



## Disguising the National as International: The Design Strategy of the Argentine Furniture Firm Buró

Researcher: Eliana Kim (Seoul National University)

Source: Design Issues, Vol. 41, No. 2 (2025)

報告人：D011430001 李淨慈

報告時間：114年11月5日10:00-10:30

# Table of contents

1. Introduction
2. A Nation Pulled in Two Direction
3. If You can't beat Them, Look Like Them
4. Pillar1: Creating a European Persona
5. Pillar2 : Mapping the Market Outsmart to Competition
6. The Result : Designing for the Opportunity
7. Pillar3 : Turning Limitations into Strengths
8. Lesson from Buró
9. Conclusions and Areas for Further Research

## Author Biography



Eliana Kim (Seoul National University)

Confluencias del «buen diseño» en centros disímiles de diseño: un análisis comparativo del KDPC de Corea y el CIDI de Argentina



Reinaldo Leiro (1930-2016)

烏爾姆造型學院 (Hochschule für Gestaltung Ulm)，曾於1953年至1968年間存在。就讀於第三任校長 Tomás Maldonado 期間。

2010年布宜諾斯艾利斯大學 (UBA) 授予他榮譽教授。

## 1. Introduction



# In a Market that Devalued the Local, How Did a National Brand Thrive for 50 Years?

Founded in 1963, Buró was a national Argentine design firm facing a monumental challenge. It had to compete in a landscape dominated by prestigious international brands like Herman Miller and Knoll, whose licensed products were seen as the gold standard. The core obstacle was overcoming a deep-seated cultural preference for foreign goods and the stigma of the 'Made in Argentina' label—a bias so strong that clients would ask founder Reinaldo Leiro to remove the stickers from the furniture.

## 2. A Nation Pulled in Two Directions



### Economic Volatility

1930s-1974

Protectionist policies (Import Substitution Industrialization) foster national SMEs like Buró.

Post-1976

A military coup ushers in neoliberalism, opening the market to foreign imports and creating intense competition and instability.

### Cultural Bias

The deep-rooted "Civilization vs. Barbarism" concept equated European influence with quality and progress.

...Argentine identity has juxtaposed 'civilization,' associated with European influence, against 'barbarism,' tied to indigenous Creole culture..."

### 3.

## If You Can't Beat Them, Look Like Them.

Instead of fighting the market's preference for foreign goods, Buró brilliantly adapted. Their core strategy was to **disguise the national as international**. They meticulously crafted a brand identity that appeared European, allowing them to compete on a level playing field with global giants.

Büro



Buró

German for "office"

A localized adaptation; a quiet nod to its Argentine roots.

# 4. Pillar 1: Crafting a European Persona.

- The Name:** Choosing "Buró," derived from the German word for office, immediately gave the brand an international, functionalist feel.
- The Look:** The logo and advertisements were heavily influenced by the minimalist Swiss design movement (*Die Neue Typographie*), projecting sobriety, elegance, and durability.
- The Message:** Advertisements intentionally omitted the phrase "Industria Argentina" and mirrored the clean, grid-based visual style of their main rivals, Knoll and Herman Miller.

Buró



Interieur Forma (Knoll)



Colección (Herman Miller)



# Our clients believed that we imported our designs.

Most of them bought our designs for more than ten years with that belief.

— *Eduardo Simonetti, Buró Designer*

Founder Reinaldo Leiro noted that his clients would often ask him to ‘take “made in Argentina” stickers off’ the furniture.

