to imagine new ways of being and to bring them into existence—is essential for the advancement of our societies and for solving humanity's stickiest problems. By seeing the world in unique and novel ways, creative people can reduce suffering, expand consciousness and contribute to human evolution. Moreover, with their deep sensitivity and ability to stir our emotions, creative people can aid us in processing our personal trauma and pain and lift us to the heights of happiness, sending ripples of wellbeing far and wide. The potential positive influence of creativity on our communities is behind Sir Ken Robinson's assertion that in our educational institutions, creativity should be given the same status as literacy; it is an essential skill.

However, creativity is not only a method to achieve altruistic ends. In a global marketplace where new ideas are scarce, creativity is a prized asset. It is a pathway to profit and power and those who wield it well are

celebrated and rewarded royally. Businesses, though, prefer to use the term innovation, a word which sounds less soft. Nevertheless, have no doubt that what they are seeking to foster is the creative spirit, and what they are working to build are creative processes and products, for it is these that will secure their future.

"Innovation is a key factor in any company's ability to succeed in the long run." ~ Elon Musk

But beyond this preoccupation with external rewards, it must be remembered that creativity is innate and inspirational part of who we are. It is in our nature and is a natural human state. We use it daily to solve personal challenges, forge connections, and fulfil our unique purpose. Creativity, then, is not just a tool for economic success but a pathway to personal wellbeing. Living in alignment with our authentic creativity leads to holistic health.

"Art washes from the soul the dust of everyday life." ~ Pablo Picasso

Suppressing or denying our inherent creative nature brings us in conflict with ourselves and all those around us. Finding it and fostering it has the potential to better our lives in profound ways.

Yet, despite the reverence with which creativity is held, it is a concept that largely remains elusive and enigmatic, and for this reason can come with great excitement.

"I've no idea where ideas come from, and I hope I never find out; it would spoil the excitement for me..."
~ J.K. Rowling

As we will see throughout these pages, the mystery of creativity comes from the fact that it is partially explained by so many disparate concepts, but not fully captured within one. Creativity encompasses ideas drawn from science, systems theory, socio-cultural constructs, psychology, and spirituality. It has intellectual and rational components as well as existential and even supernatural considerations. Each perspective contributes to our understanding, but not one captures its totality. Creativity, then, is a multifaceted and multidimensional phenomenon, and understanding it completely could be deemed impossible, or at the very least the legacy of a lifetime.

After contemplating creativity's breadth and depth, Plato insisted it was a function of the divine, impossible to be comprehended by mere mortals. Immanuel Kant also described it as a mystery even to the greatest geniuses. In writing this book then, and seeking to

understand creativity for myself, it could be expected that these great thinkers would consider me conceited.

For Plato, creativity was so beyond our mortal imagining that it required messengers, Muses, who could interpret its vast visions into our rudimentary language, provide instructions and inspire people to commit to its purpose and processes. The role of the artists was to heed the call of the Muse and accept its challenges courageously, for this was how you paid proper homage to such an ethereal entity. By answering the call of creativity, the artist achieved ascendancy and a place amongst the immortal.

However, there have been several centuries since these magnificent minds walked this Earth, and we have had much time to contemplate creativity further. We now have machines that show the electrical and chemical functions of our brains, and computers that help us determine the cause and effect of so much we see. In many ways, science has taken the place of spirituality and has become adept at documenting creativity's dance. We have numerous studies investigating and reporting upon creativity's precursors and processes and the neurophysiology behind invention. Academic journals and conferences are dedicated to discussing the concept and bringing creative communities together. A ton of self-help books and courses show people how to get better at creativity and how to nurture it in their

organisations and own homes. While each one of these offerings comes with the best of intentions, the plethora of creativity products means that in many ways, creativity has been subsumed into the materialistic swamp of our modern world. It is no longer a divine legacy but a commercial profit centre, with institutions and individuals using it to earn an income. In previous ages, creativity was associated with awe and magic; in modernity, we have seen it descend into the mundane and collapse into commodification.

Yet, while we can continue to research creativity and develop numerous theories and methods around it, I believe that creativity in its complete form can only be understood by those actively engaging in the process.

“Creativity is inventing, experimenting, growing, taking risks, breaking rules, making mistakes and having fun” ~ Mary Lou Cook

Creativity is not something you grasp by speculation alone or by putting people through a scientific study—it is something you experience by doing. It is not just a logic you can grasp, but a feat you must feel.

While each person's experience of creativity is unique, having a shared language and a common understanding of the key concepts and principles of creativity helps us navigate its mysteries and discuss it with others to gain

deeper insights. Therefore, we begin this journey by defining creativity and establishing a working foundation to guide further discussions.

From this base, we will explore how creativity is not an isolated phenomenon but an embedded entity, visible only through its outcomes in people, processes, and products. We will delve into the systemic nature of creativity, showing how individuals, domains of knowledge, and fields of gatekeepers interact to shape and influence creative work. We will also examine the creative process, revealing its stages and nonlinear, iterative nature—a messy yet magical flow well-known to artists and innovators.

We will also investigate how creativity is deeply connected to human physiology, looking at how our bodies and brains start, sustain, and shape creative pursuits. Emotions are the precursors to all of our actions, and so we will also explore the creators' psychological journey. How do emotions help or hinder the development of unique and valuable ideas? What role do resilience, curiosity, or fear play in the creative process?

Going deeper into the human condition, we will consider creativity as it intersects with intelligence and spirituality. We will see how creativity manifests as a multidimensional, multifaceted, and multidirectional

energy—a phenomenon that integrates all aspects of our existence. Creativity requires the application of many intelligences making it an integrative power. In addition, we will see how creativity fosters transformation and is thus a force that can reshape ourselves and the world in which we live.

However, while creativity has immense benefits, this book also acknowledges its challenges. As the natural laws remind us, every phenomenon has an opposite state; even the sun casts a shadow. Similarly, creativity's strengths can become weaknesses and be manipulated to serve destructive ends. We will examine the moral and ethical dimensions of creativity, exploring how it intersects with questions of right and wrong. We will also see how the call of creativity can be all-consuming, removing the responsibility and interdependence that are integral to authentic art.

In recent years, advancements in artificial intelligence have sparked fears, with some announcing it will be the cause of creativity's downfall. Yet, this book will show that technology has always been both an outcome and a catalyst for creativity. Technology and creativity are phenomenon that are intricately intertwined. On this basis, we will discuss where attention regarding artificial tools is best placed so that artistic integrity and human art can be best maintained.

From technology, we shift to nature, examining creativity through the lens of the natural laws. There are immutable laws that exist in our environments whether we like them or not. We will see what these mean for how we work with creativity and how we can best make a connection with it. Finally, the book concludes with practical guidance for fostering creativity, summarising those factors that help and hinder its flourishing. This final chapter will be of value for those shaping educational curriculums, workplace environments, health support systems and cultural enrichment programs, outlining the infrastructure that needs to be in place for creativity to prosper.

I hope this book will encourage you to contemplate and examine your views about creativity and come to your own appreciation of how it shows up in your life. And, like all the amazing philosophers before us, I hope that you enjoy the exploration of something that lives beside you every day, while at the same time is both amorphous and all-encompassing.

My greatest wish though, is that you not only think about creativity, but then go further. Test out the theories presented here, practice them, question them. Develop, design, draft, combine, construct, and collaborate. Doing so will give you a deeper understanding of the true nature of creativity. For as Buddha suggests, understanding anything, especially creativity comes

from working with the ideas yourself, and seeing what is true for you.

*“Don’t blindly believe what I say. Don’t believe me because others convince you of my words. Don’t believe anything you see, read, or hear from others, whether of authority, religious teachers or texts.” ~
Buddha*

In this way, this book serves merely as a starting point—a superficial view of creativity's components, a set of ideas that others have espoused, and, more importantly, an invitation for you to continue the exploration.

[Back to Table of Contents](#)

Chapter 1 – What Is Creativity?

"For not by art do they utter these things, but by divine influence." ~ Plato

I do concur with Plato's viewpoint that creativity is a concept that sits on a plane much higher than our human intellect. However, our world faces many desperate issues requiring inspiration, innovation and integrity. So, to foster creativity for the benefit of all, it is helpful to have a shared language by which we can work with it and to honour it together.

Humans do already have a ready reference of shared meanings in the form of the dictionary. Beginning with the dictionary definition of creativity may seem like a drab and uninspired beginning, but it is astounding the insights one can gain from reviewing the many definitions ascribed to it over time. Moreover, the synonyms and antonyms provide different perspectives of its many faces, and how it may appear within our lives. Instead of a bland and boring investigation, diving into the dictionary can reveal a rich insight into what we say simply as creativity.

On the first foray into the entry for creativity, we see it deemed a noun and is defined as:

“The ability to create.”

“The skill and imagination to create new things.”¹

Creativity, as a noun, refers to a feature, characteristic or ability—a powerful quality that allows for the conception and/or production of something new. Its synonyms include:

- Imagination
- Innovativeness²
- Inventiveness
- Originality
- Resourcefulness
- Fruitfulness
- Fertility (more on this later).

These alternate words expound creativity to be a concept full of wonder, unique perspectives and processes, and the fresh and unfamiliar. It is interesting that creativity is also associated with resourcefulness, the ability to overcome challenges and devise effective ways and means. For as we will see, resilience is a key feature of those who are known to be creative. Fruitfulness and fertility are words both related to abundance, and their inclusion as a synonym for creativity suggests the latter is a tool to solve problems that may be impeding

productivity and prosperity for individual people as well as whole populations.

However, unlike nouns like a dog, a dress or an air-conditioner, creativity does not exist as a standalone entity. Creativity, like concepts such as fear, courage or love, cannot be touched, seen, or measured directly. Instead, **creativity is an intangible quality, a characteristic that is embedded within actions and only evidenced by tangible outputs.** I can call myself a creative person, but this can only be proven by what I do and what I produce.

In this sense, creativity is better understood as an adjective, an attribute that describes the nature of something else. The “somethings” that creativity can be found manifest within include:

1. **Products** – tangible or intangible outputs such as an idea, invention, painting or performance.
2. **Processes** – the steps, decisions, and tools used to bring something new into being.
3. **People** – individuals who think divergently and discover new things.

Note that the word product is used throughout this book to denote all outputs, whether they be tangible goods or intangible services.

As we will explore in the coming sections, looking at creativity through the separate lenses of products, processes, and people, reveals different facets of this concept, highlighting its depth and complexity.

Additionally, while many creative activities are largely solo undertakings, think about writing a novel, painting a landscape, practicing a solo or coding a computer, creativity does not operate in isolation. There are continual interactions between the creative person, their processes and tools, the environment in which they live and work, audiences, critics and other creatives. These connections influence both the output and the creator themselves. In this way, **creativity is a system**, a dynamic flow between context and creator, colleagues and adjudicators.

Creativity can also be considered from an even broader perspective, as a philosophy; as a worldview, a way of thinking or a mindset. Like Stoicism advocates for reason and resilience, and Existentialism explores the meaning of life, **Creativity as a philosophy** thinks of this concept not just as a skill but central to understanding and shaping the human experience.

Let's take a deeper dive into each of these perspectives of creativity.

[Back to Table of Contents](#)

Core Concepts

Creativity is:

- **An ability or skill** to create something new (noun).
- **An intangible quality** (like love or courage) that can only be evidenced through tangible outputs, such as products, processes, or the actions of people (adjective).
- **A system** - a dynamic interaction between individuals, their tools and processes and their environment.
- **A philosophy** – a mindset and a way of being, characterised by challenging norms, embracing uncertainty, and exploring the unknown.

Creativity manifests in three primary forms:

1. **Products** – Tangible or intangible outputs like ideas, inventions, or performances.
2. **Processes** – The methods, steps, and tools used to bring something new into existence.
3. **People** – Individuals who think divergently and generate original insights.

Understanding creativity requires exploring its multiple dimensions—products, processes, people, systems, and philosophy—each offering a unique lens to appreciate its impact on the world and how it shows up in our own lives.

Chapter 2 – What Makes a Product Creative?

Creative products can exist in many forms, as a solid, stand-alone item such as a technological invention, a new tool, a piece of couture design, a sculpture, restaurant dish or a painting. They can also be found in invisible and intangible forms, such as an idea, a scientific theory, a service, a performance, philosophical insight or a novel solution to a mathematical problem. However, many immaterial outputs do tend to be captured at some time in physical form so that they can be shared with a wider audience.

But how do we know that the thing we see, hear, touch, smell or taste can be categorised as creative? Immanuel Kant began contemplating this question in the 18th Century and from his extensive analyses, a standard definition of a creative output has been developed and widely adopted³. It states that to be creative, a product must meet two crucial conditions: it must be:

1. Novel (new) and
2. Valuable.

Novelty

At its core, creativity is about bringing something into being that didn't exist before. However, there are layers

to what counts as new. According to philosopher Margaret Boden, there's a distinction between ideas that are:

- P-creative (psychologically creative) and
- H-creative (historically creative).

Something is P-creative if it is new to its creator, even if someone else has thought of it before. On the other hand, H-creative ideas are completely new to humanity—no one else in history has developed them. While H-creativity is seen as sexier and sure gets more attention, P-creativity is fundamental because every H-creative idea must first be new to the person who creates it⁴.

Value

Novelty alone isn't enough to define a product as creative. Immanuel Kant believed that artistic genius doesn't merely produce original work—it must also be exemplary.

*Exemplary - worthy of being a pattern to be imitated*⁵.

Kant recognised that there can be "original nonsense," which may be novel but lacks any value or merit. For a product to be considered creative, it must have some worth, whether that's being useful, effective, or appropriate to the problem at hand. Its worth could be

the way the creation speeds up production processes or makes a Mum's life easier. Or it could be in the way it confronts and challenges limiting cultural norms or brings joy and optimism to the downtrodden. To be valuable for some, it may be enough that the product is "fit for purpose" or "appropriate," even if it isn't world changing. A creative product doesn't need to be groundbreaking across history to be considered exemplary. It just needs to bring something new and worthwhile to its context.

The value that a product brings also doesn't need to be universally agreed upon, nor does it have to apply across all situations. Value is a subjective assessment based on the observer's own beliefs and needs. It is this personal appreciation of value that has one art critic raving about the radical enlightenment that exudes from a sculpture while, at the same time, another suggests it is best placed in a scrap heap.

The creation's value also does not have to be judged externally and appreciated by an audience, but it can exist solely as an internal insight. For example, if a parent engages their child in a new way that fosters a stronger and more positive connection, then the parent may deem this as valuable, even if no-one else witnesses the interaction. Likewise, for a writer, if their novel assists them to process a terrible and traumatic event and aids them in finding helpful perspectives, then this work

is incredibly important, even if it is never published. In this way, the value of a creative product may lie in its profound personal or emotional significance. It does not have to be made public to be precious.

This is really imperative to remember. For I have had many people say to me that they do not have a creative bone in their body, a conclusion drawn from the fact that they have no tangible artistic outputs to show. And yet, some of these self-declared creative dunces are masters at making connections with children and other vulnerable people and helping them feel validated and loved. I have watched while others cook a magnificent meal, using their intuition and inspiration to balance colours and flavours to deliver a family feast. And then there are those who work tirelessly to find new ways to engage the elderly, to bring comfort and care, excitement and enthusiasm to their days.

You won't find any of these activities given a rave review by an accomplished critic, released to a fanfare, presented at a crowded stadium or splashed across the front page of a pop culture magazine. Still, they are the epitome of human creativity, and as such should also be celebrated.

[Back to Table of Contents](#)

Core Concepts

A creative product can be tangible (e.g., technological innovations and artworks) or intangible (e.g., ideas and performances). Immaterial products are often captured in physical artefacts for sharing.

To be creative, a product must meet two key criteria: novelty (new or original) and value (useful, effective, or significant in context).

Novelty can be P-creative (new to the creator) or H-creative (historically new). Both are important, with P-creativity forming the foundation for all H-creative ideas.

For a product to be considered creative, it must have some worth, whether that's being useful, effective, or appropriate to the problem at hand.

Value does not have to be made public. It can be deeply personal and meaningful to an individual.

Value is subjective and context dependent. What one person sees as revolutionary, another might dismiss as irrelevant.

Creativity can be found in everyday interactions, with new approaches delivering profound value, such as strengthening relationships, ensuring physical and mental health, aiding emotional growth, or solving personal challenges.

Chapter 3 – What Makes a Process Creative?

While creative outcomes often receive much attention, the process that leads to them is equally significant and deserving of consideration. For a creative process is far more than just a series of mechanical steps with predictable phases. As we will see in later chapters, while we can depict it as a logical sequence, in reality, a creative process is likely to be messy, and full of surprise, spontaneity, and uncertainty.

Surprise

Creativity is the development of something new, so it is natural that there will be some level of surprise in the innovation process. The product being created is largely unknown, so the development process will inherently include unexpected elements and situations that will startle and astonish.

Philosopher Margaret Boden describes three types of creative processes, each eliciting different kinds of surprises⁶:

1. **Combinatorial Creativity** can shock and startle by combining familiar elements in previously unthought-of ways. Think of merging virtual technology and fitness, food fusions, wearable technology and music mashups. All of these combinations of pre-existing ideas have resulted in bold new breakthroughs and valuable inventions.

For example, Augmented Reality (AR) Running Apps such as Zombies, Run! surely bring a whole new world of wonder to exercise, combining gaming and the gym into one great experience. And the first time you ever try a cronut (a hybrid pastry that blends the flakiness of a croissant with the deep-fried indulgence of a donut), you would experience both shock and awe in a single mouthful.

2. **Exploratory Creativity** creates new and valuable inventions by finding fresh possibilities within the current systems of rules. For example, in jazz improvisations, musicians often engage in exploratory creativity during performances. They follow the established rules of music theory, chord progressions, and rhythm. Still, within those boundaries, they experiment with melodies, harmonies, and timing. Each improvisation is different, yet it remains within the limits of the

existent musical structure, and each holds an element of surprise.

When someone asked Duke Ellington "What is Jazz?" Ellington replied, "It is the sound of surprise."

3. **Transformational Creativity** produces exemplary outputs by breaking the existing rules and delivering something either previously thought impossible or never before considered or conceived. For example, Pablo Picasso and Georges Braque revolutionised the art world by developing Cubism, which transformed how objects were represented on canvas. Traditional painting relied on perspective and realistic representations, but Cubism shattered these rules, simultaneously presenting objects from multiple angles. This fundamentally altered the conceptual space of visual art and gave rise to a new way of seeing and interpreting the world.
-

"Metzinger painted a puzzle, cubic and triangular, which after verification, is a naked woman. I managed to discover the head, torso and legs. I had to give up finding arms. This is beyond comprehension." ~ Art Critic Jean Claude on reviewing Metzinger's "Nu à la cheminée".

Spontaneity

A hallmark of the creative process is spontaneity, meaning that it is unplanned, instinctive, or impulsive, free from rigid structure or over-analysis. It is characterised by a sense of immediacy, unpredictability, and flow. Creative ideas often arise without foresight or detailed planning, occurring from an openness to possibilities and the ability to be unrestrained and embrace the unexpected.

According to Kronfeldner⁷, spontaneity is essential to the creative process because if the outcome were already known, it wouldn't truly be creative. This unplanned nature allows for fresh perspectives and unforeseen insights, giving rise to originality and innovation.

For example, in visual art, Jackson Pollock's drip painting technique is a testament to spontaneity. Rather than using traditional constrained and careful brushstrokes, Pollock allowed paint to fall naturally onto the canvas, letting the motion of his body dictate the outcome. This method revolutionised modern art and demonstrated how unplanned, instinctive actions can lead to groundbreaking work.

Similarly, in science, Alexander Fleming's accidental discovery of penicillin in 1928 highlights the power of spontaneity. By remaining open to unexpected results,

and by not restraining the process to a set of rigid predictions and pathways, he transformed a serendipitous observation into a medical breakthrough.

“A certain randomness and incoherence seems part and parcel of any honest creative practice.” ~ Shaun Tan

Uncertainty

Closely tied to spontaneity is uncertainty. While there may be an initial vision for how a creative project will evolve, the outcome is never certain. The creator works with the unknown, navigating uncharted territory where some techniques succeed, and others fail. This unpredictability is a defining characteristic of creativity. As Gaut (2018)⁸ observes, creativity cannot follow an exact, predetermined plan—it thrives on the willingness to explore, pivot, and adapt. Uncertainty is not a hindrance but an integral part of the process, encouraging flexibility and the openness required for creative breakthroughs.

A striking example of navigating uncertainty in creativity is J.K. Rowling’s Harry Potter series of novels. Rowling began with a vague idea of a young wizard attending a magical school, but much of the series evolved organically. As she wrote, she

encountered plot challenges and character developments that required constant adaptation, revisions, and flexibility.

Similarly, in innovation, the development of the Post-it Note by Spencer Silver and Arthur Fry at 3M illustrates how embracing uncertainty can lead to success. The adhesive technology was initially deemed a failure for not being strong enough and there was great doubt about whether it would hold any value at all. However, when Fry tried using the adhesive to make a reusable bookmark for his hymnal the Post-it Note was born and would go on to be one of the company's most successful products.

Likewise, Shaun Tan found the doubt around whether his work was valuable was a motivator, pushing him to invest time and energy into ensuring it truly was exemplary.

“Ironically, this came to be my most important work, emerging from a period of deep uncertainty.” ~ Shaun Tan

Is Agency Required?

While surprise, spontaneity and uncertainty are understood to be part of a creative process, there is less consensus on whether creativity involves agency, that is,

the involvement of a human author. Some researchers believe creativity must be driven by an agent—someone with intention, control, and decision-making ability. Following this argument, natural phenomena like snowflakes, sunsets, or sand dunes can produce striking and novel outcomes, but these are not considered creative because they lack agency. That is, unless you believe there is a deity whose ethereal hand is pulling the strings of these natural events. In this case some type of God becomes the creative agent. Otherwise, if it is believed that no one is making choices or controlling the natural inputs or processes, these things, while tremendously beautiful, are not classified as creative.

However, some theorists, like Boden⁹, have begun to explore whether agency is always necessary for creativity. Suppose you remove this criterion from what constitutes creativity. In that case, natural processes such as evolution, the formation of rockscapes or even the growth of plants are creative acts that can be attributed to the timeless artist of Mother Nature.

The need for agency in creativity is a contentious issue that continues to be debated in philosophical circles. It does not look like there will be consensus on this issue any time soon, as is expected with such deep and all-pervasive philosophical dilemmas. Nevertheless, the discussion around the issue of agency is made ever more important with the increased use and capabilities of

Artificial Intelligence (AI) and its role in art and innovation. Currently, it can be seen that behind every creative output generated by AI is a programmer feeding it with code or a person plugging in prompts; there is a human in the driver's seat. However, as technology becomes more adept at mirroring human decision-making, the role of agent in creative works becomes less clear and deciding who can be awarded recognition will become more challenging.

[Back to Table of Contents](#)

Core Concepts

While the creative process can be simplified and mapped into discrete phases (as we will see later), it is an evolving process filled with surprise, spontaneity, and uncertainty.

There are three types of creativity which surprise us in different ways (Margaret Boden):

1. **Combinatorial Creativity:** Creates surprise by combining familiar elements in novel ways, producing ideas like virtual reality fitness or fusion foods.
2. **Exploratory Creativity:** Delivers wonder by expanding possibilities within existing systems or rules, such as jazz improvisation.
3. **Transformational Creativity:** Breaks existing rules to create something fundamentally new and astonishing, like Cubism in art.

Creative breakthroughs often arise spontaneously, from moments of impulse, as seen in Pollock's drip paintings or Fleming's accidental discovery of penicillin.

Uncertainty and unpredictability encourage flexibility and adaptation, driving creative solutions like the evolution of the Harry Potter series or the invention of the Post-it Note.

The debate over whether creativity requires human agency remains unresolved and is escalating in intensity with the rise of AI, which challenges traditional views of creative authorship.

Chapter 4 – What Makes a Person Creative?

"If you're alive, you're a creative person." ~ Elizabeth Gilbert

Many artists, philosophers and educators have declared that creativity is an inherent human quality and is simply waiting to be nurtured and expressed. However, as discussed previously, creativity is not just a potential or an ability. It must be applied and evidenced through action, and through repetition becomes a personal trait. It is only by taking creative action a person builds a creative character.

*"Watch your thoughts, they become words;
watch your words, they become actions;
watch your actions, they become habits;
watch your habits, they become character;
watch your character, for it becomes your destiny." ~
Frank Outlaw*

Mihaly Csikszentmihalyi¹⁰ suggests that signs of a creative character include:

1. **The expression of unusual thoughts:** A creative person views the world in unexpected and 'weird' ways.

2. **The experience of the world in novel ways:** Creative people have original perspectives on how the world works and see patterns others don't.

“Creativity is seeing what others see and thinking what no one else ever thought.” ~ Albert Einstein

These traits do not necessarily result in groundbreaking inventions or public recognition and yet can lead to invaluable innovations. Some creative people though, do go on to change culture. These are the most publicly recognised creative individuals—people like Leonardo da Vinci, Thomas Edison, Albert Einstein, Steve Jobs or Elon Musk—who produce works that significantly impact society and change the course of history.

Ten Creative Traits

More specifically, research has found ten traits that creative people foster and sustain within themselves. These are:

1. **Openness to experience:** Creative individuals are willing to explore new ideas and activities, eager to fill their lives with new experiences.¹¹
2. **Cognitive flexibility:** Creative people can shift swiftly between different concepts, think

divergently and find connections between seemingly unrelated ideas.¹²

3. **Intrinsic motivation:** Creative individuals pursue creative tasks for the inherent pleasure and satisfaction they derive from the activity itself rather than for external rewards.¹³
4. **Curiosity:** Curiosity drives creative people to seek out new knowledge, constantly asking questions and exploring all possibilities.¹⁴

*Creativity is a natural extension of our enthusiasm. ~
Earl Nightingale*

5. **Tolerance for ambiguity:** Creative people are comfortable with the unknown and are more likely to embrace uncertainty as part of the creative process.¹⁵
6. **Persistence and resilience:** Creative people demonstrate persistence and resilience in the face of challenges.¹⁶
7. **Playfulness:** Creative individuals often have a playful, childlike attitude, which allows them to approach problems with a fresh perspective.¹⁷
8. **Risk-taking:** Creative individuals are more willing to challenge conventions and pursue unconventional ideas, even at the risk of failure.¹⁸

"Others have seen what is and asked why. I have seen what could be and asked why not."~ Pablo Picasso

9. **Independence and nonconformity:** Creative people are less concerned with conforming to societal expectations and are more likely to follow their own path.¹⁹
-

"To live a creative life, we must lose our fear of being wrong."— Joseph Chilton Pearce

10. **Emotional sensitivity:** Creative individuals tend to be more emotionally sensitive and attuned to their own and others' emotions.²⁰

These ten traits overlap and work together, allowing creative individuals to sense what is happening around them, see patterns and opportunities, develop original problem-solving strategies, push boundaries, and bring innovative ideas into the world.

Balancing Opposites

One of the most fascinating aspects of creative individuals is their **ability to balance seemingly opposing traits**. They can be at times both playful and disciplined, extroverted and introverted, determined and doubtful, humble and proud. This ability to reside

comfortably within dichotomy provides them with the ability to think divergently and to pull from both emotional extremes in their work. In this way, they exhibit the same multi-faceted and multi-dimensional nature as creativity itself. The role of paradox in creativity will be discussed in further detail later when we delve into its relationship with the natural laws.

Character Depends on Context

All of the characteristics outlined previously can be nurtured within an individual, however the extent to which they can be expressed depends greatly upon the environment in which they live and work. A person's cultural context and companions can either celebrate or crush their capacity, stimulate or suppress it. Therefore, while investigating the characteristics of an individual creator is helpful, we also need to take a holistic perspective and consider the system in which they are situated.

[Back to Table of Contents](#)

Core Concepts

Becoming a creative person requires a continued undertaking of creative actions; action precedes character.

Creative individuals (Mihaly Csikszentmihalyi):

- Express unusual thoughts
- Experience the world in novel ways.

Some creative people change culture, producing works that transform society.

Key traits of creative individuals include:

- Openness to experience
- Cognitive flexibility
- Intrinsic motivation
- Curiosity
- Playfulness
- Tolerance for ambiguity
- Persistence and resilience
- Risk-Taking
- Independence
- Emotional sensitivity
- An ability to balance opposing emotional states.

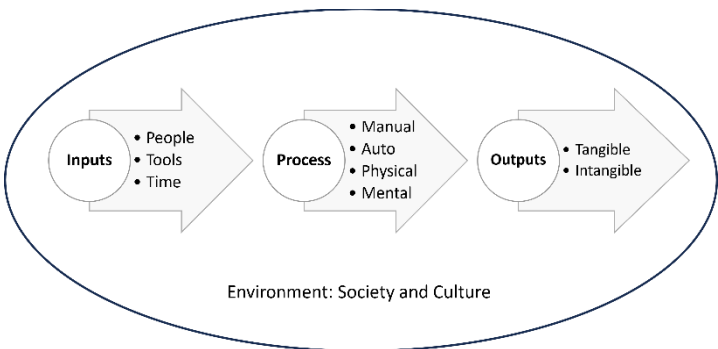
The development and expression of these traits can be supported or suppressed by a person's environment, including the culture in which they live and work and the colleagues and companions they spend time with.

Chapter 5 – Creativity as a System

“An idea or product that deserves the label “creative” arises from the synergy of many sources and not only from the mind of a single person.” ~ Mihaly Csikszentmihalyi

As we have seen, creativity is embedded within people, processes and outputs. The relationship between them can be viewed as a linear, logical sequence as follows.

Figure 1 - A Simple Creativity System



In this simple system model of creativity, we see an individual using the resources at their disposal to develop and deliver creative outputs. This is done within the constraints and supports provided by the society and culture in which the creator is working.

Creativity researcher Mihaly Csikszentmihalyi has looked closely at the environment further, seeking to understand the parties that play a role in creative pursuits. His research shows that creative outputs are shaped by the interaction between three separate and yet interrelated systems²¹ being the individual, the domain and the field.

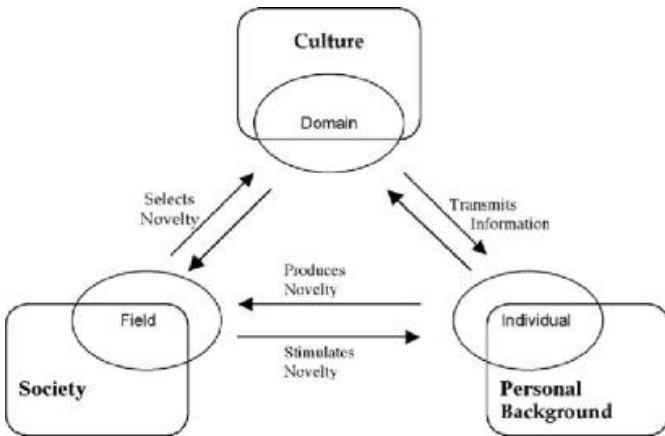
The domain is the collection of knowledge, processes, and resources available to a creator. It includes the rules within which creation occurs and is changed by creative outcomes.

The field is the group of people within society who evaluate a creator's work, determine its worth and select what becomes part of the domain.

The individual works within the domain, drawing upon its resources and rules as inputs to their creative processes. The individual also works with the field to have their work recognised as new and valuable, selected and incorporated into the domain.

The flows of information and inspiration in this system go both ways, to and from the creator, the domain and the field, making the creative network and interconnected and interdependent entity.

Figure 2 - The Systems Model of Creativity (Csikszentmihalyi)



Let's take a deeper dive into each element of the creative system.

The Individual

The individual brings a unique combination of personal traits, experiences, knowledge skills and motivation to their creative activity. While much of the work they do may be in isolation (think about the endless hours a painter spends alone in their studio), Csikszentmihalyi argues that creativity is not solely contained within this person. The individual, first and foremost is a product of their upbringing, shaped by the society in which they were raised. In mastering their craft and producing their work, they also interact with the world around them—gaining inspiration, building on existing knowledge, and

applying creative skills to generate new ideas. And it is difficult to think of any creative output that does not require some form of collaboration. For example, a writer works with an editor and publisher, a dancer with musicians and the owners of a performance space, and an inventor may require the resources of a manufacturing company to test their creation. Creativity then is a collection of individuals working together to bring ideas to life.

The Domain

The domain refers to the broader body of knowledge, conventions, and rules associated with a particular field of creativity. For example, the domain of painting includes techniques, styles, materials, and historical contexts. In contrast, the domain of science includes theories, methodologies, and accepted practices. The individual must work within this framework, understanding and mastering the domain before pushing its boundaries to create something new. One must become intimately familiar with the game is played before they have the ability to change it. In this way they are not acting from ignorance, but from inspiration.

