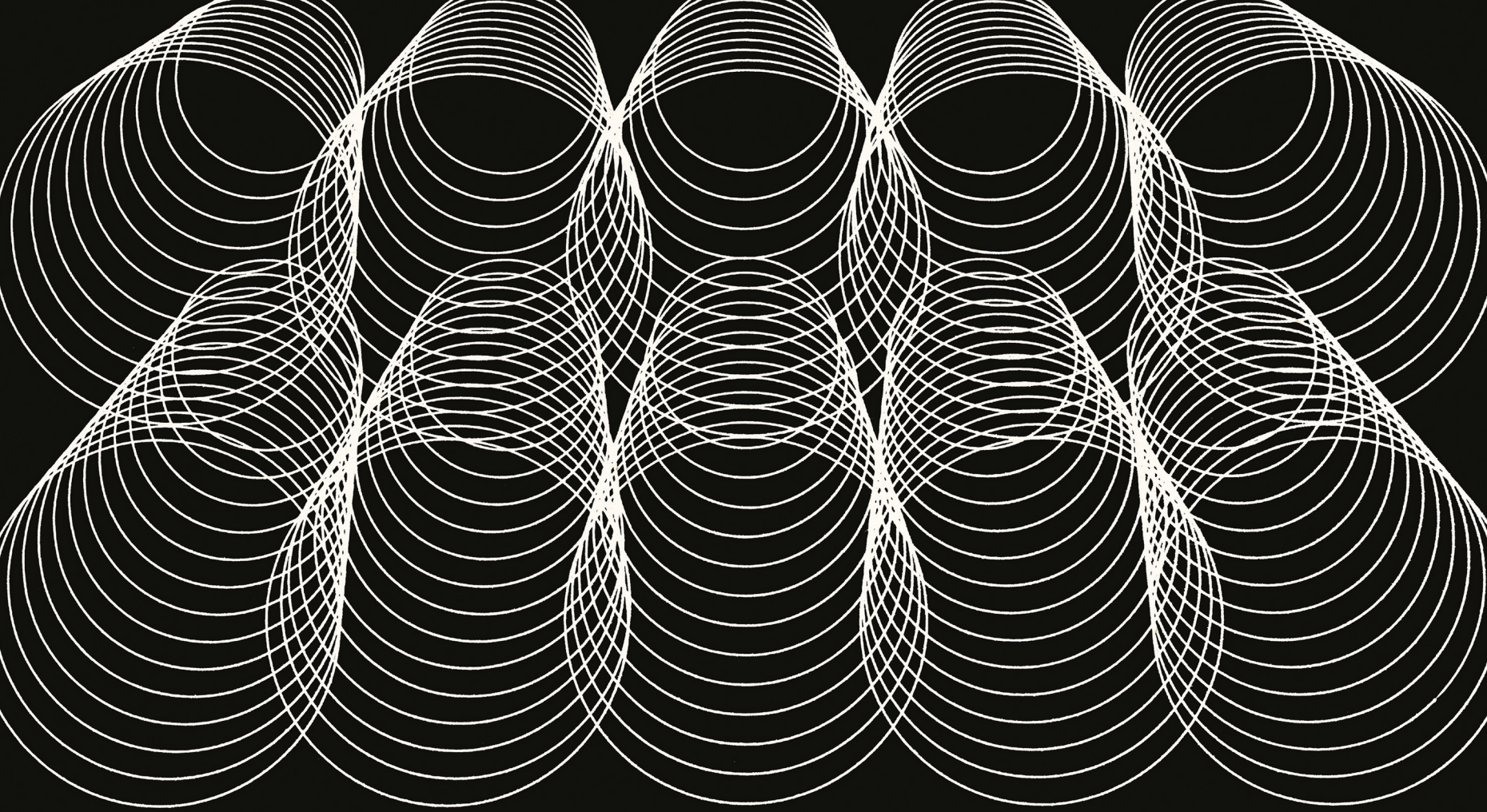
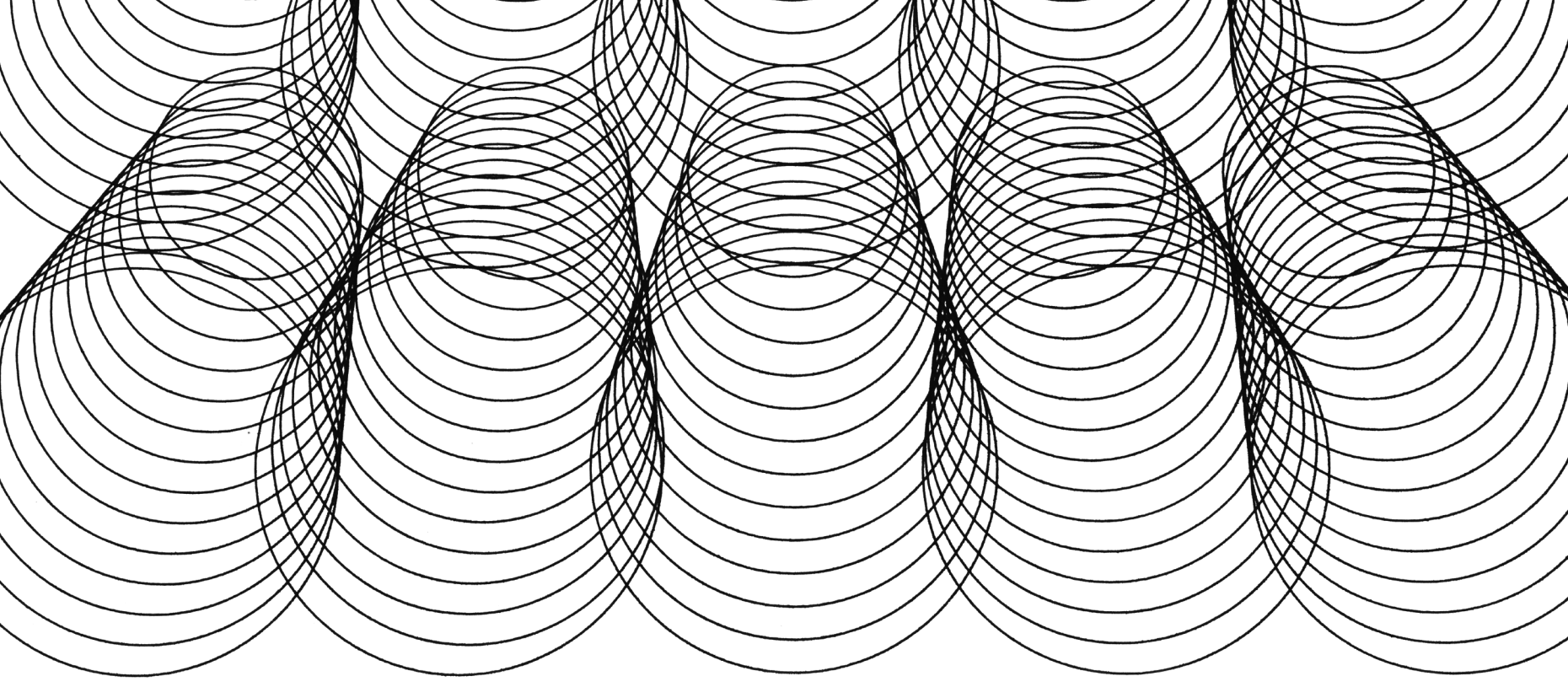