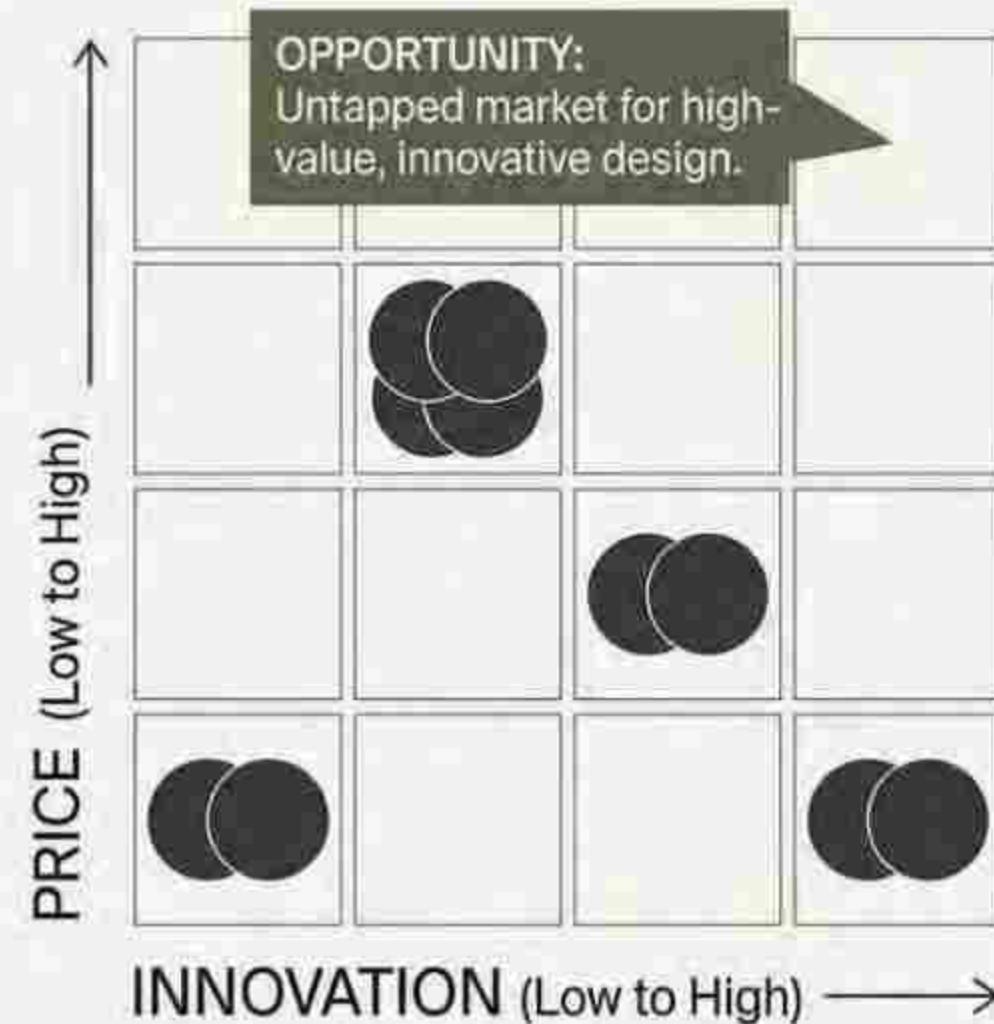
## 5.

## Pillar 2: Mapping the Market to Outsmart the Competition.

Buró employed a proprietary strategy developed by founder Reinaldo Leiro: "Counter-Design" (Contra-diseño). This was a systematic market analysis, not just a design philosophy.

The process involved creating a value-pair map to graphically position competitor products based on variables like price and innovation.

This tool allowed Buró's designers to instantly identify weaknesses and underserved gaps in the market.



# 6.

## The Result: Designing for the Opportunity.



Buró

The Rolo armchair (1968) is a prime example of Counter-Design in action. Its novel form, featuring curved chrome steel tubes and upholstered cylindrical modules, was an innovative solution that filled a gap competitors had missed. It became a huge commercial success, popular in both modern offices and domestic settings.

## 7.

## Pillar 3: Turning Limitations into Strengths

Buró's national status gave it a key advantage over international licensees: flexibility. While competitors were locked into rigidly reproducing foreign models, Buró could:

- Adapt designs to local materials and manufacturing realities.
- Create highly modular and customizable systems for clients.
- Navigate economic chaos by designing "hybrid" products (part local, part imported) that didn't look like a hybrid.

**“...ten years of thinking about the limits of the factual possibilities of an almost non-existent but imaginative furniture industry.”**

— Arnoldo Gaite, Buró Designer

# A System, Not Just a Product.

Buró's modular approach, showcased here with the NQ desk line, offered unparalleled adaptability for the modern office. The same core components could be configured in different ways to suit various functions, creating a cohesive furnishing solution across an entire space.