“Begin by learning to draw and paint like the old masters. After that, you can do as you like; everyone will respect you.” ~ Salvador Dali

The structures, traditions, and resources within a given domain will determine how easily it is for the creator to develop and promote new ideas. For example, there are many supports available for writers to hone their craft and to share their work. However, there are not so many available to encourage those who would like to learn underwater basket weaving. It is relatively easy for a writer to find a competition to enter, a course to enrol in or a coach to help them complete their piece. There is not much help for those who would like to master the latter art. One of the key roles of the field is to advocate for and attract resources to the domain, expanding it and encouraging all those within it.

We also see that as the domain shapes creative outputs, creativity also continuously reshapes the domain, meaning that what is considered creative evolves over time as new ideas are integrated and further innovations emerge. In this way, creativity is not only a product of the context in which it operates but is also a key input to its evolution and even transformation.

The Field

The field comprises the gatekeepers or experts who evaluate, validate, accept or reject creative work. In the arts, this might include critics, curators, or publishers. In science, it could be peer reviewers, funding bodies, government experts, or academic institutions. The field

decides whether a creative product is novel and valuable enough to be incorporated into the domain.

Without recognition and acceptance by the field, even a groundbreaking idea may not have the opportunity to be seen by the domain or have a chance to impact society. The field also plays an important role in providing feedback. The messages it sends about what is valuable informs individuals about where they should focus their creative energies and processes if they want to be accepted by the domain.

It is imperative to recognise that despite the democratisation of many creative channels, the role of the field still exists. It just takes a different form. Consider self-publishing, home-made music and films, and social media; all of these facilities allow a creator to get their work out into the domain. However, it does not mean that it will be automatically appreciated. Instead, success relies on a set of influencers, those with enough clout in the culture to tell others that this work is worthwhile, and to share it around.

Whether one likes it or not, the fact is the field is an integral part of the creative system. Of course, it is not necessary to consider it if your creativity is focused on your own personal growth and enjoyment. However, if you do want to use it to change the world in some way, then it must first pass through and be validated by the

field. In this way, creativity can be seen as a political exercise, a downside which will be discussed further in following chapters.

How the System Works Together

In Csikszentmihalyi's model, creativity is the result of reciprocal interactions between the three elements:

- **The domain influences the creator** by providing an established set of ideas, rules and routines and other individuals with which to learn from and collaborate with.
- **The field interacts with the individual** by evaluating their work and assessing its worth. The evaluation by the field determines whether the creative contribution will be added to the domain.
- **The individual shapes the domain** by having their work accepted and shared, providing further inspiration for individuals.
- **The feedback loops between the individual, domain, and field** ensure that creativity is a continuous and evolving process, an eternal flow of energy. A breakthrough in one field (e.g., a new artistic style or scientific discovery) transforms the domain, providing future creators with new possibilities and challenges.

[Back to Table of Contents](#)

Core Concepts

Creativity is a complex, interconnected system where all elements influence and depend on one another.

Three Elements of the System (Csikszentmihalyi):

1. The Individual: The person creating equipped with traits, skills, knowledge, and motivation, interacts with the world and collaborates within the system.
2. The Domain: The body of knowledge, conventions, and rules which individuals must master and innovate within to create something new.
3. The Field: Gatekeepers who decide which creative contributions are incorporated into the domain.

These elements interact as follows:

- The individual is inspired by the domain, generating new ideas and pushing boundaries.
- The field evaluates the work's novelty and value, determining whether it becomes part of the domain.
- Accepted ideas are integrated into the domain, influencing future creative efforts.

Despite the democratisation of many creative domains, the field still exists, with it being industry representatives being replaced with social media influencers.

Chapter 6 – Creativity as a Philosophy

It could be argued that creativity is even far more expansive than a system—it is a complex and profound concept that touches every aspect of human existence. It is a multifaceted notion involving aspects of psychology, sociology, art, and even science. It is too vast to be captured within a simplistic diagram. It is simultaneously a personal act, a cultural phenomenon, and a universal force of change.

In essence, creativity represents a way of thinking and living that goes beyond the mere production of new ideas or artifacts. It reflects a mindset, a worldview that challenges conventions and embraces the unknown, allowing individuals to transcend the mundane and seek out something that does not yet exist.

In this way, creativity can not only be considered suitable for philosophical inquiry but is, in itself, a philosophy.

Philosophy: the study of the fundamental nature of knowledge, reality, and existence.

The power of creativity calls us to ponder some of the deepest questions about human nature, and how we exist in the world, for example:

- What role does creativity play in our survival and wellbeing?
- What does it mean to create something new?
- How do I express my unique essence in this world, and why should I do it?
- How do we push the boundaries of tradition, and possibility for the prosperity of all?
- How does creativity transform culture and vice versa and how do we halt harmful loops?
- How does creativity blend science and spirituality and where should the focus of attention be placed?
- How are people deemed to be gatekeepers and how can they be held to account?

Creativity, in this sense, becomes a lens through which we understand change, growth, and the evolution of ideas, art, and culture. It is a way to engage with the world that celebrates curiosity, self-expression and risk-taking, but which also recognises that creativity is also imbued with many conflicts and conundrums.

As a philosophy, creativity invites individuals to see the world as full of possibilities, where boundaries can be pushed, rules can be redefined, and politics must be

managed for the greater good. This aligns with existentialist ideas of meaning-making, of seeing ourselves as evolving beings and having the freedom to shape one's own identity.

As a philosophy, creativity also understands that the concept is grounded in the realities of everyday life but is also a tool that can help people thrive within them. This aligns with pragmatist philosophies (such as Stoicism) that emphasise innovation, action, resilience and adaptability.

Some Philosophical Perspectives on Creativity

There have been numerous people who have contributed significantly to the study of creativity, gaining a deep knowledge about its nature, including both its light and its shadows. From Nietzsche to Noë, creativity has been the subject of lifetimes worth of inquiry and investigation, and, interestingly, as shown by this book, the exploration is still occurring. It appears there is no destination when it comes to fully understanding creativity.

The following table comprises but a small selection of examples showing how this concept has already been considered comprehensively in philosophical circles.

UNDERSTANDING CREATIVITY

Person	Contribution	Example	Perspective
Friedrich Nietzsche: Creativity as a Fusion of Opposites	Explored the dual forces of the Dionysian (chaotic, emotional) and the Apollonian (structured, rational).	Nietzsche's interpretation of Greek tragedy emphasises how creativity arises from the interplay of these opposites.	Creativity becomes a way of reconciling contradictions within ourselves and the world.
Arthur Schopenhauer : Creativity as an Escape from Suffering	Schopenhauer viewed art and creativity as a means of transcending the "will"—the source of human suffering.	An artist finds temporary relief from the struggles of existence, achieving a state of pure aesthetic awareness.	Creativity serves as a bridge to a higher, more meaningful reality, offering both solace and insight.
Henri Bergson: Creativity as Vital Impulse	Bergson emphasised the concept of "élan vital" (vital impulse), a creative force that drives innovation.	The development of art, technology, and ideas reflects this ongoing, dynamic process.	Creativity is a fundamental principle of life itself, expressing humanity's ability to adapt, innovate, and transcend.
John Dewey: Creativity as Pragmatic Innovation	Dewey highlighted the connection between creativity, experience, and problem-solving.	A teacher designing an innovative curriculum to engage students demonstrates how creativity can address practical challenges.	Creativity is a pragmatic tool that transforms both individuals and societies by fostering continuous adaptation and improvement.

UNDERSTANDING CREATIVITY

Person	Contribution	Example	Perspective
Martin Heidegger: Creativity as Revealing Being	Heidegger viewed creativity as ways of "revealing" truths about existence and our relationship to the world.	A verse capturing a shared human experience exemplifies how creativity brings hidden truths into the open.	Creativity is an act of existential discovery, connecting us to deeper realities and meanings.
Simone de Beauvoir: Creativity as Authentic Self-Expression	Creativity is an expression of freedom and authenticity; a way to challenge social norms and redefine identity.	A feminist artist using her work to critique patriarchal structures reflects creativity as a form of existential resistance.	Creativity empowers individuals to define themselves and contribute to collective change.
Immanuel Kant: Creativity as Sublime Genius	Kant described artistic creativity as the product of "genius," a natural talent that combines imagination with the ability to generate universal ideas.	A composer creating a symphony that evokes universal emotions demonstrates how creativity bridges individual expression and collective experience.	Creativity is both personal and transcendent, embodying the interplay between individual insight and shared humanity.

UNDERSTANDING CREATIVITY

Person	Contribution	Example	Perspective
Alfred North Whitehead: Creativity as the Ultimate Principle	Whitehead considered creativity the fundamental principle underlying all existence, driving the emergence of new forms and relationships.	The evolution of ecosystems or the development of civilizations showcases creativity as a universal process.	Creativity is not confined to human activity but is a cosmic force shaping all aspects of reality.
Jean-Paul Sartre: Creativity as Freedom and Responsibility	Sartre emphasised the role of freedom in creativity, arguing that creating something new is an assertion of human agency and responsibility.	A novelist crafting a story to explore moral dilemmas reflects the existential responsibility inherent in creativity.	Creativity is an existential act that affirms our freedom and shapes our engagement with the world.
Mihaly Csikszentmihalyi: Creativity as Flow	Highlighted creativity as an optimal state of engagement where individuals lose themselves in their work.	A painter immersed in their art experiences a sense of timelessness and purpose, exemplifying the flow state.	Creativity integrates focus, joy, and self-transcendence, making it a deeply fulfilling aspect of existence.

UNDERSTANDING CREATIVITY

Person	Contribution	Example	Perspective
Byung-Chul Han: The Burnout Society	Creativity flourishes in states of contemplation and rest—conditions undermined by the pressures of modern capitalism.	The obsession with performance and optimisation leads to mental exhaustion and diminishes the capacity for original thought.	His philosophy underscores the tension between productivity-driven culture and the deeper rhythms required for authentic creative work.
Terry Eagleton: Creativity as a Double-Edged Sword	Eagleton argues that creativity, while often celebrated as a liberating force, can also reinforce existing power structures when co-opted by market forces.	Art and creativity can either challenge social inequalities or, conversely, perpetuate them by serving as tools for cultural hegemony.	His work invites a critical examination of who defines creativity, who benefits from it, and how it can be wielded to either sustain or subvert the status quo.
Alva Noë: Creativity as an embodied phenomenon.	Creativity is not confined to the mind but emerges from the interaction between the body, environment, and social context.	Visual art and dance are not just outputs of creativity but also tools for exploring the nature of human experience and agency.	His philosophy stresses the interplay between physical action, sensory experience, and cultural practices in creative expression.

Thinking Creatively about Creativity

To think of creativity as a philosophy is also a form of neologism, meaning that it combines established ideas in a novel way. Neologisms are new words or phrases that reflect shifts in how we think about the world, often emerging from cultural, social, or intellectual transformations. Creativity as a philosophy can be viewed in this light: it's an evolving idea that responds to changes in understanding human potential, knowledge, and progress.

Traditionally, creativity was seen as something largely confined to the arts or sciences. Still, as we have deepened our understanding, creativity is now viewed as a broader philosophical approach to life. The act of redefining creativity as a guiding philosophy of thought, behaviour, and being is itself a creative act. This neologism reshapes how we engage with creativity. Creativity as a philosophy makes it an expansive concept that embraces a whole way of life rather than discrete processes or outputs.

By viewing creativity as a philosophy, we are not just describing a human ability but embracing creativity as a framework for understanding ourselves at a deep level, navigating uncertainty, pushing intellectual boundaries, and continuously reshaping the world.

Just as the Stoics continually assess situations in terms of personal control, and Buddhists are constantly aware of attachments, those approaching creativity as a philosophy are always subtly scanning and seeking new ways to see and shape reality. They do not subscribe to boundaries between domains but bridge disciplines to expand cultural horizons and apply this philosophy at all levels—from personal growth and problem-solving to shaping cultures and societies. Figures like Da Vinci and Michelangelo exemplified those who lived by the principles of creativity.

In this sense, creativity as a philosophy offers a way of life that embraces both the known and the unknown, celebrates individual uniqueness, asks us to question norms, and to open ourselves to endless possibilities. As a neologism, it reflects the evolving nature of human thought—pushing us to think creatively about creativity itself.

[Back to Table of Contents](#)

Core Concepts

Creativity transcends being just a process or product—it is a profound concept that touches every aspect of human existence, including psychology, sociology, art, and science.

Creativity raises fundamental philosophical questions about human nature, knowledge, and existence, exploring its role in survival, self-expression, and cultural transformation.

Thinkers like Nietzsche, Sartre, and Whitehead have examined creativity as a force for self-expression, existential freedom, cultural evolution, and universal transformation.

Others such as Byung-Chul and Eagleton have considered the challenges to creativity in cultures obsessed with productivity and power.

Viewing creativity as a philosophy redefines it as an evolving framework for navigating uncertainty, breaking boundaries, and reshaping reality.

Creativity as a philosophy can be viewed as a neologism; we are thinking creatively about creativity itself.

Creativity as a philosophy encourages applying creative principles—curiosity, innovation, and adaptability—to all aspects of life, from personal growth to societal change.

Chapter 7 – The Benefits of Creativity

We have seen that to be deemed creative, products, services, people or performances have to provide some value. However, creativity in itself is invaluable. Whether it be combinatorial, exploratory or transformational type of creative activities, they have the potential to deliver significant positive outcomes for the creator and the communities that they operate within.

For the Creator

"A creative life is an amplified life. It's a bigger life, a happier life, an expanded life, and a hell of a lot more interesting life." ~ Elizabeth Gilbert

Having creativity as a personal philosophy, or even participating regularly in creative pursuits, offers many opportunities for the individual to find stimulus and satisfaction in everyday experiences and respond constructively to change. Creativity is core to human nature and our survival. It is also central to our ability to thrive and reach our highest potential. This is because creativity actively contributes to constructing all four pillars of wellbeing.

According to Dr Richard Davidson and the Centre for Healthy Minds²², individual wellbeing is built on four key pillars:

1. **Awareness:** The ability to maintain focus and meta-awareness, reducing distractions and enhancing presence in the moment.
2. **Insight:** A curiosity-driven understanding of one's narrative and beliefs, allowing for a shift in perspective and self-awareness.
3. **Connection:** Cultivating qualities like kindness, compassion, and gratitude to foster meaningful relationships and social harmony.
4. **Purpose:** Clarifying core values and aligning daily activities with a sense of direction and meaning in life.

Creative practices play a crucial role in developing these pillars in the following ways.

Awareness

Creativity enhances awareness by requiring focus and attention during the creative process. Whether engaged in painting, writing, or playing music, the need to be present in the moment reduces distractions and sharpens the ability to observe one's thoughts and surroundings. This improvement in meta-awareness—the ability to be aware of one's mental processes—helps individuals stay grounded and engaged in the present, promoting mental

clarity and reducing the effects of a wandering mind, which research shows is often linked to decreased levels of happiness.

Insight

Creative processes provide valuable insight by encouraging individuals to reflect on their personal narratives and beliefs. Creativity invites individuals to question their assumptions and explore new perspectives, helping them understand the patterns and thoughts that shape their reality. Through this reflective process, individuals can gain insight into their behaviour, emotional responses, and worldviews, fostering a deeper understanding of themselves and their surroundings.

Connection

Creativity fosters connection, both with oneself and with others. By expressing emotions, ideas, and experiences through creative acts, individuals come to a greater understanding of their own beliefs, thoughts and emotions and create spaces for empathy and compassion. Sharing creative works—whether through art, music, or writing—encourages connection with others by allowing individuals to express and receive kindness and gratitude and provide and gain support. Scientific evidence suggests that such prosocial characteristics increase personal wellbeing and

contribute to healthier and more fulfilling social relationships.

Purpose

Creativity is closely tied to purpose—it gives individuals a sense of direction and meaning. Engaging in creative pursuits allows people to align with their core values, helping them find fulfilment in activities that resonate with their authentic selves. When individuals express their inner truths through creative outlets, they experience a profound sense of purpose and understand their personal contribution to the world. Whether through a small personal project or a large-scale creative endeavour, creativity helps people connect with what truly matters in their lives, bringing a sense of satisfaction and direction.

"Creativity is a central source of meaning in our lives ... most of the things that are interesting, important, and human are the results of creativity ... [and] when we are involved in it, we feel that we are living more fully than during the rest of life." ~ Mihaly Csikszentmihalyi

Csikszentmihalyi believes that many of the most meaningful and important aspects of life come from creativity. When people are engaged in creative work, they feel more fully alive than during other moments.

This deep engagement, referred to as the "flow" state, occurs when people are completely engaged in an activity that stretches their skills but is not beyond their ability²³.

"If you feel safe in the area you're working in, you're not working in the right area. Always go a little further into the water than you feel you're capable of being in. Go a little bit out of your depth. And when you don't feel that your feet are quite touching the bottom, you're just about in the right place to do something exciting."
~ David Bowie

Being a little bit out of their depth allows individuals to lose themselves in creative activity, finding joy, satisfaction, and a sense of purpose in exploring previously uncharted territory. Understanding or achieving something that seems just beyond our reach brings with it a sense of accomplishment that not only enhances happiness in the moment but also contributes to a greater sense of life satisfaction.

"The world always seems brighter when you've just made something that wasn't there before." ~ Neil Gaiman

It is because of its creativity's effective contribution to these foundational aspects of wellbeing that we also see

several other benefits arise from taking creative action, including:

Emotional Resilience

Research indicates that participating in creative activities, whether through art, music, writing, or problem-solving, can reduce symptoms of anxiety, depression, and stress. A review published by the NIH on the connection between art, healing, and public health highlights that creative expression can lessen negative emotions, such as shame, anger, and sadness, particularly after a traumatic event²⁴. Through creative outlets, individuals process difficult emotions, release tension, and achieve a sense of relief and healing. Creative individuals also report increased positive emotions and improved immune function. Studies have demonstrated that regular engagement in creative activities enhances psychological wellbeing, helping individuals maintain a more optimistic outlook on life. These emotional benefits contribute to overall life satisfaction and a more balanced mental state, providing a protective buffer against life's stressors.

Cognitive Development and Problem-Solving Skills

Creativity enhances problem-solving skills, which is one of its most practical benefits. Engaging in creative exercises encourages individuals to think in novel ways, to explore alternatives, and to approach challenges with

a fresh perspective. By regularly exercising their creative faculties, individuals develop the cognitive flexibility necessary to find new methods for completing old tasks or generating entirely new solutions. This improves problem-solving capabilities and builds confidence, as success in creative endeavours reinforces the creator's belief in their ability to tackle future challenges.

Longer Life and Health Benefits

According to a study published in *Scientific American*²⁵, individuals who regularly engage in creative activities tend to live longer, possibly due to the mental and emotional health benefits associated with creativity. Creativity encourages active engagement with life, continual learning, and adaptability—all of which have been shown to promote longevity. The stimulation of the mind through creative processes also supports cognitive health, potentially reducing the risk of cognitive decline in later life.

For the Community

Creativity doesn't just benefit individuals; it creates a ripple effect that extends into the communities where people live and work. When creative individuals express their ideas and innovations, they enhance the social, cultural, and economic wellbeing of the community.

Creative expression can have a transformative impact on a collective level in the following ways.

Cultural Enrichment and Evolution

Creative expression plays a crucial role in shaping a community's cultural identity and facilitating its evolution. Through art, literature, music, and other forms of creative work, communities develop a shared sense of belonging and cultural heritage. Public art installations, local festivals, and community-based creative projects provide spaces where diverse voices are celebrated, fostering a sense of unity and shared experience and strengthening the social fabric²⁶. Coming together also provides the potential for sparking collaborations and cultural shifts that redefine social norms, values, and aesthetics²⁷.

Social Cohesion and Civic Engagement

Creativity fosters social cohesion by bringing together people from different backgrounds to collaborate on projects, share experiences, and celebrate diversity. Creative activities such as community theatre, art exhibitions, and music festivals create inclusive environments where individuals can connect, breaking down social barriers and enhancing relationships within the community²⁸.

Creativity can also lead to higher levels of civic engagement. Community members who participate in collaborative creative projects, such as public murals or theatre productions, often become more invested in the wellbeing of their community. This increased engagement leads to stronger advocacy for social issues, more active participation in local governance, and a deeper commitment to community development²⁹.

Economic Development and Innovation

Communities that embrace creativity often experience significant economic benefits. Creative industries—such as design, advertising, digital media, and the arts—generate employment, attract tourism, and contribute to economic growth³⁰. The creative economy can revitalise urban areas, bringing new businesses and innovation to cities and towns that may otherwise face economic decline. Additionally, creativity is a key component of entrepreneurship, which identifies market gaps, develops unique business models and drives economic growth by creating new businesses, services, and products³¹.

Problem-Solving and Resilience

Communities that foster creativity are better equipped to face challenges and adapt to changing circumstances. Creative thinking encourages innovative problem-solving at both the individual and collective levels. For

instance, communities that engage in participatory design processes are more likely to develop sustainable urban planning solutions, tackling issues like housing, transportation, and environmental sustainability with fresh perspectives³². Creativity is also vital for social innovation, which aims to address societal challenges such as inequality, poverty, and injustice. Social entrepreneurs and non-profits use creative solutions to design interventions that promote equity and social welfare. Creativity in this domain can also help foster social cohesion, peace-building, and long-term systemic change³³.

When communities embrace creativity, they unlock new possibilities for collaboration, innovation, and resilience. By fostering creative expression and supporting creative industries, communities create a foundation for lasting growth and transformation. This interconnected web of benefits underscores creativity's vital role in not just personal fulfilment but in the overall strength and vibrancy of the communities we live in.

For Business

*The World Economic Forum's Future of Jobs 2023 report identifies creative thinking as one of the most in-demand skills by 2027.*³⁴

A study reported by Forbes reveals that over 70% of surveyed companies consider creative thinking a skill

expected to gain significant importance between 2023 and 2027.³⁵

Businesses are microcosms of the broader community, so facilitating creativity within organisations has similar and far-reaching positive outcomes. Businesses that encourage creative thinking foster innovation and problem-solving, improve employee satisfaction, drive economic growth, and enhance competitive advantage.

Innovation and Competitive Advantage

Creativity is a major driver of innovation in businesses. Organisations encouraging employees to think creatively and generate novel ideas are more likely to develop new and valuable products, services, and business models that meet changing consumer needs and market demands and provide a competitive advantage³⁶.

Moreover, creativity is essential for sustainable innovation, focusing on long-term solutions that balance profitability with social and environmental responsibility. Creative thinking allows businesses to develop environmentally friendly products, reduce waste, and implement sustainable supply chains and business practices that benefit the planet and attract consumers who prioritise corporate responsibility³⁷.

Problem-Solving and Flexibility

Businesses face complex challenges in the ever-changing landscape of the global economy. Creativity enhances problem-solving skills, enabling employees to approach problems from multiple angles and find innovative solutions. A creative workforce is more adaptable and able to respond to disruptions with resilience, enabling the entire organisation to remain agile in times of turbulent change³⁸.

Employee Engagement and Job Satisfaction

Facilitating creativity in the workplace improves employee engagement and job satisfaction. Creative opportunities allow employees to feel a sense of ownership over their work and provide them with avenues to express their ideas and talents. This leads to higher levels of motivation, loyalty, and overall job satisfaction, reducing turnover and improving productivity³⁹.

Improved Team Dynamics and Collaboration

Creativity fosters collaboration and strengthens team dynamics within businesses. Employees who are encouraged to collaborate on creative projects develop better communication and teamwork skills. Creative problem-solving in teams often leads to more inclusive and innovative solutions, as diverse perspectives are

valued and integrated. Creative collaboration then, is an effective way to improve group performance and develop innovative and effective solutions in business environments⁴⁰.

Customer Satisfaction and Brand Loyalty

Creative businesses also excel in creating memorable customer experiences. By using creativity to tailor their products, services, and marketing strategies, companies can engage customers on a deeper level, leading to perceptions of greater value and stronger brand loyalty. Businesses that differentiate themselves creatively tend to retain customers and attract new ones through word-of-mouth marketing⁴¹.

This information shows that the positive effects of creativity on an individual compound when put within an organisation, providing the ability to boost employee satisfaction, enhance team collaboration, and position themselves at the forefront of their industries. Moreover, creativity drives sustainable practices and customer engagement, making it a key component of long-term business success. Embracing creativity in all areas of operation allows businesses to build a highly satisfying work environment and sustainable success.

For Government

The words creativity and governance don't seem to be ones that naturally sit comfortably together. However, creativity within our public institutions is just as essential as it is for individual constituents and the organisations that operate within our communities. It is the height of hypocrisy for governments to be calling on its people to find new ways to solve-problems but then continue to sit comfortably within its own boring box.

Creativity within governance is vital for fostering innovation, adaptability, and problem-solving across local, state, federal, and global levels. As the world becomes more complex, governments must find novel ways to address the challenges of technological change, social inequality, climate change, and economic instability. And as changes are occurring at an astoundingly rapid rate, if governments are to be able to continue to best serve their people, then they must find ways to catch up quickly and support the new systems and structures in a timely and effective manner. Being left behind means governments become redundant, and they lose their power to shape society and cultures for the common good.

But by facilitating creativity in institutional processes, governments can enhance public services, increase civic engagement, improve the health of their citizens and

promote sustainable development, ensuring stewardship of resources for future generations.

Policy Innovation and Effective Problem-Solving

Creativity in government leads to policy innovation, allowing leaders to approach complex issues with fresh perspectives and develop more effective solutions⁴². For if a problem still exists, then it is clear that previous plans are not working, and a creative approach is warranted. Whether it's addressing housing crises, improving healthcare, or tackling climate change, creative thinking encourages policymakers to generate new questions about the issue, explore alternative answers and consider new frameworks by which they can implement initiatives. Creative governments are flexible, adaptable, confident and courageous, and are better equipped to adapt to emerging challenges and complex and evolving societal needs⁴³.

Improved Public Services

Creativity within government processes helps improve public services, making them more efficient, responsive and user centred. Local governments that embrace creative solutions can implement participatory governance models, allowing citizens to contribute ideas, collaborate on public projects and implement an approach of co-creation. This leads to more tailored services that better meet the needs of communities⁴⁴,

while at the same time fostering collaboration and connection.

Civic Engagement and Participation

Creative approaches to governance often lead to higher levels of civic engagement and participation. By using creative strategies like design thinking, participatory budgeting, and digital platforms, governments can involve citizens in decision-making, leading to more democratic and inclusive outcomes and also a greater sense of community identity. These creative models empower citizens to contribute to shaping their communities, leading to a greater sense of ownership and trust in public institutions and stronger social governance systems⁴⁵. Creative approaches also create communities.

Sustainable Development and Environmental Solutions

Creativity is essential for promoting sustainable development and addressing environmental challenges at the local, state and global levels. Governments that support creative approaches to sustainability—such as green urban planning, renewable energy initiatives, and innovative waste management systems—can meet climate goals while at the same time fostering economic development and securing natural resources for future generations⁴⁶.

Economic Growth and Job Creation

Creativity in government also drives economic growth by supporting creative industries such as technology, the arts, and education and supporting entrepreneurship, which can boost economic development. Local and state governments that invest in creative sectors can foster job creation, attract tourism, and encourage entrepreneurship, all of which contribute to a more robust and dynamic economy that drives innovation and inspiration for its people⁴⁷. In this way, creativity is a circular economy. While it requires resources to foster its growth, it gives back in terms of individual health, connected, resilient communities and financial rewards.

Global Cooperation

At the federal and global levels, creative thinking is crucial for fostering national and international cooperation and addressing transnational challenges such as pandemics, terrorism, and migration. Creative diplomacy—using innovative strategies like soft power, cultural exchange, and collaborative problem-solving—helps nations build stronger international relationships and work together on complex global issues⁴⁸. When we keep doing things the way we always have, we will continue to suffer through wars, poverty, violence and all manifestations of totalitarianism.

Climate Change Mitigation and Adaptation

Creative thinking is crucial in both mitigating and adapting to climate change. Innovations such as carbon capture and storage (CCS), climate-resilient agriculture, and geoengineering are examples of creative solutions aimed at reducing the impacts of climate change. Moreover, creativity is needed to develop policies and practices that help communities adapt to the changing climate, from designing flood-resistant infrastructure to implementing sustainable agriculture practices⁴⁹. Interestingly, many new approaches to climate concerns are using combinatorial creativity, blending ancient practices with modern technologies to achieve outstanding outcomes.

Crisis Management and Resilience

Governments that foster creativity are better prepared to handle crises when and where they arise and build resilience for recovery. Creative approaches to disaster response, pandemic management, and economic recovery help governments navigate uncertainty and rapidly adapt to new circumstances. Through fostering creativity in everyday activities, people become comfortable at dealing with uncertainty and develop flexibility to deal with problems as they arise. Therefore, by encouraging out-of-the-box thinking, governments can develop innovative crisis management strategies

that save lives and reduce long-term damage⁵⁰, and foster constituents that are well adept to handle the process of recovery.

Healthier People

As we have seen previously, engaging in creative activities offers substantial mental and physical health benefits, from improved immune function to enhanced mental wellbeing. From art therapy to music therapy, creativity has been shown to reduce anxiety, improve emotional resilience, and even enhance cognitive function, especially in older adults. Therefore, if a government truly cares for its people, it will stimulate and support creative endeavours, providing opportunities for people to engage in creative pursuits and collaborate with other creatives. Through these initiatives, governments are creating more dynamic, connected and resilient communities and are also working to improve their physical and mental health⁵¹.

Creativity is a powerful tool for governments at all levels, enabling them to innovate, solve complex problems, and improve public services. By fostering creativity in both individual and institutional processes, governments can engage citizens more effectively, promote sustainable development, drive economic growth and improve the health of its people. Additionally, creative approaches to governance

enhance a government's ability to respond to crises and adapt to the ever-changing global landscape. In this way, creativity is not just an asset for the private sector—it is essential for effective, forward-thinking governance. Any country, city or locality that wants to make itself great, must first learn how to foster creativity.

[Back to Table of Contents](#)

Core Concepts

The benefits of creativity include:

For the Creator:

- Boosts physical and cognitive health
- Enhances psychological wellbeing
- Promotes emotional resilience
- Improves problem-solving skills.

For the Community:

- Enriches the culture
- Strengthens social bonds
- Drives economic growth
- Effectively solves problems
- Supports resilience.

For Business:

- Drives innovation
- Boosts employee engagement
- Fosters competitive advantage
- Builds brand loyalty.

For Government:

- Improves public services
- Solves sticky problems
- Promotes sustainability
- Strengthens civic engagement and sense of connection with the community
- Enhances crisis responses and resilience
- Improves the health of its citizens.

Chapter 8 – The Cons of Creativity

The Law of Opposites tells us that everything has its counterpoint; every action has an antithesis. Where benefits exist, so do disadvantages, even just as a possibility. Therefore, while the pros of creativity are profound and prolific, we must also explore the other side of the coin: the cons of creativity. For they do exist and are a function of:

- The nature of the creative process.
- How creativity is used.

The Cons of the Creative Process

Creative approaches have many difficulties and downsides that can detract from their benefits or present significant barriers to those on the creative pathway. These include:

Unpredictability and Risk

Creative ideas and processes are often unpredictable, and there is no guarantee that they will lead to successful outcomes. Creative endeavours carry a certain level of risk because they involve venturing into the unknown, potentially resulting in wasted resources (time, money,

energy) if the creative solution does not work or fails to gain acceptance⁵². However, it could also be argued that there is no such thing as wastage or failure if the process has resulted in some learning. Nevertheless, in communities and organisations where resources are scarce taking risks that may provide no tangible rewards may see creative approaches deemed an unacceptable option.

Stress and Mental Health Issues

While creativity has so many potential health benefits, when the delivery of creative outputs comes with extreme pressure, this can lead to stress, burnout, and mental health issues. And in fact, as outlined by Byung-Chul, the obsession to deliver creative outputs within extreme deadlines may compromise the level of creativity applied and the overall quality of outcomes. This harmful approach to creativity can be found particularly in industries that value constant innovation, such as the highly competitive fields of technology, art, and advertising.

Additionally, if a creator cares more about validation and acceptance by the field than their own growth and flourishing, then continually being ignored or rejected could have a massive negative impact on their mental and emotional wellbeing, causing them to reconsider

their purpose and even continuing their creative projects.

Isolation and Conflict

An inherent part of creativity is thinking differently and developing ideas that are novel and even nonconforming to social norms. This can mean that those undertaking creative endeavours may be marginalised and even experience extreme social isolation⁵³. Because creative people tend to challenge established norms and question the status quo, they may face resistance from those who prefer conventional thinking. This nonconformity can lead to friction in team environments, where group cohesion is important and lead to the conflict between collegiality and camaraderie on the one hand and creativity on the other.

Creative conflict can arise when multiple creative minds work together but fail to align on priorities, directions, or desired outcomes, hindering collaboration, disrupting team dynamics and impacting the quality of the outputs⁵⁴. Both isolation and conflict can lead to loneliness and anxiety, both precursors to a range of mental health issues.