ROUTLEDGE

DISCOVERING THE DESIGN PROCESS

Into the Beautiful Mess

Courtney Windham
Margaret Fletcher



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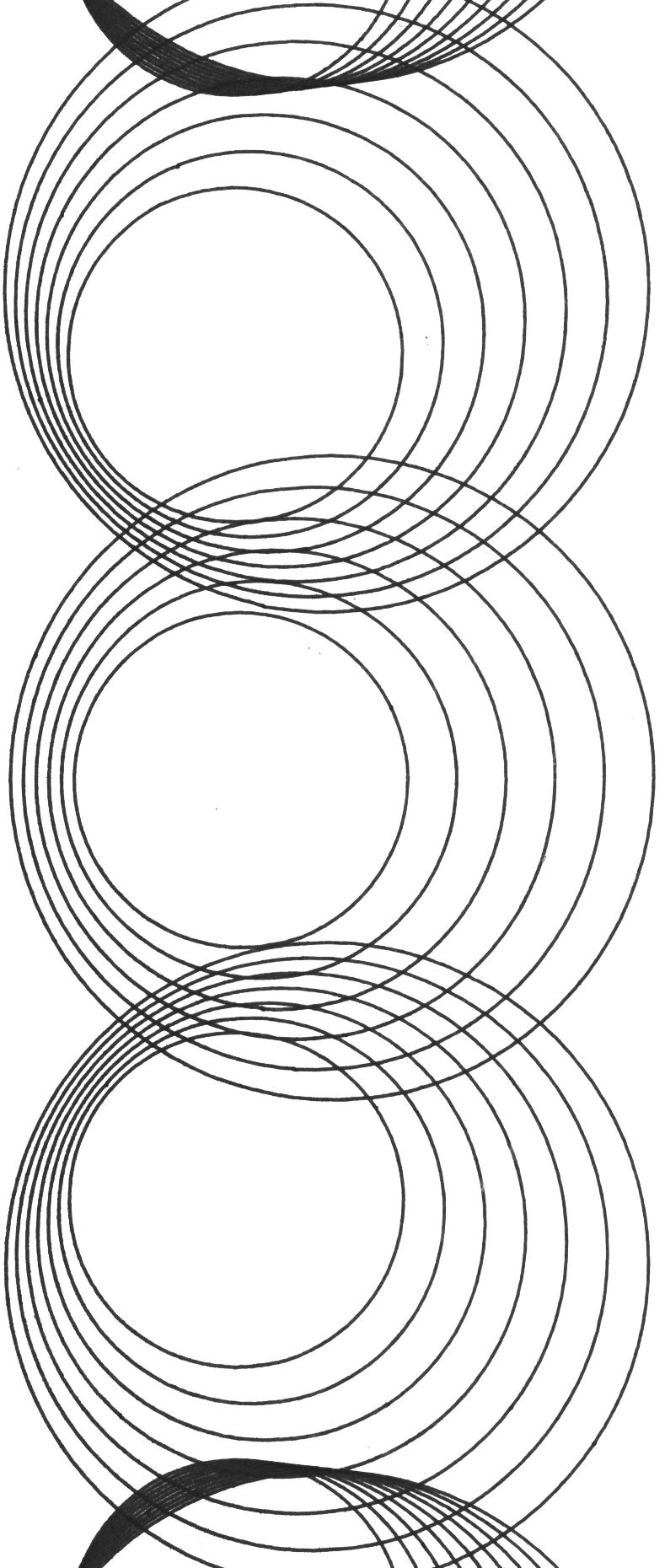

DISCOVERING THE DESIGN PROCESS

Into the Beautiful Mess

Courtney Windham and Margaret Fletcher

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2026 by Routledge
605 Third Avenue, New York, NY 10158

and by Routledge
4 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Routledge is an imprint of the Taylor & Francis Group,
an informa business

Publisher's Note: This book has been designed by Courtney Windham and prepared from the provided camera-ready copy.

ISBN: 9781032499246 (hbk)
ISBN: 9781032499192 (pbk)
ISBN: 9781003396062 (ebk)
DOI: 10.4324/9781003396062

Typeset by Courtney Windham in Acumin Pro and Freight TextPro.

For our family, friends, and colleagues
For our past, present, and future students
For designers, artists, and makers everywhere
—Courtney and Margaret

For Jerrod, thank you for your never-ending
love and support through it all.
—Courtney

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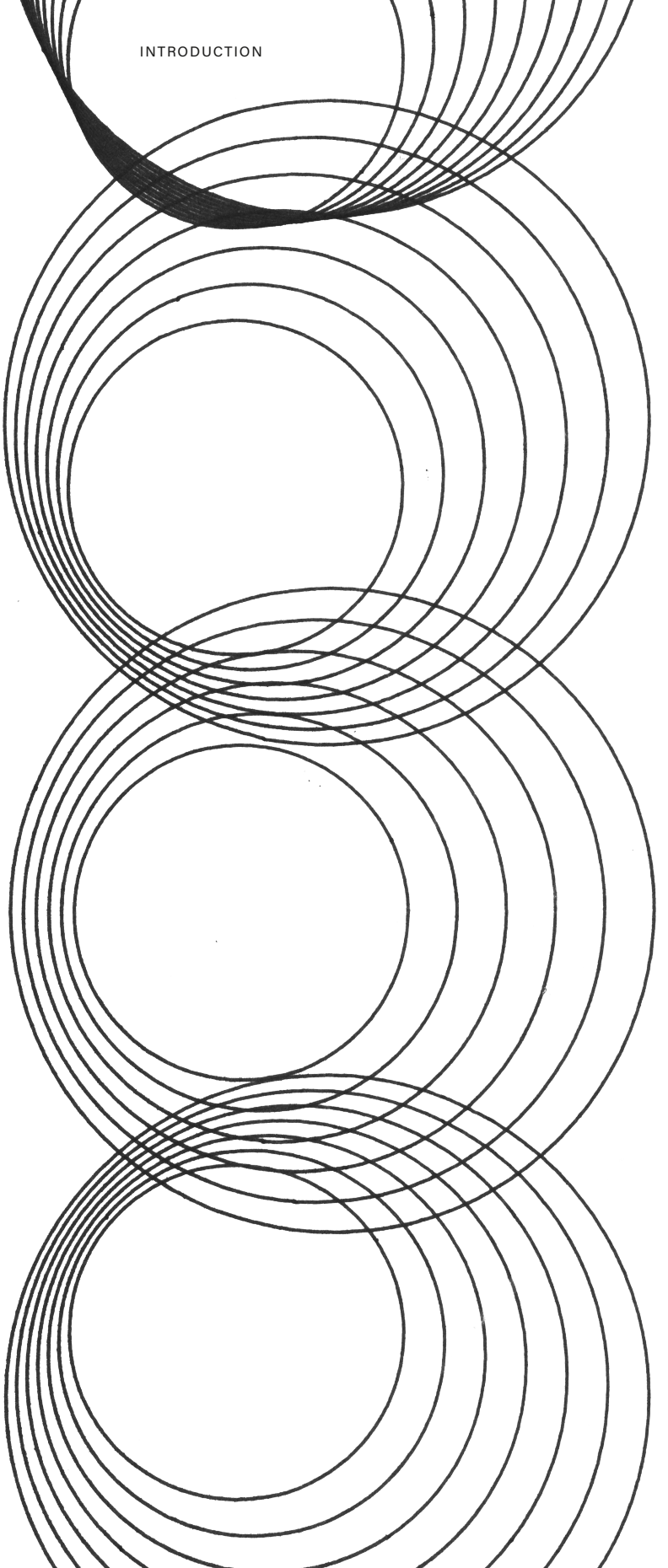