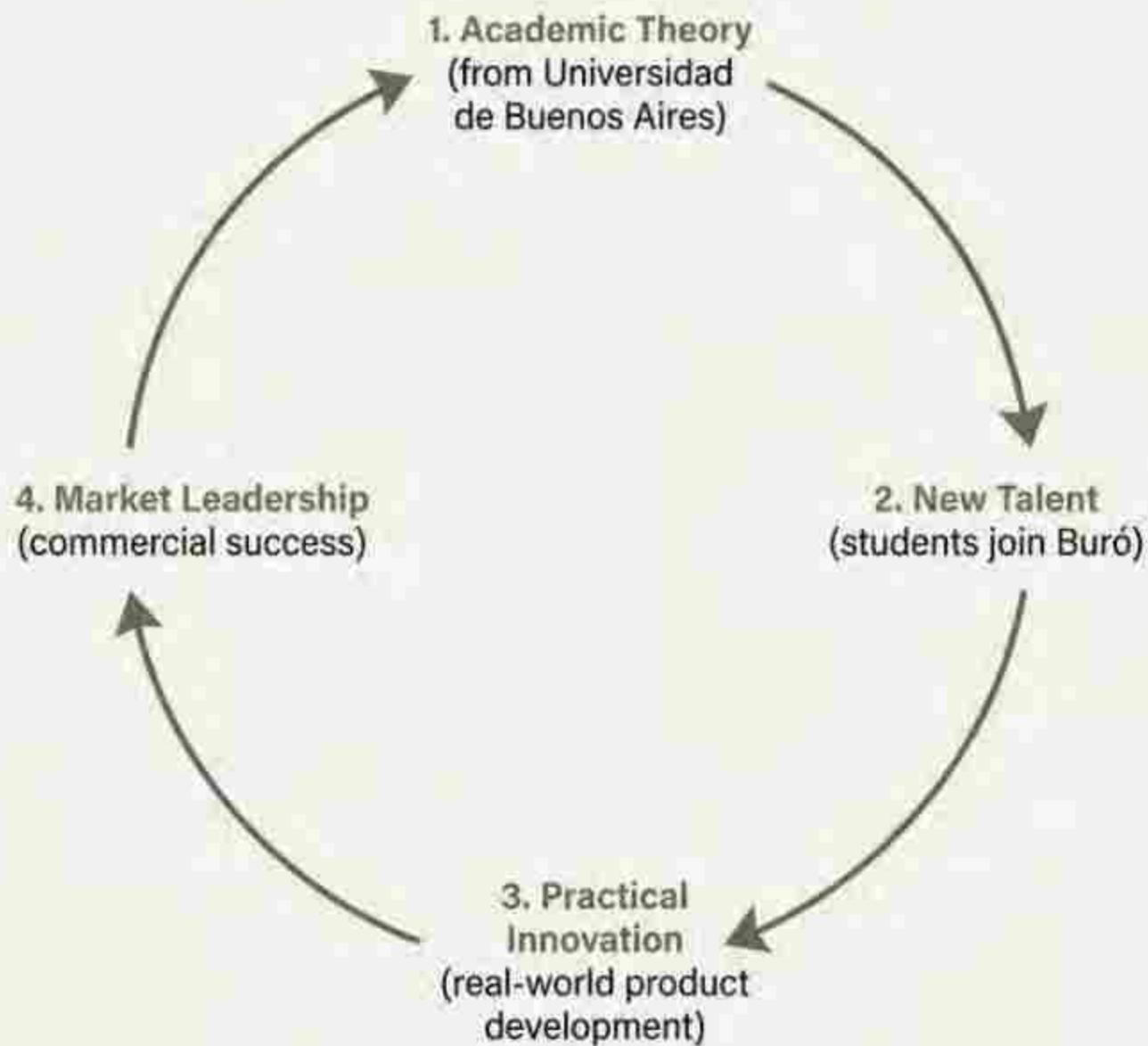
→ Standalone Configuration: A simple, individual workspace for reception.



→ System Configuration: Core components are joined to create larger, collaborative L-shaped workstations.

# A Factory, A Classroom, An Incubator.

Driven by founder Reinaldo Leiro, a longtime educator, Buró created a unique synergy with Argentina's design schools. This virtuous cycle fed the company with top talent and cutting-edge theory, while Buró provided a real-world laboratory for students to become professionals, applying theory to solve market-driven problems.



# Weathering Decades of Storms.

After a remarkable 50-year run, Buró ceased operations in 2013. Its closure was the result of multiple pressures:

- \* The devastating 2001 economic crisis.
- \* Widespread illegal copying of its designs.
- \* Internal leadership and family business challenges.



Buró

1963

2013

Center for Industrial Design Investigation, (CIDI, 1963)

Argentine History

1976

Military Coup

The Golden Age, 1950s-1974

Import Substitution Industrialization (ISI)

1990s

Privatization

2001

Economic Crisis

# From Disguise to Definition

Buró's strategy was so **successful** that it ultimately transformed the very perception it was designed to overcome. The firm proved that "Made in Argentina" could be synonymous with world-class quality, innovative thinking, and a universal, modern aesthetic, helping to redefine and elevate the nation's entire design identity.