Lack of Focus

Excessive creativity can lead to a lack of focus and, in some cases, chaos. Continually exploring new ideas

without a clear purpose or strategy can result in the inability to actualise any valuable outcome. Instead of providing a sense of meaning, it can lead to a feeling of instability, mania and incompetence. This is why it is said that the opposite side of the creative coin is "discipline", for it is the rigour of following through on ideas that ensures innovation and valuable outcomes are achieved⁵⁵.

Overwhelming Complexity

Creativity can sometimes result in overly complex solutions that are difficult to implement or understand or are inefficient to implement⁵⁶. While creativity seeks to push boundaries, the solutions generated may be too elaborate or abstract, leading to confusion or resistance. This can particularly be a problem when creative innovations are not easily scalable or practical in everyday applications. Co-creation processes with customers and clients can ground innovations in reality and enable an outcome that is both new and valuable.

Time Consumption

Creative processes may take longer than routine tasks, for, as we will see later, they can involve deep contemplation and engagement with the work and many iterations of exploration and experimentation. This

time-consuming nature of creativity can be a disadvantage, particularly in industries or situations that require quick decision-making or rapid results⁵⁷.

So, while creativity brings many benefits, it has challenges. Unpredictability, risks, time delay, isolation and conflict, are all issues that arise when creativity is not properly managed or directed. Understanding the downsides of creativity allows individuals and organisations to navigate these risks and harness the power of creativity in a balanced and sustainable way. The levers available to individuals and organisations to minimise and mitigate these drawbacks are covered in the final chapter.

How Creativity Is Used

In itself, creativity is neither good nor bad; it does not come with morality embedded. It is a skill that can be applied in any way a person or organisation desires and to advance any end they seek. While some can use creativity to rectify social injustice, it can also be employed to maintain inequality. Similarly, where creative pursuits can be implemented to improve community health, they can also inflict harm. Creativity, then, is not an end in itself but a tool to deliver upon the creator's intentions.

Creativity, celebrated as a force for progress and transformation, operates within the ethical and moral frameworks of its creators and the societies they inhabit. While its potential for positive change is immense, creativity can also take a darker turn when applied to unethical, harmful, or destructive purposes⁵⁸. Like everything, creativity has a shadow side, requiring consideration of its moral implications, the cultural contexts that shape it and the ethical frameworks that support it.

Immoral Inventions

The same imaginative processes that lead to breakthroughs in art, science, and technology can also give rise to innovations with harmful consequences. For instance, creative ingenuity has been harnessed to develop sophisticated weaponry, enabling destruction on a massive scale. The invention of nuclear arms, while a feat of scientific creativity, has also posed existential risks to humanity.

Similarly, creative thinking is often used manipulatively, such as in deceptive advertising campaigns that exploit psychological vulnerabilities to drive consumer behaviour. These tactics may creatively engage audiences but do so at the expense of ethical considerations, fostering consumerism, misinformation, or even public harm.

In the digital age, creativity has also fuelled harmful innovations in cybercrime. Hackers and malicious actors deploy novel methods to breach security systems, steal sensitive data, and disrupt critical infrastructure. The creative algorithms behind phishing schemes and ransomware attacks illustrate how ingenuity, when misdirected, can lead to significant harm.

One of the most pressing examples of creativity's darker side is the rise of malicious algorithms designed to exploit human psychology. Social media platforms and digital ecosystems employ creative algorithms to capture attention and maximise user engagement, often leading to internet addictions and reduced mental well-being. By creatively analysing user behaviour, these algorithms exploit vulnerabilities to keep users scrolling, clicking, and consuming content—sometimes at the expense of their mental health and personal relationships. For example, algorithms on social platforms like YouTube or TikTok are creatively designed to predict and push content most likely to keep users engaged. While this can enhance user experience, it can also lead to the spread of misinformation, and polarisation, raising ethical questions about the responsibility of creators and corporations.

There is no doubt that these inventions are both novel and valuable, which classifies them as creative. However, the benefits from these innovations are gained

by the few and at the expense of the many. Not only that, but they seek to take advantage of the vulnerability of others, making these things creative, yes, but also cowardly.

Creativity to Cement Power

While often celebrated as a force for innovation and progress, creativity is not immune to corruption and manipulation. We have seen how valuable creativity is, and so we should not be surprised that across history, it has been wielded not only to inspire and liberate but also to consolidate power, skew culture in self-serving ways, and reinforce systems of control. In this context, creativity becomes a tool not only for expression and transformation but also for political ends.

One of the most significant ways creativity can be used to cement power is through the dynamics of the creative field. As defined by Mihaly Csikszentmihalyi's systems model of creativity, the field—comprising gatekeepers like critics, curators, publishers, and funders—determines what creative works are accepted, celebrated, and remembered. This gatekeeping role inherently holds the ability to shape the domain and define what is considered valuable or innovative.

However, gatekeeping is far from a neutral process. It can be influenced by personal biases, societal norms, and political or economic interests. Those in positions of

power within the field often can exclude voices that challenge the status quo, favouring works that align with dominant ideologies or commercial interests. This raises critical questions about access, authority, and equity in creativity:

- Who gets to be the gatekeepers?
- How is the decision made as to what is valuable or meaningful?
- Whose voices and perspectives are marginalised or excluded and how does this benefit the gatekeepers?

For example, in the art world, marginalised artists may struggle to gain recognition because their work does not align with the tastes or priorities of influential gatekeepers who come from generalised backgrounds. Similarly, in the publishing industry, creative works that tackle controversial or radical ideas may be sidelined in favour of safer, more marketable content, as, for these people, success is indicated by how much money is made.

As we will see in later chapters, technology has assisted to decentralise and democratise creativity, allowing artists and inventors direct access to audiences, investors and customers. However, the field still exists, increasingly in the form of influencers on social media, and so these new players are also subject to the realities of power games and politics.

Another avenue through which creativity is corrupted is its commodification under capitalism. Creativity is increasingly viewed as a marketable skill, and creative outputs are often judged not by their intrinsic value but by their potential to generate profit. This has significant implications for culture, as commercial interests often shape what is produced, consumed, and celebrated. Popularity and profitability become proxies for value, sidelining works that challenge dominant narratives or push artistic boundaries.

For instance, the entertainment industry often prioritises blockbusters and sequels over experimental or independent films, perpetuating formulas that guarantee financial returns and prioritising entertainment over art. This dynamic raises important questions about the relationship between creativity and commerce:

- What makes a creative work valuable?
- Who decides its value, and what criteria are used?

The commodification of creativity extends beyond outputs to tools and technologies that promise to enhance creative potential. Neuromodulation devices, for example, are marketed as tools to boost cognitive flexibility and ideation, tapping into the high demand for creativity in fields like technology, marketing, and design. These are the performance-enhancing tools of the creative world. While these tools may be effective to

some extent, they also raise ethical concerns about the commercialisation of creative potential and the societal pressure to constantly enhance productivity.

Terry Eagleton, a philosopher who critiques creativity, specifically its socio-political dimensions, warns against the exploitation of creativity by economic and ideological forces. In *The Ideology of the Aesthetic*⁵⁹, Eagleton argues that creative works are embedded within systems of power and privilege. Creativity, he suggests, is a double-edged sword: it has the potential to challenge social inequalities and inspire change, but it can also perpetuate existing power structures when co-opted by market forces.

Eagleton invites us to examine creativity's role in sustaining or subverting the status quo by asking the following critical questions about the power structures that surround it:

- Who defines creativity?
- How did they get that authority (has it been invested, or is it implied)?
- Who benefits from the definition of creativity?
- Is creativity being wielded to either sustain or subvert the status quo?

Creativity holds immense power, but as we have heard from some of the philosophers earlier, it is a power that must be wielded with intention and responsibility. We

all have the freedom to create, but we also have the responsibility to recognise our interdependence and to act with integrity. By critically examining how creativity is shaped and directed, we can ensure it remains a tool for liberation and progress rather than a means of entrenching inequality and exploitation.

Government plays a key role in this endeavour, for while market forces may push towards the commercialisation and commodification of creativity, policies and social investments can ensure access and support for amateur and marginalised creators, reducing the potentially toxic effects of centralised gatekeeping power.

[Back to Table of Contents](#)

Core Concepts

The challenges of the creative process include:

- Unpredictability and risk
- Stress and mental health issues
- Isolation and conflict
- Lack of focus
- Overwhelming complexity
- Wastage of resources.

Ethical concerns in creativity arise when there are:

- Immoral or harmful inventions
- Misuse of power for personal gain
- Commodification impacting cultural value.

Critical questions to consider:

- Who defines creativity, and who benefits from this definition?
- Is creativity being used to challenge or sustain the status quo?
- How can creativity be wielded ethically and responsibly?

The role of governments include:

- Ensuring equal access to and support of creativity by supporting amateur and marginalized creators and mitigating harmful effects of commodification.
- Establishing ethical frameworks to ensure creativity serves as a force for liberation, accountability and collective progress.

Chapter 9 – Creativity in the Brain

Neuroscience has become an expansive and exciting field and has enabled us to look behind the curtain at the chemical and electrical processes occurring in our brains during creative activities. Some Eastern philosophies suggest that what we see in MRI scans is only a physical result of the influences from a more immense and invisible identity called the mind and that the brain is not the cause of creativity but a mediator between mind and body. We will explore this idea further in the following section on creativity as a spiritual practice. However, regardless of whether you believe that the mind and the brain are separate or the same thing, understanding those physical systems stimulated during moments of curiosity, connection, and invention provides great insight. Let's look at what we can learn from our brains about creativity.

Neural Networks Involved in Creativity

Recent neuroscience research has revealed that creativity is not located in merely one centre of the brain but is driven by the interaction of multiple brain networks, primarily the:

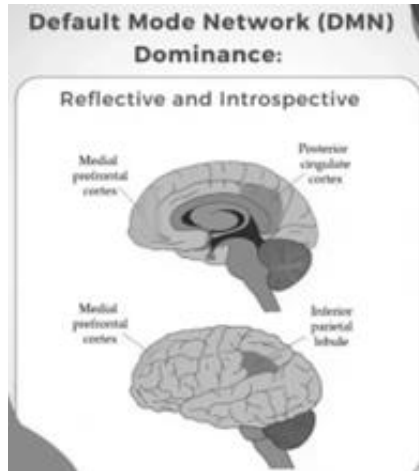
- Default Mode Network (DMN)
- Executive Control Network (ECN)
- Ventral Attention Network (VN).

These three networks interact to balance spontaneous idea generation with focused attention, allowing individuals to develop new ideas and refine and implement them.

The Default Mode Network (DMN)

The key regions of the DMN include the posterior cingulate cortex and medial prefrontal cortex. This network is most active during introspective activities such as reflection, deep thinking, mind-wandering, planning for the future and imagination. The DMN, therefore, is a core player in generating novel and divergent ideas⁶⁰. The internal processes of thoughts and ideas allow individuals to freely associate between different concepts and experiences, often without deliberate effort. This freedom to explore seemingly unrelated thoughts is essential to creativity, particularly in the idea-generation phase. During times of stress, it can facilitate people turning inwards to self-soothe and find solace. It may stimulate the undertaking of creative activities to help process experiences and emotions⁶¹.

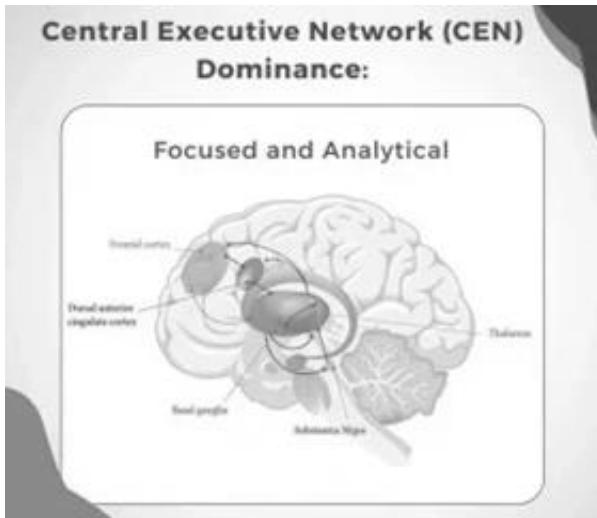
Figure 3 - The Default Mode Network in the Brain



The Executive Control Network (ECN)

In contrast, the ECN (or the Central Executive Network, CEN) is involved in cognitive control, attention, and planning. As such, it is essential in decision-making and task completion. It comprises the frontal and parietal lobes and becomes engaged when individuals focus on an activity or are undertaking analysis to evaluate the feasibility of their ideas. In creativity, the ECN is essential for idea evaluation, where individuals must assess the value and practicality of the novel concepts generated by the DMN.

Figure 4 - The Executive Control Network in the Brain

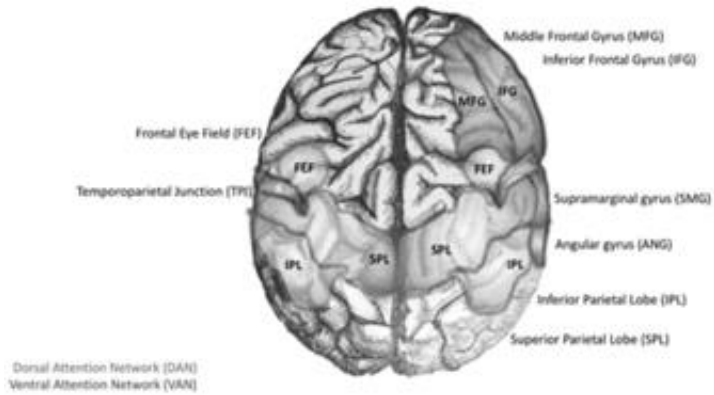


The Ventral Attention Network (VN)

The Ventral Attention Network (VN) plays a crucial role in detecting and responding to salient external or internal stimuli. It acts as a dynamic bridge between internally focused tasks, such as introspection and creative ideation, and externally driven demands, such as reacting to environmental changes. By facilitating attentional shifts, the VN ensures that individuals can transition effectively between generating ideas and evaluating their relevance or adapting to immediate challenges. In the context of creativity, the VN helps balance focus, allowing creators to stay open to new inspirations while maintaining awareness of external constraints or opportunities. Its flexibility is vital in

dynamic or high-pressure environments, where balancing focus and responsiveness is key.

Figure 5 - The Ventral Attention Network⁶²



The Interaction Between Networks

The interaction between the networks in the brain showcases the incredible orchestration required to foster creativity. The Default Network (DN) and Executive Control Network (ECN) collaborate dynamically during creative tasks, seamlessly integrating goal-directed memory retrieval with pre-potent response inhibition. This interaction is essential when generating novel ideas while avoiding conventional or habitual responses. For instance, brainstorming a fresh concept requires retrieving unique memories or associations (supported

by the DN) while suppressing clichéd or irrelevant ones (enabled by the ECN).

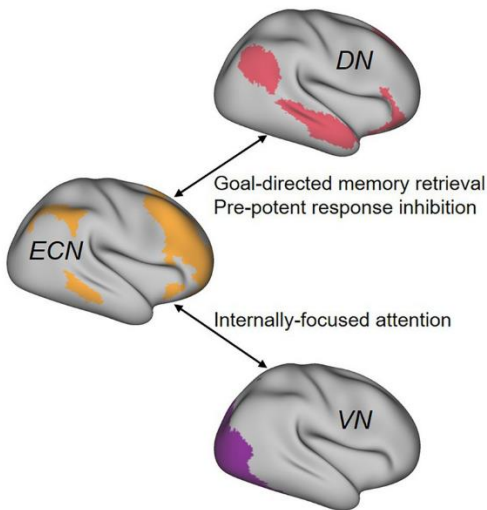
Moreover, internally focused attention—the ability to maintain creative ideation amidst external distractions—relies on the interplay between the DN and the Ventral Attention Network (VN). The VN manages the balance between staying anchored in internally directed thought processes, such as imagination and daydreaming, while remaining receptive to external cues. This synergy allows creators to immerse themselves in ideation without being overwhelmed by external stimuli.

What makes creativity remarkable is how it harmonises opposing modes of thought supported by the DN and ECN, two networks often in opposition during other cognitive tasks. While the DN becomes more active during moments of introspection and mind-wandering, the ECN takes the reins when task-related cognitive control is required, such as refining ideas to meet specific goals. In the early phases of creativity, the DN dominates, enabling free-flowing ideas. Later, as these ideas are evaluated and shaped, the ECN takes over, applying structured thought and top-down control.

This network interaction highlights the brain's extraordinary ability to navigate the complex balance between uninhibited ideation and disciplined

evaluation. The accompanying diagram vividly illustrates these interdependencies, demonstrating how the dynamic coordination of these networks propels the creative process forward, bridging imagination with execution.

Figure 6 - The Interaction Between Neural Networks in Creative Processes⁶³



These neuroscientific findings directly support the research of Mihaly Csikszentmihalyi, who identified that creative individuals often display and balance opposing traits. Csikszentmihalyi found that highly creative people can be both playful and disciplined, extroverted and introverted, and humble yet proud. This ability to balance opposing traits aligns with how the

brain alternates between the spontaneous, imaginative processes of the DMN and the disciplined, evaluative functions of the ECN. Creative individuals can "switch" between these modes, allowing them to explore new possibilities (playfulness, extroversion) while maintaining the ability to control and refine their ideas (discipline, introversion). This balance mirrors the brain's ability to move between divergent thinking and focused attention, enhancing the creative process.

These neuroscientific findings provide physical evidence for what philosophers and psychologists have long suspected: creativity results from a dynamic balance between opposing forces. Whether it's the balance of playful and disciplined traits in creative individuals (Csikszentmihalyi) or the merging of Dionysian passion and Apollonian order (Nietzsche), the brain's networks reveal how creativity is born from the interaction of chaos and control. Neuroscience confirms what ancient philosophers intuitively understood—creativity emerges when the brain harnesses freedom and focus.

The Role of Memory in Creativity: A Neurobiological Perspective

Creativity is deeply intertwined with the brain's ability to store, retrieve, and recombine memories in novel ways. Far from being localised to a single area, memory

is distributed across interconnected brain regions, each uniquely shaping how past experiences and knowledge inform creative processes.

Explicit Memory and Its Creative Role

Explicit memories, encompassing episodic (personal experiences) and semantic (facts and general knowledge) types, are fundamental to creativity. These memories are processed and stored across three major brain regions: the hippocampus, neocortex, and amygdala⁶⁴.

- **Hippocampus:** Situated in the temporal lobe, the hippocampus is responsible for forming and indexing episodic memories. For instance, a personal memory of a family trip might later serve as inspiration for a creative story or painting. The groundbreaking study of Henry Molaison, whose hippocampus was removed, revealed that this region is essential for creating new long-term memories. However, it is not the final repository for stored memories.
- **Neocortex:** Over time, certain memories are transferred from the hippocampus to the neocortex, becoming consolidated into general knowledge. This transfer, often occurring during sleep, equips creators with a repository of concepts and facts to draw upon when generating ideas or solving problems.

- **Amygdala:** By attaching emotional significance to memories, the amygdala amplifies their impact on creativity. Strong emotional memories, such as those tied to joy, fear, or grief, often shape the depth and intensity of creative works. For example, a poet might channel memories of heartbreak into emotionally resonant verses.

Implicit Memory and Motor Creativity

Implicit memories involving unconscious learning, like motor skills, are critical for physical forms of creativity, such as playing an instrument or dancing. These memories are rooted in the basal ganglia and cerebellum:

- **Basal ganglia:** These structures are integral to sequencing complex motor activities, like choreographing a dance routine or mastering intricate piano compositions.
- **Cerebellum:** Known for fine motor control, the cerebellum ensures precision and subtlety in physical actions, such as a sculptor's delicate carving or a pianist's nuanced touch on the keys.

Working Memory and Creative Synthesis

The prefrontal cortex (PFC), responsible for short-term working memory, is a critical player in the creative

process. It allows individuals to hold and manipulate information actively, enabling the synthesis of new ideas. For example, during brainstorming, the PFC helps retain and combine fragments of information into cohesive, innovative concepts.

Associative Thinking: Memory Networks in Action

Creativity often emerges from associative thinking, a process where the brain links unrelated memories or concepts to form new meanings. This dynamic interaction is facilitated by the connectivity between the prefrontal cortex and temporal lobes, which work together to recall, recombine, and recontextualise stored information. Neuroscience research, such as that by Jung and Haier (2013)⁶⁵, highlights how higher connectivity between these regions enables creative individuals to think flexibly and make unexpected connections.

Emotional and Contextual Influence on Creativity

The emotional tone and context of memories also play a vital role in creative ideation. For instance, the amygdala's role in shaping emotionally charged memories explains why deeply personal or poignant experiences often inspire impactful creative works. Similarly, the PFC supports emotional regulation during creative pursuits, ensuring that emotional memories are

channelled productively rather than overwhelming the creative process.

Margaret Boden's Concept of Combinatorial Creativity

The brain's ability to synthesise information from disparate sources closely aligns with Margaret Boden's concept of combinatorial creativity⁶⁶. Boden describes this as generating novel ideas by innovatively combining pre-existing elements. For instance:

- A filmmaker might merge elements of dystopian fiction with documentary storytelling to create a unique narrative format.
- A musician could blend traditional folk melodies with electronic beats to craft a new genre.

This process relies on the brain's ability to recombine explicit and implicit memories stored across various regions, echoing Boden's idea that creativity stems from the interplay of familiar elements in novel configurations.

Creativity is not a singular cognitive act, but a multi-faceted interplay of memory systems distributed across the brain. Whether drawing on personal experiences stored in the hippocampus, tapping into general knowledge consolidated in the neocortex, or leveraging motor skills governed by the basal ganglia and cerebellum, creative thought emerges from the intricate collaboration of these regions.

The Role of Neurotransmitters in Creativity

Creativity is a complex cognitive and emotional process involving a complex interplay of neurotransmitters that regulate mood, focus, cognitive flexibility, and neural plasticity. Dopamine, serotonin, norepinephrine, endorphins, acetylcholine, glutamate, and GABA all contribute to different aspects of the creative process, from generating ideas to refining and implementing them. These chemicals facilitate communication between neurons and influence mood, focus, flexibility, and other factors critical for creativity. The following table provides a breakdown of the key neurotransmitters involved in creativity and their roles.

Interestingly, dopamine is best known for making people feel good. It is released during activities essential for human survival, such as eating, sexual activity, social bonding, and problem-solving. These dopamine-driven behaviours ensure that individuals continue to engage in activities that promote their survival and the survival of the species. It is fascinating, then, that dopamine also shows up as a reward system in creative pursuits. Just as it reinforces survival-related behaviours, dopamine reinforces creativity by making it a pleasurable and rewarding experience. Moreover, it allows people to become extremely resourceful to find ways to partake in creative activities.

UNDERSTANDING CREATIVITY

Neuro-transmitter	Function	Role in Creativity	Reference
Dopamine	Regulates reward, motivation, and pleasure.	Enhances divergent thinking, cognitive flexibility, resourcefulness and idea generation.	Beaty et al. (2018) ⁶⁷
Serotonin	Regulates mood, emotion, and social behaviour.	Fosters emotional balance and resilience, aiding creative thinking.	Crockett et al. (2008) ⁶⁸
Norepinephrine	Supports alertness, focus, and energy.	Promotes sustained focus and arousal, critical for executing creative tasks.	Runco & Jaeger (2012) ⁶⁹
Endorphins	Reduces pain and increases feelings of pleasure.	Boosts morale and helps maintain motivation during prolonged creative efforts.	Schott et al. (2015) ⁷⁰
GABA (Gamma-Aminobutyric Acid)	Inhibits excessive neural activity and promotes relaxation.	Supports relaxation and reduces anxiety, creating a conducive state for creativity.	Mayseless & Shamay-Tsoory (2015) ⁷¹
Acetylcholine	Facilitates learning, memory, and muscle function.	Enhances associative memory and idea linking, supporting innovative thinking.	Runco (2007) ⁷²
Glutamate	Main excitatory neurotransmitter in the brain; involved in learning and memory.	Facilitates neural connections and supports long-term memory essential for idea recombination.	Abraham (2014) ⁷³

The presence of dopamine hits during creative activities suggests that creativity is essential for personal fulfilment and the survival and thriving of the human race. Creative thinking leads to innovation, adaptability, and problem-solving, all of which are critical for humans to navigate complex environments, overcome challenges, and improve their quality of life. Dopamine's involvement in creativity underscores its role in driving progress on an individual and societal level.

Neuroplasticity As the Foundation for Creativity

Neuroplasticity is a term that describes the brain's remarkable ability to reorganise itself by forming new neural connections throughout life. Neuroplasticity is the quality of the brain that allows us to learn new things. Moreover, when we practice something, engage in repeated behaviours, over time, through neuroplasticity, these actions become automatic. We achieve automaticity. Then, they require significantly less cognitive effort, allowing individuals to focus on innovative and exploratory aspects of their craft. For example, when a painter achieves automaticity, they no longer have to concentrate on brush techniques or colour mixing—they have already mastered these basic skills. Now they can instead channel their energy into experimenting with new styles or expressing profound ideas.

Neuroplasticity, by facilitating mastery⁷⁴, plays a pivotal role in creativity by freeing the mind to explore, imagine, and innovate. By understanding this connection, we can better appreciate how practice and repetition, far from stifling creativity, actually lay the groundwork for its most profound expressions.

The Path from Automaticity to Mastery

Automaticity emerges as a direct result of the brain's capacity for neuroplasticity. When learning a new skill, the brain's prefrontal cortex—responsible for conscious attention and decision-making—is initially highly active. As a person practices, neural pathways associated with the skill are reinforced through a process known as synaptic pruning, where redundant connections are eliminated, and essential pathways are strengthened. Gradually, regions like the basal ganglia, which are involved in habit formation, take over. This neural adaptation allows the task to be performed with minimal conscious effort, freeing up the brain's prefrontal resources for higher-order activities.

For example, a novice pianist learning to play must consciously focus on finger positioning, rhythm, and coordination. Initially, every note requires deliberate thought, with the prefrontal cortex driving the process. However, as the pianist practices, the brain optimises performance by shifting control to automatic neural

circuits. This process, driven by neuroplasticity, allows the pianist to transition from basic mechanics to expressive artistry, unleashing their creative potential.

From Mastery to Creativity

Once automaticity is achieved, the individual reaches a level of mastery where they not only perform the skill with ease but also understand its deeper principles. The brain's executive function, now freed from the mechanics of the skill, can focus on more complex and creative applications. Mastery involves automaticity and a deeper comprehension of the domain's underlying rules, enabling the individual to improvise and innovate.

For example, a chess grandmaster no longer has to think about basic moves and strategies because these have become automatic. Instead, their brain can engage in strategic foresight, pattern recognition, and creative problem-solving. Similarly, a master chef no longer has to think about the fundamentals of cooking but can experiment with flavours and techniques, creating unique dishes. A master coder, whose basic programming skills have become automatic, can apply their knowledge creatively to solve unique challenges, build innovative applications, or develop new technologies. Likewise, an experienced artist can use their mastery of painting techniques to experiment with form and style, pushing the boundaries of their medium.

In creative domains, mastery is often the foundation for innovation. Having internalised the skills needed for the task, the brain can now engage in divergent thinking, exploring new possibilities, techniques, or solutions. This leads to creativity, where individuals use their expertise to create something new or adapt old ideas in novel ways⁷⁵.

Neuromodulation Techniques and Creativity

Recent advances in neuromodulation techniques, such as transcranial direct current stimulation (tDCS) and transcranial magnetic stimulation (TMS), have opened new avenues for enhancing creative cognition. These non-invasive brain stimulation methods are used to modulate neural activity in specific brain regions involved in creativity, particularly the prefrontal cortex and parietal cortex, which we have seen are associated with problem-solving, idea generation, and attention.

Transcranial Direct Current Stimulation (tDCS)

tDCS is a technique that uses a weak electrical current to stimulate or inhibit neural activity in targeted regions of the brain. Research has shown that stimulating areas like the left dorsolateral prefrontal cortex (associated with executive control and cognitive flexibility) can improve performance on tasks requiring divergent thinking—a key component of creativity.

For example, in a study by Chi and Snyder (2012)⁷⁶, tDCS applied to the prefrontal cortex enhanced creative problem-solving in participants, helping them think outside conventional boundaries and develop novel solutions more efficiently. These findings suggest that tDCS can temporarily alter brain activity to facilitate more creative outcomes.

Transcranial Magnetic Stimulation (TMS)

TMS uses magnetic fields to stimulate or suppress activity in specific brain regions. Like tDCS, TMS has been shown to increase creative cognition by modulating the brain's control networks, allowing for a freer flow of ideas and enhancing cognitive flexibility. Studies have shown that TMS can help reduce cognitive inhibition, which often limits the generation of novel ideas, by temporarily reducing activity in areas that impose rules or conventions on thinking.

For instance, Cerruti and Schlaug's (2009)⁷⁷ research demonstrated that low-frequency TMS applied to the right dorsolateral prefrontal cortex could decrease cognitive control, encouraging more freeform, creative thinking.

While neuromodulation techniques offer promising potential to enhance creativity, there are important ethical concerns to consider. These concerns primarily revolve around the fairness, safety, and long-term

consequences of using such technologies to manipulate brain function.

- **Fairness and Accessibility:** Enhancing creativity through neuromodulation could create disparities in access, where only those with sufficient financial resources could augment their cognitive abilities. This raises questions about the fairness of such interventions, particularly in competitive fields like art, science, or education.
- **Safety and Long-Term Effects:** Although tDCS and TMS are considered safe when used under controlled conditions, there are still unknown risks associated with their long-term use. Continuous stimulation of certain brain regions could alter neural pathways in unintended ways. Fitz and Reiner (2015)⁷⁸ raise concerns about the potential for overuse and the lack of understanding about the long-term impacts of repeated brain stimulation.
- **Coercion and Consent:** There is also the possibility of coercion in environments where high creativity is demanded, such as in the workplace or competitive fields. Individuals may feel pressured to use neuromodulation techniques to maintain a competitive edge,

leading to ethical concerns about the voluntariness of such decisions.

- **Authenticity of Creativity:** Another ethical consideration is the question of authenticity. If creative ideas or artistic expressions are influenced by neuromodulation, it raises questions about the authenticity of the work produced. Is creativity enhanced through artificial stimulation still considered "natural," or does it alter the value of the creative process?

As we stand at the crossroads of neuroscience and creativity, the potential for neuromodulation techniques to revolutionise creative cognition cannot be ignored. These technologies, with their ability to stimulate idea generation and enhance problem-solving, present exciting opportunities for individuals and industries.

However, they also bring profound ethical and philosophical questions about fairness, authenticity, and the long-term effects on our cognitive and emotional landscapes. Will neuromodulation become the performance-enhancing drug of the creative world, redefining the boundaries of innovation, or will its use remain limited to niche applications? The answer may shape the very essence of human creativity in the decades to come.

[Back to Table of Contents](#)

Core Concepts

Creativity involves multiple brain networks, primarily the:

- Default Mode Network (DMN) - supports introspection, imagination, and divergent thinking.
- Executive Control Network (ECN) - manages cognitive control, evaluation, and refinement of creative ideas.
- Ventral Attention Network (VN) - transitions attention between internal ideation and external demands.

Creativity leverages explicit and implicit memories stored across the hippocampus, neocortex, and amygdala for ideation, emotional depth, and motor skills.

Dopamine, serotonin, norepinephrine, and others influence mood, focus, and cognitive flexibility, facilitating creativity.

Neuroplasticity enables skill mastery, freeing cognitive resources for higher-order creative exploration and innovation.

Emerging technologies like tDCS and TMS show potential for enhancing creative cognition but raise ethical concerns around fairness, safety, and authenticity.

Chapter 10 – Creativity in the Body

"There is more wisdom in your body than in your deepest philosophy." ~ Friedrich Nietzsche

In his book *Out of Our Heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness* (2009)⁷⁹ Alva Noë challenges the traditional view that the brain alone is the seat of consciousness and creativity. Instead, he argues for an embodied approach, asserting that our minds are deeply intertwined with our physical bodies and the environment. In this view, creativity arises not solely from abstract and intangible thought processes in the brain but from the dynamic interplay between the mind, body, and the external world. Creativity, then, is a distributed phenomenon.

As Nietzsche suggested, our physical forms hold great intelligence is both essential to and imbued within the creative process. Our body is far more than a passive vessel for creative ideas—it is a dynamic participant in gathering experience, sharing self-expression, and actualising creative outputs.

Creativity and the Senses

*"All our knowledge begins with the senses." ~
Immanuel Kant*

With this succinct statement, Kant recognises that sight, sound, touch, taste, and smell are the gateways through which we experience and come to understand the world. They provide unique contributions to creative work, delivering a wealth of information and inspiration. Moreover, the outputs of creative activities seek to stir the sense of others, engaging the physicality of the audience and ensuring the experience of art and innovation is an ever-expanding, embodied experience. Let's dive deeper into the integral role each of our senses plays in creativity.