INTRODUCTION

This book began from a shared curiosity about the nature of the design process that, while sometimes rather unspecific, maintains a profound sense of purpose and direction. Our initial reflection on design process, intuition, and thought evolved into a deeper inquiry, challenging us to distinguish between the ways we describe process and the specific words we use. At its core, this book seeks to demystify the discomfort with generated thoughts, unresolved ideas, and gut reactions to illuminate the path through the creative labyrinth we call the beautiful mess. Our search led us to the stories of others, captured through interviews that span a spectrum of perspectives and experiences.

As you proceed through these pages, we invite you to reflect on the essence of creativity, the resilience in facing the undefined, and the beauty in embracing the "beautiful mess" of design. Through this exploration, we extend our deepest gratitude to those who have shared their insights and experiences, offering us a glimpse into the complexity of human creativity.

how the book works ::

As design educators, through our teaching experience, we have coached hundreds of design students on the importance of the design process and discovering their own methods of working, thinking, and learning. We often point to sources, assign readings, demonstrate techniques, and cross-reference examples to assist young designers in the appropriate direction for finding the answers to their unique vision and voice. This book offers a powerful tool to explore new avenues of understanding how to integrate formal processes with intuition and creativity in design. As a whole, this book considers how individual designers collect, select, filter, share, and reflect on their processes as they develop their work.

At its core, the book operates as an inter-sectional platform where snapshots of the creative process are readily available, welcoming readers to open it at any juncture and find a moment of clarity or inspiration. The beauty lies in its simplicity—offering a variety of quotes and learning opportunities from designers of varied experience levels.

DOI: 10.4324/9781003396062-1

The structure of the book presents a hierarchy of content through a Key Observation List—verbal signposts that provide accessible descriptions of specific pieces of the design process. These are strategically keyed into interviews, enabling readers to drill down to the narrative around a single topic without the necessity of traversing the entire book. Yet, for those who prefer a traditional approach, the book offers a rich cover-to-cover reading experience that is both narrative-based and easily digestible. What makes this book so helpful for those fascinated by design is its approach to cross-referencing these key observations, insights, and the interviews. Different designers' thoughts and experiences are woven together to reveal the overlaps in their processes, rendered graphically to enhance comprehension.

For the reader who is enthralled by a particular facet of the design process, this book serves as a guide, with markers to thumb through and dig deeper into the specific stages of creation. These reference points act as a network of pathways, connecting various sections and designers, making the journey through the book a personalized adventure.

The book stands as a testament to the dynamic and multifaceted nature of the design process, inviting readers from all walks of life to explore the creative landscape through a range of perspectives—whether seeking a moment of inspiration in a poignant quote or a deeper, more comprehensive understanding of design.

the interviews ::

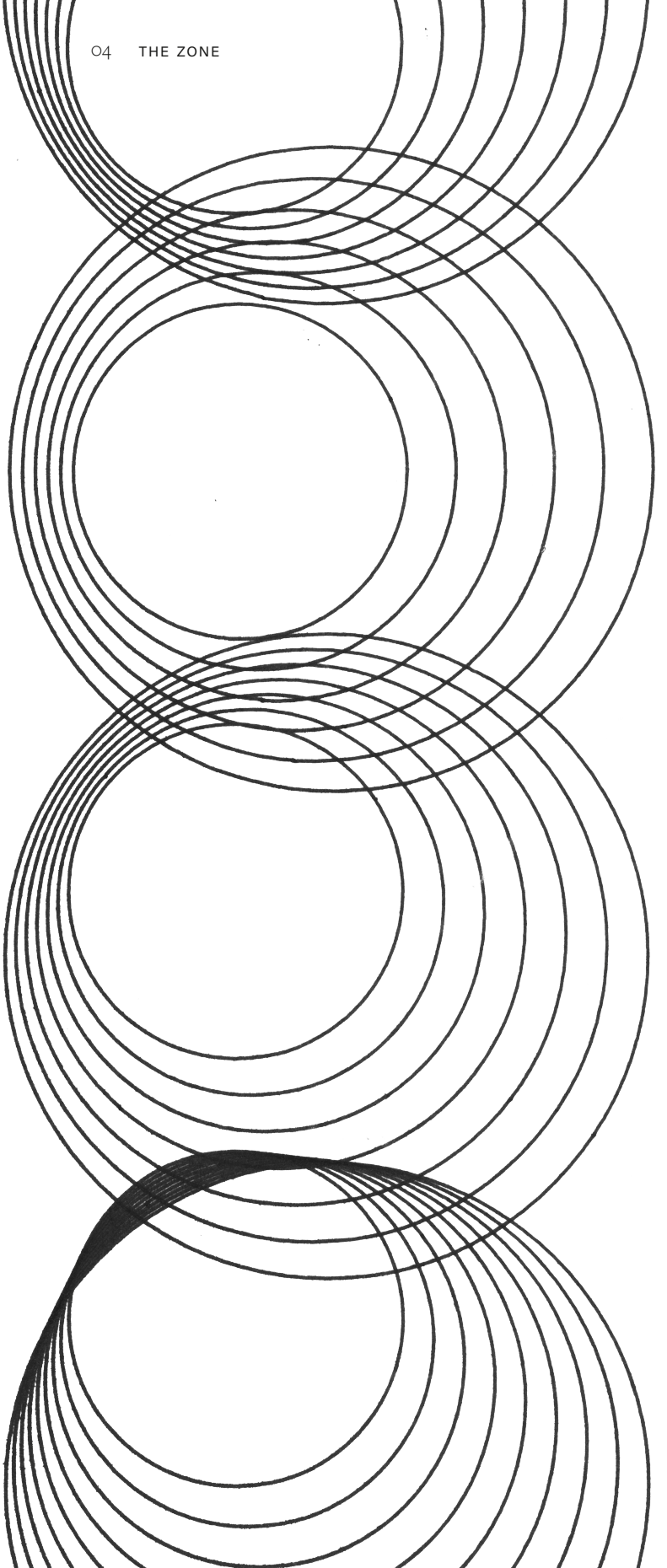
The case studies allow readers to step inside the designer's studio, observe the physical product of the design process, and gain insight into the designer's mindset. They serve as catalysts for inspiration and provide insight into how various means, methods, and processes can inform how designers make decisions, build concepts, and connect designs to the world around us.