## 8.

# Lessons from Buró.



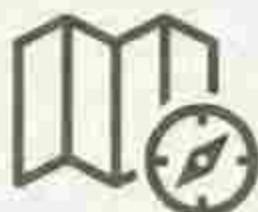
## Strategic Identity

A brand is a powerful tool. Buró masterfully wielded its identity not just to sell products, but to overcome deep-seated market bias.



## Constraint Breeds Creativity

Economic and technological limitations were not obstacles but catalysts. They forced Buró to develop innovative, flexible, and ultimately more resilient design solutions.



## Know Your Context

Lasting success requires a profound understanding of the social, cultural, and economic environment. Buró thrived because it adapted to its reality rather than fighting it.

## 9.

# Conclusions and Areas for Further Research

Future research should focus on Transnational Design and Methodological Nationalism to provide an in-depth understanding of **Taiwan** design identity.



My presentation is now complete.  
Thank you for your attention.

I'd be happy to answer any questions you may have.

Questions & Discussion

報告者：李淨慈  
Keatsli@GMAIL.com



114-1專題研討

# AI as a co-creator and a design material: Transforming the design process

## 人工智慧作為共同創作者與設計材料：轉變設計流程

Keywords: artificial intelligence, design process, creativity, human-AI collaboration, design education

關鍵字：人工智慧、設計流程、創造力、人機協作、設計教育

報告者：D11430002 李佳蓉

授課教授：李傳房 教授

# Author Introduction



**Wendy Fangwen Yu**  
**Harvard University, Cambridge, MA, United States,**  
**Carnegie Mellon University, Pittsburgh, PA, United States**

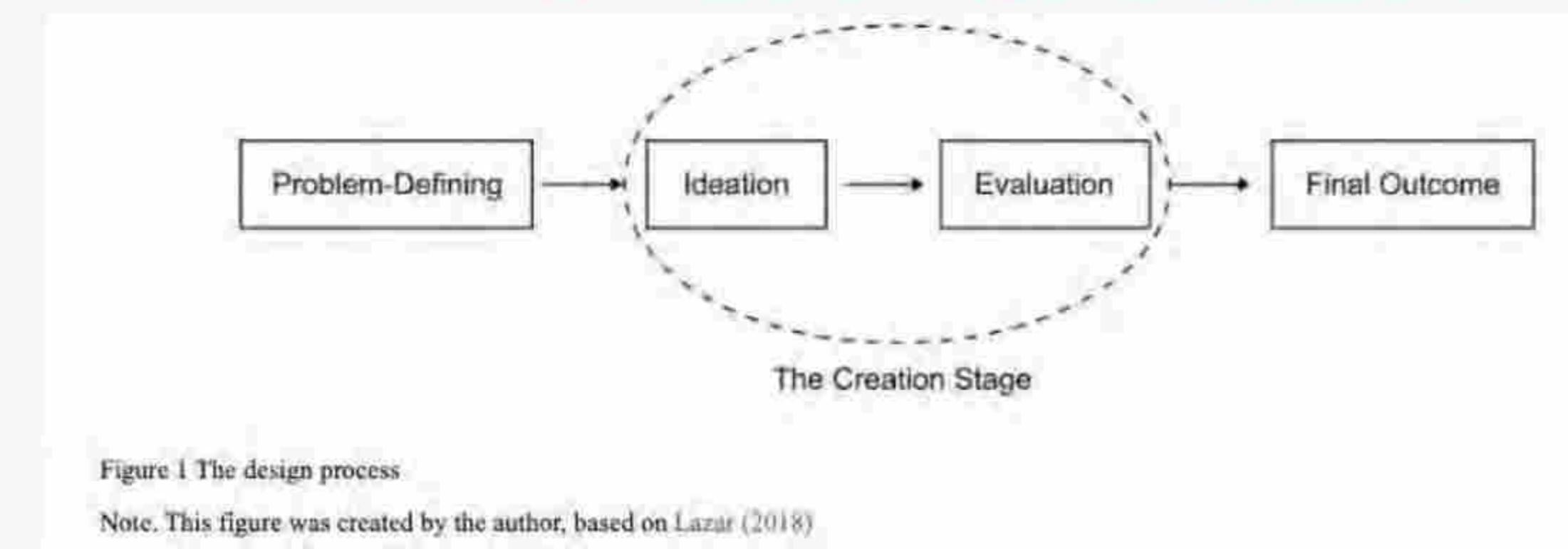
**Researchers focusing on the collaboration between design and artificial intelligence**