Sight

Visual stimuli are foundational for creative processes, providing inspiration through colours, shapes, light, motion, form and spatial relationships. The interplay of these visual components can form the basis for how a person perceives and creates art, with their combinations evoking a whole range of emotions. Additionally, the ability to organise and find patterns in visual stimuli and to imagine structure and systems around what appears

chaotic are also at the heart of many exploratory breakthroughs.

Sound

Sounds, both natural and artificial, can evoke emotions and influence mood, sparking new ideas and stimulating many creative forms. Music is not just a creative output but also an important input to the creative process. It has been found that music stimulates creative thinking by engaging both the left and right hemispheres of the brain. While the left hemisphere handles patterns and structure, the right hemisphere supports abstract thinking and emotional interpretation, allowing music to inspire creativity and problem-solving. Music also has a powerful ability to evoke emotions, helping people express feelings that are difficult to articulate through language. Levitin notes that this emotional connection to music can lead to deeper creative insights and personal transformation⁸⁰.

Additionally, exposure to natural sounds, such as flowing water or rustling leaves, has been associated with increased creativity. These sounds can reduce stress and improve mood, creating a mental state conducive to creative thinking.

In contrast, exposure to high levels of urban noise can negatively impact creativity. Research indicates that while moderate ambient noise (around 70 decibels) may

enhance creative thinking, higher noise levels (above 85 decibels), typical in bustling city environments, can impair creativity by overwhelming cognitive processes and reducing information processing capacity⁸¹. Additionally, chronic exposure to urban noise has been linked to increased stress levels, sleep disturbances, and cognitive impairments, all of which can detrimentally affect creative abilities.

Touch

The sense of touch is pivotal in creativity, especially in fields that rely heavily on tactile interaction with materials, such as sculpture, textile design, and architecture. The ability to manipulate and engage with physical objects through touch allows creative individuals to explore materials' texture, weight, shape, and flexibility, which directly informs their creative processes. For instance, in pottery, artists constantly adjust the pressure and movement of their hands to shape the clay, responding to its texture and resistance. This interactive process helps the artist develop a deep connection with the material, allowing creativity to flow as they experiment with different forms and techniques. The sensory feedback helps the artist stay present in the creative process, making decisions that respond to the physical qualities of the medium and enable the forming of a relationship with it, deepening the embodiment of the artist within their art. Similarly, for writers, the grip

of the pen and the feel of the paper, or the deliberate act of pressing each letter on a keyboard, can encourage mindfulness, allowing writers to engage more fully with their thoughts and expressions. This tactile interaction bridges the writer's internal ideas and their external expression, making the writing process more tangible and, for some, more creatively fulfilling.

Taste and Smell

Both taste and smell are complex sensory systems that directly influence how people experience the world. Their nuanced capacity to trigger emotions, memories, and associations makes them powerful tools in the creative process. The olfactory system can detect thousands of odours, making it much more complex than taste, which is limited to basic categories like sweet, sour, salty, bitter, and umami. This richness in smell allows chefs and perfumers to create multi-layered experiences through subtle variations in ingredients. Additionally, research has demonstrated that olfactory stimuli can evoke memories and emotions, becoming a tool through which creators can call upon an immense library of past experiences, ideas and inspiration⁸².

Taste profoundly influences the human experience, connecting us to culture, memory, and emotion. It evokes sensory pleasure and nostalgia, with flavours often tied to specific moments or traditions, shaping personal and collective identities. While familiar

flavours can comfort or bring up challenges of the past, new individual tastes or unique combinations can excite and engage. In creativity, taste inspires culinary arts, literature, and even design, stimulating imaginative associations and storytelling. The interplay of taste with other senses fosters multisensory experiences, enriching artistic expression and offering new perspectives on how we perceive and interpret the world. In the culinary arts, creativity emerges from exploring new combinations of flavours and aromas that push boundaries and defy traditional expectations. Through taste, these creators shove us out of our comfort zones and challenge us to see different possibilities and perspectives.

Movement

When we think of the role of movement in creativity, we likely default to ideas about dance. Certainly, dance is the epitome of embodied creative expression. Dancers use movement to communicate emotions, tell stories, and explore ideas beyond what language can convey. Choreographing a dance itself is a creative process involving improvisation, spatial awareness, and emotional expression. Research shows that engaging in dance boosts cognitive flexibility and enhances emotional and psychological well-being. Dance movement therapy can improve emotional regulation and encourage creative problem-solving. For this

reason, it is being recognised as an effective form of therapy for those working through psychological challenges⁸³.

Whether through dance, sports, or everyday physical activities, movement stimulates both the body and mind, allowing for new perspectives and creative breakthroughs. Movement-based activities allow individuals to explore their environment in a dynamic way, offering a direct pathway for innovative thinking. Many people report experiencing creative breakthroughs while engaging in physical activities such as walking, exercising, or dancing. Physical movement can help release mental blocks by allowing the mind to roam freely, and the repetitive nature of certain movements can encourage mind-wandering and divergent thinking, which are key to generating new ideas.

More specifically, in sports, physical movement enhances creativity by allowing athletes to think on their feet and solve problems in real time. Athletes often exhibit spontaneous creativity as they adapt to the changing dynamics of a game, adjusting their movements and strategies based on the actions of their opponents or teammates⁸⁴.

The Mind-Body Connection

*"The mind and body are like parallel universes." ~
Deepak Chopra*

The intricate relationship between the mind and body is a cornerstone of human creativity. If creativity is an embodied phenomenon, then the quality of our creative processes and outputs is contingent on the health of our physical forms. Here are just a few examples of the mind-body connection evident in creativity.

Strength

*"A strong body makes the mind strong". ~ Thomas
Jefferson*

With a strong body comes a strong mind. Strength in the body fosters physical resilience and psychological courage, empowering us to venture beyond our comfort zones and embrace new challenges in the creative process. This connection has been supported by research suggesting that regular physical exercise can improve self-efficacy and reduce anxiety, paving the way for bold exploration⁸⁵.

Flexibility

With a flexible body comes a flexible mind. Physical

and mental flexibility enables us to adapt to novel circumstances, approach problems from diverse perspectives, and embrace unconventional ideas. Studies in embodied cognition have shown that physical movement, such as yoga or stretching, enhances cognitive flexibility, supporting innovative thinking⁸⁶.

Stamina

Equally vital is endurance. With a fit body comes a fit mind. Physical fitness enhances stamina and focus, enabling us to sustain the grind required to transform ideas into tangible outcomes. Aerobic exercise, in particular, has been linked to improved executive function and sustained attention, both critical for seeing complex creative projects through to completion⁸⁷.

Nutrition

With a well-nourished body, we have the energy to explore. Nutrition also plays a foundational role. Proper dietary habits fuel the brain, providing the glucose and micronutrients necessary for cognitive functioning and creative ideation. For example, omega-3 fatty acids and antioxidants have been linked to enhanced brain health and memory, critical components of the creative process⁸⁸.

Breath

Breath bridges the body, mind and connects us to our environment. We inhale the inspiration around us and as we breathe out, we are contributing back into the creations of the eternal mother nature. The way we breathe then is a clear indicator of the way we work. Deep, intentional breathing activates the parasympathetic nervous system, reducing stress and creating a mental state conducive to divergent thinking—the cornerstone of innovation. Rhythmic, steady breathing improves oxygen flow to the brain, enhancing energy and focus for creative pursuits⁸⁹. Techniques like box breathing or alternate nostril breathing have also improved focus and enhanced the ability to switch between analytical and imaginative thinking⁹⁰. In contrast, shallow or erratic breathing patterns, often associated with fear, anxiety or fatigue, can deplete mental and physical resources, impacting the endurance necessary for long periods of ideation or problem-solving.

Stillness

With a still body, we have a calm confidence in advancing our creative pursuits. Stillness, achieved through practices such as mindfulness or meditation, fosters emotional regulation and mental clarity. Research has demonstrated that such practices reduce

stress and enhance divergent thinking, a key component of creativity⁹¹.

The mind and body are inseparably linked in their contributions to creativity. Strength, flexibility, fitness, nourishment, breath and stillness each uniquely shape our capacity to innovate and bring ideas to life. By nurturing the body, we simultaneously empower the mind, creating fertile ground for creativity to thrive.

"We are out of our heads. We are in the world and of it. We are patterns of active engagement with fluid boundaries and changing components. We are distributed." ~ Alva Noë

[Back to Table of Contents](#)

Core Concepts

Embodied Creativity: Creativity arises from the dynamic interplay between the mind, body, and environment, with the body serving as an active participant in gathering experiences and expressing ideas.

Role of the Senses: Sight, sound, touch, taste, and smell provide inspiration, emotional resonance, and sensory engagement, making them integral to both the creative process and the experience of creative works.

Movement and Creativity: Physical activities like dance, sports, and walking stimulate creativity by enhancing cognitive flexibility, emotional regulation, and divergent thinking.

Mind-Body Connection: Strength, flexibility, stamina, nutrition, breath, and stillness are foundational for mental clarity, focus, and innovative thinking, enabling the creative process.

Creative Resonance of the Body: The health and engagement of the body directly influence creative outputs, demonstrating the inseparable link between physical well-being and mental innovation.

Philosophical Perspective: Creativity as an embodied phenomenon reflects our interconnectedness with the world, emphasising that we are "patterns of active engagement" rather than isolated thinkers.

Chapter 11 – Creativity as a Spiritual Practice

"To practice any art, no matter how well or badly, is a way to make your soul grow. So do it." ~ Kurt Vonnegut

The term spirituality can have many different connotations. Some may equate the notion of spirituality with formal religions and know it as a dedication to a specific dogma. Others may associate spirituality with new-age concepts and alternative therapies. Some consider spirituality a private exploration, a nuanced adventure into their unique essence. It must also be acknowledged that for some, spirituality is irrelevant in their life; science and only what can be seen hold any significance. Given the various approaches to spirituality, it is important to define what we mean by it in this book. Here, spirituality is:

"The practice of connecting with your spirit."

Spirit is defined as:

"The life-giving force."

The word spirit may be troublesome for some people, so here are some other similar terms that you may be more comfortable with:

- Essence
- A sense of purpose
- Meaning
- The power within
- Innermost self
- Vibe
- Mojo
- Energy.

There is no single part in the body where you can find spirit; it has no tangible boundaries. It resides peacefully in the places we find ourselves, but also calls us to be more, to develop, to learn and to grow. It holds us safely where we are but also encourages us to embrace this adventure called life.

Spirituality, then, is the actions one takes to understand their innermost self and to bring meaning to their life. It is not just present when you are praying, chanting over crystals, or caring for the poor; a spiritual practice is the totality of those things that bring light to your life and joy to your days. It is the unique set of values, passions, and dreams that energise and sustain you and compel you to share them with others.

Connection With Spirit

Wayne Dyer describes perfectly what it looks like to be connected to your spirit.

"Strong emotions such as passion and bliss are indications that you're connected to Spirit, or 'inspired,' if you will. When you're inspired, you activate dormant forces, and the abundance you seek in any form comes streaming into your life." ~ Wayne Dyer

We have already discovered in the previous chapters that creativity fosters a whole range of positive emotional experiences. It directly impacts all elements of holistic wellbeing, improving awareness, insight, and purpose. It is also supported by dopamine, resulting in feel-good reactions to creative pursuits. So, from this we can make the following deductions.

Connecting with spirit = A flow of positive emotions.

Creativity = A flow of positive emotions.

Therefore

Connecting with spirit = Creativity.

Creativity then is one way we come to know our true selves, find meaning and express our essence in the

world. Creativity is a spiritual practice, which connects us with ourselves, and with something greater.

Connection With the Self

Creativity is not just about making something new; it is an expression of one's authentic self, allowing individuals to investigate and share personal truths, emotions, desires and insights that may otherwise remain hidden. When people participate in creative pursuits, they are called to find those ideas that resonate most deeply with them and challenged to explore them in detail. In this way, and as suggested by Julia Cameron in her book *The Artist's Way*, engaging in creative practices can lead to a deeper understanding of one's inner divine nature⁹². By creating something that makes sense to them, an individual comes to have a greater sense of themselves.

In their research, Leder et al. (2004)⁹³ confirmed that creative engagement fosters a more profound understanding of oneself and others, promoting emotional connection and resonance. This process often leads to personal transformation as individuals navigate complex emotions and experiences through their creative work. Creativity, in this sense, transcends the physical and mental realms, delving into the spiritual, where individuals can find meaning, purpose, and healing.

"Making art is very therapeutic for me... it's a way of having an internal conversation." ~ Shaun Tan.

This quote emphasises how creative activities provide a means for connecting with our inner selves, processing emotions and exploring personal experiences, resulting in a greater understanding of our past and potential.

It can also be argued that true creativity is only possible when a person allows themselves to understand and tap into their unique and true selves. Each person is inherently unique, possessing a combination of life experiences, beliefs, and perspectives that no one else shares. When we embrace and express this uniqueness, we can deliver something genuinely new to the world.

Connection With Something Greater Than the Self

Creativity is often much more than an individual pursuit; it is a way of connecting with something greater than oneself, whether that's the Divine, the universe, a community, or even just one other person. Creative expression has the potential to unite individuals with forces and experiences that transcend each one, offering a profound sense of purpose, belonging and contribution. Many artists and philosophers have described creativity as an act of collaboration with a higher power, where they serve as vessels through which divine energy or universal truths are channelled.

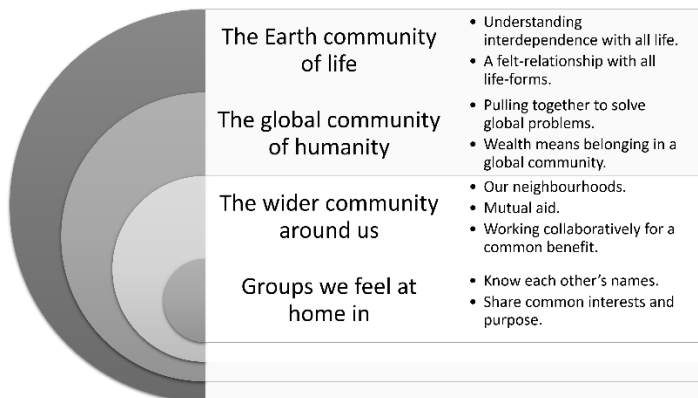
However, the "something greater" that our creativity is contributing to can be something much smaller and closer to home. Our creativity can support and inspire the spirit of another person—a friend, a partner, or someone with whom we collaborate, bringing together unique perspectives and talents to create something new.

Creativity often involves collaboration, whether in artistic partnerships, scientific innovations, or social movements. New ideas and innovation can thrive when people come together, bringing their unique perspectives and processes to form partnerships that result in something greater than any individual can achieve alone.

Artists and musicians frequently collaborate with other creators, combining their skills and inspirations to produce new and original works. Whether it's a band composing music together or an author and editor finalising a novel, creativity, in these cases, is the result of collective effort, where each person's contribution enriches the final product. By sharing ideas, exchanging feedback, and building on each other's strengths, people can create works that reflect their visions and the spirit of their partnership. In these cases, creativity becomes a form of intimacy and collaboration, where the act of creating is intertwined with the connection between two people.

On a broader scale, creativity can connect individuals to their communities. Artists and thinkers often create in response to the needs, struggles, or aspirations of their society, offering ideas, art, and solutions that contribute to the collective wellbeing. In this sense, creativity is an act of service to something greater than oneself—it becomes a way to impact the community, culture, or planet. In the book *Active Hope*⁹⁴, Macy and Johnstone describe four community levels in which creativity can both give and receive inspiration.

Figure 7 - The Macy and Johnstone Levels of Community



Adapted from Macy, J., & Johnstone, C. (2012). *Active Hope: How to Face the Mess We're in without Going Crazy* (58069th ed.). New World Library.

This diagram also shows the ripple effect of creativity. For while we may only think that we are contributing to our own family or small community, the effects flow outward, providing inspiration, guidance and

permission for others to engage in creative pursuits, meaning that our initial influence can travel far and wide.

Creativity As a Higher Power

Across history, some cultures and philosophers have seen creativity not as a means for connection with self and something greater, but as a higher power all in itself, with ways and whims beyond the wisdom available to human beings. Given that creativity has the potential to be a profound, life-giving power, it is no coincidence that all of the Gods found within the world's major religions have been credited with this capability.

"In the beginning, God created the heavens and the earth." (Genesis 1:1)

"From the lotus flower that grew from the navel of Vishnu, Brahma appeared. Through intense meditation and the grace of Vishnu, Brahma understood his purpose and began the process of creating the universe." (Bhagavata Purana)

"He is the Originator of the heavens and the earth. When He decrees a matter, He only says to it, 'Be,' and it is." (Surah Baqarah ayat 117, Quran).

As these extracts show, creativity can be considered the supreme state, coming before all others, and paving the way for all forms of existence.

Additionally, in every ancient religion and mythology, gods and goddesses have taken charge of all forms of art and invention. A list of these is provided below.

Religion	God/Goddess	Domains of Creativity
Greek Mythology	Apollo	Music, poetry, arts, prophecy, healing.
	The Muses	Inspiration for arts and sciences <ul style="list-style-type: none"> • Calliope - Epic poetry and eloquence • Clio - History • Euterpe - Music and lyric poetry • Erato - Love poetry and lyrical songs • Melpomene - Tragedy and tragic drama • Polyhymnia - Sacred poetry, hymns, and eloquence • Terpsichore - Dance and choral singing • Thalia - Comedy and pastoral poetry • Urania - Astronomy and celestial inspiration
	Athena	Wisdom, strategy, crafts (e.g., weaving, pottery).
Roman Mythology	Minerva	Wisdom, arts, and crafts.
	Vulcan	Fire, metalworking, craftsmanship.
	Apollo	Music and poetry.

Religion	God/Goddess	Domains of Creativity
Hindu Mythology	Saraswati	Knowledge, music, art, wisdom, learning.
	Vishvakarma	Architecture, engineering, craftsmanship.
Norse Mythology	Bragi	Poetry, music, eloquence.
	Saga	Storytelling and history.
Egyptian Mythology	Thoth	Writing, wisdom, knowledge, arts.
	Ptah	Craftsmanship, artisans, builders.
	Hathor	Music, dance, creative inspiration.
Mesopotamian Mythology	Enki (Ea)	Wisdom, magic, craftsmanship.
	Nisaba (Nidaba)	Writing, learning, creative inspiration.
Celtic Mythology	Brigid (Bríde)	Poetry, healing, smithcraft.
Aztec Mythology	Quetzalcoatl	Wisdom, learning, arts, writing.
	Xochipilli	Music, dance, poetry, arts.
Other Traditions	Ogun (Yoruba)	Metalwork, craftsmanship, technology.
	Tsukuyomi (Shinto)	Poetic inspiration, moon deity.

As we have heard earlier, Plato believed creativity was a gift from the gods, specifically the Muses, who inspired poets, artists, and musicians. In his dialogues, Plato suggested that individuals were merely channels for divine energy, creating not from personal genius but from a connection to higher truths. For Plato, creativity was a process of tapping into a universal source of beauty and bringing it into the world through human effort. The spirit that Plato was referring to connecting

with was one external to the person, a life force far greater than their own.

Similarly, Immanuel Kant described creative genius as a mysterious force, not fully understood even by the artist themselves. Kant believed that genius involved the ability to produce works that were original and exemplary. Still, he suggested that this ability was connected to something beyond the individual's control—closer to a spiritual or divine source. Creativity, for Kant, allowed individuals to access the sublime and to touch the invisible and the transcendent.

Instead of being linked to just one divine force, Nietzsche saw creativity as a balance between two opposing powers: the Dionysian (chaotic, passionate, and instinctual) and the Apollonian (ordered, structured, and rational). Nietzsche believed the most profound artistic achievements were born from the cooperation between these two supernatural elements.

Regardless of whether you subscribe to the views of prophets or philosophers, believe it to be a force emanating from here on earth or from the heavens, it is clear that across time, creativity has been experienced as a transcendental power.

The Seat of Creativity- Sacral Chakra

In contrast to the previous views where creativity came from outside the individual, some Eastern spiritual traditions believe it emanates from a person's core, their chakras. A chakra is a Sanskrit term meaning "wheel" or "disk". It is an energy centre believed to reside within the human body. Chakras are seen as vortexes of energetic potential that influence a person's physical and emotional wellbeing. Chakras are often described as pathways for energy (prana) to flow through the body. When energy flows freely through these centres, individuals experience a sense of balance, vitality, and emotional wellbeing. However, if a chakra becomes blocked or imbalanced, it can lead to physical and emotional challenges.

Each person is seen to have a system of seven main chakras which are aligned along the spine, each corresponding to specific areas of the body and aspects of life, from basic survival to higher consciousness. These are shown on the diagram on the following page.

The Sacral Chakra, known as Svadhishana in Sanskrit, is the second of the seven main chakras and is referred to as the energy centre of creativity. Located in the lower abdomen, about two inches below the navel, the Sacral Chakra governs creativity, emotional expression, sexuality, and relationships. It is symbolised by the

colour orange and is associated with the element of water, representing fluidity, adaptability, and intuition.

Figure 8 - The Seven Chakras



The Sacral Chakra is particularly influential in our ability to create, both in terms of artistic and intellectual endeavours, as well as in the creation of life itself, through its association with sexuality and fertility. Just as the chakra governs the areas related to the conception and birth of a child, it also facilitates the creative

process, whether that be generating ideas, producing art, or solving problems. This creative energy, flowing freely through the Sacral Chakra, allows individuals to tap into their emotional depth and express themselves fully.

When the Sacral Chakra is balanced, creativity flows effortlessly, emotions are expressed freely, and relationships are fulfilling. Signs of a well-functioning Sacral Chakra include:

- Increased creativity and artistic expression
- Emotional balance and a strong connection to feelings
- A healthy relationship with sexuality and intimacy
- Passion and enthusiasm for life.

However, suppose the Sacral Chakra is blocked or imbalanced. In that case, it can significantly impact people's ability to think creatively, express their feelings, feel inspired and connect with themselves and others. Physical symptoms, such as lower back pain, reproductive issues, or urinary problems, can also manifest.

It is also insightful to consider the location of the Sacral Chakra, the seat of creativity, in relation to its closest chakra neighbours, as these provide information as to the requisites for creativity to flourish within an

individual, and to come forth into the world. The Sacral Chakra (Svadhishana) is located between the Root Chakra (Muladhara) and the Solar Plexus Chakra (Manipura) and so is directly influenced by the energy of both. Together, these three chakras form an important energetic pathway that impacts our sense of security, emotional expression, creativity, and personal power.

The Root Chakra, located at the base of the spine, is responsible for our sense of grounding, trust in self and others, security, and stability. When the Root Chakra is balanced, it offers the Sacral Chakra a stable foundation from which creativity can emerge. Feeling grounded and secure allows individuals to explore their creative impulses freely without fear of losing their footing. A blocked or imbalanced Root Chakra can hinder creativity, causing insecurity or fear, which stifles the flow of ideas. For example, a person within a toxic relationship or hostile environment may find it difficult to draw on their creativity as their energy is focused on keeping themselves safe and surviving both physically and emotionally. Considering the flow in the other direction, if a person's Sacral Chakra is blocked or under-developed, this will also impact upon their sense of security as they have little resources or resilience to apply to life's problems or creative ways to deal with daily dilemmas. In this way a lack of creativity directly affects a person's sense of security and safety in the world.

Above the Sacral Chakra is the Solar Plexus Chakra (Manipura), which governs personal power, confidence, and self-esteem. While the Sacral Chakra is the centre of creative flow, the Solar Plexus Chakra provides the willpower and determination to bring creative ideas into reality. This chakra also helps individuals manage the shame and self-doubt that often arise when creating something new or stepping outside societal norms. By strengthening personal power, the Solar Plexus Chakra supports the Sacral Chakra in expressing creativity with confidence. It enables individuals to take risks, trust their abilities, and step outside societal expectations (or "the tribe") to pursue new creative ventures. For example, while a person may have developed many new and valuable ideas, if they do not have the self-esteem to share them, if they are riddled with self-doubt, then these ideas may not be shared and the opportunity to use them to shape society will have been lost.

"The worst enemy to creativity is self-doubt." ~ Sylvia Plath

Looking at it in the reverse, a blocked Solar Plexus Chakra, a lack of self-confidence will also flow backwards impacting upon the belief that a person has in their own work and compromising the extent to which they are willing to continue creative pursuits and to form creative connections.

Creativity Is a Spiritual Practice

Creativity is far more than the act of making something new—it is a profound journey of self-discovery, connection, and transcendence. It invites us to engage with our innermost selves, unearthing truths and emotions that deepen our understanding of who we are. At the same time, creativity serves as a bridge to something greater than us, whether that is the divine, the universe, or the shared energy of a community.

Whether you subscribe to ancient traditions, modern philosophers or Eastern aesthetics, the message is the same: creativity is a life-giving force that nurtures our essence, inspires growth, and fosters healing. It enables us to connect with our unique purpose while building relationships and contributing to the collective human experience. Whether expressed through art, music, writing, or innovation, creativity becomes a sacred act—a way to infuse our lives with meaning, joy, and light.

In embracing creativity as a spiritual practice, we honour the divine spark within ourselves and others, creating a ripple effect of inspiration that reaches far beyond the boundaries of the individual and flows into the communities within which we live and work.

[Back to Table of Contents](#)

Core Concepts

Spirituality is the practice of connecting with your essence or "life-giving force," bringing meaning, purpose, and joy to life.

Creativity fosters connection with the self by allowing individuals to express their authentic truths.

Creativity joins us with something greater than ourselves, with our creative actions and outcomes contributing to colleagues, communities or the divine collective.

Creativity can be seen as a divine collaboration or a life-giving power, as recognized in religious and philosophical traditions.

The Sacral Chakra (Svadhishana), located in the lower abdomen, is the energetic centre of creativity, influenced by grounding (Root Chakra) and personal power (Solar Plexus Chakra).

Embracing creativity as a spiritual practice nurtures self-discovery, connection, and healing, infusing life with meaning, growth, and transcendence.

Creativity's spiritual nature fosters collaboration, builds community, and contributes to the collective human experience, creating a ripple effect of inspiration and connection.

Chapter 12 – Creativity as Integrated Intelligence

“Creativity is intelligence having fun.”
~ Albert Einstein

As we have seen, creativity is a holistic process that integrates the mind, body, and spirit, drawing on all aspects of human experience to produce something new and valuable. It is not limited to intellectual endeavours, nor is it solely emotional or physical—it is the interplay of all these elements that gives creativity its power. The extent to which creativity relies upon our human wholeness is supported by Gardner's (1993)⁹⁵ theory of multiple intelligences. The nine intelligences identified (outlined in the following table) show the holistic nature of being human, and the vast range of faculties that we can bring to creative pursuits. These intelligences cover aspects of human physiology, psychology, philosophy and spirituality.

Figure 9 - Gardner's Nine Intelligences

Type of Intelligence	Description
Linguistic	The ability to use language effectively for communication, including reading, writing, and speaking.
Logical-Mathematical	The capacity for deductive reasoning, problem-solving, and mathematical calculations.
Spatial	The ability to visualise and manipulate objects in a spatial environment.
Bodily-Kinesthetic	The ability to use one's physical body skilfully and handle objects adeptly.
Musical	The capacity to recognise, create, reproduce, and reflect on music, including rhythm and melody.
Interpersonal	The ability to understand and interact effectively with others.
Intrapersonal	The capacity for self-awareness and self-reflection, understanding one's emotions and motivations.
Naturalistic	The ability to recognise, categorise, and draw upon certain features of the environment.
Existential	The capacity to ponder deep questions about human existence, such as the meaning of life.

It is recognised that Gardner's model has been criticised for its lack of rigorous empirical validation. It is argued that while the idea of multiple intelligences is appealing, it has not been consistently demonstrated through

scientific studies. Additionally, critics suggest that the boundaries between Gardner's intelligences are not as distinct as he proposes and that some intelligences, like bodily-kinesthetic and musical intelligences, are better categorised as talents or skills. Nevertheless, as a theoretical construct, Gardner's model is of significant value as it provides a broad and inclusive view of how creativity integrates all aspects of our being. Moreover, while it may not have robust scientific backing, Gardner's theory is well understood in practice. Take, for example, the experience of a painter, who can be seen to directly use most intelligences in developing one piece of work.

Figure 10 - The Nine Intelligences in Painting

Type of Intelligence	How it is Used
Linguistic	Researching their idea and sharing it with others in the spoken or written form.
Logical-Mathematical	Determining spacing and structuring of forms on the canvas.
Spatial	Visualising and manipulating the objects on the canvas.
Bodily-Kinesthetic	Skilfully working with brushes and knives to deliver the required techniques and textures.
Musical	Music may be used as support or inspiration in the creative process.
Interpersonal	Working with others to receive and process feedback.

Type of Intelligence	How it is Used
Intrapersonal	Monitoring their moods and motivations through the process and being aware of their expectations and goals.
Naturalistic	Various natural elements, such as shapes or colours, may be incorporated into the work, or the theme may be inspired by the environment around it.
Existential	The theme may relate to profound questions about the human condition, the meaning of life, personal mortality and the future of humanity.

This experience of one creator shows clearly that creativity is a byproduct of a holistic and unique form of cognition. In this way:

“Creativity is an inspired form of integrated intelligence. “~ Belinda Tobin

The expansive and interwoven application of intelligence in creativity will become even more important in later chapters when we discuss the growth of artificial intelligence and computers as a tool for creativity.

The ability for creative pursuits to connect and combine our various intelligences holds incredible importance for health and wellbeing. According to Dr Gabor Maté,

wellbeing is deeply intertwined with integrating various aspects of the self, including emotional, psychological, and physical elements. He emphasises that a lack of integration, often resulting from trauma, can lead to mental and physical health issues⁹⁶. Thus, if creativity integrates our vast intelligences, then it must also be an effective form of improving our overall wellbeing.

In their exploration of the psychology of art, Leder, Belke, Oeberst, and Augustin (2004)⁹⁷ confirmed that creativity involves cognitive processes that foster deeper understanding and emotional resonance. As such, creative pursuits serve as a vehicle for personal and collective expression and a catalyst for profound personal growth. This is because the development and application of the skill of creativity involves the interplay of:

- **Cognitive Engagement:** Creative endeavours stimulate cognitive functions by encouraging viewers to analyse, interpret, and reflect on what they see. This process enhances critical thinking and problem-solving skills, as viewers must decode complex visual information and make sense of abstract concepts.
- **Emotional Resonance:** The process of creation has the power to evoke a wide range of emotions, providing a cathartic experience for both the creator and the viewer and the opportunity to

process and gain new perspectives on these through their work. This emotional engagement can lead to greater maturity, empathy and understanding as individuals connect with the feelings and experiences expressed through the experience.

- **Personal Expression:** Creating can be a profound means of personal expression and growth. The process allows for self-exploration, investigation of views and values, appreciation of individuality, and articulating thoughts and emotions that might be difficult to express otherwise.

This is confirmed in the outcomes of a scoping review by De Witte et al. (2021)⁹⁸, which highlights how Creative Arts Therapies (CATs)—including art therapy, dance/movement therapy, drama therapy, music therapy, and poetry/bibliotherapy—promote psychological and physiological health outcomes by integrating cognitive, emotional, and physical processes. It is clear then that whether you use Gardner's nine intelligences or the more simplistic categories of cognitive engagement, emotional resonance and personal expression, creativity calls upon a comprehensive and connected consciousness.

[Back to Table of Contents](#)

Core Concepts

Creativity integrates mind, body, and spirit, drawing on all aspects of human experience to produce something new and valuable.

Creativity involves diverse forms of intelligence, including linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, intrapersonal, naturalistic, and existential intelligences.

Creativity is an inspired form of integrated intelligence, combining various cognitive, emotional, and physical elements to foster innovation and expression.

Creativity enhances wellbeing by fostering the integration of emotional, psychological, and physical aspects of the self, which is essential for overall health.

Engaging in creative activities promotes:

- Cognitive engagement
- Emotional resonance
- Personal expression.

Creative Arts Therapies (CATs) such as art, dance, music, and drama therapies, improve psychological and physiological health by integrating cognitive, emotional, and physical processes.

Chapter 13 – The Creative Process

We have seen how creativity is a complex interplay between individual intelligence and collaborative interactions. The next question is how these things come together to produce creative outputs. What is the creative process? In this chapter, we will review the traditional linear models of the creative process. While simplistic, these provide a foundational understanding of how ideas come to life. However, we will also see how creativity is far more dynamic and iterative, influenced by internal feedback loops and external factors that constantly reshape and refine the final outcome. Let's look at how both perspectives fit together to provide a complete view of the creative process.