Through our research, we have discovered incredible overlaps in the processes of a multitude of design disciplines. We have also found that learning from other disciplines helps us understand our own work. Taking a chance was inherent in our methodology, a testament to the trust we placed in the unpredictable nature of creativity itself. Our design process for this exploration mirrored the very essence of the designers we featured—it was not about rigid plans or predictable outcomes but about embracing the beautiful mess of the creative process.

By presenting a diverse group of designers, each unique in their approach and rich in their narrative, we celebrate the shared struggle and triumph inherent in the act of creation. This study serves as a reminder that creativity is a human circumstance,

innate and omnipresent, and its beauty lies in its diversity, its willingness to share, and its power to unite us across all walks of life.

These everyday creatives allowed us to see ourselves in their work. Their openness and engagement in discussing their processes and the “whys” of their work afforded us a rare glimpse into the life of the creative spirit. They embody the genius of the everyday creative—their lives are reflections of our own, underscoring that the struggles and triumphs of creativity are part of a shared human experience.



THE ZONE

—

Navigating Creative Thinking

the formal design process—a framework for creativity ::
Designers seek moments of creative bliss when everything aligns perfectly, stress melts away, and decisions flow effortlessly. These are "in the zone" moments that keep creatives inspired. The workspace reflects this: sketches, models, prototypes, and tools are scattered in a chaotic yet purposeful arrangement—a visual manifestation of various thoughts and processes. This "beautiful mess" captures the dynamic interplay between structured design methods and spontaneous inspiration revealing the fascinating tangle of creative thinking, essentially bridging the divide between structured and informal moments of the design process.

In design professions, process is taught through a framework of linearity: establish a problem, conduct research, ideate, prototype, get feedback, and execute. This structured design process offers a shared language across all design disciplines and ensures systematic progress and clarity regardless of the discipline, from architecture to fashion design. While the tools may vary, the 12 case studies in this research revealed striking similarities in the design processes across professions. The shared language of the design process framework supports interdisciplinary collaboration and helps align diverse disciplines across a common approach.

Through an iterative practice of learned experience, designers know that the steps of the design process provide essential structure, serving as a road map, guiding designers through complex problems and projects. Far from a rigid structure, it is a framework within which creativity comes into play. True innovation often stems from the unexpected—the moments when spontaneity disrupts the linear flow of the process. Experienced designers realize that their intuition—something that doesn't always follow prescribed steps—plays an equally crucial role in successfully navigating the design process.

Designers often move back and forth between steps, revisiting earlier stages as new insights emerge. This movement back and forth allows the design process to adapt to the unpredictable nature of creativity. Designers often experience moments where thoughts, actions, and problem-solving capabilities go beyond the prescribed steps. Therefore, the actual design process is not a rigid path but a dynamic interplay between the rational, structured steps and the intuitive, creative impulses that

DOI: 10.4324/9781003396062-2

arise throughout. The formal process establishes a framework, but the designer must leave room for creative leaps that bring new ideas to design solutions. These moments—where new connections are made, and unexpected ideas emerge—are often spontaneous, weaving conscious and unconscious thinking into a cohesive narrative that can shape design activities.

By delving deeper into the mechanics of structured and unstructured design processes, we aim to uncover the secrets to consistently entering the zone where creativity thrives. The intersection of these two forces—the formally understood design process and the intuitively accessed creative process—uncovers the natural state of the designer's "beautiful mess."

design thinking versus the design process ::

Design thinking, often confused with the term design process, is best understood as a mindset. Herbert A. Simon, in *The Sciences of the Artificial*, laid the groundwork for modern design thinking, emphasizing its cognitive underpinnings. Additional thinkers like Nigel Cross, Horst Rittel, Peter Rowe, and Bryan Lawson expanded on this, linking design thinking to problem-solving, intuition, and iterative exploration.[1]

Design thinking focuses on how designers engage with problems. It prioritizes empathy, ideation, and iteration, fostering a creative mindset that complements the formal design process.[2] For example, design thinking centers on an understanding of the user's needs through things like empathy and observation. This user-centered approach ensures that resulting solutions are not only appropriate but also meaningful and relevant. The formal design process provides the scaffolding for productivity; design thinking enriches the resultant work with deeper insights and emotional resonance. Design thinking is often framed as a set of principles to foster creativity. The design process is a series of steps that require a deliberate effort to bring an idea to fruition.

the creative mind, conscious and unconscious thinking ::

The human mind is a complex system with a primary duality of conscious and unconscious thought.[3] Though functionally distinct, these two types of thinking work together to support decision-making and creativity. Understanding the dynamic between the two is key to capitalizing on productive potential.

First, it is essential to understand the general difference between conscious and unconscious thinking. Simply put, conscious thought is a type of thinking you are aware of. Unconscious thinking happens without you being aware; this type of thinking occurs in the background beneath the level of conscious thought. Conscious thought is slow and deliberate and involves reasoning and analysis. Unconscious thinking happens fast; it operates through automated processes, sorting through vast amounts of information and experiences that have accumulated over time. The unconscious mind is quicker and can process much more data—an estimated

11 million pieces of information per second, compared to about 40 pieces that the conscious mind processes.[4] The unconscious mind operates as an active, adaptive system that excels at recognizing patterns, enabling designers to make quick, instinctive decisions without overthinking. But conscious thought still plays a crucial role—it helps us step back, evaluate, and refine our intuitive instincts. By integrating both forms of thinking into the design process, designers can begin to understand both the how and why of their own processes.

> "The unconscious mind operates as an active, adaptive system that excels at recognizing patterns, enabling designers to make quick, instinctive decisions without overthinking. But conscious thought still plays a crucial role —it helps us step back, evaluate, and refine our intuitive instincts."