## Research Background and Core Question

- Recent advancements in **Artificial Intelligence (AI)** have created new opportunities for incorporating AI into **creative activities**.
- AI has become an increasingly significant tool in the **design process**, changing **traditional workflows**.
- This study explores AI's role as both a **co-creator** and a **design material**.
- The **core research question** examines AI's transformation of the **creation stage (ideation/evaluation)** from a **psychological, neural-based, and educational** perspective.

# Defining the Design Process and Study Scope

- AI refers to **computer systems that reproduce human cognition** by learning from **data** and **statistical models** to recognize patterns and make decisions.
- **Generative AI** is a new category capable of generating seemingly new, meaningful content such as **text, images, or audio** from training data.
- The **conventional design process** can be divided into four stages: **Problem-Defining, Ideation, Evaluation, and Final Outcome**



# Psychological Foundations (I): Thinking Processes

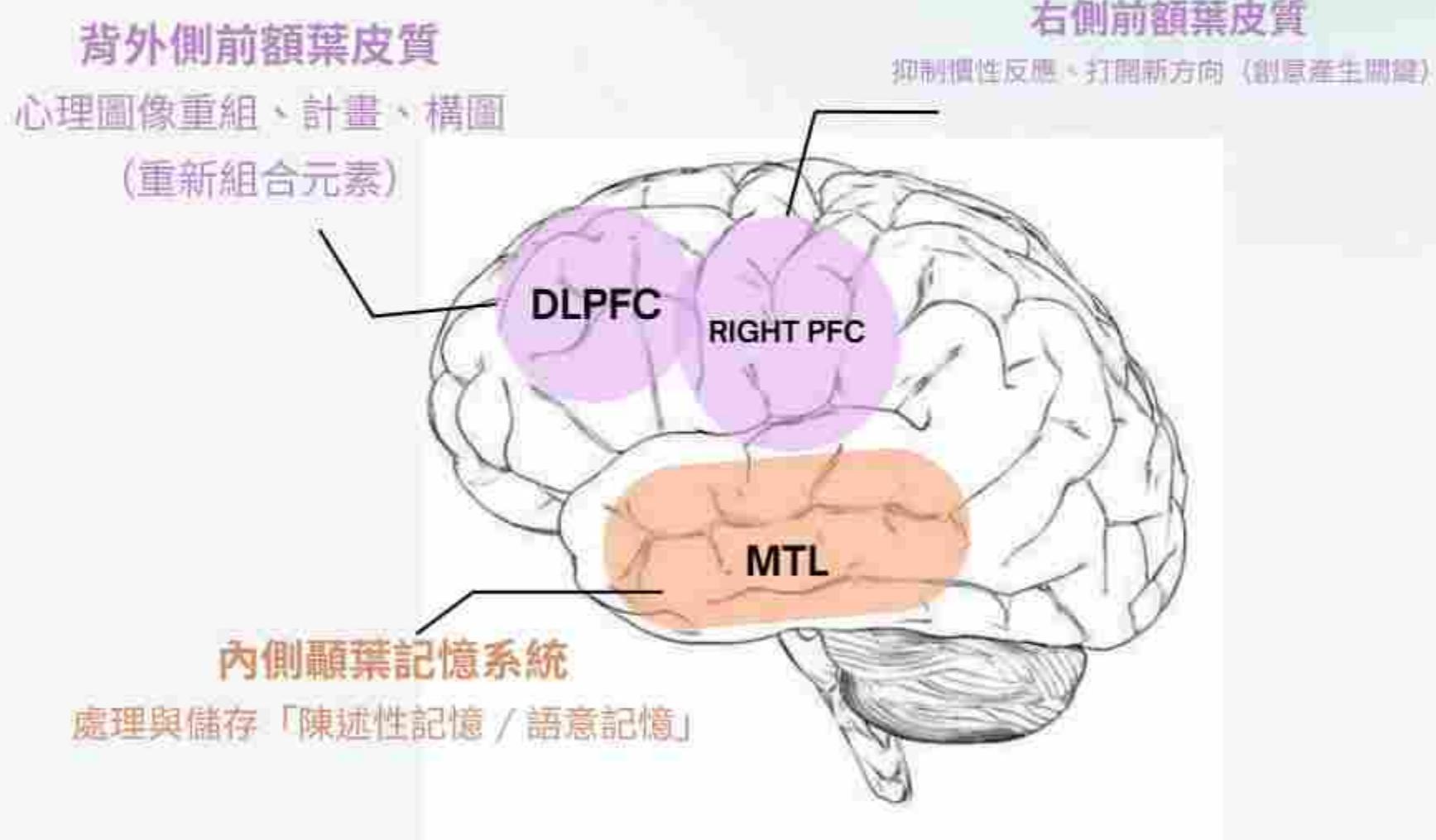
- The main cognitive strategy during the **prototype generation (ideation)** stage is **Divergent Thinking**.
- **Divergent thinking** uses **Analogical Reasoning** to connect present problems with similar past problems, enhancing creativity by **mapping deeper structural connections**.
- The **evaluating outcome** stage involves **Convergent Thinking**, which focuses on **analytical thinking** and **refining ideas into final solutions**.