Linear Models of the Creative Process

The creative process has long been recognised as an assembly of multiple stages, with many models being proposed over the years. One of the simplest is the Geneplore model⁹⁹, which identifies two core stages:

1. Generating ideas
2. Exploring ideas.

This model echoes the distinction between inspiration and investigation, as described by early 20th-century philosophers of science, such as Karl Popper (1934)¹⁰⁰. However, the most influential model is Henri Poincaré's four-stage theory from his 1908 lecture, "*Mathematical Creation*,"¹⁰¹ later expanded upon by Graham Wallas in *The Art of Thought* (1926)¹⁰². The stages contained in Wallas's model are:

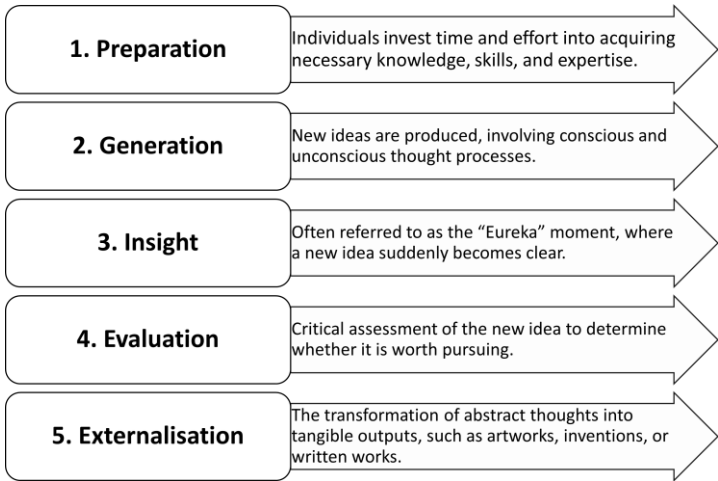
1. Preparation
2. Incubation
3. Illumination
4. Verification.

These steps remain foundational in creativity research today. The Stanford model of creativity has refined this framework by adding a broader concept of generation in place of incubation and introducing an additional stage, externalisation, for a total of five operations, as shown in the diagram on the following page¹⁰³.

Stage 1 - Preparation

The preparation stage is the foundation of the creative process. In this phase, individuals invest time and effort to acquire the necessary knowledge, skills, and expertise. This stage is crucial because it builds the cognitive framework that allows creators to make sense of complex problems and recognise opportunities for novel solutions.

Figure 11 - The Stanford Creative Process



According to the "ten-year rule", a theory popularised by Howard Gardner (1993)¹⁰⁴, individuals often need around ten years of immersion in their domain before making significant creative contributions. This timeframe allows people to not only solve existing problems but also identify new problems to explore. Ericsson et al. (1993)¹⁰⁵ also argue that deliberate practice during this phase is essential to achieve mastery, laying the groundwork for future creativity.

However, it's important to note that too much formal training can potentially hinder creativity. Simonton (1984)¹⁰⁶ found that creativity and education follow an inverted U relationship. While initial learning is crucial, excessive formal schooling may reinforce pre-established styles of thought, limiting the individual's

ability to think beyond traditional frameworks. Therefore, the preparation stage must balance acquiring expertise with maintaining openness to new ideas.

Stage 2 - Generation

The next phase is generation, in which new ideas are produced. This phase begins with tension, a sense that there is a problem, a puzzle, a task to be completed or a conflict, which can involve both unconscious reflection and conscious action.

Stage 3 - Insight

The insight phase is often called the "Eureka" moment, where a new idea or solution suddenly becomes clear. It is the light-bulb moment when someone finally figures something out or finds a way forward. Insight is marked by a sense of surprise and clarity and occurs when an individual either:

- Forms new, task-related connections between concepts.
- Perceives a solution or concept in a novel way.

This process involves breaking free from established assumptions and reorganising existing mental representations into something new, allowing the person to see something they could not initially. The resulting insight can be experienced as a sudden flash of

understanding, often accompanied by an emotional response—a profound feeling of achievement or satisfaction.

Stage 4 - Evaluation

The evaluation phase follows insight and involves critically assessing the new idea to determine whether it is worth pursuing. Not all ideas that seem promising at first are ultimately successful, and the evaluation stage helps the creator identify whether the idea needs to be refined, revised, or even discarded.

During this phase, individuals must ask themselves key questions, such as:

- Will this idea work?
- Is it new and valuable?
- Does it align with the broader goals of the project?
- Do I have the resources to explore it further and bring it to fruition?
- How does it fit with other elements of my program?

Research in the psychology of creativity has identified various factors influencing the evaluation process. For instance, Blair & Mumford (2007)¹⁰⁷ found that people evaluate ideas based on domain-specific criteria. In the arts, ideas are assessed based on aesthetics, in

engineering it is functionality that is foremost, while for business, ideas will be evaluated based on feasibility. Additionally, the ability to effectively evaluate ideas often depends on the individual's internalised model of the domain, which is honed during the preparation stage (Csikszentmihalyi & Sawyer, 1995)¹⁰⁸.

Moreover, evaluation is influenced by responses from peers, mentors, or audiences, creating a feedback loop that may lead to further iterations of the idea. The evaluation phase is critical in the creative process because it determines which ideas survive and evolve into final outputs.

Stage 5 - Externalisation

The final stage of the creative process is externalisation—expressing an idea in a concrete, observable form. Externalisation transforms abstract thoughts into tangible outputs, such as artworks, inventions, or written works. This stage is crucial because it allows ideas to take shape in the real world, where they can be experienced, shared, and evaluated by others.

The process of externalisation requires not only cognitive effort but also physical skill. Whether through writing, painting, designing, or performing, creators must engage mental and bodily processes and all their intelligences to bring their ideas to life. This phase is

often iterative, as creators revise and refine their work in response to feedback or new insights that emerge during creation.

Externalisation also plays a critical role in facilitating collaboration and cultural exchange, as ideas shared can inspire further insights and new ideas. As such, externalisation represents both the completion of the creative cycle and the beginning of new creative possibilities.

The Creative Process is Messy

The idea that creativity follows a linear, step-by-step process is often more of a convenient simplification than a reflection of reality. These five stages are not discrete steps that neatly follow one another. Instead, the creative process is inherently messy and nonlinear. Creators frequently move back and forth between stages, and it is common for iterations, dead-ends, and revisions to shape the final output. Creativity involves cycles of trial-and-error and continuous feedback loops, and the interplay between these stages ultimately leads to new and valuable work. For example, while you may be in the process of externalising an idea, you might encounter new insights that send you back to the generation stage to further develop or refine the idea. This dynamic interplay means creativity is an ongoing

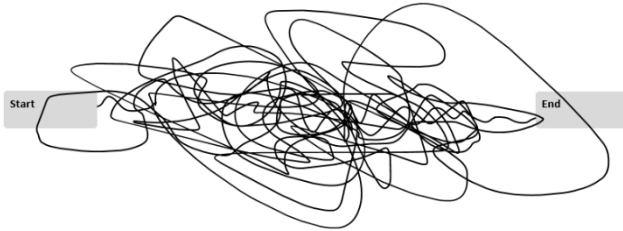
iterative process where creators return to earlier stages in light of new information, insights, or feedback.

The trial-and-error approach is central to this process. As you develop creative work, you generate numerous ideas, some of which are discarded or abandoned. In contrast, others are refined over multiple iterations. Sawyer (2012)¹⁰⁹ emphasises that creativity is not about having a single brilliant idea but rather about repeatedly testing, revising, and improving ideas over time. By engaging in multiple rounds of experimentation, creators refine their ideas, ultimately arriving at something valuable.

Additionally, the evaluation and externalisation phases are not necessarily the final steps in the process. Evaluation often leads to further generation, as creators realise that ideas need revision or modification. This cycle between stages shows creativity as more of a recursive loop than a linear progression. Each stage feeds into the next, and moments of insight frequently lead to new rounds of problem-finding and idea generation. Moreover, creative people tend to work on multiple projects at once, externalising one while generating ideas for another. This interchange of ideas can lead to spontaneous insight or the sudden re-emergence of previously discarded concepts, meaning that one creative process merges with another and even folds back upon itself. The result is this may be a more

accurate visual depiction of what the creative process looks and feels like.

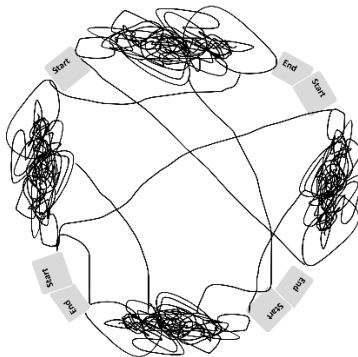
Figure 12 - The Messy Creative Process



"Creativity is inventing, experimenting, growing, taking risks, breaking rules, making mistakes, and having fun." ~ Mary Lou Cook

And given that creatives continue this cycle endlessly throughout their lives and that separate projects can find synthesis in surprising ways, this may be a fitting depiction of the life of a creative project or person.

Figure 13 - The Life of a Creative Project or Person¹¹⁰



Looking at the creative process like this, it is easy to see how Nietzsche came to understand it as a balance between two opposing powers: the chaotic and the structured. For this is the collaboration that plays out in every creative process.

“Art, in itself, is an attempt to bring order out of chaos.” ~ Stephen Sondheim

The Creative Process as a Complex System

As outlined previously, the systems model of creativity shows that the creative process does not operate in isolation. It is a systemic interaction between three core elements, being the:

- Individual (the creator)
- Domain (the body of knowledge or discipline)
- Field (peers, mentors, and audiences).

Constant feedback and interdependencies amongst these elements make creativity a complex dance rather than a direct line.

The Influence of the Domain on the Creative Process

The domain—the established body of knowledge, techniques, and conventions within a particular field—also plays a critical role in the creative process. The domain serves as a foundation for creative work and a

set of boundaries that creators can follow, challenge, work within, or seek to change. The domain influences and impacts upon the creative process in the following ways:

- **Preparation:** The domain sets the foundation for the knowledge and skills creators must master before contributing meaningfully to the field. For example, a writer needs to understand the conventions of language and narrative structure before they can innovate within those boundaries.
- **Generation:** When generating ideas, creators engage with the existing knowledge within the domain, often combining or building upon established concepts.
- **Evaluation:** The domain provides the criteria by which ideas are judged. What counts as original or valuable is often determined by the standards of the domain. Creators must evaluate their ideas in light of these standards, ensuring that their work either fits within the domain or pushes it forward in meaningful ways.
- **Externalisation:** The domain also influences what kinds of creative work are externalised. Creators must consider how their work aligns with or challenges the conventions of the domain, deciding whether their ideas are ready to be shared or need further refinement.

The domain thus shapes the creative process by providing both the raw materials for creative thought and the criteria by which that thought is evaluated. Creators engage with the domain in a dynamic way, using it as a resource while also contributing to its evolution through their innovations.

The Influence of the Field on the Creative Process

In a complex system, creativity is not an isolated act of individual inspiration; it is deeply shaped by the field, which includes peers, mentors, and audiences who evaluate and respond to the creative work. The feedback from the field can have significant implications for each stage of the process as follows:

- **Preparation:** Feedback from the field may prompt the creator to invest more time in learning or acquiring new skills, ensuring that they have the foundational experience necessary to meet the expectations or challenges presented by the field.
- **Generation:** The input from the field can also shape the ideas generated during this stage. Creators may be guided to focus on concepts more aligned with the current trends or expectations of the field, balancing innovation with what is likely to be accepted or appreciated.
- **Evaluation:** During the evaluation, creators often consider how others will receive and judge

their work. This external perspective can influence their decisions about which ideas to pursue and which to abandon.

- **Externalisation:** Finally, the decision to externalise an idea—whether to share it with the public or keep it private—is influenced by the creator's anticipation of how the field will react. If the creator believes the work will be well-received, they are likelier to share it. If not, they may withhold it or continue to refine it before release.

This way, the field acts as a feedback loop, continuously shaping the creator's decisions.

The Influence of the Broader Social and Cultural Context

The broader social and cultural context in which the creative process occurs also plays a significant role, with creative pursuits often responding to the needs or trends of the time. Social and cultural factors can encourage certain types of creativity while discouraging others, shaping what is considered valuable, acceptable, or even possible. This societal shaping is done through the:

- **Cultural Norms:** Cultural expectations influence what creative work is encouraged or suppressed. For example, certain cultures may value innovation and risk-taking, while others may prioritise tradition and conformity. These

norms shape how creators approach their work, encouraging bold experimentation or fostering more conservative approaches.

- **Social Dynamics:** Social factors like collaboration, competition, and mentorship influence the creative process. Collaboration can lead to exchanging ideas and fostering new perspectives and approaches. Conversely, competition can push creators to innovate as they strive to stand out.
- **Physical Environment:** The physical environment in which creators work—whether it's a well-equipped studio or a simple home office—can also affect the creative process. Access to tools, resources, and inspiration from the surrounding environment can shape how creators develop and externalise their ideas.

In this way, the broader social and cultural context serves as both a source of inspiration and a constraint, influencing how creators generate, evaluate, and externalise their work. The creative process is thus deeply embedded in the cultural moment in which it occurs, reflecting and shaping the world around it.

[Back to Table of Contents](#)

Core Concepts

Traditional frameworks like Geneplore (generation and exploration) and Wallas's model (preparation, incubation, illumination, verification) provide foundational steps for understanding creativity.

The Stanford model refines these with the additional phase of externalization.

Key Stages of Creativity:

1. Preparation: Building knowledge and skills.
2. Generation: Producing ideas from tension or problems.
3. Insight: Sudden clarity or connections ("Eureka" moments).
4. Evaluation: Assessing ideas for feasibility and value.
5. Externalization: Turning ideas into tangible outputs.

Creativity is iterative and messy, with feedback loops, trial-and-error, and overlapping stages. Multiple projects and spontaneous insights often interconnect forming cross-project relationships.

The domain provides knowledge and criteria for evaluation and serves as both a resource and boundary for innovation.

The field influences the creative process by causing the creator to contemplate what works will be accepted, and through feedback, sending the creator back into previous stages.

Chapter 14 – The Internal Conditions for Creativity

The image of the tortured artist is a familiar one—an individual consumed by shame, guilt, and perfectionism, constantly grappling with the fear that their work will never be good enough. From Vincent van Gogh to Sylvia Plath, this idea of the creator suffering for their art has become ingrained in the cultural narrative. We often envision the artist as someone wrestling with their inner demons, struggling to overcome self-doubt and pride, all in the pursuit of an unattainable ideal.

But while these emotions are, for some, part and parcel of the creative process, this picture only tells one part of the story. What is often missing from the narrative is the second half, the necessity of acceptance—the section of the journey where the creator learns to rise above their fears, self-judgment, and insecurities to build something new.

Creativity, at its core, is about transforming not just the external world but also the inner world of the creator. It involves embracing imperfection, stepping into the

unknown, and finding the courage to bring forth work despite the emotional challenges. Creativity is not just about the final product; it is also about the journey of personal growth that creators go through, and the strength it takes to confront uncertainty and bring something original into existence.

In this chapter then, we look at the inner conditions necessary for creation, concentrating on an individual's ability to:

- Build supportive beliefs about creativity.
- Process distressing emotions.
- Develop the courage required for creation.

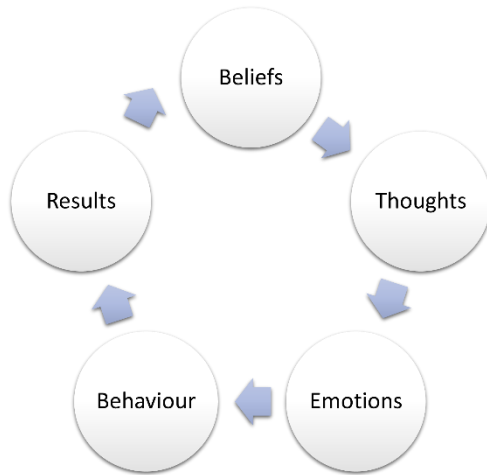
The Beliefs Behind Creativity

"The outer conditions of a person's life will always be found to reflect their inner beliefs." ~ James Allen

As we will see in later chapters, all life is mental. It was known well by the ancients that what we believe becomes our reality. Now, what was previously philosophy has now been proven. Thanks to extensive research in psychology and sociology, we now understand the internal process a person goes through during their creative pursuits. The Cognitive Behavioural Therapy Model (CBTM) shows what is

going on for each person as they embark upon and continue to execute their ideas, and it shows the pivotal role that beliefs play in shaping experiences.

Figure 14 - The Cognitive Behavioural Therapy (CBT) Model



A belief is a thought, attitude, or opinion an individual accepts as true. Many of our beliefs are adopted from our parents and carers and ingrained in childhood. However, some are also formed through our own life experiences, with our time away from our families potentially being used to discredit or dispose of those we were taught when we were young. It is important to note that a belief does not have to be based on fact in order to significantly influence a person's behaviour and experiences. All that matters is the individual's acceptance of it as truth.

The impact of beliefs is well illustrated by placebo research, where even if a person is given a simple sugar pill, it can trigger real physiological responses. It only requires a person to believe that they have been given an effective treatment to result in improvements in conditions such as pain, fatigue, coughs, and even Parkinson's Disease. When an individual truly believes in the efficacy of a treatment, it becomes their reality and results in tangible outcomes.

It is the same with creativity. What we hold as truths—about ourselves, our situations, and about creativity itself—plays a crucial role in determining our behaviour and what we can achieve. Let's work through some examples to show how powerful beliefs are.

"Creativity is a Skill That Can Be Developed"

Believing that creativity is a skill—one that can be nurtured and developed over time—fosters a growth mindset. This belief encourages individuals to view creativity not as an inborn talent that only a select few possess but as a practice that anyone can engage in. By seeing creativity as something that can be improved through effort, learning, and experience, individuals are more likely to experiment, take risks, and be persistent in their creative pursuits. This belief leads to openness, curiosity, and willingness to learn from failure, all of which are essential for creative success.

Here's how the behavioural cycle may progress for those with this belief.

- **Belief:** Creativity can be improved with effort and practice.
- **Thoughts:**
 - "If I keep working at it, I will get better."
 - "Failure is part of learning."
 - "There's no need to be perfect right away."
- **Emotions:**
 - Optimism: Progress is possible.
 - Curiosity: Eagerness to try new ideas.
 - Resilience: Willingness to accept setbacks.
- **Behaviour:**
 - Engages in creative practice regularly.
 - Seeks out learning opportunities.
 - Takes risks and experiments with new ideas.
- **Result:**
 - Increased competence and skill over time.
 - More frequent creative outputs.
 - Personal satisfaction from improvement.
- **How the Belief is Confirmed:** As the individual invests in learning and improving, it reinforces the belief that creativity can be developed

through practice. Positive peer feedback or noticeable progress confirms that effort leads to creative success.

"I Must Create Something Perfect"

The belief that perfection is the ultimate goal in creativity can be severely limiting. While striving for excellence is valuable, pursuing perfection often leads to paralysis, where the fear of making mistakes or producing something less than ideal prevents a person from moving forward. This belief can also lead to self-criticism and a focus on external validation rather than the creative process itself. Perfectionism hinders experimentation and playfulness, both of which are key to generating original ideas. By holding onto this belief, individuals may avoid taking creative risks, ultimately stifling their potential to grow and innovate. The following is the potential pathway for those holding this belief.

- **Belief:** Only perfection is acceptable in creative work, and anything less is a failure.
- **Thoughts:**
 - "If it's not perfect, it's not worth sharing."
 - "I'm afraid others will criticise me."
 - "I need to avoid mistakes at all costs."

- **Emotions:**
 - **Anxiety:** Fear of failure or judgment.
 - **Frustration:** Difficulty meeting standards.
 - **Self-doubt:** Questioning one's abilities.
- **Behaviour:**
 - Procrastinates or delays projects.
 - Overthinks or constantly revises.
 - Avoids sharing work with others.
- **Result:**
 - Infrequent creative outputs.
 - Reduced motivation and satisfaction.
 - Limited growth as fear prevents risk-taking.
- **How the Belief is Confirmed:** The individual's perfectionist tendencies lead to unmet expectations, reinforcing the belief that their work is not good enough. This cycle of striving for perfection and failing to meet it feeds anxiety and self-doubt, confirming the fear that they are not creative enough unless their work is flawless. In addition, because they do not share their work, they lose the opportunity to gain valuable feedback, from which they can learn and grow.

As these examples show, the beliefs about themselves and the creative process can either empower or constrain the creator and their ability to develop new and valuable contributions. Becoming aware of the beliefs we hold about creativity is essential for unlocking our full creative potential. By taking on the role of a curious scientist, we can dig into our subconscious and examine the beliefs that hold us back. Through reflection and experimentation, we can challenge limiting beliefs, replace them with more empowering ones, and observe how these changes affect our creative process.

The Emotions of Creativity

"Your intellect may be confused, but your emotions will never lie to you." ~ Roger Ebert

Emotions often carry a societal stigma, with many being taught to fear, deny or repress them. This stigma, rooted in older generational attitudes, perceives emotions as signs of weakness, lack of discipline, or disruptions to logic and reason. Additionally, many people avoid dealing with their emotions because they feel uncomfortable, and it is easier to move away from them than get embroiled in their messiness.

However, as seen in the CBT model, emotions bridge thoughts and actions. Without emotional triggers, such as anger, excitement, fear, or love, human behaviour

would lack motivation. Thus, listening to and working with emotions is essential as they are conduits to creativity.

What Are Emotions?

Emotions result from electrical signals in the brain that extend their influence throughout the body, manifesting as feelings. Their nature is captured in the word 'emotion', which can be broken down into 'e-motion,' meaning energy in motion. This energy creates various reactions within the physical body, which can be intense and unsettling. While emotions generate psychological discomfort, they can also cause pronounced physical sensations. This is why we tend to shy away from those emotions that make us feel bad (anger, shame, sadness) and seek out and cling to those that make us feel good (happiness, joy, pride).

However, more than just electrical currents or physical experiences, emotions are the manifestations of what we believe to about the situation in which we find ourselves. In this way, they are messengers about what is truly going on for us. They evidence how we are processing an event and what filters we are placing over the information flows.

According to Jim Dethmer¹¹, there are five primary emotions, each conveying specific messages:

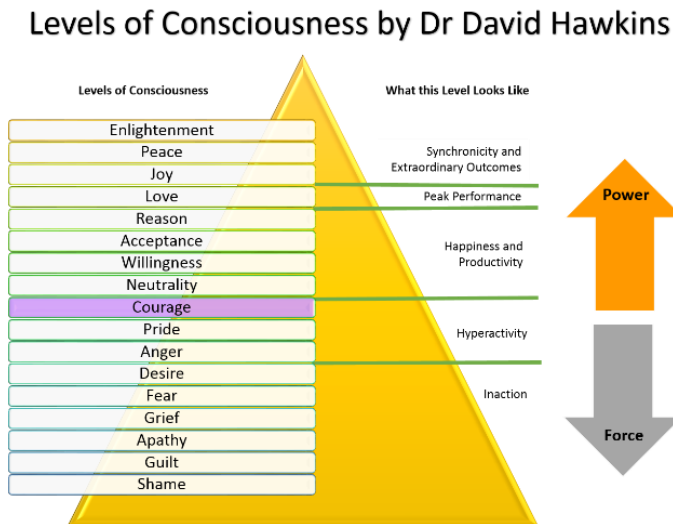
1. **Anger:** Indicates that something or someone has crossed a boundary, whether it be a physical or mental one. It calls for establishing or reinforcing boundaries and the capacity to say "no" without justification.
2. **Fear:** Signals that something important needs to be faced or learned. It encourages full presence and awareness, prompting attention to new skills or behaviours that need to be acquired.
3. **Sadness:** Reflects the need to let go of something significant that is departing. It urges acceptance of reality and the release of roles, dreams, behaviours, or relationships that no longer serve us.
4. **Happiness:** Suggests that something or someone should be celebrated or appreciated. It calls for taking the time to acknowledge personal achievements or positive experiences, fostering a sense of internal wellbeing.
5. **Sexual Feelings:** These feelings indicate that we are being called to create and innovate. They encourage the development of new ideas and taking action to create something unique.

It is interesting to note that sexual feelings in Dethmer's description also align with creativity, similar to what we saw in the explanation of the energies located within the Sacral Chakra.

Emotions of Force vs. Power

Dr. David Hawkins has developed a more detailed landscape of emotional states and has documented these in his Levels of Consciousness model, developed through Applied Kinesiology (AK) studies¹¹². Through his research, Dr Hawkins identified the different energy signals that come with a whole range of different emotions and mapped these as follows.

Figure 15- The Levels of Consciousness by Dr David Hawkins



In this model, emotions traditionally seen as distressing, such as shame, guilt, fear, and anger, are categorised as emotions of Force. These emotions exert pressure,

influencing behaviours by causing inaction or demanding excessive effort. For these reasons, Dr Hawkins described them as life-destroying energies. They constrain individuals, creating a sense of obligation and burden, and often lead to a feeling of being out of control of one's life and destiny.

Conversely, there are emotions or states of being that draw upon intrinsic strength, allowing individuals to live authentically. These are known as emotions of Power and include love, joy, and peace. Dr Hawkins described these emotions as life-affirming, leading the individual towards their highest potential.

While Force emotions may appear undesirable compared to Power emotions, Dr. Hawkins suggests that experiencing lower-level emotions is part of a necessary journey through various states of consciousness. There are no bad emotions; simply steps in finding one's true power. Experiencing the Force emotions is essential, but so is ensuring you don't get stuck in them. They all have benefits, but basing oneself in the lower-level states can lead to self-destructive outcomes.

For example, when channelled productively, anger can be a powerful motivator, pushing creators to challenge limitations and overcome obstacles. It can lead to intense bursts of creative energy, allowing individuals to

express frustrations and confront issues head-on through their work. However, suppose a person gets stuck in this state. In that case, it can also cause impulsiveness and impatience, resulting in rushed or unfocused work or an inability to collaborate effectively with others due to heightened emotional tension.

Likewise, pride can instill a strong desire for recognition and achievement, driving creators to pursue excellence in their work. Pride can lead to high-quality outputs as individuals push themselves to meet or exceed the standards set by the gatekeepers in the field. On the flip side, though, continually operating from this force emotion may manifest as perfectionism or defensiveness, where the creator becomes resistant to feedback, overly attached to their work, or fearful of failure. This way, pride may stifle creativity and prevent necessary experimentation or growth.

As discussed, the four pillars of wellbeing include Awareness and Insight. When one can become conscious that they are acting from Force emotions, they can use this awareness to understand the realities of operating within this energy, and so either capture or challenge it effectively in their work. For only by experiencing the constraints of emotions like shame, guilt, and fear can individuals understand the complexity of the human condition and so adequately address it in their creative pursuits. By working through

the Force emotions, a creator becomes wiser and more able to work with it rather than be swamped by it.

The Role of Love in Creativity

When Dr Hawkins speaks of love, it is not the gushy romantic or airy-fairy kind we see on Disney Princess movies or embraced with a Percy Shelley poem. Love is an action, not an idea. Here, I define love as:

"The actions taken to bring happiness, remove suffering and help a being reach their fullest potential." ~ Belinda Tobin

While many may suggest the opposite of love is hate, many wise people have suggested it is actually fear. That these two emotional states, love and fear, are opposed was propositioned by Seneca the Younger (4BC - 65AD). He said:

"True love can fear no one."

This statement suggests that there can be no fear when true love is present, and in the opposite, where there is fear, there is no true love. I have found that this claim was also made more recently by both Elisabeth Kubler-Ross and John Lennon.

"There is only love or fear, for we cannot feel these two emotions together, at exactly the same time. They're opposites. If we're in fear, we are not in a place of love. When we're in a place of love, we cannot be in a place of fear." ~ Elisabeth Kubler-Ross

*"There are two basic motivating forces: fear and love."
~ John Lennon*

Lennon believed that acting from a place of love was vital to authentic creativity. He saw that when you work from love, you are open to life's reality but have the passion and excitement to contribute and bring positive change. Spending our days in fear is nothing short of destructive – for those living in fear and the world around them. Because as Lennon so wisely perceived:

"When we are afraid, we pull back from life."

Fear closes us down to others and our potential. We mistrust ourselves and sacrifice our ability to contribute positively to this world. When we fear how others react, we do not give all of ourselves. We live in a state of conflict – there is a war between who we know we truly are and what we display to others. Care, creativity and contribution are stifled. Gandhi recognised this when he said:

"Fear kills the soul."

Therefore, as suggested by Lennon, if authentic creativity is the goal, then those embarking on creative pursuits must be able to find a way to move through the Force emotions of fear and find love for themselves and their creations. This is achieved through the conduit of courage.

Creativity Requires Courage

Courage is central to the transition from Force emotions to Power emotions, acting as a bridge between these two states. Courage is critical in creativity, enabling individuals to undertake the deep, reflective work required to reconnect with their true selves. It facilitates the shift from being suppressed or over-stimulated by harmful emotions to finding the personal power required to heed their messages, move through them and learn from them.

If you look in the dictionary, you will see that the definition of courage is:

"The ability to do something that frightens one".

This definition holds the key to what courage is all about. Courage does not mean that you don't feel afraid.

It is the exact opposite. Fear is an inherent part of courage. In fact, without fear, bravery does not exist. But courage is choosing to move beyond fear. It is the choice to sit with the discomfort of the unknown because of something more important.

"Courage is not the absence of fear, but rather the assessment that something else is more important than fear." ~ Franklin D. Roosevelt

To live a creative life, a person will need to decide that listening to and acting upon their ideas and inspirations is more important than allowing fear to keep them stuck in the same cycles of stagnation and external validation. They will need to decide that stepping into their power is more valuable than giving in to their anxiety. This choice is not necessarily a discrete, single decision but the result of actions taken to try new activities, meet new people and find those things that give energy, fuel passions, and make their hearts sing.

This is because courage is not a quality endowed at birth or granted by our Fairy Godmother with a wave of a wand. It is an ability developed over time and with dedicated practice. Biceps are built by repeatedly lifting weights and increasing the load over time. Similarly, it is possible to build courage through practice. Like reading, driving a car, or playing an instrument, courage

is a skill learnt over time. Dr. Russ Harris outlines the steps to build courage in his model, The Confidence Cycle¹¹³.

Figure 16 - The Confidence Cycle



Working through these steps will build confidence in any new endeavour, whether learning to dance, speak Spanish, make your first film or write your first novel.

However, it is recognised that a person can face many psychological barriers as they progress through the Confidence Cycle. Here are five, as identified by Dr Harris, along with the solutions to overcome each.

UNDERSTANDING CREATIVITY

Barrier	Description	Solutions
Excessive Expectations	Setting excessively high expectations, creating pressure and fear of failure.	Focus on progress, not perfection.
		Practice self-compassion.
		Set realistic, achievable goals and celebrate small wins.
Harsh Self-Criticism	An inner critic that undermines confidence by focusing on perceived flaws and failures.	Practice mindfulness to observe self-critical thoughts.
		Reframe self-talk with kindness and encouragement.
		Use diffusion techniques to separate from critical thoughts.
Fear of Failure	Fear mistakes or being judged, leading to inaction and avoidance of risks.	Redefine failure as a learning opportunity.
		Take small, manageable steps toward goals.
		Focus on values-driven actions rather than outcomes.
Lack of Experience	Confidence grows through experience, but avoiding challenges creates a cycle of inaction and low confidence.	Start with small tasks outside your comfort zone.
		Learn from each attempt ("failing forward").
		Build a portfolio of experiences to reinforce belief in your ability.
Fear of Discomfort	Avoidance of discomfort, such as anxiety or vulnerability, prevents growth and confidence.	Accept discomfort as part of growth.
		Use mindfulness to stay present during discomfort.
		Commit to actions aligned with values, focusing on long-term meaning rather than short-term comfort.

Notice that the Confidence Cycle begins with the step of 'practising the skills', not with 'feeling courageous.' There is a sinister belief that you must feel confident or courageous before doing something. However, science has shown that it is the other way around. The actions of courage come first, and the feelings of courage come later.

*"Hoping drains your energy. Action creates energy." ~
Robert Kiyosaki*

Sitting around wishing or praying for courage does not work. Action and reflection are needed to determine what worked well and what didn't. There is no knowing what a person can do without a commitment to continued improvement.

I would go further, though, suggesting that not feeling confident is expected from someone undertaking creative actions. By their very nature, creations are unique; therefore, what is being attempted is new. The novelty of the activity suggests that there will inherently be a sense of uncertainty and some level of anxiety about how it will progress. However, by continuing to be aware of any limiting beliefs, working from a space of love, and progressing through the Confidence Cycle, an expansion in courage and creativity is expected.

Every creator encounters moments of self-doubt, where they question their ideas, talents, or direction. This anxiety is a natural part of creating something new, as it involves stepping outside the familiar into uncharted territory. But gaining the courage to create means understanding that these moments of doubt are normal and often necessary for growth and innovation. The willingness to continue, even in the face of uncertainty, allows creative ideas to develop and flourish.

[Back to Table of Contents](#)

Core Concepts

Our beliefs about creativity directly influence our experience of it and shape the outcomes of our creative work.

Emotions act as motivators, creating movement between thoughts and actions.

Recognizing and processing emotions like anger, fear, sadness, and joy provides valuable insights into creative challenges and opportunities.