Intuition, at the heart of the creative process, is the ability to understand something instinctively without conscious reasoning. Intuitive thinking is a form of unconscious thinking. As Swiss psychologist Carl Jung posited, intuition is "the perception of the possibilities inherent in a situation," allowing individuals to uncover relationships between things that may not be immediately obvious.[5] The importance of intuition in design is significant. Intuition, described above as an unconscious mental process, allows designers to quickly make connections, recognize patterns, and draw on a lifetime of experiences stored as unconscious knowledge.

In his book *Blink: The Power of Thinking Without Thinking*, journalist Malcolm Gladwell popularizes the concept of "thin-slicing." According to Gladwell, thin-slicing is the ability to make quick judgments or decisions—sometimes in just seconds—by relying on subtle cues, patterns, and past experiences. These snap assessments can be remarkably accurate, even though they occur without deliberate analysis or conscious thought. This process is highly intuitive and fast, operating beneath the surface of conscious thought. Gladwell attributes the description of this unconscious ability to psychologists Robert Rosenthal and Nalini Ambady, who identified how thin-slicing allows us to make judgments with astonishing accuracy despite limited data.[6]

In *Gut Feelings: The Intelligence of the Unconscious*, German psychologist Gerd Gigerenzer further explores the efficiency of unconscious reasoning through his "fast and frugal" concept. He suggests that the unconscious mind creates "rules of thumb," or mental shortcuts, that guide decision-making, especially in situations with limited information.[7] Gigerenzer describes this cognitive technique as "the

ability of the unconscious in some cases to discover these rules of thumb, in some cases to apply them without awareness."[8] This thinking allows for rapid decisions, often without the conscious mind fully aware of the reasoning.

Lois Isenman, cellular biologist and author of "Understanding Unconscious Intelligence and Intuition: Blink and Beyond," explains that intuitive processing can be parallel to visual perception. In this process, the unconscious integrates multiple cues and presents them to the conscious mind as coherent judgments. This integration of cues enables individuals to make sound decisions with minimal effort.[9] To better describe unconscious processing, Isenman adds to thin-slicing by describing "adequate slicing" and "fat slicing" where adequate slicing is ordinary pattern recognition and fat slicing "as thinking out of the box or having a sense of the whole or the big picture."[10] These are all devices for quick pattern recognition using minimal cues by gathering information over time—a tool to make complex decisions by assimilating different types of information.

The unconscious mind's ability to quickly process information is not only beneficial for simple decisions but also for creative problem-solving. In her work on creative intuition, Theresa Jane Hardman describes the experience of creativity as "fragile and fleeting," marked by "moments of mysterious potentiality and open-ended suggestiveness."[11] This creative intuition is often unconscious, arising spontaneously without clear reasoning or awareness of its origin. Hardman emphasizes how intuition in creativity allows for the expansion of consciousness, generating "new and original thoughts, sounds, images, and actions."[12] The unconscious mind's capacity to hold and process large amounts of information is remarkable. It can pull together seemingly disparate pieces of information based on narrow slices of experience over a vast amount of time, thus creating mental shortcuts that guide decision-making. This ability is essential in design, where decisions must be made quickly and often with limited information.

Behavioral psychologist and Nobel Laureate in Economics Daniel Kahneman's work in *Thinking, Fast and Slow* contrasts two modes of thinking, System 1 and System 2. System 1 operates quickly and automatically, often without conscious effort. In contrast, System 2 is slower, more deliberate, and used for complex problem-solving. Kahneman explains, "System 1 generates surprisingly complex patterns of ideas, but only the slower System 2 can construct thoughts in an orderly series of steps."[13] This dual-process model demonstrates how the unconscious and conscious mind interact to create a complete decision-making process. While System 1 is responsible for rapid, instinctual judgments, System 2's more deliberate thinking allows for careful analysis and evaluation of information. Kahneman argues that "true intuitive expertise is learned from prolonged experience with good feedback on mistakes,"[14] showing that the unconscious mind, while quick and efficient, benefits from the refinement and guidance of conscious reflection and learning. John F. Kihlstrom, in "Unconscious Processes," states: "In principle, unconscious processes differ

from conscious processes because they operate outside phenomenal awareness. And because conscious awareness is the logical prerequisite for conscious control, unconscious processes are not susceptible to voluntary self-regulation."[15] Simply stated, the control of rational decision-making is highly regulated by the self, while unconscious thinking is not.

The relationship between our conscious and unconscious minds is not just two parts but rather a highly integrated system. Isenman describes this as the unconscious constructing a "coherent and meaningful world" from multiple cues and presenting it to the conscious mind for refinement.[16] While efficient in recognizing patterns and making quick judgments, the unconscious mind is shaped and refined through conscious thought, experience, and feedback. This mutual influence creates more effective decision-making, by combining the speed and intuitiveness of unconscious thought with the depth and rationality of conscious reflection. Or, as Kahneman would say, fast thinking (or intuitive thinking) provides initial ideas and sparks, while slow thinking (or rational thinking) allows for deeper analysis and refinement.[17]

J.P. Guilford, a renowned psychologist, first introduced the concepts of convergent and divergent thinking in his 1956 publication, "The Structure of Intellect."[18] Divergent thinking, which is primarily associated with the unconscious mind, involves the generation of many possible solutions without the need for immediate evaluation. It allows the designer to explore a wide range of possibilities, free from the constraints of rational judgment. Convergent thinking, on the other hand, is a slower, more deliberate mental process that involves narrowing down these options to find the best solution. This is the rational, conscious mind at work. Successful designers need to be adept at oscillating between these two modes of thinking.

oscillating in design ::

As Bryan Lawson, architect and psychologist, notes in *How Designers Think*, design is a constant movement between intuition and rationality, where each mode of thought informs and refines the other. Designers must learn to oscillate between these two modes of thinking. The ability to seamlessly switch between rational and creative thinking is a hallmark of great designers. They must embrace uncertainty and discomfort as they navigate between fast and slow thinking, intuition, and analysis.[19]

This intersection between conscious and unconscious thought is not just a theoretical concept; it is an important, active part of understanding how to design. Designers are taught the formal design process as a scaffold for making design decisions. However, designers must also develop processes that tap into their unconscious minds to cultivate creative insights. As observed in this text through interviews with various designers from diverse disciplines—architects, fashion designers, graphic designers, and more—it became clear that they all experience a similar phenomenon. These designers frequently mentioned the importance of allowing randomness,

curiosity, and play to fuel creativity. They all mentioned some version of "creating opportunities for serendipity," where moments of discovery emerge unexpectedly.