## Psychological Foundations (II): Fixation and Inspiration

- **Design Fixation** is a state where designers **restrict exploration of the design space** due to an **unconscious bias** resulting from **prior experiences or assumptions**.
- Design tools could be developed to provide **diverse stimuli** to encourage **broader exploration** of the design space, supporting designers in **recognizing and overcoming fixation**.
- **Inspirational stimuli** provided to designers facilitate the **retrieval of useful concepts from memory**.
- **Near-field stimuli** (analogy from related domains) have been shown to sustain **a more productive level of ideation** and promote **abstract thought**.

# Neural-Based Perspective: Brain Activity

- The **Prefrontal Cortex (PFC)** plays a critical role during the **generative phase of design**. The **right PFC** is particularly important in **creative tasks**.
- The **Dorsolateral Prefrontal Cortex (DLPFC)** is heavily involved in **planning** and **mental imagery**.
- The **Medial Temporal Lobe (MTL)** is activated during **idea generation**, supporting **analogical processing** and **novel idea creation**.
- The **Evaluation stage** activates **prefrontal areas** and the **Default Network**, supporting **analytical assessment** and **emotional evaluation** (the "gut feeling").



# AI as Co-creator: Creativity Enhancement

- Integrating AI aims to **overcome human limitations** and **enhance capabilities**, optimizing **resource allocation** and **boosting creativity**.
- AI utilizes the "**random stimulus principle of lateral thinking**" to **disrupt designers' preconceived notions** and **reasoning patterns**.
- This approach effectively counters the **risk of designers becoming fixated** on a **single paradigm**.
- **Generative AI** can produce **novel** and often **unorthodox** design solutions, providing **unexpected visual cues** crucial for **triggering lateral thinking**.

# AI as Co-creator: Roles in Idea Development

- AI's potential roles include **Representation Creation**, where AI suggests **texts or images** to **widen design scope** or **trigger design actions**.
- AI acts as an **Empathy Trigger**, supporting **descriptive thinking**, valuable for **building scenarios** and **expanding the scope** of possible design ideas.
- AI serves as **Engagement**, helping designers **learn new insights** and providing **instructions or questions** to help **overcome barriers** and **prevent fixation**.
- **Empirical observations** suggest that **AI-based inspirations** can lead to a **burst of new ideas**, even when **initial stimuli** seem **irrelevant**.

# AI as Co-creator: Cognitive Load Management

- Cognitive load is the relative demand imposed by a particular task in terms of mental resources required.
- The use of AI tools has resulted in the AI-assisted group benefiting from cognitive off-loading.
- AI handles repetitive elements, thereby reducing the mental burden on designers.
- This enables a more efficient allocation of designers' cognitive resources, which potentially enhances the overall creativity and productivity in the design process.