Force emotions (e.g., shame, guilt, fear) can hinder creativity, while power emotions (e.g., love, joy, peace) inspire growth and innovation.

Experiencing lower-level emotions is part of the human journey, but moving towards higher-level emotions is essential for creative fulfillment.

Love, defined as actions that bring happiness and remove suffering, opposes fear and fosters authentic creativity.

Acting from a place of love allows creators to overcome fear and embrace their unique contributions.

Courage is the bridge between fear and love, enabling creators to confront self-doubt and take risks. Building courage involves practice and action, as demonstrated by Dr. Russ Harris's Confidence Cycle.

Chapter 15 – Measuring Creativity

If there is anything that has been gleaned from the discussion around creativity thus far, it is that it is a complex concept involving both internal intangible processes like inspiration, problem-solving, and collaboration as well as subjective external assessments and evaluations. Its processes are messy and multi-directional, and many iterations may occur before a final output is achieved. And so, the idea of then trying to measure creativity appears to be a nonsensical concept.

For example, how would you rate the novelty and value captured within the Taj Mahal or the Mona Lisa? How could you validate and verify the creativity encompassed within a person or a team? Trying to box in something so all-encompassing into a set of metrics can be deemed, at best, reductionist and, at worst, disrespectful. Besides, how does one measure something that is liminal and limitless?

"You can't use up creativity. The more you use, the more you have."— Maya Angelou

Yet, as we have also seen, creativity significantly benefits individuals, businesses, the community and society. In addition to personal growth, it drives commercial innovation and national competitiveness,

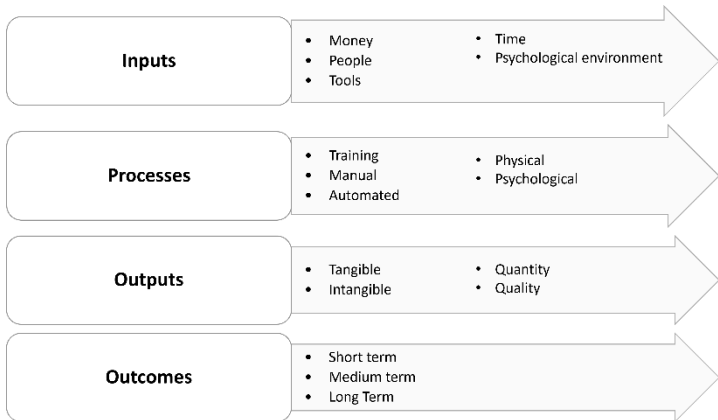
which have considerable social and monetary rewards. Be it in community wellbeing, corporate profits or economic growth, creativity has very important outcomes. For this reason, significant investments are being made by collectives, corporations and governments to enhance it. As resources are poured into developing creative skills and processes, there is a pressing need to evaluate whether these investments are paying off. How can we tell if the programs and initiatives designed to foster creativity are working?

Therefore, as amorphous as creativity is, being able to evaluate its existence, and, more importantly, its increase is crucial. This chapter will explore various methods for measuring creativity, consider their validity, strengths and limitations, and leave you better informed as to some indicators used as a proxy for the power of creativity.

The Service Logic Model

In Chapter 5, we looked at the simple system of creativity, with the concept broken into the components of inputs, processes and outputs. We can expand on this system to now include the ultimate achievement of aims, being outcomes. This more comprehensive systems model is often known as the service logic model and is widely applied in fields such as public service delivery, nonprofit programs, and government initiatives to demonstrate how resources contribute to desired results.

Figure 17 - The Service Logic Model



The elements of the service logic model are as follows:

Inputs: These are the resources necessary to deliver the outputs. For example, the inputs into the creation of a painting include people, tools, and time. Beliefs, thoughts and emotions can also be considered as important input components.

Processes: These are the actions or tasks undertaken to achieve the output. In the example of producing a painting, processes include idea generation and development, training sessions, workshops, or mentoring programs, and the physical processes of sketching, mixing and applying paints.

Outputs: These are the direct products of the processes. Outputs often take the form of quantifiable results, such as the number of attendees at a performance or the number of creative works produced. Following the

example of the painting, its completed form can be viewed as a single output.

Outcomes: Are the changes or benefits that result from the output, which can be categorised into:

- Short-term outcomes: Immediate effects, such as an increase in skill, showing or sale of the work, and the inspiration and enjoyment it provides to others.
- Medium-term outcomes: Behavioural changes, such as the appreciation, adoption and application of new skills or techniques or increased creative confidence.
- Long-term outcomes: Broader impacts, such as societal innovation, cultural shifts and enrichment, or economic growth.

Starting at the End

While the achievement of creative outcomes is a forward progression of inputs to outputs, when planning the work to be undertaken, it is best to start at the end; understanding the outcomes being sought and getting clear about what change you are seeking to make. For only when you have a clear view of what you want to achieve can you determine what type of products and services will be valuable and contribute to the overall outcome. And from there, you can better identify the processes that will deliver on these meaningful outputs. Once an understanding of the outputs and processes has

been gained, then you can work backwards further and identify the inputs required to support such an undertaking. In this way, while delivering creative outcomes flows forward, the planning for them must be undertaken in reverse.

“If you don’t know where you’re going, any road will take you there.” ~ Cheshire Cat, Alice in Wonderland

The service logic model provides a helpful framework to consider how we may measure creativity at each stage of the cycle. We can break down the creative process into its components, identifying measures that would be applicable to assess how it is showing up in each stage. Moreover, we can analyse the results to identify correlation and causation, which is cause and effect relationships. That way we can become wiser about what changes we can make that will have the greatest impact on the outcomes. Let’s see some examples of how this could be done.

Measuring Creative Inputs

Measuring creative inputs is essential for understanding the quantity and quality of resources invested in the creative process. These inputs can then be compared with the resulting outputs and outcomes to determine if sufficient benefits have been achieved for the

investments made. This is known as a cost-benefit analysis or otherwise as ensuring value for money.

The inputs to the creative process that are generally measured are time, money (and other material resources) and creative skill.

Time as a Creative Input

Time is one of the most crucial resources in the creative process. It is often said that creativity requires both quantity and quality of time, for it is not just the number of hours spent on a creative pursuit that is important, but the attention and intention of the creator during this time that impacts the depth of exploration and the refinement of ideas.

Indicators for measuring time as a creative input might include:

Measure	Description
Time spent in preparation	Including in research, learning, and skill acquisition, all essential for building a creative foundation.
Time spent in active creation	This measures the amount of time actively engaged in generating creative work, whether writing, designing, painting, or problem-solving.

Measure	Description
Time dedicated to reflection and revision	Creativity often requires periods of reflection and iteration. Measuring how much time is spent evaluating and refining ideas can provide insights into the thoroughness of the creative process.

Money and Material Resources

The financial investment made in a creative project can strongly indicate the resources available to support the creative process. This might include:

Measure	Description
Funding for materials or space	In fields like the visual and performing arts, design, or engineering, access to high-quality materials, tools and working or performance space can significantly impact the ability of people to undertake creative processes and the quality of their outputs.
Budget for workshops, courses, and mentorship	Investing in professional development, training, or collaboration can enhance the creative skill set of individuals involved in a project.

Measure	Description
Financial backing for research, experiment and production	Creativity often involves significant time, risk and experimentation, which require adequate funding to explore untested ideas without fear of failure.

Creative Skill

The level of skill that individuals bring to the creative process is another critical input. Creative skill can be measured through various techniques, including:

Measure	Description
Portfolio reviews	A qualitative assessment of past creative work can provide an understanding of an individual's or team's creative abilities and experience.
Technical assessments	For specific fields, such as graphic design, music, or programming, technical skills can be tested to gauge proficiency in the tools and techniques needed to create.
Psychological assessments	Tests such as the Creative Achievement Questionnaire (CAQ) or the Torrance Tests of Creative Thinking (TTCT) measure an individual's ability to think creatively.

The Psychological Environment

We have heard how fear is the antithesis of creativity, shutting people down and limiting their ability to be authentic and develop or implement new ideas. The psychological environment in which the people are working, then, is an important precursor to creative outputs, determining their ability to feel supported and bring their full creative selves to the project. In particular, psychological safety is a critical input to creativity because it fosters an atmosphere where individuals feel secure to express ideas, take risks, and challenge norms without fear of judgment or retribution.

Psychological safety is often measured through surveys or assessments that gauge perceptions of trust, openness, and respect within a team or organisation. Tools like the Psychological Safety Index (Edmondson, 1999) assess factors such as whether team members feel comfortable asking questions, admitting mistakes, or proposing new ideas. Additionally, methodologies have been developed that include a combination of observation and survey to provide a more comprehensive assessment¹¹⁴.

The Limitations of Measuring Inputs

While measuring the resources and skills that go into the creative process is valuable, these metrics have inherent limitations. Inputs alone do not guarantee creative success. For example:

- Is more time spent on a project better? Increased time dedicated to creative projects could also show inefficiencies in processes or wasted time due to unsuitable equipment or skills.
- Is more money invested into a project better? Similar to time, if this resource is being used inefficiently, it is not a valuable indicator to predict the quantity or quality of creative outcomes.
- Is greater skill better? An individual may have great technical skills or high scores on psychological assessments. Still, these are only potentials and may not accurately predict their ability to innovate within a specific project, team or cultural context.

Many external factors, such as the physical and psychological environment, the nature of the task, the camaraderie and collaboration between team members, and the support systems in place influence creative outcomes. Therefore, it is essential to complement measurements of inputs with assessments of the creative process and outputs to better understand how effectively they have achieved the desired goals.

Measuring Creative Processes

The creative process is not a straightforward or linear journey. However, we can use frameworks like the

Stanford 5-stage model to assess the efficiency and effectiveness of the creative process. By measuring the activities at each stage, evaluators can gain insights into how resources, time, and efforts are utilised. For example:

Preparation

In the preparation stage, individuals or teams invest time in learning, researching, and acquiring the skills and knowledge necessary for creative work. To evaluate the efficiency of this stage, one can look at:

Measure	Description
Time spent acquiring knowledge and skills	How much time is dedicated to learning about the subject or mastering the necessary techniques?
Resource use	Are the right tools, materials, or sources being used, and are they being utilised effectively?
Outcome	Does the preparation yield a solid foundation or accreditation for further creative processes?

Generation

This stage involves the production of new ideas or concepts, which can happen either through deliberate brainstorming or subconscious processes like

incubation. Efficiency in this stage can be evaluated by considering:

Measure	Description
Idea quantity	How many ideas are generated? Sometimes, generating a large volume of ideas can lead to breakthrough moments.
Time to ideation	How quickly do the individuals or teams move from generating raw ideas to focusing on the most promising ones?
Quality and diversity of ideas	Are a wide range of creative ideas being explored, or is the process yielding repetitive or predictable results?

Insight

The insight stage is often described as the "Eureka!" moment, where a promising idea emerges. Measuring efficiency here can involve:

Measure	Description
Frequency of insight moments	How often does insight occur? While this can be difficult to predict or quantify, assessing how the activities during previous stages (e.g., brainstorming or incubation) contribute to these breakthroughs is possible.

Measure	Description
Speed of insight	How long does it take to go from generating raw ideas to identifying a promising solution or concept?
Relevance of insight	Does the insight reflect the original goal, or has the process diverged too far from the intended outcome?

Evaluation

In the evaluation stage, the generated ideas are assessed to determine their viability, usefulness, and fit for the problem or project at hand. It is important at this stage that there clear, effective criteria for assessing the ideas. Effective evaluation should balance creativity with feasibility, and setting structured criteria can improve efficiency. Measuring the success of the evaluation stage can be done by assessing:

Measure	Description
Decision-making speed	How long does it take to decide whether an idea should be kept, revised, or discarded?
Feedback loops	Does the evaluation process involve constructive feedback that feeds back into the generation and preparation stages, improving subsequent cycles of the process?

Measure	Description
Success of previous evaluations	How many of the ideas evaluated to proceed led to achieving the desired outcomes?

Externalisation

The Externalisation stage is where ideas are expressed concretely—through writing, designing, building, or performing. Measuring the effectiveness and efficiency of this stage can involve:

Measure	Description
Speed of production	How quickly are ideas translated into tangible outputs? This could be measured by tracking the time from insight or evaluation to creating a prototype, artwork, or design.
Resource use in production	Are resources like materials, time, or tools being used efficiently during production of the final output?
Iteration cycles	How many rounds of refinement or iteration are necessary before the final product is complete? Excessive iteration may suggest inefficiencies, but in some creative processes, multiple iterations are necessary for high-quality output.

In addition to these specific metrics, Sawyer (2012)¹¹⁵ suggests that measuring creative success should include understanding the collaborative processes that led to the final output. This is because, in group settings, creative outputs may result from joint efforts, and the interactions between team members can enhance or limit the creativity of the final product.

Measuring Creative Outputs

Measuring creative outputs is an essential but complex task, as the value and impact of creativity are often difficult to quantify and can be very subjective. Tangible measures such as peer recognition, audience engagement, and awards provide a sense of the reach and appreciation of creative work, but they also come with limitations. True creative works are sometimes so novel or challenging that they may not immediately receive widespread recognition yet contribute to long-term cultural value. Additionally, measuring creativity by outputs alone requires careful consideration of both qualitative criteria and quantitative criteria, with examples including:

Peer Recognition

One of the most traditional methods for measuring creative output is peer recognition within the creator's field. This could include:

Measure	Description
Reviews from experts or critics in the field	Such as art critics for visual artists, music critics for musicians, or academic peers for researchers.
Inclusion in exhibitions, publications, or collections	These represent validation from the creative community.
Mentions in academic or creative journals	This indicates that the work is considered worthy of discussion and analysis by experts

According to Amabile (1982)¹¹⁶, the most valid way to assess creativity is through consensual judgment by experts in the relevant domain, what Csikszentmihalyi would call the field. The field is deemed the set of experts best placed to evaluate whether an output is novel and appropriate within its domain. It is these experts that are said to be able to see beyond what is merely popular and identify those outputs that will push boundaries and change cultures.

Audience Engagement (Popularity)

Another common measure of creative output is the level of audience engagement or popularity. This could include metrics such as:

Measure	Description
Ticket sales, downloads, or purchases	Indicating how widely a piece of creative work has been consumed.
Social media engagement	Including likes, shares, and comments, measures how much the work resonates with the general public.
Attendance	Attendance at exhibitions, performances, or public displays, indicating audience interest and participation.

Awards and Accolades

Creative works are often judged by the awards they win, whether in arts, design, film, literature, or other fields. Awards are a sign of recognition by industry professionals or judging bodies that the work meets or exceeds certain criteria for creativity such as quality, and impact.

The Limitations of Measuring Outputs

It is relatively easy to measure outputs and to show them off to peers and the public. However, just because they are easy to measure, it does not mean these metrics effectively evaluate creativity. This is because:

- **Creative work often pushes boundaries, challenges norms, and may not achieve**

immediate recognition or popularity. Works that are too novel or ahead of their time may not receive due credit until later, as history is filled with examples of unappreciated geniuses who only gained recognition posthumously.

- **Peer opinion can be based on politics** within creative industries or purely on commercial success, failing to capture a creation's long-term cultural value. Judging panels, critics, and audience opinions are subjective and can distort the perception of what is truly creative.

Measuring Creative Outcomes

Measuring creative outcomes is about ensuring that creative efforts deliver on the objectives the project set in the first place. It focuses on the long-term impact and value generated by creative work rather than the immediate recognition or tangible outputs. Creative outcomes are often intangible and longer-term, influencing individuals, communities, and cultures in profound but subtle ways. By shifting the focus from the immediate product of creativity to its effects on the domain and broader society, we can better understand its significance. Creative outcomes can be evaluated from several perspectives, including the personal, societal, and cultural dimensions.

Personal Transformation

One of the key outcomes of creativity is its ability to foster growth and transformation in individuals. This can be measured by:

Measure	Description
Emotional impact	Gauging how the creative work affects emotions, such as inspiring joy, provoking thought, or offering solace.
Skill development	Assessing whether the creative process has promoted learning or enhanced the skillset of individuals and teams.
Self-expression and identity	Understanding how creative activities help individuals explore or affirm their identities.

Societal Impact

Creative outcomes can also be assessed by their effect on society, focusing on the social and communal benefits. Examples include:

Measure	Description
Social connectivity	Measuring how creative work fosters dialogue, collaboration, or unity among groups. This could include increased participation in communal events or initiatives inspired by the work.

Measure	Description
Behavioural change	Analysing whether the creative work influences societal behaviours or attitudes, such as increasing environmental awareness or advocating for social justice.
Economic contribution	Considering the work's role in stimulating economic activity, such as job creation, tourism, or local business growth.

Cultural Legacy

Creative work contributes to the cultural fabric of society, shaping ideas and values that endure over time. Cultural outcomes might be measured by:

Measure	Description
Influence on other creators	Evaluating how the work inspires future creative endeavours, often through references, reinterpretations, or adaptations.
Preservation and heritage	Determining whether the creative work contributes to the documentation or evolution of cultural identity.
Shifts in norms and trends	Observing how the creative work challenges or redefines societal norms, aesthetics, or intellectual paradigms.

The Limitations of Measuring Outcomes

While measuring outcomes provides valuable insights, it comes with challenges:

- **Intangibility:** Many outcomes, such as individual inspiration or cultural impact, are difficult to quantify, relying on subjective interpretations or anecdotal evidence.
- **Timeframe:** The full effect of creative work often emerges over years or decades, making immediate assessment incomplete or misleading.
- **Context dependency:** Outcomes can vary significantly based on cultural, social, or individual contexts, complicating efforts to generalise their impact.

Comprehensive Measurement Methods

As shown in the previous paragraphs, each potential method for measuring creativity has limitations. Moreover, the various inputs, processes and outputs are interrelated, and all play a role in delivering the creative outcomes. Therefore, to measure creativity, it is necessary to capture a holistic view, being a balance of:

- Lead (cause) and lag (effect) indicators.
- Quantitative and qualitative data.

Ivonne Chand O'Neal, PhD, is the founder and principal of MUSE Research, LLC, a creativity and arts impact research firm that provides arts impact assessment services for multinational companies, community and government development programs, and educational institutions. She advocates for breadth and depth of creative analysis, covering both quantitative and qualitative indicators. In her assessments, she uses a combination of the following methods:

Quantitative Methods

Method	Description
Surveys and questionnaires	Used to gather numerical data on aspects such as student engagement, cognitive abilities, and problem-solving skills before and after participation in creative programs.
Standardised tests	Administered to measure specific outcomes like academic performance or critical thinking skills, which could be statistically analysed to assess the impact of creativity on educational success.
Participation metrics	Tracking attendance, number of creative outputs (e.g., art pieces, performances), and frequency of participation in arts-related activities to evaluate engagement levels.

Method	Description
Pre and post program assessments	These involved measuring specific skills or abilities at the beginning and end of a program to determine how creativity has developed over time.

Qualitative Methods

Method	Description
Interviews	Conducted with students, teachers, and program facilitators to gather in-depth, narrative insights into personal experiences and the subjective impact of creative processes.
Focus groups	Used to facilitate discussions that allow participants to reflect on their creative experiences and the personal or educational changes they observed.
Case studies	Detailed examinations of individual or group projects within the programs to explore the unique ways creativity manifests and impacts participants.
Observations	Watching participants during creative activities is useful to assess people's behaviour, engagement,

Method	Description
	collaboration, and the overall nature of the creative process.
Reflective journals	Encouraging participants to keep journals documenting their thoughts and progress throughout the creative process provides rich qualitative data about personal growth and creative breakthroughs.

By combining quantitative methods (which provide measurable data) with qualitative approaches (which offer deeper insights into personal and emotional growth), O'Neal's research created a holistic view of how creativity impacts individuals and communities. These methods ensured that creativity was not just evaluated by its immediate output but also by its broader influence on individual development, societal engagement, and cultural participation.

The Irreplaceable Individual Indicators

Measuring creativity is a necessary endeavour, especially as organisations and governments continue to invest to cultivate creative processes, and it must be determined if these investments are yielding valuable results. However, focusing too much on tangible measures—such as peer recognition, audience engagement, financial rewards and industry awards can cause harm.

"It's dangerous to validate yourself using these sorts of external measures." ~ Emma Dean

This is because there is a magical yet often-missed feedback loop between a creator and their creations that deserves much greater respect and recognition. There is an invaluable intrinsic reward that comes from the act of creation itself.

"Even without success, creative persons find joy in a job well done. Learning for its own sake is rewarding."
~ Mihaly Csikszentmihalyi

Suppose this internal achievement is downplayed in favour of external validation. In that case, it can sever a person's link with their creative selves and have sinister repercussions. This view is supported by Dr Gabor Maté (2022)¹¹⁷ when he notes that modern society's emphasis on productivity and external achievements can lead to disconnection from one's authentic self, further exacerbating stress and mental health issues. Maté advocates for creating environments that support emotional expression, connection, and authenticity as essential for fostering true wellbeing. In this way, when assessing the effectiveness of creative projects, significant emphasis should be placed on internal measures of success. These include:

Measure	Description
Self-acceptance	Gaining a deeper understanding and acceptance of oneself through the creative journey
Personal fulfillment	Finding joy, satisfaction, engagement, passion or a sense of purpose through creating.
Emotional healing	Successfully processing, conveying and transforming emotions through creative work.
Authenticity	Finding and staying true to one's vision, voice, or artistic style without caving to external pressures.
Growth and learning	Observing personal or skill development over time due to creative pursuits.
Courage and resilience	Overcoming fear, challenges, setbacks, or failures.
Impact on others	Recognising that one's work has moved, inspired, or resonated with others on a personal level.
Consistency and discipline	Maintaining a steady creative practice and showing up regularly for one's craft.
Forming connections	With the self, the work, or others in the creative community.

Interestingly, these internal measures of success align with the four pillars of wellbeing discussed previously.

Pillar of Wellbeing	Internal Measures
Awareness	Self-acceptance Emotional healing Authenticity
Insight	Growth and learning Courage and resilience Consistency and discipline
Purpose	Personal fulfilment Impact on others Authenticity
Connection	Healthy connections Self-compassion Positive impact on others

Earl Nightingale has said that:

“Success is the progressive realisation of a worthy goal or ideal.”

Holistic wellbeing is an incredibly honourable goal. By undertaking creative pursuits and ensuring sufficient regard is placed on intrinsic measures such as those above, individuals can achieve authenticity and holistic health, and that is the true power of creativity.

[Back to Table of Contents](#)

Core Concepts

Creativity can require significant investments both in time, money and tools. Therefore, methods to evaluate its impact must be found to determine if investments are effective.

The Service Logic Model is a framework to measure the efficiency and effectiveness of creativity through the components of inputs, processes, outputs, and outcomes.

- Input measures include time, material resources, skills, and psychological safety.
- Processes measures can focus on preparation, generation, insight, evaluation, and externalisation.
- Outputs can be measured via peer recognition, audience engagement, and awards.
- Outcomes encompass personal transformation (self-expression, emotional healing), societal impact (behavioural change, social connectivity), and cultural legacy (influence, preservation).

Given creativity's interdependent and iterative nature, holistic systems of measurement must be used, including lead and lag indicators and quantitative and qualitative measures.

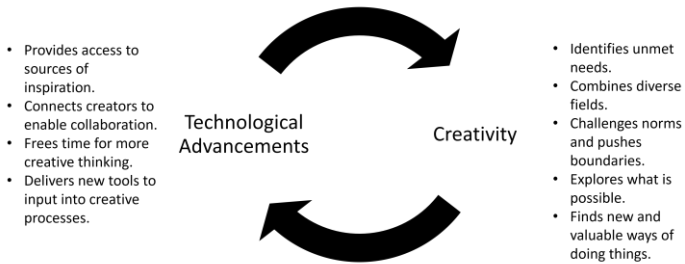
Internal success metrics such as self-acceptance, personal fulfillment, authenticity, and resilience can also be assessed to ensure a balanced approach to fostering creativity and minimising the harm from reliance on external accolades.

Chapter 16 – The Impact and Influence of Technology

Technology is the manner or method by which a task is accomplished. Throughout human evolution, our technologies have changed radically, from those requiring significant investments of our bodies and brains, to those where computers now do most of the heavy lifting. However, while the types of technologies we use may have changed, one thing has remained the same: technology and creativity are inextricably linked. This is because creative endeavours drive and are driven by technological innovation, creating a circular relationship.

By their very nature, being new and valuable, technological innovations are the products of creative processes. Inventors spend time and energy experimenting, gaining insights, evaluating and externalising their ideas, and delivering a never-before-seen product, service, component, service or system. Once these technologies are available within the domain, they provide the inspiration and inputs for further ideas, becoming integral parts of the creative system.

Figure 18 - The relationship between creativity and technology



While there is much concern about artificial intelligence (AI) and its impact upon human creativity, we must remember that technological innovations have always influenced and impacted upon what and how we create. Technologies like the printing press and the computer have altered how creative outputs, such as written works, are produced and distributed. Similarly, innovations in electronics and lighting have revolutionised stage performances, filling them with previously unimaginable embellishments. Combining electronics and music has also reshaped the sound landscape for recent generations, giving rise to entire new modes of self-expression. Regardless of era or genre, the evolution of technology has not only changed how artists create but also expanded the boundaries of what can be created. Here is just a small snapshot of how technological advancements have shifted the nature of creative processes and outputs over time.

Technology	Impact	Influence
Photography (1826)	Photography revolutionised visual art by capturing reality instantly.	Freed from the need to reproduce reality, artists explored new, abstract forms, leading to Impressionism and Surrealism.
Motion Pictures/Film (1890s)	Offered a new storytelling medium, combining visuals and sound.	Film changed not only how stories were told but also how they were consumed.
Radio (1920s)	Brought storytelling and entertainment into homes fuelling the rise of radio plays and music.	Radio democratised access to information and entertainment, providing new ways in which creators could reach the domain.
Animation (1920s to 1930s)	Opened a new realm of storytelling.	Animation allowed for the creation of fantastical worlds, and movies unbounded by the constraints of live-action filmmaking.
Television (1930s to 1950s)	Introduced new genres like soap operas, game shows, and reality TV, and innovation in writing, cinematography, and production.	Television revolutionised how stories were told and expanding the reach of creative works into the everyday lives of the public.
The Synthesizer (1960s)	Transformed music production by manipulating sound waves and create entirely new tones without orchestras or expensive studios.	Synthesizers expanded the possibilities for sound design and influenced genres like electronic music, synth-pop, and ambient music.

Technology	Impact	Influence
Personal Computers (PCs, 1970s)	Provided new and readily accessible tools to produce and manipulate creative works in unprecedented ways.	By making creative tools and outputs more accessible, PCs opened the door for greater personal expression and connection.
Musical Instrument Digital Interface (MIDI, 1983)	MIDI allowed electronic instruments to communicate with computers, integrating technology into music production seamlessly.	MIDI revolutionised digital music production and gave rise to genres like techno, house, and trance, which rely heavily on digitally composed music.
The Internet (1990s)	Democratised access to creative tools and distribution platforms bypassing traditional gatekeepers.	Led to the rise of digital publishing, self-publishing, and new platforms for collaboration, profoundly impacting fields like writing, music, and film.
3D Printing (2000s)	Allowed creators to externalise digital designs offering new possibilities for sculpture, industrial design, and architecture.	The technology empowered creators to prototype and customise designs with precision, at a fraction of the cost of traditional manufacturing.
Smartphone (2007)	Put high-quality cameras, audio recording, and editing tools directly into users' hands.	Democratised creativity even further, fuelling user-generated content on platforms like Instagram and TikTok. It blurred the lines between professional and amateur content creation, leading to spontaneous, on-demand creativity.

Technology	Impact	Influence
Artificial Intelligence (AI) (2020s)	Enables rapid generation of content ranging from visual art to writing and music. It enables swift access to existing creative works and the ability to automate the combination of these into new forms.	AI tools have brought further automation to creative processes while also assisting human creators in pushing the boundaries of their work and finding new forms for creative expression.

Artificial Creativity?

With the advent of machine learning and advancements in artificial intelligence, the question arises as to whether these things can be considered creative in the same way that humans are. Creativity is often defined by two core principles: the ability to produce something unique and valuable. By this definition, AI can arguably produce creative outputs, especially in fields like writing, music, and art, where AI-generated works may be both novel and appreciated for their quality. In many cases, the outputs can fool the observer and even pass through AI detection checks to be viewed as an equivalent of human creation.

To determine whether these technologies can, in themselves, be deemed creative, we must investigate them through two different lenses:

1. Agency
2. Integrated intelligence.

The Agency Argument

In Chapter 3, we have heard that some researchers believe that the presence of an intention, direction and controlling entity, is required for creativity; also known as agency. Suppose it is deemed that agency is an essential component of creativity. In that case, we can argue that artificial creations do not inherently meet this criterion, at least not yet. AI cannot deviate meaningfully from its programming or develop truly self-directed creative intent. Currently, it operates based on prompts and algorithms created by humans.

As Paul and Stokes (2021)¹¹⁸ suggest, AI lacks the capacity to "give a damn," meaning it cannot care about or take responsibility for the work it generates. Therefore, if creativity requires agency—the ability to act with purpose—then AI lacks the essential component that defines true creativity; it is the human programmers that are the creative force behind AI.

The Use of Integrated Intelligences

Even if you remove the requirement for creativity to be driven by an agent, AI will still not pass the test as a creative entity due to its limited intelligence. What has been made clear throughout this book is that creativity

is a holistic process involving body, mind, and spirit. We have also seen that using Gardner's theory of multiple intelligences, a whole range of cognitive abilities come together in creative acts. There are specifically four types of Gardner's intelligences that are important in considering the role of AI in creativity. These are:

- **Interpersonal:** The ability to understand and interact effectively with others.
- **Intrapersonal:** The capacity for self-awareness and self-reflection, understanding one's emotions and motivations.
- **Bodily-Kinaesthetic:** The ability to use one's body skilfully and handle objects adeptly.
- **Existential:** The capacity to ponder deep questions about human existence, such as the meaning of life.

The combination of interpersonal and intrapersonal intelligence is very similar to Daniel Goleman's concept of Emotional Intelligence¹¹⁹, which comprises the following components:

1. **Self-awareness** - the ability to recognise and understand one's emotions, strengths, weaknesses, values, and drivers.
2. **Self-Regulation** - involves managing one's emotions and impulses effectively. It encompasses controlling or redirecting

disruptive emotions and adapting to changing circumstances.

3. **Motivation** - refers to a passion for work beyond money or status. It involves a drive to pursue goals with energy and persistence.
4. **Empathy** - the ability to understand the emotions of others.

From all we have heard, it is clear that creativity requires considerable emotional intelligence. However, despite the impressive advancements in AI, as shown in a response from ChatGPT, AI is stunted in this capacity.

Figure 19 - ChatGPT response to the question "How are you feeling?"

As an AI, I don't have feelings or emotions. My purpose is to assist you by providing information and answering questions based on the data I've been trained on. If you have any other questions or need further assistance, feel free to ask!

AI has some interpersonal intelligence as it can interact with humans and recognise a few emotional cues. However, it lacks the deep understanding and genuine empathy required for effective interpersonal intelligence. At this time, AI also lacks self-awareness, self-reflection, and an understanding of its emotions and motivations. Because it has no physical form with which to interact with the world, the creations made by AI are very two-dimensional; they are technical and individual endeavours that lack the vital feedback loop from the

physical form. Additionally, existential intelligence, involving pondering deep philosophical questions, remains far beyond the scope of current AI capabilities. The nature of our existence, our demise and mortality, and the challenges of the human condition are some of the greatest inspirations for art and innovation. Without feeling these conundrums and understanding them as part of your very being, it is difficult to see how AI can bring a holistic perspective to any creative pursuit.

Therefore, while AI would be an effective tool to assist with technical aspects of logical, mathematical, visual or literary creations, it cannot replicate the emotions that are essential inputs into creative works, nor deal deeply with existential issue. For example, A choreographer could use AI to help plan the steps of a dance in sequence with the music. Still, it could not understand or embed the emotions essential to the story.

A playwright could use AI to develop an outline or character profiles for their next production. However, it could never understand the existential issues the characters are dealing with or the complexity of their human connections.

A musician could use AI to develop lyrics or a chord sequence for her next song. However, these could never hold the deep insight they have gained from their personal experiences or adequately represent the unique

and authentic personality they bring to her work. It may sound great but not fully reflect or resonate with the musician's truth.

An illustrator could use AI to develop ideas for creatures. Still, it cannot imitate the curiosity and compassion with which the artist imbues them, nor replicate the emotional interplay between creator and creation. In this way, AI is a tool that merely facilitates the development and expression of the illustrator's creative self.

Unlike humans, AI cannot draw from subjective experiences, experience emotional sensitivity or take intuitive leaps. And so, the depth of human creativity, which involves self-reflection and emotional resonance, is still largely beyond the reach of AI. Sure, AI may create all manner of things, and it is creating many things, but because of all I have discussed above, I do not believe we can call it creative.