> ". . .design is a constant movement between intuition and rationality, where each mode of thought informs and refines the other. Designers must learn to oscillate between these two modes of thinking. . ."

the neuroscience of intuition ::

Neuroscientist Antonio Damasio's work on somatic markers suggests that emotions and physical sensations guide the unconscious mind in making decisions, particularly when navigating complex situations and explains the physiological underpinnings of intuition. According to Damasio, "bodily cues such as muscle tone, heart rate, and endocrine activity"[20] translate unconscious emotions into instinctual responses. These markers, shaped by evolutionary needs, enhance survival by enabling quick responses to complex situations.[21]

Research in neuroscience, particularly in the context of play, offers valuable insights into how intuition and the unconscious mind play a vital role in the creative process. In *How Play Shapes the Brain, Opens the Imagination, and Invigorates the Soul*, Stuart Brown and Christopher Vaughan emphasize that play is a fundamental part of evolutionary biology. This idea challenges the common assumption that play is merely frivolous. Instead, it argues that play is crucial for brain development and creating neural connections, all of which enhance creativity.[22] While this research is not directly about design, it provides a valuable lens through which we can better understand how designers—consciously or unconsciously—can incorporate spontaneity into their design process.

What does this mean for the design process? Designers must allow space for both structured, rational thinking and spontaneous, intuitive thought. Gladwell's concept of "thin-slicing," for instance, demonstrates how the unconscious mind can quickly identify patterns from narrow slices of experience.[23] This unconscious decision-making process happens faster and processes much more information than the conscious mind. In a typical design process, however, the conscious mind is often expected to dominate, leaving little room for these fast, intuitive moments to emerge.

learning through the design process ::

The unconscious mind's pattern recognition and integration capacity make it a powerful ally in learning. Research suggests that learning involves both unconscious and conscious stages, with the unconscious often preceding conscious understand-

ing.[24] This dual-layered approach allows designers to internalize complex processes and concepts, which then manifest as intuitive insights.

Bloom's Taxonomy of Learning provides a valuable framework for understanding this relationship within modes of learning. Its hierarchy—"remember, understand, apply, analyze, evaluate, and create"[25]—similarly mirrors the stages of the design process, emphasizing the integration of knowledge, thinking, and creativity. To navigate these steps, designers must blend conscious effort with unconscious assimilation. This learning process is not limited to situations of formal education. All designers continuously refine their skills through practice, reflection, and feedback.

The learning process involved in design is deeply tied to both conscious and unconscious thinking. Since the unconscious mind has greater processing capacity, much of what designers learn happens beneath the surface of conscious awareness. "Learning processes must have an unconscious, implicit, unintentional, intuitive, experiential, or automatic processing stage, mainly due to limited conscious processing capacity."[26] Learning to recognize patterns, make decisions, and solve problems involves both intuitive and unconscious learning and mindful reflection. As such, the design process is not solely about applying a set of steps; it is about allowing the interaction between these two cognitive processes—unconscious and conscious—to work in harmony to promote learning.

the beautiful mess, navigating the zone ::

Design's "beautiful mess" occurs when structured processes meet intuitive insight. Lawson captures this dynamic: "Many forms of design, then, deal with both precise and vague ideas, calls for systematic and chaotic thinking, and needs both imaginative thought and mechanical calculation."[27] The ability to oscillate is a key practice for effective design.

To thrive in this zone, designers must cultivate their ability to switch between thinking modes. Activities like brainstorming, sketching, and prototyping encourage unconscious thinking, while critical analysis and testing foster conscious thinking. Creating an environment that supports both modes of thinking can enable designers to access the zone repeatedly.

Designers can take deliberate steps to enhance their ability to access the zone. One strategy is to embrace ambiguity and resist the urge to resolve uncertainty too quickly. Allowing ideas to percolate in the unconscious mind often leads to richer, more innovative solutions. Similarly, creating rituals or routines—such as setting aside dedicated time for free-form sketching or maintaining a visually stimulating workspace—can help trigger the intuitive mindset. Anything visual will help. For instance, sketching can be used as a tool to help see opportunities through a visual process rather than a linguistic one. Psychologist Barbara Tversky states, "Express-

ing ideas in a visuospatial medium makes comprehension and inference easier than in a more abstract medium such as language."[28]

Another approach is to seek diverse experiences and perspectives. Exposure to different disciplines, cultures, and ways of thinking deepens the mental repository from which intuition draws. Designers can also practice mindfulness, which enhances their awareness of unconscious cues and fosters a deeper connection between mind and body. Finally, collaboration is crucial to expanding the zone. Engaging with others introduces new ideas, challenges assumptions, and can spark creative breakthroughs. The give-and-take of multiple perspectives mirrors the dynamic interaction between conscious and unconscious thinking, amplifying the potential for innovation.

In practice, embracing spontaneity in the design process can take many forms. For example, setting up exercises that encourage rapid idea generation—such as quickly sketching multiple design variations without overthinking—helps stimulate the unconscious mind. These exercises create an environment where intuition can take the lead, with the conscious mind stepping in later to evaluate and refine the results. By incorporating these playful, iterative activities, designers can balance fast, intuitive thinking and slow, rational thought. By intentionally alternating between these approaches, designers can make use of the full spectrum of their cognitive abilities.

harnessing the beautiful mess ::

The design process is ultimately a complex system that encompasses a variety of actions, including intuition, analysis, structure, and spontaneity. By recognizing and understanding the dynamic interplay between the formal framework of the design process and the intuitive insights of the unconscious mind, designers can confidently navigate the complexities of their work. Both conscious and unconscious processes play essential roles in decision-making and creativity. The unconscious mind, with its capacity for rapid, intuitive judgment, works with the more deliberate, analytical conscious mind to form a dynamic cognitive system. By embracing the strengths of conscious and unconscious thought, individuals can unlock the full potential of their cognitive abilities, enhancing both decision-making and creative expression.

From Gladwell's concept of "thin-slicing" to Kahneman's dual-process model, the ability of the unconscious mind to make quick, informed decisions is crucial for navigating both everyday and complex situations. In the realm of creativity, the unconscious provides the foundation for the spontaneous generation of new ideas, as described by Hardman and Jung.

> "By embracing the strengths of conscious and unconscious thought, individuals can unlock the full potential of their cognitive abilities, enhancing both decision-making and creative expression."

In conclusion, the design process is far from linear. It is not simply a series of steps to follow but a dynamic interaction between the structured, rational steps of conscious thought and the fluid, intuitive impulses of the unconscious mind. Designers can more effectively navigate the complexities of the design process by embracing both intuition and rationality. This act makes the often chaotic "beautiful mess" behind design work more accessible and, ultimately, more effective. The "beautiful mess" is not a flaw to be avoided but rather a state to be embraced and actively pursued. It reflects the richness of the design process, where logic and creativity converge. Ultimately, the zone is not a destination but a journey that invites us to explore the depths of our creativity and the limitless opportunities of our cognitive abilities.