## AI as Co-Creator: Evaluation and Decision-Making

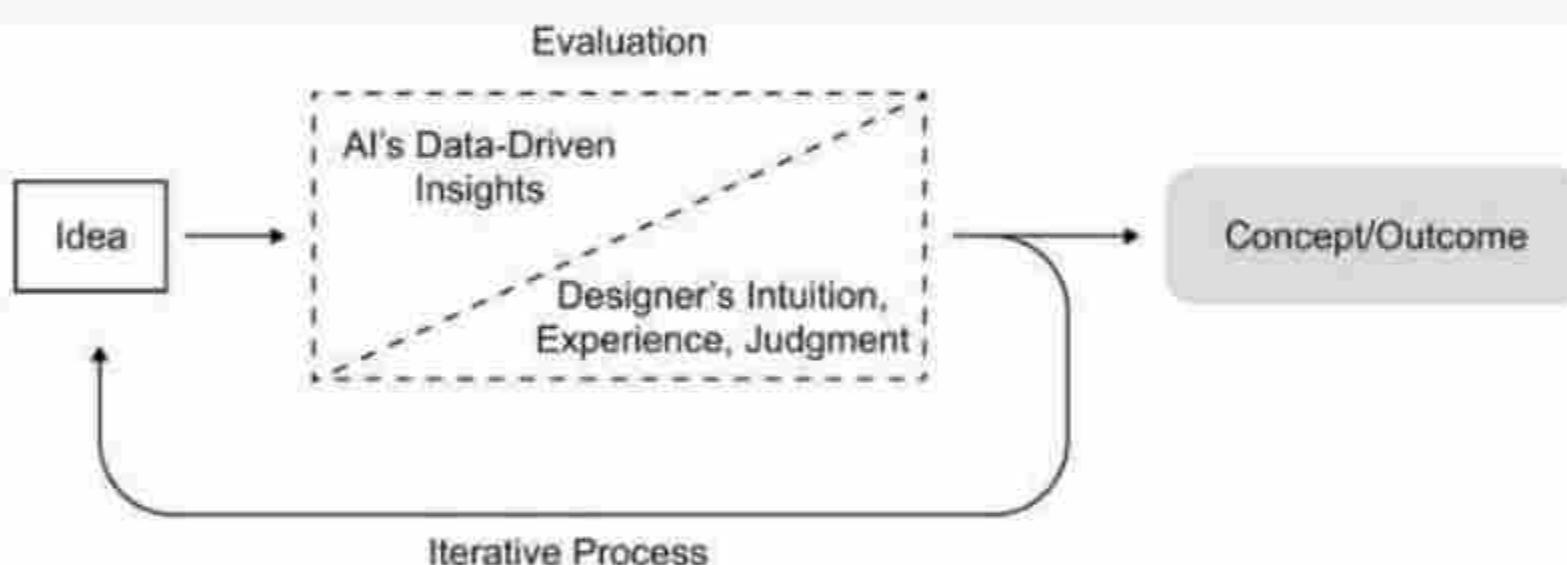


Figure 4 How AI transforms the evaluation and decision-making process.

Note. This figure was created by the author

- **AI enhances evaluation** by processing and combining extensive data sets for rapid assessment and balancing complex design variables.
- **AI facilitates heuristic evaluations**, providing holistic feedback on usability and user experience.
- **Human-AI symbiosis**: AI handles complexity with analytical methods, allowing humans to address uncertainty using intuition, experience, and creative strategies.

## Co-creator Challenges (I): Cognitive Load Paradox

- AI poses **risks of cognitive overload** because it can introduce an **overwhelming amount of information and options, making integration difficult**.
- Designers risk becoming **overly dependent on AI**, leading to a potential loss of **creativity and critical thinking skills**.
- **Generative AI**, while **enhancing individual creativity**, was found to reduce the **collective diversity** of novel content (in a writing study), making **stories more similar** to each other.
- Further research is needed to determine whether **AI-generated image inspirations** also lead to a **homogenizing effect**.

## Co-creator Challenges (II): Agency and Control

- AI-generated images have been observed to suppress the design team's engagement, leading to dissatisfaction with the AI results.
- Designers often find it difficult to share control with AI tools, sometimes feeling that the AI dominated the design process.
- In the "AI without augmented design" mode, designers may experience a loss of agency and feel less in control, potentially lowering innovative thinking.
- Mixed-Initiative Co-Creativity (MI-CC) systems enable iterative, bidirectional exchanges and use features like scrutability and explainability to preserve user agency.