What does this mean for those who use AI to develop creative works? Well, only the person pressing the buttons can know whether their output reflects their authentic vision and whether they have truly invested their own body, mind and spirit into the process. Only the creator will know whether they were the agents in control of the creation or whether they substantially delegated development to AI tools. Ownership of a

creative work remains a very personal experience—only the creator can feel whether the piece is truly theirs. As technology continues to become more sophisticated, and in some ways, more human, it will be up to creators to find the balance between human production and technological assistance that fills them with a sense of integrity.

[Back to Table of Contents](#)

Core Concepts

There is a symbiotic relationship between creativity and technology. Creativity drives technological innovations, which in turn inspire and expand the possibilities for creative endeavours.

Technologies like photography, film, and AI have continually revolutionised creative processes and outputs, shaping how we create and what we can achieve.

New technologies consistently redefine art forms, enabling groundbreaking genres and expanding the reach of creative works.

AI can generate unique and valuable outputs, but it lacks agency, emotional intelligence, and self-awareness, which are critical elements of human creativity.

Creativity relies on intrapersonal and interpersonal intelligence, existential reflection, and physical interaction, all of which AI lacks.

AI enhances human creativity by filling technical gaps, sparking imagination, and streamlining processes, but it cannot replicate the holistic perspective of human creators.

The use of AI in creative works requires creators to, on a case-by-case basis, assess and critically evaluate whether the output reflects their authentic vision and integral involvement.

Chapter 17 – Creativity Through the Lens of the Natural Laws

“Creativity is the natural order of life. Life is energy: pure creative energy.” ~ Julia Cameron

Creativity is an ability, action and experience that exists well beyond the human domain. It is an inherent quality of all life, not only on this planet but well beyond even the reaches of the universe we know. Each day, our bodies undertake a phenomenal investment in creation, replacing 330 billion cells, or 3.8 million new cells per second¹²⁰. It is this regeneration, the removal of what is not working, and the replacement with newly created cells that keeps us alive. Similarly, the universe that we inhabit is undergoing a continual process of creation and destruction, often referred to as the "cosmic cycle of life." In our galaxy, the Milky Way, it is estimated that around 55 new stars are formed each year¹²¹. In between humans and the heavens, our own planet, Earth, moves in the same rhythms, just at a different pace. Fires, floods, storms and snow all create destruction but simultaneously enable renewal, fostering biodiversity, ecological resilience, and the perpetual cycle of life.

As shown by this example, there are certain principles that can be found across all levels of life that are inescapable and immutable. These are known as the natural laws and were espoused and documented by Hermes Trismegistus in the first century AD, and thus are also known as Hermetic Laws. There are seven such laws, and they apply to the intangible processes of creativity as much as they apply to each cell within our body or the constellations we see in the sky. The Hermetic Law are:

1. **Mentalism** - The All is mind; The universe is mental.
2. **Correspondence** - As above, so below; As below, so above. As within, so without; As without, so within.
3. **Vibration** - Nothing rests; Everything moves; Everything vibrates.
4. **Polarity** - Everything has poles; Everything has its pair of opposites; Opposites are identical in nature but different in degree.
5. **Rhythm** - The pendulum swing manifests in everything; The measure of the swing to the right is the measure of the swing to the left.
6. **Cause and effect** - Every cause has its effect; Every effect has its cause.
7. **Gender** - Gender is in everything; Everything has its masculine and feminine principles; Gender manifests on all planes.

These principles were seen as blasphemous in their time seeming to conflict with the religious tenets and authoritarian rule. Yet, during the Renaissance, they became cornerstones of philosophical thought and self-development, inspiring both scientific and artistic innovation. They have become embedded within modern psychology and are embedded within the teachings of a plethora of self-development gurus like Tony Robbins, Deepak Chopra, Eckhardt Tolle and the Dalai Lama. It is said that to function in alliance with these laws brings peace, wisdom and prosperity. Operating in ignorance and opposition to these principles brings tension and turmoil. Let's see how each one applies to creativity.

Mentalism – The Primacy of the Mind in Creativity

The first Hermetic Law, Mentalism, holds that:

"The All is mind; the Universe is mental."

This principle suggests that everything begins with the mind, and our thoughts form the foundation of our experiences. We have already seen how our beliefs about our own creative ability influence our emotions and actions, and this is a perfect illustration of just how much creativity is a mental construct.

If we believe creativity is an innate, limitless resource, we are more likely to experience it as such. Conversely, if we think of creativity as constrained or beyond our reach, that belief will also become a self-fulfilling reality. By understanding that creativity is dependent upon our own mindset, then we can choose to see creativity as expansive and eternal or constrictive and competitive.

"There is nothing either good or bad but thinking makes it so." ~ William Shakespeare

Our mind, too, is where ideas originate, and so it plays a pivotal role in the creative process. Importantly, within this principle, "mind" refers to something broader than just the brain. While the brain is a physical organ, the mind encompasses not only our intellectual faculties but also our emotions, intuition, and the subtle ways we connect to things beyond ourselves. In many cultures, the mind is seen as extending beyond the individual to include nature, community, and even the divine.

For instance, in certain Indigenous cultures, the mind is not confined to the individual but is part of a larger "collective consciousness." This includes not only people but the land, animals, and ancestors, all interconnected in a shared mental and spiritual web. Similarly, in some African philosophies, the concept of

ubuntu reflects a mind that encompasses community and interdependence, suggesting that creativity and thought are not purely individual acts but collaborative, influenced by all members of the group. In Taoist philosophy, the mind is seen as harmonising with the rhythms of nature rather than existing in isolation, reflecting a broader sense of consciousness that includes the physical and spiritual environments. In this way, it is interesting to see how even the concept of mind has become a mental construct. Additionally, broadening your notion of what the mind actually is also provides the ability to tap into an endless expanse of mental inspiration for creative pursuits.

Philosophers like Schopenhauer reflected on the capacity of artists to "lose themselves" in the beauty and sublimity of mental experience. According to him, artists and creators access deeper levels of insight when they immerse themselves fully in their creative visions, stepping beyond mundane concerns and embracing the boundless world of imagination. In this sense, Mentalism suggests that by entering a mental state of flow and surrender, creators open themselves to a wellspring of ideas, clarity, and inspiration that might not be accessible in ordinary consciousness. Through this immersion, they touch the intangible essence of creativity itself, which flows from thought into being.

Correspondence – The Mirror of Inner and Outer Worlds

The second Hermetic Law, Correspondence, is encapsulated in the phrase:

"As above, so below; As below, so above. As within, so without."

This principle highlights the interdependent nature of internal and external realities, suggesting that what exists within a person mirrors what manifests in their outer world. Similarly, what is occurring within the outer world also occurs within them. We have seen this in the cycle of creativity, where creators draw from the domain in which they operate and then contribute to it with their own perspectives and outputs. Creativity is not then a separate and singular activity but an interdependent and integrative process. It is shaped by the forces occurring within the external world and contributed to by the inner world of the creator.

It is this law that is the heart of Gandhi's belief that:

"You must be the change you wish to see in the world." ~ Mahatma Gandhi

What is occurring within the creator will be captured within their creations and then ripple out into the world.

So, if a person wishes for their innovations to bring peace, love and understanding, then they must first find this within themselves. Similarly, it can be seen that those people whose inventions are made to cause harm, have produced these outputs because of a deep distress within themselves.

Likewise, this law is captured within the following quote from W. Clement Stone:

"Be careful the friends you choose, for you will become like them." ~ W. Clement Stone

Research, including a 30-year longitudinal study, has demonstrated that social networks significantly impact various aspects of physical health and behaviours¹²². For example, having friends who smoke increases the likelihood of smoking by 61 per cent, but the influence does not stop there. Even the habits of friends of friends can indirectly affect personal behaviour. The environment in which a person exists will filter into their physical and psychological experiences and shape how they think and what they do.

The effect of the environment has significant implications for those organisations wishing to foster a greater sense of creativity amongst their employees. This is especially the case for those people with strong creative tendencies, as they are more likely to possess a

unique openness and sensitivity to their surroundings. This heightened perception makes them more attuned to subtle shifts in their environment and more susceptible to sensory overload.

In essence, the law of Correspondence reminds us that creativity is not isolated from life but is deeply interwoven with both the creator's inner world and the world they inhabit. The inner becomes the outer, and the outer becomes the inner, as each creation stands as both a personal expression and a contribution to the collective consciousness. This dynamic interplay enriches the creative process, allowing it to become a powerful bridge between the individual and the universal.

Vibration – Energy and Motion in the Creative Process

The third Hermetic Law, Vibration, holds that:

"Nothing rests; Everything moves; Everything vibrates."

This principle underscores the constant state of energy and motion that permeates the universe. In the realm of creativity, Vibration speaks to the dynamic and ever-evolving nature of the creative process. Creativity is not static but a state of motion where ideas are continually transformed, refined, and brought into existence through oscillating cycles of energy and rhythm.

This vibrational quality in creativity is reflected in the way energy flows between active phases of creation and moments of rest and reflection. Csikszentmihalyi's research on creative individuals often highlights this oscillation: creators exhibit high energy and focus when immersed in their work but recognise the need for quieter periods to process, reflect, and restore. This rhythm between action and repose ensures that creative energy remains sustainable, avoiding burnout and allowing new insights to emerge in times of stillness.

The vibration of energy in creativity is thus a balance of action and contemplation, chaos and order, inspiration and refinement. These cycles are essential to nurturing the creative process, allowing creators to harness their energies effectively and transform fleeting inspirations into enduring creations. Embracing this vibrational rhythm enables individuals to engage deeply with their creativity, flowing with the natural oscillation between dynamic movement and reflective stillness that sustains true creative expression.

Polarity – Embracing Opposing Traits in Creativity

The fourth Hermetic Law, Polarity, states that:

"Everything has poles; Everything has its pair of opposites."

In the context of creativity, this principle reveals that creativity thrives within the dynamic balance and interplay between opposing forces. Polarity is not merely about contrast; it is about the complementary relationship between opposites that enhances the depth, complexity, and originality of creative work.

At the heart of this polarity within creativity is Friedrich Nietzsche's concept of the "Dionysian" and "Apollonian" aspects of artistic expression. Nietzsche viewed creativity as an interplay between two opposing forces: the Dionysian, representing chaotic energy, passion, and vitality, and the Apollonian, embodying structure, restraint, and order. Together, these forces create a balanced tension that propels the creative process. The Dionysian provides the raw energy and drive, a powerful force of inspiration and intuitive insight, while the Apollonian brings discipline and form, structuring the initial burst of creative inspiration into a cohesive and intelligible work.

Creativity often emerges through the tension and harmony between pairs, such as light and dark, chaos and order, or masculine and feminine energies. Each of these polarities holds its own unique qualities, but it is their interaction that sparks a vibrant energy, producing works that resonate deeply with audiences. The contrast between extremes allows creative individuals to explore

the full spectrum of their ideas and emotions, pushing the boundaries of expression.

Moreover, the embracing of paradox within creativity can be seen to bear witness to the true nature of life. Jung said that:

"Only the paradox comes anywhere near to comprehending the fullness of life".

According to Jung, capturing the reality of duality and dichotomy within the creative process also aligns with the spiritual reality of our lives.

Csikszentmihalyi's research on creative personalities illuminates this concept of polarity in action. He observed that creative individuals frequently embody opposing traits: they can be both smart and naive, disciplined and playful, humble yet proud. For example, the naivety that many creative people maintain is essential for approaching problems with fresh eyes and open minds, while their intelligence allows them to approach ideas with rigour and critical thought. Similarly, discipline provides the structure needed to refine ideas, while playfulness keeps the process joyful, innovative, and flexible.

Navigating these polarities is essential in the creative process. Instead of choosing one extreme over the other,

creative individuals find ways to blend and balance opposing traits, creating a unique and harmonious tension. This interplay of opposites enriches their work, giving it depth and resonance that might be lacking if they were to rely on only one aspect of themselves. Moreover, the movement between opposites creates the energy necessary for the continual progression of creative outputs.

Polarity, then, invites creatives to embrace and integrate seemingly contradictory qualities, creating a balanced space where innovation and expression can flourish. By finding the creative tension between opposing forces, individuals bring a unique vibrancy and originality to their work, crafting creations that reflect the full complexity of the human experience.

Rhythm – Cycles of Inspiration and Creation

The fifth Hermetic Law, Rhythm, teaches that:

"The pendulum swing manifests in everything; The measure of the swing to the right is the measure of the swing to the left."

This principle speaks to the natural cycles of ebb and flow, highlighting how all things, including social trends, political dominance, and creative energy, will swing between opposite states. For creative individuals,

this rhythm manifests as cycles of inspiration and creation, interspersed with periods of rest and reflection.

Following this law, one cannot expect creativity to follow a steady, logical, linear path. Instead, it moves rhythmically, with moments of high energy and productivity being offset by quieter periods. Just as nature operates in seasons, the creative process often involves a rhythm of growth, harvest, rest, and renewal. Times of inspiration and intense output are balanced by pauses that allow for reflection, incubation, and replenishment. Creative blocks or lulls are not merely interruptions; they are integral to the cycle, allowing the "pendulum" to swing back toward productivity with renewed vigour.

Understanding and honouring these rhythms can help creative individuals maintain balance. Many artists, writers, and innovators consciously structure their routines to include both active work and rest. For instance, writers like Ernest Hemingway were known to work intensely for a few hours each morning, leaving the afternoons free to rest, reflect, and recharge. Similarly, composer Igor Stravinsky adhered to a strict daily routine, working only a few hours each day to maintain a balance between intense concentration and mental rejuvenation.

Ultimately, the Law of Rhythm reminds us that creativity is not a constant sprint, nor a straightforward marathon, but a swinging cycle of peaks and valleys. By aligning with this rhythm, creators allow themselves to experience the full range of the creative process, from initial spark to quiet reflection, honouring each phase as a vital part of bringing their ideas to life.

Cause and Effect – Creative Processes and Outcomes

The sixth Hermetic Law, Cause and Effect, states that:

"Every cause has its effect; Every effect has its cause."

In creativity, this principle highlights the systematic relationship between actions taken during the creative process and the final outcomes achieved. Creativity is rarely a product of spontaneous magic; instead, it unfolds as a series of subconscious beliefs, intentional actions and cultural contexts. Each step in the creative process is not a discrete entity but is contributed to by many tangible and intangible inputs, and it itself serves as a cause for future stages, leading to effects that gradually shape and define the creative work.

Creativity often begins with preparation and groundwork. Writers research their subjects, artists gather materials, and musicians practice techniques. This preparation provides a foundation, nurturing the

knowledge and skills that enable creators to tackle the challenges of their work. When combined with intentionality, preparation becomes a powerful cause, setting the stage for insight and discovery to emerge as effects.

Intentionality is particularly important in the creative process. Great creative work rarely occurs by accident; rather, it arises from deliberate effort and practice. Musicians, for instance, practice scales and exercises to build muscle memory and skill, enabling them to translate spontaneous inspiration into refined performances. Similarly, designers experiment with shapes, colours, and textures to see which combinations resonate, creating effects that guide their next steps.

Moreover, the iterative nature of creativity embodies the concept of cause and effect through cycles of feedback and refinement. Rarely is a first draft or initial sketch of the final product. Instead, creators receive feedback, evaluate their work, and make adjustments, each change representing a new cause that leads to a refined effect. Writers, for example, revise drafts after gathering feedback, and visual artists make modifications based on how each stroke or colour choice influences the whole.

Through these cycles, the creative process becomes an ever-evolving sequence of causes and effects, where

each choice and adjustment contribute to the final outcome. By recognising this principle, creators are reminded of the value of persistence, experimentation, and intentional effort. Every step taken in the creative process, however small, acts as a cause that will shape the ultimate effect—bringing their visions to life with purpose and clarity. Similarly, if the output from a creative process is not achieving the intended purpose, then a person can investigate the inputs, looking at all the physical and psychological elements that are shaping the outcome and determining which ones are contributing to the problem. Is it being caused by a lack of skill, limiting beliefs, inappropriate tools, or an unhelpful context?

Gender – Integration of Masculine and Feminine Principles in Creativity

The seventh Hermetic Law, Gender, posits that:

"Gender is in everything; Everything has its masculine and feminine principles."

This principle refers not to biological gender but to the presence of both masculine and feminine energies within all aspects of life, including creativity. The characteristics of these energies are shown in the following table¹²³.

UNDERSTANDING CREATIVITY

	Feminine	Masculine^v
Searching For	Deep love	Freedom
Find it in	Relationships	Challenges
Moved by	Connection	A mission or direction
Life feels like	A flow of emotion	A problem to be solved or art to be mastered
Thrives in	Giving and receiving love	Competition
Wants to	Flow with the energies of life	Transcend life and be free
Is lessened by	Hoping or searching for love	Struggling for freedom
Grows through	Learning to live as love	Learning to live as freedom

In the realm of creative expression, these energies interact and balance one another, facilitating a rich and holistic creative process. The masculine represents structure, action, and discipline, while the feminine embodies intuition, nurturing, and emotion. Together, these qualities offer a dynamic foundation for creativity, allowing individuals to access a fuller spectrum of creative potential.

Creative endeavours benefit from an integration of these principles. The masculine qualities—direction, structure problem-solving and the search for freedom—provide the framework and persistence necessary to bring ideas to life. Artists need a structured approach to organise their thoughts and refine their skills, whether this takes the form of daily practice, detailed planning, or technical mastery. They also need a mission and motivation not only to begin the work but to see it through the peaks and troughs of inspiration. The feminine qualities of emotion, connection and nurturing, on the other hand, are equally essential. They allow creators to access deeper insights, embrace their internal world, and foster sensitivity and build empathy, enabling them to explore

ideas with fluidity and openness. Through forming supporting relationships with themselves and others, they are able to refine ideas and stay true to their authentic selves.

Csikszentmihalyi's research on creativity emphasises that many highly creative individuals embody both masculine and feminine traits, breaking free from traditional gender stereotypes. For example, creative individuals might show both intense focus and disciplined work habits, seeing their work as a challenge to be overcome (typically associated with masculine traits) while also demonstrating empathy, introspection, and emotional sensitivity, seeking to form a relationship with the work and the process (often associated with feminine traits). This balance allows them to navigate the creative process with both rigour and fluidity, resulting in more nuanced and impactful work.

By embracing both energies, creators can achieve a sense of wholeness in their expression. When the masculine and feminine principles harmonise, they enable a creator to approach their work with both strength and subtlety, logic and intuition, resilience and empathy. This integration nurtures a more profound creative experience and encourages a deeper connection to the work, enabling artists to bring forth creations that resonate on multiple levels. The Hermetic Law of Gender reminds us that the integration of these

principles is not only natural but essential for accessing the full potential of creativity.

Creativity is Governed by Universal Laws

Each of the Seven Hermetic Laws teaches us more about the creative process, highlighting traits commonly observed in creative individuals and the cyclical journey of creation. Well before we had brain scans or telescopes, it was recognised that creativity, and in fact, all phenomena, are deeply anchored in these universal principles. By recognising creativity as part of a larger cosmic order, we see it not as an isolated act but as an interconnected and timeless force. This perspective invites us to view our creative endeavours as harmonious with the universe itself, underscoring the expansive nature of human creativity. Moreover, these laws also explain how creativity is also a contrasting concept, both enduring and ever-changing, just like ourselves.

[Back to Table of Contents](#)

Core Concepts

Creativity exists across all levels of life, from the cellular regeneration in our bodies to the cosmic cycles of star formation and planetary renewal.

Creativity aligns with the Hermetic Laws (also called the natural laws) which govern both tangible and intangible processes of creation.

1. **Mentalism:** All creation begins in the mind, shaped by beliefs, emotions, and intentions.
2. **Correspondence:** Inner states reflect outer realities, emphasizing the interplay between personal emotions and external creations.
3. **Vibration:** Creativity thrives in dynamic cycles of action and reflection, oscillating between chaos and order.
4. **Polarity:** Opposing forces, like discipline and spontaneity, work together to enrich creative depth and originality.
5. **Rhythm:** Creativity follows natural cycles of inspiration and rest, akin to seasonal or pendulum-like flows.
6. **Cause and Effect:** Every creative action influence outcomes, underscoring the importance of intentionality and iterative refinement.
7. **Gender:** Creativity integrates masculine (structure, action) and feminine (intuition, emotion) principles, fostering holistic and impactful expressions.

Recognising creativity as part of a universal order encourages creators to embrace its expansive, enduring, and ever-changing nature.

Chapter 18 – What Helps and Hinders the Creative Process?

Creativity is core to being human. However, it can be easily covered over by everyday challenges, lost in the busy lives that we lead and overshadowed by chasing external measures of success.

"We are all created creative. But by the time we are three of four years old, someone has knocked the creativity out of us. Some people shut up the kids who start to tell stories. Kids dance in their cribs, but someone will insist they sit still. By the time the creative people are ten or twelve, they want to be like everyone else." ~ Maya Angelou

Angelou's observation has been evidenced in research. In 1968, George Land, Ph.D., and Beth Jarman, Ph.D., conducted a groundbreaking study on creativity, testing 1,600 children over time to assess their ability to solve problems innovatively¹²⁴. The test, which evaluated the children's creativity and originality, began with participants aged three to five and followed them as they grew older. At age five, an astonishing 98 per cent of the children scored at a genius level of creativity, demonstrating a remarkable capacity for innovative thinking. However, the results declined sharply over

time. By age 10, only 30 per cent of the children reached the genius level, and by age 15, the number dropped further to just 12 per cent. When Land and Jarman later administered a similar test to 280,000 adults with an average age of 31, only 2 per cent achieved genius-level scores.

This study highlights the significant decline in creativity from childhood to adulthood, raising questions about the societal and environmental factors that may dampen creative potential, but also those that may nurture this innate ability. What can be done to support creativity? And more importantly, what barriers could be in place that we were not even aware of? What helps and what hinders the creative process?

What Supports Creativity?

Creativity is an integrated phenomenon influenced by the individual, the domain, the field, and the creator's cultural context. Therefore, there are numerous components within each that can push people to explore creative pursuits and gain the confidence they need to externalise and express their ideas. Following are some levers that can be adjusted to provide greater support to a person's creative characteristics and pursuits.

Creative Helper	Explanation
Time	Creativity thrives when individuals have time for skill development, experimentation, reflection, and expansive exploration. The opportunity and space to undertake multiple iterations and the refining ideas is critical.
Play	Uninhibited exploration, and divergent thinking encourage innovative problem-solving and fresh perspectives.
Comfort with paradox and uncertainty	Creativity often involves navigating conflicting ideas or working without clear answers. Flexibility and adaptability are key traits of successful creators.
Curiosity	A driving force behind creativity, curiosity fuels exploration, questioning, and discovery.
Intrinsic motivation	When creators are driven by passion and internal satisfaction rather than external rewards, they are more likely to persevere through challenges and produce authentic work.
Comfort with failure and resilience	Creativity inherently involves risk, and being open to failure allows creators to experiment boldly and learn from setbacks. The ability to recover from disappointments and persist in the face of obstacles is crucial for sustained creative effort.
Exposure to diverse disciplines and perspectives	Exposure to diverse fields and perspectives enriches creative thinking by allowing individuals to connect ideas across domains.

Creative Helper	Explanation
Mindfulness	Mindfulness supports creativity by promoting awareness, insight, and connection. It helps creators find meaning in their work and remain focused during the process.
Psychological safety	Environments where individuals feel safe to take risks and express themselves without fear of judgment foster creativity. This includes support for personal sensitivities and non-conformance.
Sensory stimulation	A creatively stimulating environment, rich in sights, sounds, and textures, can inspire and engage the senses.
Physical health	The connection between mind, body, and spirit highlights the importance of physical health. A healthy body supports mental clarity and emotional balance, which are essential for creativity.
A domain full of resources and mentors	A domain filled with resources for creators to draw from encourages people to enter creative fields. Likewise, having mentors who are willing and wise provides encouragement, and feedback, helping individuals refine their abilities.
A field that fosters creativity	Creativity thrives when the field prioritises nurturing newcomers over asserting power or pandering to popularity. Constructive feedback, rather than criticism driven by politics or commercial interests, helps creators grow.

Ultimately, the main aid to developing creativity is practice. While organisations and governments can create the time, space and supportive mechanisms for a person, they can only expand their creative ability through actually doing things. The act of creating, regardless of outcomes, builds momentum, fosters learning, and diminishes fear. Engaging in the process consistently allows creators to develop skills and confidence across all stages of the creative cycle. Creativity, then, while aided by all the elements in the table, is only developed by doing.

What Stifles Creativity?

The things that hinder the creative process are largely the direct opposite of those things that help. Not enough time, fear, too much or little training, and unhelpful feedback are all things that can prevent a person from putting in the practice they need to build confidence. Here are the things that have been shown to corrupt or restrain the creative process.

Creative Hindrance	Explanation
High-pressure environments	Excessive pressure, unrealistic deadlines, stress and continual ‘busyness’ inhibit cognitive flexibility, and erode time for reflection.

Creative Hindrance	Explanation
Overemphasis on formal training	Highly structured education systems that reward rote learning and devalue exploration can reinforce conformity and stifle original thought.
Overreliance on external validation	Placing too much focus on feedback and accolades from the field can dilute a creator's vision and voice and result in a loss of self-trust.
A field more concerned with power than potential	A field that prioritises power dynamics, panders to only what will be popular, or provides harmful feedback can discourage originality and continued improvement in creative pursuits.
A culture of fear	Where people do not feel free to express their ideas, to innovate and to fail, then creativity will be compromised.
A preoccupation with perfection	A preoccupation with perfection is a function of fear. It limits the freedom to take risks, explore unconventional paths, and learn from mistakes. It also delays getting important feedback from the field.

All these factors take away a person's willingness or ability to act towards creative goals. They push people into places where they cannot practice creativity, so their growth is stunted, and their creative momentum is lost. Nevertheless, it can be reinvigorated and restored. Any things identified as helping creativity are great places to

start; these are levers that can lead a person back to their love of creation.

A Delicate Balance

The conception of a child is often described as miraculous because it requires the convergence of so many precise and improbable events, all of which must align perfectly to create new life. The intricate balance of biological, environmental, and genetic factors that must occur for each one of us to exist is simply awesome. The same can be said for all acts of creation.

There is not just one or two factors that must come together for creativity. It, too, is a phenomenon that depends on the delicate balance and synchronicity between many factors and flows. The following table shows how each element must be provided in the right amount for creative action to take place and ability to be advanced.

Creative Component	Too Little	Too Much
Time	Insufficient exploration, experimentation and reflection.	Procrastination in the delivery of outputs.
Play	Diminished divergent thinking.	Not enough discipline to build skills and externalise ideas.

Creative Component	Too Little	Too Much
Training	Lack of foundational understanding of the domain and key skills.	Ingrained ideas and concern with conformity.
Fear	Indicates that the person is not pushing the boundaries of their own ability or in artistic expression.	Inhibits expressing or externalising ideas.
External validation	Uncertainty about whether the creations add value.	May push a person to continue doing what is popular rather than true to themselves.
Resources within the domain	Insufficient capacity to build skills of creators.	Could stifle ingenuity and resourcefulness, lead to wastefulness a lack of regard.
Power held by the field	Little advocacy and formal support for creators.	May politicise and commodify creativity.

The Commodification of Creativity

The commodification of creativity refers to turning creative ideas, skills, or works into marketable products or services for profit. In the modern world, where there is a market for just about everything, it is evident that

creativity has transitioned from a primarily artistic or personal endeavour to a powerful economic driver. The arts and other creative industries contribute considerably to GDP, adding almost \$64 billion to Australia's bottom-line¹²⁵. While this shift has empowered creators and fuelled industries, it also raises complex questions about authenticity, sustainability, and the integrity of the creative process. Has the commodification of creativity helped or hindered innovation and ingenuity?

A Historical Perspective: From Patrons to Platforms

It must be recognised that throughout history, creators have relied on financial and material support to pursue their work. It is simply the means of compensation that has evolved.

In earlier eras, many creators depended on wealthy patrons for financial support. These patrons, often aristocrats or religious institutions, provided resources that allowed artists, composers, and writers to focus on their craft. For example, the Medici family of Renaissance Italy famously supported luminaries like Michelangelo and Leonardo da Vinci, fostering a golden age of art and culture. While this system allowed creators to dedicate themselves to their work, it also often tied their output to the tastes and demands of their benefactors.

By the 18th and 19th centuries, with the decline of aristocratic patronage, creators began to rely more on the open market to sell their works. This shift coincided with the rise of middle-class audiences and the development of industries such as publishing and music. For example, writers like Charles Dickens succeeded by serialising novels in magazines, creating works tailored to public consumption.

The Industrial Revolution introduced new mass production and distribution methods, making creative works more widely accessible. Creators increasingly worked within commercial industries, but the tension between artistic vision and market demands became more pronounced.

Today, digital platforms have democratized access to creative opportunities, allowing creators to reach global audiences without traditional gatekeepers. However, this system often rewards visibility over substance, with algorithms and metrics shaping what succeeds. Instead of artistic patrons, what becomes shown and valued is decided by algorithms. For example, YouTube and Spotify allow independent creators to share their work and create competitive environments where success often depends on virality.

The Benefits of Commodification

No one wants to be a starving artist, so the commodification of creativity provides some level of economic empowerment. It provides creators with opportunities to earn a living by leveraging their talents. From freelance artists to independent filmmakers, individuals can turn passion projects into sustainable careers. Additionally, by turning creative works into consumer products, commodification brings art, music, design, and more to a wider audience, enriching cultural experiences across the globe. Moreover, the demand for creative solutions in a competitive marketplace spurs continual innovation. Creative industries have become pivotal in advancing technology, entertainment, and social progress. However, it must be remembered that creative outputs can struggle with morality. Just because they are popular does not mean they are productive.

The Risks of Commodifying Creativity

Just like everything else, commodification of creativity also has drawbacks. Many creators face immense pressure to produce on demand, often leading to burnout and undervaluation of their outputs. Freelance platforms can exacerbate this by encouraging a "race to the bottom" approach towards pricing. Additionally, commercial pressures may compel creators to prioritise market trends over personal vision, compromising the

authenticity and integrity of their work. And while access to creative marketplaces helps people make a living, many platforms are far from equitable. The corporations behind these commercial ventures often reap significant financial rewards, and individual creators frequently see only a fraction of the profits generated by their work. Moreover, the focus on quantity of outputs can lead to a flood of derivative, formulaic content, stifling genuine innovation. Alternatively, it may also push people to cross boundaries that are damaging and distressing, seeking to make money and gain fame through the use of cultural appropriation, traumatic images and personal attacks.

Impact on the Creative Process

The commodification of creativity fundamentally alters how creators approach their work. Instead of being guided by intrinsic motivation or the joy of exploration, creators may become overly reliant on market trends and external validation. It could be argued that commodification lessens creativity, as money is made by selling what people want, not by developing things that are necessarily new and valuable. Metrics such as likes, shares, and revenue can influence the type of creativity pursued, prioritising what is popular over what is novel or meaningful. The pressure to deliver quick results can also undermine the depth and risk-taking often required for true artistic breakthroughs.

Just like the other areas of balance we have discussed previously, commodification distinguishes between being helpful and hindering creative development. Without some form of monetary support, creators cannot afford the tools they need to create, nor have the time or stability that supports the generation and externalisation of ideas. However, when money becomes a prime motivator, the ability to act authentically and to explore new avenues is stifled. The creator is no longer driven by the divine, but by the materialistic and the mundane. I believe how people balance the commercial aspect of creativity with their authentic visions is one of the creator's greatest challenges. How does one remain independent and inspired while also gaining an income?

[Back to Table of Contents](#)

Core Concepts

Research shows a dramatic decline in creativity from childhood (98% at genius level at age five) to adulthood (only 2%), highlighting how easily creativity can be compromised in our modern lives.

Key enablers of creativity include time, play, curiosity, intrinsic motivation, and comfort with failure and uncertainty.

Other aids include exposure to diverse perspectives, psychological safety, sensory stimulation, mindfulness, and physical health.

A supportive domain (with mentors) and a constructive field (fostering growth over politics or popularity) are essential for sustained creative development.

High-pressure environments, overemphasis on formal training, fear of failure, and prioritizing perfection hinder creativity.

A focus on external validation and harmful feedback from unsupportive fields or cultures of fear further stifle originality and confidence in creators.

While commodification can support creators with tools and income, it risks diluting authenticity and focusing on profitability over meaningful, novel work.

Balancing financial sustainability with personal vision remains a key challenge for creators, requiring thoughtful integration of intrinsic motivation and market demands.

Conclusion

“Creativity is found in the smallest of gestures and the greatest of monuments. It is found in the works that inspire generations and within deep personal insights.