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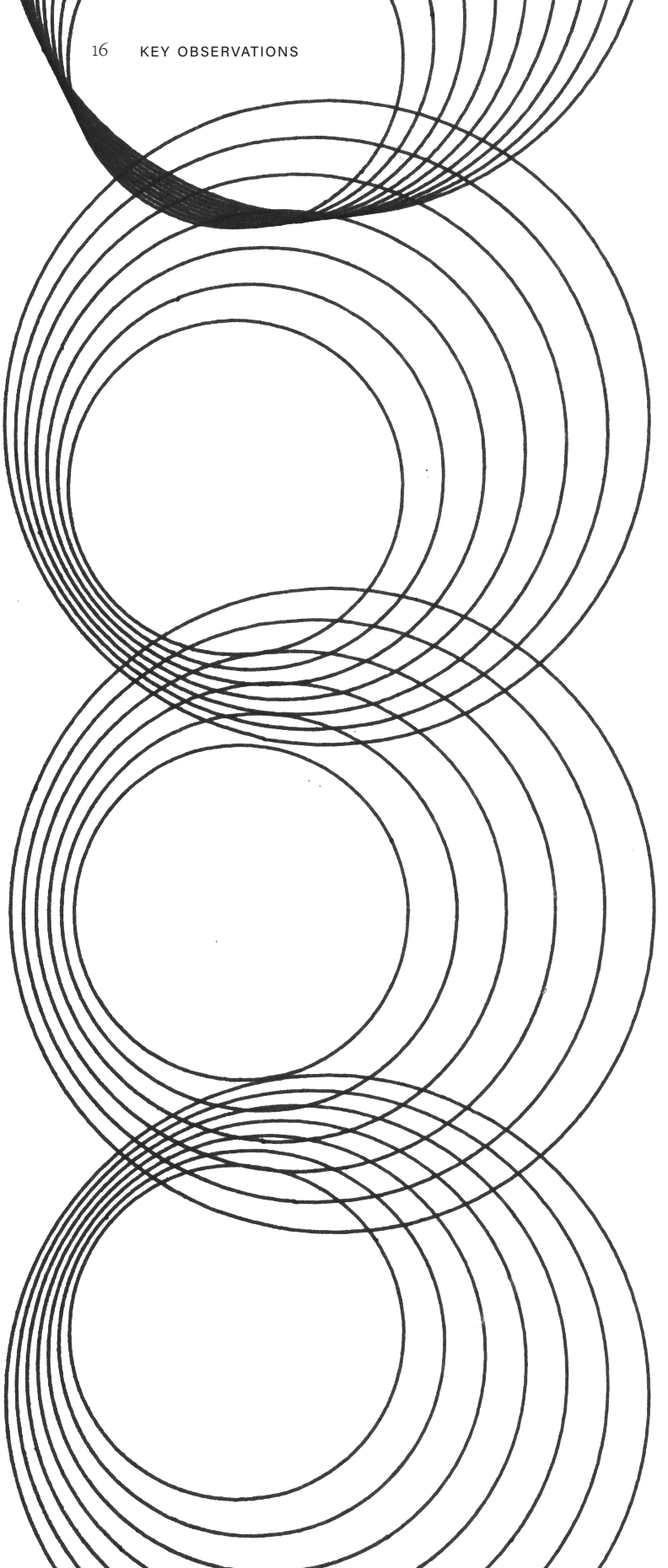

KEY OBSERVATIONS

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Navigating the Creative Journey

Insights and Commonalities in the Design Process

In the world of design and creativity, the path from an initial idea to a finished product is as vital as the outcome itself. This path is described in the design community as the design process. Even though each designer's design process is unique, some categories and overlaps exist between all designers, no matter their field or training.

This section includes key observations from interviews with the 12 designers featured in this research. In the span of three years, the authors traveled to different regions of the United States to visit the chosen designers, artists, and makers. Selections on who to interview were quite organic, allowing room for recommendations from colleagues, discoveries from reading a magazine, or happening upon an artist's work through a shared connection. Considerable effort was made to find designers who were accessible and willing to share their space and process. Each interview was recorded by audio and transcribed into a document for review and editing. Important thoughts were captured and highlighted as notations to be considered as key observations across all participants. Essays were written and developed from the edited transcripts into a summary of conversations for the designers highlighting important ideas relevant to each. Together, the voices and images of the interviewees were combined and developed into a series of case studies that carefully represent the design process behind the work of each participant. Through this process, it was discovered that the designers interviewed face similar challenges and opportunities in their processes.

This collection of key observations reflects common aspects of the design process and offers insights for applying them to our own processes. The observations create a framework for understanding and enhancing creativity. By applying these principles, designers, artists, and makers can navigate their work's complexities and strive to understand their own design process better.

In this section, readers will find references to specific moments from discussions with the participating designers. These reference notes invite further exploration of each topic, providing deeper insights into the shared design journey.

DOI: 10.4324/9781003396062-3

01

start :: the key to progress in design

The idea behind "just start" is straightforward: begin your work. This approach is critical in design where getting started is often the most challenging part. Spending too much time imagining a solution can be counterproductive because design solutions are inherently complex and emerge through discovery. This discovery process happens by actively working on the design. The best approach is to simply start. This deceptively uncomplicated idea can be difficult to implement because designers often overthink each decision or potential process path. However, design fundamentally depends on action and reaction to advance the work. You cannot design a complete solution in your head; it requires physical execution and iterative adjustments. The earlier you begin, the faster you'll make progress.

Setting yourself up for easy ways to start can make a significant difference. One practical strategy is to leave a straightforward, mundane task on your desk for when you return. By immediately starting with this simple task, you can ease into the workday and begin making decisions that propel you forward. Spending too much time imagining a solution can be counterproductive because design solutions are inherently complex and emerge through discovery. The act of starting provides a foundation upon which to build and refine ideas and ultimately leads to innovative and effective design solutions.

When in doubt, start with what you know. This simple yet effective mantra emphasizes the importance of taking the first step. The key is to begin. The momentum you gain from completing familiar tasks can carry you through more challenging aspects of your work. Engaging your conscious mind with a simple task allows your subconscious mind the freedom to process information in the background. This can lead to breakthroughs in your design thinking, as new insights and directions often emerge spontaneously during these moments of routine activity.

Inaction is the enemy of creativity and productivity. When unsure of where to start, it is easy to become paralyzed by indecision. Instead of sitting idle and worrying about the next steps, starting with what you know can keep you moving. Trust that as you work, your mind will naturally guide you to make decisions that advance your project. The act of starting itself can spark a chain reaction of ideas and actions.

DESIGNER CASE STUDY
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07 / Lotta Jansdottter (156–157)

progress
moving forward toward an outcome

to start
to begin, to move forward with momentum

to know
to have experience with

02

cultivate confidence :: figure it out

The directive to "figure it out" is about learning to find solutions independently. It is not about having all the answers or knowing exactly how to proceed at all times. Instead, it involves confronting an issue head-on, sitting with the problem, and methodically working through it until a solution or a way forward is discovered. This process teaches designers to rely on their own abilities and to persevere through challenges without immediately seeking external assistance. Learning to figure things out fosters confidence, resilience, and adaptability, which are essential qualities in any field, particularly in design. Since the design process is inherently dynamic, designers are often faced with unexpected challenges that require on-the-spot decision-making. This is where the ability to figure things out becomes particularly valuable. The capability to independently solve problems is much more useful than receiving an immediate answer from someone else.

For beginners, the prospect of figuring things out can be daunting. However, it is essential to recognize that everyone starts from the same place—at the beginning. Lack of knowledge, practice, or training should not deter you from the overall goal. Embracing the learning process and being willing to experiment with new materials and techniques are important steps in becoming proficient. The experimental mindset of "figure it out" encourages designers to take initiative and learn through hands-on activity. Learning to "figure it out" requires a certain amount of self-reliance and persistence—both valuable assets.

DESIGNER CASE STUDIES
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08 / James Mabery (176)

09 / John Morgan (201–202)

confidence
feeling of certainty

cultivate
to care for or grow something

figure it out
to rely on one's own ability to persistently experiment while working toward a solution

03

inspiration in design :: fuel creativity

In the design process, inspiration plays a crucial role and can be defined as mental stimulation that leads to creative action. Inspiration offers a number of benefits in the design process. It is a powerful antidote to creative blocks providing the spark needed to move past the moments of feeling stuck. Inspiration can be one of the entry points into the design process, serving as a catalyst for initial design ideas, providing the raw material from which concepts can be developed.

Inspiration can be drawn from a myriad of sources. Everyday objects and experiences often serve as fertile ground for ideas. Music, dance, art, sculpture, theater, imagery—almost anything—offers sensory and emotional experiences that can spark creative thinking. With its endless forms and patterns, nature also provides a robust source of inspiration. Other artists and makers also contribute significantly, offering perspectives and techniques that can be adapted and transformed. Something seen before, an old design or a fleeting

DESIGNER CASE STUDIES
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08 / James Mabery (176–177)

10 / Tré Seals (217)

11 / Urvi Sharma and Manan Narang (239)

to fuel
to provide force used to create power

image, can resurface as a fresh idea. Well-known artists or designers can also serve as sources of inspiration as well. Their work can provide benchmarks of excellence and innovation.

Wherever it comes from, effectively using inspiration involves both seeking it out and acting upon it. Designers can continuously refresh their perspectives and approaches by continuously pursuing and filtering inspiration from everywhere.

inspiration
an external force that propels intellectual or emotional activity; ignites the mind

to stimulate
to encourage development

04

creating through making :: hands-on design

Making is an indispensable part of the design process. The principle of "make, make, make, and then make some more" emphasizes the importance of continuous creation. Thinking through active hands—manipulating materials, assembling parts, and constructing objects—offers insights and solutions that theoretical exercises might miss. It bridges the gap between abstract ideas and tangible outcomes by providing a hands-on approach to problem-solving.

DESIGNER CASE STUDIES
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04 / Talia Cotton (109)

09 / John Morgan (197–200)

One of the most exciting aspects of making is that it often reveals differences and nuances not anticipated during the conceptualization phase. Designers often encounter unexpected variables and opportunities as they engage with materials and begin the creation process. Disconnecting from digital tools and starting with sketches can also be beneficial. Sketching is a familiar and freeing method for developing ideas. Working on a computer can make everything appear final, while sketches encourage experimentation and iterative thinking. Embracing this approach ensures forward motion, even when faced with indecision.

to create
to produce something new

to make
to bring into existence through active construction

05

time and planning strategies ::

Designers often have limited time to gather research and develop concepts and solutions. Using time wisely is not just about avoiding waste but about optimizing the creative process to improve both the quality and speed of arriving at design solutions. One way to re-frame the importance of time management is to view time as the true mediator of the design process. Acknowledging the finite nature of time helps appreciate its value.

DESIGNER CASE STUDIES
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01 / Najeebah Al-Ghadban (46)

06 / Yoyo Ferro (139)

Effective time management involves creating a detailed plan for how time will be spent and allowing flexibility within that plan. This approach serves as a guide to productivity, reducing the mental burden of constantly deciding what to do next. Having a schedule helps maintain focus and momentum. Flexibility within this structure is also crucial, allowing for adjustments and adaptations as the design process unfolds.

management
effective oversight

A productive strategy for time management involves setting timers and imposing self-defined time constraints. Although this might initially seem extreme, it can be an efficient way to force progress. By setting specific time limits, designers are encouraged to act and react in a structured manner, leading to iterative improvements. Each cycle of action and reflection brings the designer closer to the final solution.

It should also be noted that the absence of a schedule is a decision about time. Allowing time to pass without an intentional plan can result in random and haphazard progress. Recognizing the finite nature of time emphasizes the need for deliberate use of it.

strategy
a plan for a specific goal

time
a measured period of existence

to plan
to think prior to action with intention toward an explicit outcome

06

navigating impostor syndrome :: embrace self-doubt

At some point, everyone experiences impostor syndrome, a nagging feeling of not being good enough or a persistent fear of inadequacy. Self-doubt is a part of the human condition, and recognizing when you internalize these feelings can help you address them head-on. Everyone experiences these doubts at some point. It's about getting comfortable with discomfort and understanding that feelings of self-doubt are a natural part of the process. Experiencing impostor syndrome indicates a desire to do a good job. It's not a bad thing unless it gets in the way of your progress.

to embrace
a accept with joy

imposter syndrome
a normal emotional experience based on an unfounded fear of inadequacy

self-doubt
feeling of doubt about one's own abilities

Overcoming impostor syndrome is a continuous process. While you may never completely remove these feelings, you can learn to recognize them for what they are and embrace them as part of your journey. By normalizing these feelings, you can reduce their power over you and continue to challenge yourself. Over time, you will build enough trust in yourself and your design process that impostor syndrome will have less and less impact on you and your work.

07

curiosity as a catalyst ::

Being curious is fundamental to understanding and interpreting the world around us. Curiosity is a powerful driver for discovery in the design process. It encourages designers to explore new things, ideas, and processes. It fosters creativity, enhances understanding, and serves as a catalyst for discovery. By encouraging and satisfying their curiosity, designers can continually expand the boundaries of their work.

DESIGNER CASE STUDIES
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02 / Marshall Brown (64)

12 / David Wolske (260)

The desire to learn as much as possible creates a curiosity-driven exploration that is a powerful motivator. Curiosity propels one toward exploration and experimentation. This action-oriented mindset is essential in design. Curiosity