It is captured in beginnings and in ends and everywhere in between. Creativity is universal and unbounded and available to all of us. All it asks is that we honour it with courage and compassion, honesty and humility. For while it is within you it is not yours alone.” ~ Belinda Tobin

Creativity is a noun—a word that defines the ability to create. Yet creativity is only evident when it is manifested in the world. It is an invisible ability that we can only see when captured in tangible outputs, innovative processes, and the actions of creative individuals. In this way, we can also view creativity as an adjective, a quality, a characteristic that infuses works, systems, and people with novelty and value and is found in those things that surprise and inspire.

We recognise creativity in the works that break boundaries and systems that redefine norms. It shines through in individuals who possess sensitivity, seek to observe deeply, are curious to explore the unknown and are courageous enough to take risks and persevere through failure. And it is embedded within processes

that are fluid, iterative, frustrating and sometimes inconclusive. It is important to recognise that these expressions of creativity—whether as outputs, processes, or people—do not operate in isolation. They are interconnected, feeding into one another in interdependent cycles of feedback and refinement. Creativity, then, is a connected phenomenon.

Similarly, creativity is significantly influenced by the context in which it is conducted. The domain—the related discipline or field of expertise—provides a foundation, carrying the collective knowledge and practices of those who came before. The field—the evaluators and gatekeepers of creative works—determines which are acknowledged, supported and allowed to shape the domain. All of this unfolds within a broader cultural environment, which can encourage creativity by fostering freedom and exploration and tolerating failure or constraining it through rigidity and resistance to risk-taking.

Beyond thinking about creativity as components and systems, creativity can also be viewed as a philosophy, a lens through which we understand the human condition. It can be considered a way of being that challenges us to think creatively about creativity. Philosophers and theorists have spent thousands of years contemplating its profound nature. For example, Plato considered creativity a function of the divine, and Kant

believed it was beyond comprehension by mere mortals. Alfred North Whitehead positioned creativity as the ultimate principle of existence, while Jean-Paul Sartre saw it as a delicate balance between freedom and responsibility. Alva Noë highlighted how creativity is an embodied energy, and Terry Eagleton has investigated the paradox of how creativity can both liberate and suppress.

Creativity, then, is not a singular phenomenon but a multifaceted and multidimensional one. It can be looked at through a variety of perspectives; it is at once a tool, a process, a product, a philosophy, and a reflection of our humanity.

The Power and Paradox of Creativity

The common theme across all perspectives is that creativity is a life-giving force, expansive in scope and elusive in nature. Engaging in creative pursuits contributes significantly to holistic wellbeing, building the four pillars of a healthy mind: awareness, insight, connection, and purpose. It allows individuals to integrate past experiences, form new perspectives, and unlock their full potential.

Creativity's influence extends beyond the individual, shaping communities, organisations, and governments. It enriches societies by fostering collaboration, building

cohesion, and inspiring engagement. Economically, creativity drives invention and innovation, forming industries that propel progress, provide employment and enable self-expression. Creativity can also assist in solving the most persistent and complex social challenges. Through creative thinking and action, humanity has tackled problems ranging from public health crises to climate change, finding novel solutions to improve lives and the places we live.

However, it must be remembered that creativity does not come with its own moral code. It is a neutral power, its impact determined by the intentions of those who wield it. While creativity can heal, help, inspire, and unite, it can also harm and exploit. The same innovative spirit that leads to medical breakthroughs has also created sophisticated weaponry capable of mass destruction. Beyond physical harm, creations like poker machines and addictive social media algorithms have been designed to sway hearts and minds and manipulate behaviour for nefarious ends, causing psychological and financial damage to countless individuals.

The systems that support and evaluate creativity—the domain and the field—are also not immune to corruption. The field, in particular, wields significant influence. When driven by profit or power, it can suppress genuine innovation, favouring what is popular, marketable, or financially sustainable. This can

discourage creators from pursuing bold, unconventional ideas and instead push them toward producing what is safe, familiar, or lucrative. In doing so, the field risks prioritising commodification over authenticity, profiting at the expense of creators and stifling the broader potential of creativity.

Yet, despite attempts to exploit or constrain it, creativity endures. Its essence cannot be cancelled, for it is intrinsic to who we are as humans. Creativity is a reflection of our ability to imagine, innovate, and bring meaning into the world. It transcends the systems that seek to control it and persists as a powerful reminder of humanity's boundless potential. Whether used for good or ill, creativity remains an undeniable force, shaping the world and defining what it means to be alive.

Creativity: An Infinite Practice

Creativity is who we are. It is embedded in the very fabric of our existence, woven into the structures of our brains that support divergent thinking, reflection, and innovation. It is driven by the hormones that fuel motivation and provide chemical rewards for figuring things out, gaining insights and overcoming challenges. These internal mechanisms reveal that creativity is not merely an artistic endeavour or a luxury—it is an essential human function deeply tied to our survival and evolution.

Our physical form, too, plays a vital role in creativity. The senses offer a wealth of stimuli, acting as inspirational inputs that feed our imagination. The health of our bodies and minds is directly reflected in the quality of our creative outputs; how we think and move influences what we make.

While some view creativity through a scientific lens, others recognise its spiritual dimensions. Creativity calls us to explore our inner worlds, uncovering our deepest desires, values, and visions. It is a process of self-discovery that leads us to understand and appreciate our authentic selves. But creativity is not limited to personal growth—it ripples outward, forging connections that inspire and benefit our local and global communities. In its most profound form, creativity is an act of service, uncovering our true selves and using our unique skills to contribute to something greater than ourselves.

Yet creativity requires courage. Bringing something new into existence naturally involves stepping into the unknown, confronting fears, and revealing oneself to others. Overcoming limiting beliefs and trusting in one's vision are central to the creative journey. This process demands iterations of internal work, processing thoughts and emotions, and pushing through doubt to step into one's power. To create is to evolve continually, moving through the forces that keep us stuck and rising to greater levels of consciousness.

This is why creativity cannot be confined to a static definition. While it can be seen as a noun—the ability to create—and an adjective—a quality visible in works and people—through writing this book, I have come to believe that it is, most accurately, a verb. To create is an action, one that requires practice, persistence, and progression. More than this, it is an infinitive; it is not an end goal but a continuous evolution, a journey of unbounded possibilities.

Creativity is limitless. Like love, kindness, and courage, it is immeasurable, endless, and ever-expanding. It invites us to keep moving forward, investing our body, mind, and spirit into this essential practice—not only for our own wellbeing but also for the flourishing of the world we are a part of.

Understanding Creativity

Another key insight I have gained while preparing this book is the joy of thinking creatively about creativity. I hope this book has helped you do that. Seeking the nature of creativity is an exciting exploration, one without end, for just when you think you have it figured out, creativity comes at you with another surprise, and you are suddenly on a whole new adventure. It pops out at you from the mundane and then brings forth the magical. I hope that through this book, you have found

ways to understand this unique power for yourself, to uncover and honour it in a way that makes sense to you.

As Thich Nhat Hahn said:

"Understanding is the essence of love. If you cannot understand, you cannot love."

It is by understanding creativity that we come to better understand ourselves. And by better understanding ourselves, we are one step closer to truly loving and caring for ourselves. And if we seek to make the world a better place, then this is exactly where we must begin.

So please begin.

And if you have already started, just keep going.

And if you have stopped, today take one little step.

And if you feel alone, find a friend.

And if you think you have failed, know it is part of the process. Do more practice.

There are no excuses when it comes to creativity.

Just the opportunity to build courage.

And to dance with the divine.

[Back to Table of Contents](#)

References

- ¹ *Thesaurus results for CREATIVITY.* (2024).
<https://www.merriam-webster.com/thesaurus/creativity>
- ² It is interesting that in the corporate world, you do not hear much about “creativity” but a lot about “innovation”. Perhaps this is a function of people believing creativity is too soft, airy-fairy or subjective of a concept. In contrast, innovation is more solid and acceptable to their investors. It must be noted, though, that innovation is simply a synonym for creativity, and while these organisations can choose to use different words, ones that align with their corporate lexicon, what they are actually referring to is the product of a creative process.
- ³ Kant, Immanuel, 1790 [2000], *Kritik der Urteilstkraft*, Berlin und Libau : Lagarde und Friedrich. Translated as *Critique of the Power of Judgment*, Paul Guyer (ed.), Eric Matthews (trans.), Cambridge: Cambridge University Press, 2000.
- ⁴ Velcu-Laitinen, O. (2022). Definitions of Personal Creativity. In: *How to Develop Your Creative Identity at Work*. Apress, Berkeley, CA.
https://doi.org/10.1007/978-1-4842-8680-7_2
- ⁵ *Thesaurus results for EXEMPLARY.* (2024).<https://www.merriam-webster.com/thesaurus/exemplary>
- ⁶ Boden, M.A. (2004), *The creative mind: Myths and mechanisms*, Routledge, London, UK
- ⁷ Maria Kronfeldner, "Creativity Naturalized," *The Philosophical Quarterly* 59, no. 237 (2009): 577–592.

- ⁸ Berys Gaut, "The Value of Creativity," in *Creativity and Philosophy*, eds. Berys Gaut and Matthew Kieran (London: Routledge, 2018), 124–139.
- ⁹ Boden, M.A. (2004), *The creative mind: Myths and mechanisms*, Routledge, London, UK
- ¹⁰ Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. Harper Collins.
- ¹¹ McCrae, R. R. (1987). "Creativity, divergent thinking, and openness to experience." *Journal of Personality and Social Psychology*, 52(6), 1258-1265.
- ¹² Zabelina, D. L., & Robinson, M. D. (2010). "Creativity as flexible cognitive control." *Psychology of Aesthetics, Creativity, and the Arts*, 4(3), 136-143.
- ¹³ Amabile, T. M. (1983). "The social psychology of creativity: A componential conceptualization." *Journal of Personality and Social Psychology*, 45(2), 357-376.
- ¹⁴ Kashdan, T. B., & Steger, M. F. (2007). "Curiosity and pathways to well-being and meaning in life: Traits, states, and everyday behaviors." *Motivation and Emotion*, 31(3), 159-173.
- ¹⁵ Furnham, A., & Marks, J. (2013). "Tolerance of ambiguity: A review of the recent literature." *Psychology*, 4(09), 717-728.
- ¹⁶ Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. Harper Collins.
- ¹⁷ Bateson, P. (2015). "Playfulness and creativity." *Current Biology*, 25(1), R12-R16.
- ¹⁸ Simonton, D. K. (1999). "Creativity as blind variation and selective retention: Is the creative process Darwinian?" *Psychological Inquiry*, 10(4), 309-328.
- ¹⁹ Reference: Runco, M. A. (2004). "Creativity." *Annual Review of Psychology*, 55, 657-687.

-
- ²⁰ Kaufman, J. C., & Baer, J. (2004). *Creativity and reason in cognitive development*. Cambridge University Press.
 - ²¹ Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. Harper Collins.
 - ²² The Healthy Minds framework. (n.d.). Centre for Healthy Minds. <https://centerhealthyminds.org/science/the-healthy-minds-framework>
 - ²³ Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. Harper Collins.
 - ²⁴ Stuckey, H. L., & Nobel, J. (2009). The Connection Between art, Healing, and Public Health: A Review of Current literature. *American Journal of Public Health*, 100(2), 254–263.
<https://doi.org/10.2105/ajph.2008.156497>
 - ²⁵ Rodriguez, T. (2024, February 20). Creativity predicts a longer life. *Scientific American*.
<https://www.scientificamerican.com/article/open-mind-longer-life/>
 - ²⁶ Borrup, T. (2006). *The Creative Community Builder's Handbook: How to Transform Communities Using Local Assets, Arts, and Culture*.
 - ²⁷ Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. Harper Collins.
 - ²⁸ Leadbeater, C. (2005). *The Art of With: Social Creativity in a Connected Age*.
 - ²⁹ Stern, M. J., & Seifert, S. C. (2010). "Civic Engagement and the Arts: Issues of Conceptualisation and Measurement." *Journal of Planning Education and Research*, 29(3), 341-357.
 - ³⁰ Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community, and Everyday Life*.

-
- ³¹ Sternberg, R. J., & Kaufman, J. C. (2018). *The Nature of Human Creativity*.
- ³² Landry, C. (2008). *The Creative City: A Toolkit for Urban Innovators*. Earthscan.
- ³³ Leadbeater, C. (2007). *We-think: Mass Innovation, Not Mass Production*. Profile Books.
- ³⁴ Future of jobs: These are the most in-demand skills in 2023 - and beyond. (2024, September 10). World Economic Forum. <https://www.weforum.org/stories/2023/05/future-of-jobs-2023-skills>
- ³⁵ Oses, A. (2024, October 30). Most in demand skills for employers as we enter 2025. *Forbes*. <https://www.forbes.com/councils/forbestechcouncil/2024/10/30/most-in-demand-skills-for-employers-as-we-enter-2025>
- ³⁶ Amabile, T. M. (1997). "Motivating Creativity in Organizations: On Doing What You Love and Loving What You Do." *California Management Review*, 40(1), 39-58.
- ³⁷ Hart, S. L., & Milstein, M. B. (2003). "Creating Sustainable Value." *Academy of Management Executive*, 17(2), 56-67.
- ³⁸ Runco, M. A. (2004). "Creativity." *Annual Review of Psychology*, 55, 657-687.
- ³⁹ C. E., Zhou, J., & Oldham, G. R. (2004). "The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here?" *Journal of Management*, 30(6), 933-958.
- ⁴⁰ Paulus, P. B., & Nijstad, B. A. (Eds.). (2003). *Group Creativity: Innovation through Collaboration*.

-
- ⁴¹ Pine, J. B., & Gilmore, J. H. (1999). *The Experience Economy: Work Is Theatre & Every Business a Stage*. Harvard Business Review Press.
 - ⁴² Howlett, M. (2014). "Policy Design: What, Who, How and Why?" *Canadian Public Administration*, 57(3), 369-379.
 - ⁴³ Mulgan, G. (2009). *The Art of Public Strategy: Mobilizing Power and Knowledge for the Common Good*. Oxford University Press.
 - ⁴⁴ Bason, C. (2010). *Leading Public Sector Innovation: Co-Creating for a Better Society*. Policy Press.
 - ⁴⁵ Nabatchi, T., & Leighninger, M. (2015). *Public Participation for 21st Century Democracy*. Wiley.
 - ⁴⁶ Hart, S. L., & Milstein, M. B. (2003). "Creating Sustainable Value." *Academy of Management Executive*, 17(2), 56-67.
 - ⁴⁷ Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community, and Everyday Life*. Basic Books.
 - ⁴⁸ Nye, J. S. (2004). *Soft Power: The Means to Success in World Politics*. PublicAffairs.
 - ⁴⁹ Stern, N. (2007). *The Economics of Climate Change: The Stern Review*.
 - ⁵⁰ Klein, G. (2017). *Sources of Power: How People Make Decisions*. MIT Press.
 - ⁵¹ Stuckey, H. L., & Nobel, J. (2010). "The Connection Between Art, Healing, and Public Health: A Review of Current Literature." *American Journal of Public Health*, 100(2), 254-263.
 - ⁵² Simonton, D. K. (1999). "Creativity as blind variation and selective retention: Is the creative process Darwinian?" *Psychological Inquiry*, 10(4), 309-328.

-
- ⁵³ Runco, M. A. (2014). *Creativity: Theories and Themes: Research, Development, and Practice*. Academic Press.
- ⁵⁴ Paulus, P. B., & Nijstad, B. A. (Eds.). (2003). *Group Creativity: Innovation through Collaboration*. Oxford University Press.
- ⁵⁵ Weick, K. E. (1989). "Theory construction as disciplined imagination." *Academy of Management Review*, 14(4), 516-531.
- ⁵⁶ Sternberg, R. J. (2006). "The nature of creativity." *Creativity Research Journal*, 18(1), 87-98.
- ⁵⁷ Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. Harper Collins.
- ⁵⁸ Cropley, D. H., Cropley, A. J., Kaufman, J. C., & Runco, M. A. (Eds.). (2010). *The Dark Side of Creativity*. Cambridge University Press.
- ⁵⁹ Eagleton, T. (1991). *The ideology of the aesthetic*. Wiley-Blackwell.
- ⁶⁰ Neuroscience News. (2024, July 15). *Creativity's Neural Origin Revealed*.
<https://neurosciencenews.com/creativity-dmn-neuroscience-26436/>
- ⁶¹ Neuphony by PankhTech. (n.d.). *Understanding your brain's networks: DMN, CNS, CEN, and SNS dynamics*. Neuphony. <https://www.neuphony.com/blog/exploring-the-dmn-cns-cen-and-sns-networks>
- ⁶² *Core regions of the dorsal and ventral attention networks. The Dorsal*. . . (n.d.). ResearchGate. https://www.researchgate.net/figure/Core-regions-of-the-dorsal-and-ventral-attention-networks-The-Dorsal-Attention-Network_fig1_348810346
- ⁶³ Vartanian, Oshin & Saint, Sidney & Herz, Nicole & Suedfeld, Peter. (2020). *The Creative Brain Under Stress*:

-
- Considerations for Performance in Extreme Environments. *Frontiers in Psychology*. 11. 10.3389/fpsyg.2020.585969.
- ⁶⁴ *Where are memories stored in the brain?* (2024, September 25). Queensland Brain Institute - University of Queensland. <https://qbi.uq.edu.au/memory/where-are-memories-stored>
- ⁶⁵ Jung, R. E., Mead, B. S., Carrasco, J., & Flores, R. A. (2013). The structure of creative cognition in the human brain. *Frontiers in Human Neuroscience*, 7, 330. <https://doi.org/10.3389/fnhum.2013.00330>
- ⁶⁶ Boden, M.A. (2004), *The creative mind: Myths and mechanisms*, Routledge, London, UK
- ⁶⁷ Beaty, R. E., Benedek, M., Silvia, P. J., & Schacter, D. L. (2018). Creative cognition and brain network dynamics. *Trends in Cognitive Sciences*, 20(2), 87–95.
- ⁶⁸ Crockett, M. J., Clark, L., Tabibnia, G., Lieberman, M. D., & Robbins, T. W. (2008). Serotonin modulates behavioral reactions to unfairness. *Science*, 320(5884), 1739.
- ⁶⁹ Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92–96. <https://doi.org/10.1080/10400419.2012.650092>
- ⁷⁰ Schott, B. H., Richter, S., Wustenberg, T., & Seidenbecher, C. I. (2015). The role of endorphins in human brain function. *NeuroImage*, 120, 225–232. <https://doi.org/10.1016/j.neuroimage.2015.06.051>
- ⁷¹ Mayseless, N., & Shamay-Tsoory, S. G. (2015). Enhancing verbal creativity: Modulating creativity by altering the balance between right and left inferior frontal gyrus with tDCS. *Neuroscience*, 291, 167–176.
- ⁷² Runco, M. A. (2007). *Creativity: Theories and themes: Research, development, and practice*. Elsevier.

-
- ⁷³ Abraham, A. (2014). Creative thinking as orchestrated by semantic memory. *Frontiers in Human Neuroscience*, 8, 873. <https://doi.org/10.3389/fnhum.2014.00873>
- ⁷⁴ Anderson, J. R. (1982). "Acquisition of Cognitive Skill." *Psychological Review*, 89(4), 369–406.
- ⁷⁵ Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). "The Role of Deliberate Practice in the Acquisition of Expert Performance." *Psychological Review*, 100(3), 363–406.
- ⁷⁶ Chi, R. P., & Snyder, A. W. (2012). Enhancing insight by non-invasive brain stimulation. *PLOS ONE*, 7(4), e34514.
- ⁷⁷ Cerruti, C., & Schlaug, G. (2009). Anodal transcranial direct current stimulation of the prefrontal cortex enhances complex verbal associative thought. *Journal of Cognitive Neuroscience*, 21(10), 1980–1987
- ⁷⁸ Fitz, N. S., & Reiner, P. B. (2015). The challenge of crafting policy for do-it-yourself brain stimulation. *Journal of Medical Ethics*, 41(5), 410–412.
- ⁷⁹ Noë, A. (2010). *Out of our heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness*. Hill and Wang.
- ⁸⁰ Levitin, D. J. (2006). *This Is Your Brain on Music: The Science of a Human Obsession*. Plume.
- ⁸¹ *Too much or too little noise turns off consumers, creativity*. (2012, May 12). ScienceDaily. <https://www.sciencedaily.com/releases/2012/05/120514134332.htm>
- ⁸² Herz, R. S. (2016). The Role of Odor-Evoked Memory in Psychological and Physiological Health. *Brain Sciences*, 6(3), 22. <https://doi.org/10.3390/brainsci6030022>

-
- ⁸³ Karkou, V., & Aithal, S. (2015). "Dance Movement Therapy in the UK: A Review of the Literature." *Arts in Psychotherapy*, 42, 1-8.
- ⁸⁴ Memmert, D. (2011). "Sports and Creativity." *Creativity Research Journal*, 23(3), 285-291.
- ⁸⁵ Ratey, J. J., & Loehr, J. E. (2011). The positive impact of physical activity on cognition during adulthood: A review of underlying mechanisms, evidence, and recommendations. *American Journal of Lifestyle Medicine*, 5(6), 500-516.
- ⁸⁶ Gothe, N. P., Keswani, R. K., & McAuley, E. (2016). Yoga practice improves executive function by attenuating stress and enhancing positive mood. *Brain, Behavior, and Immunity*, 58, 1-6.
- ⁸⁷ Hillman, C. H., Erickson, K. I., & Kramer, A. F. (2008). Be smart, exercise your heart: Exercise effects on brain and cognition. *Nature Reviews Neuroscience*, 9(1), 58-65.
- ⁸⁸ Gómez-Pinilla, F. (2008). Brain foods: The effects of nutrients on brain function. *Nature Reviews Neuroscience*, 9(7), 568-578.
- ⁸⁹ Saoji, A. A., Raghavendra, B. R., & Manjunath, N. K. (2019). Influence of yogic breathing practices on stress, cognition, and immunity: A systematic review. *Frontiers in Psychiatry*, 10, 657. <https://doi.org/10.3389/fpsyt.2019.00657>
- ⁹⁰ Brown, R. P., & Gerbarg, P. L. (2009). Yogic breathing and the impact on stress and resilience: Clinical applications and neurophysiological mechanisms. *Chest*, 135(1), 54-62. <https://doi.org/10.1378/chest.08-1834>
- ⁹¹ Colzato, L. S., Ozturk, A., & Hommel, B. (2012). Meditate to create: The impact of focused-attention and open-monitoring training on convergent and divergent thinking. *Frontiers in Psychology*, 3, 116.

-
- ⁹² Cameron, J. (2016). *The artist's way: 25th Anniversary Edition*. National Geographic Books.
- ⁹³ Leder, H., Belke, B., Oeberst, A., & Augustin, D. (2004). A model of aesthetic appreciation and aesthetic judgments. *British Journal of Psychology*, 95(4), 489–508.
- ⁹⁴ Macy, J., & Johnstone, C. (2012). *Active Hope: How to Face the Mess We're in without Going Crazy*. <http://ci.nii.ac.jp/ncid/BB09953675>
- ⁹⁵ Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences*. Basic Books.
- ⁹⁶ Maté, G., & Maté, D. (2022). *The myth of normal: Trauma, Illness & Healing in a Toxic Culture*. Random House.
- ⁹⁷ Leder, H., Belke, B., Oeberst, A., & Augustin, D. (2004). A model of aesthetic appreciation and aesthetic judgments. *British Journal of Psychology*, 95(4), 489–508.
- ⁹⁸ De Witte, M., et al. (2021). From Therapeutic Factors to Mechanisms of Change in the Creative Arts Therapies: A Scoping Review. *Frontiers in Psychology*, 12. [DOI: 10.3389/fpsyg.2021.678397](https://doi.org/10.3389/fpsyg.2021.678397).
- ⁹⁹ Finke, R. A., Ward, T. B., & Smith, S. M. (1996). *Creative cognition: Theory, research, and applications*. Cambridge, MA: MIT Press.
- ¹⁰⁰ Popper, K. R. (1934). *Logik der Forschung [The logic of scientific discovery]*. Vienna: Springer. (Translated and published in English in 1959 by Hutchinson, London)
- ¹⁰¹ Poincare, H. (1910). Mathematical creation. *The Monist*, 20(3), 321–335. <https://doi.org/10.1093/monist/20.3.321>
- ¹⁰² Wallas, G. (2018). *The art of thought*.
- ¹⁰³ *Creativity (Stanford Encyclopedia of Philosophy)*. (2023, February 16). <https://plato.stanford.edu/entries/creativity/>

-
- ¹⁰⁴ Gardner, H. (1993). *Creating minds: An anatomy of creativity seen through the lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi*. New York: BasicBooks.
- ¹⁰⁵ Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363–406. <https://doi.org/10.1037/0033-295X.100.3.363>
- ¹⁰⁶ Simonton, D. K. (1984). *Genius, creativity, and leadership: Historiometric inquiries*. Cambridge, MA: Harvard University Press.
- ¹⁰⁷ Blair, C., & Mumford, M. D. (2007). Errors in idea evaluation: Preference for the unoriginal? *The Journal of Creative Behavior*, 41(3), 197–222. <https://doi.org/10.1002/j.2162-6057.2007.tb01288.x>
- ¹⁰⁸ Csikszentmihalyi, M., & Sawyer, K. (1995). Creative insight: The social dimension of a solitary moment. In R. J. Sternberg & J. E. Davidson (Eds.), *The nature of insight* (pp. 329–363). Cambridge, MA: MIT Press.
- ¹⁰⁹ Sawyer, R. K. (2012). *Explaining creativity: The science of human innovation* (2nd ed.). New York: Oxford University Press.
- ¹¹⁰ This diagram resembles a knot image, which holds great significance for creativity and is found in many cultures. Originating in Roman art, such designs spread widely, influencing Byzantine architecture, Ethiopian art, Russian illustrations, Islamic patterns, and Celtic traditions like the endless knot. Knot symbology represents interconnectedness, unity, the intricate balance of life's complexities and the cyclical nature of existence.
- ¹¹¹ Dethmer, J., Chapman, D Leadership. and Klemp, K., n.d. The 15 Commitments of Conscious.

-
- 112 Hawkins, D. (2002). *Power vs. force*. Carlsbad, Calif.: Hay House.
 - 113 Harris, R., 2011. *The Confidence Gap*. Boston: Trumpeter
 - 114 O'Donovan, R., Van Dun, D. & McAuliffe, E. Measuring psychological safety in healthcare teams: developing an observational measure to complement survey methods. *BMC Med Res Methodol* 20, 203 (2020).
<https://doi.org/10.1186/s12874-020-01066-z>
 - 115 Sawyer, R. K. (2012). *Explaining creativity: The science of human innovation* (2nd ed.). New York: Oxford University Press.
 - 116 Amabile, T. M. (1982). Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology*, 43(5), 997–1013.
<https://doi.org/10.1037/0022-3514.43.5.997>
 - 117 Maté, G., & Maté, D. (2022). *The myth of normal: Trauma, Illness & Healing in a Toxic Culture*. Random House.
 - 118 Paul, E. S., & Stokes, D. (2021, November 11). Computer creativity is a matter of agency. *Institute of Arts and Ideas News*.
 - 119 Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. Bantam Books.
 - 120 Starr, M. (2021, January 23). Your body makes 3.8 million cells every second. most of them are blood: ScienceAlert. ScienceAlert. <https://www.sciencealert.com/your-body-makes-4-million-cells-a-second-and-most-of-them-are-blood>
 - 121 Starr, M. (2023, March 1). The Milky Way might be producing more stars than we thought: ScienceAlert.

ScienceAlert. <https://www.sciencealert.com/the-milky-way-might-be-producing-more-stars-than-we-thought>

- ¹²² Christakis, N. A., & Fowler, J. H. (2008). The collective dynamics of smoking in a large social network. *New England Journal of Medicine*, 358(21), 2249-2258.
- ¹²³ Based upon Deida, D. (2017). *The Way of the Superior Man* (20th Anniversary Edition). Sounds True.
- ¹²⁴ Land, G., & Jarman, B. (1992). *Breakpoint and beyond: Mastering the future today*. New York: HarperBusiness.
- ¹²⁵ Cultural and Creative Activity in Australia, 2008–09 to 2022–23 (Methodology Refresh)

[Back to Table of Contents](#)

P.S.

[About the author](#)

279 Meet Belinda Tobin

[About the Understanding Series](#)

280 Other titles in the series

[Read on](#)

Find out about other UP books

281 Understanding Sexuality

283 Understanding Addiction

Meet Belinda Tobin



Belinda Tobin is a researcher, author, producer, publisher and curator of creative events. She is also an avid explorer of the human experience with her journeys spanning fiction, non-fiction, poetry, tv series and film. However, they all share a common purpose, to foster a more conscious, compassionate and connected future.

Find out more about Belinda and her projects at www.belindatobin.com.

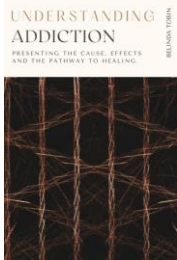
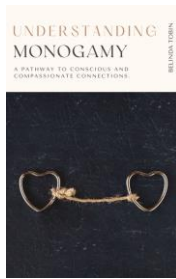
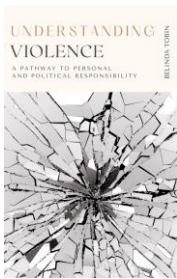
[Back to Table of Contents](#)

About the Understanding Series

"The highest form of ignorance is when you reject something you don't know anything about." — Wayne Dyer

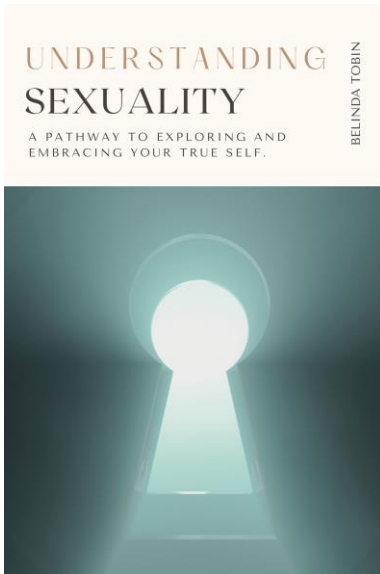
Understanding Press was founded with a simple yet profound mission: to help each of us step into our power through knowledge and to pave the way for wise action.

The Understanding Series is the first project for Understanding Press. It provides clear and concise information about some of the most fundamental issues and pressing problems of our time. Here are the current titles in The Understanding Series.



Read On

Understanding Sexuality



"Sexuality is one of the ways that we become enlightened, actually, because it leads us to self-knowledge." ~ Alice Walker.

What if your sexuality wasn't something to be hidden or feared but a powerful force that could unlock your creativity, deepen your connections, and guide you toward your highest potential?

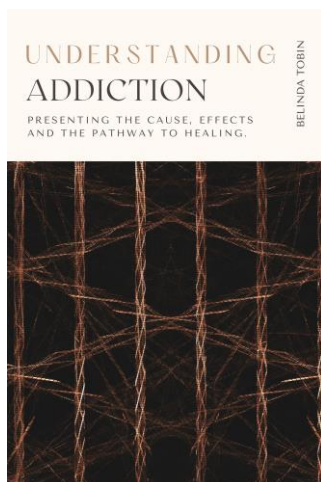
Understanding Sexuality offers a fresh, insightful approach to exploring the complexities of human sexuality. Drawing on personal insights, historical reflections, and modern research, it presents a model of sexuality that can be used to encourage shared understandings and constructive conversations. The book delves into the links between sexuality, spirituality, maturity, morality and shame and challenges the reader to uncover their own deep-seated beliefs and desires.

Whether you're seeking personal understanding, improved relationships, or a challenge to outdated ideas, Understanding Sexuality serves as a valuable guide to embracing your unique sexual power and living with greater compassion and meaningful connections.

[Back to Table of Contents](#)

Read On

Understanding Addiction



Presenting the cause, effects and the pathway to healing.

Understanding Addiction provides an insightful exploration of addiction, its causes, effects and the pathway to healing. The book presents the informative Addiction Healing Pathway model, which shows how addiction stems from a fundamental disconnection from one's spirit or true self, which fuels internal conflicts and distressing emotions, leading to harmful behaviours. This perspective challenges conventional views by framing addiction not just as a disease or disorder but as a symptom of a deeper spiritual crisis.

According to the Addiction Healing Pathway, healing from addiction is a top-down process that begins with addressing physical health through detoxification, nutrition, and medical support. It then progresses to mental and emotional healing, where individuals confront and reshape distressing thoughts, beliefs, and unresolved emotions. The final and most crucial stage involves reconnecting with one's spirit, rediscovering purpose, and cultivating self-compassion.

This book offers not just a theoretical framework but a practical guide, emphasising the importance of a supportive environment, holistic care, and the courage to face personal wounds. It redefines the journey from addiction as one of healing rather than mere recovery, acknowledging the enduring scars and the ongoing process of self-reconnection and resilience.

Whether you work in addiction support, are experiencing addiction, care for a loved one, or are simply curious about the complexities of addiction, this book will deepen your understanding and empower you to take informed and effective action.

[Back to Table of Contents](#)



UNDERSTANDING PRESS

For more titles, go to:

www.heart-led.pub/understanding-press