# AI as Design Material: Capability Uncertainty

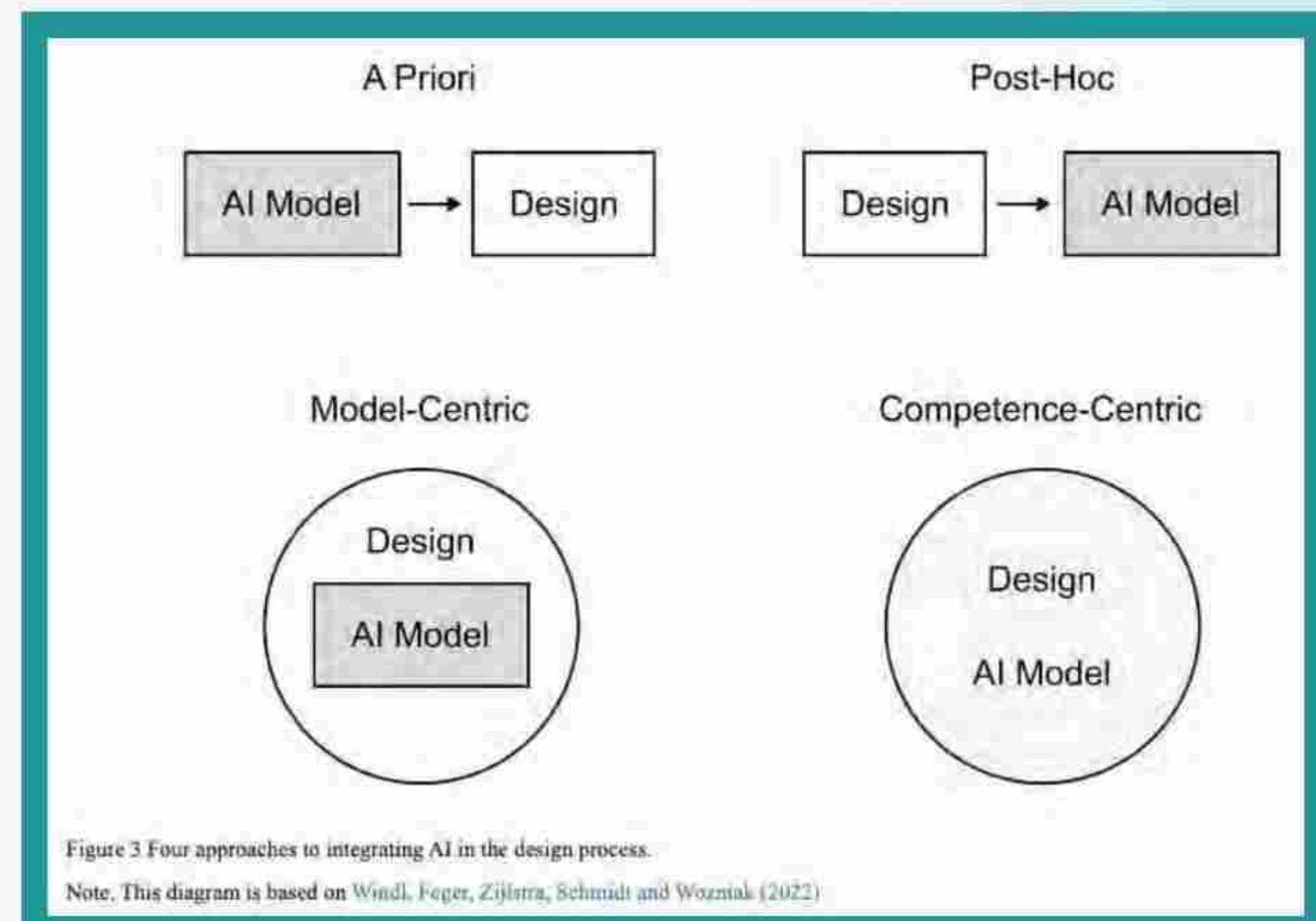
- Despite **AI's potential**, there is a **notable lack of innovation** in its use as a **design material**.
- A fundamental challenge is that many designers **struggle to comprehend Machine Learning (ML)**, often perceiving it as "**black magic**".
- This results in "**capability uncertainty**," referring to the **ambiguities surrounding the functionalities** of AI systems.
- **Capability uncertainty impedes early ideation**, as designers **cannot easily assess the feasibility** of potential AI applications.

# AI as Design Material: Prototyping Difficulties

- "Output Uncertainty" complicates how designers **conceptualize the AI system's complex behaviors**.
- Prototyping AI-infused products is **cognitively demanding** because prototypes must **reflect the inherent complexity and uncertainty** of AI models.
- Designers frequently use the "**Wizard of Oz**" method (**human simulation**) for prototyping and **testing**.
- However, this method risks producing "**fictitious design possibilities**" because it may **fail to capture the technical constraints** of real AI systems.

# AI as Design Material: Integration Models

- **A Priori:** The AI model is developed before the design, requiring designers to conform to its requirements.
- **Post-Hoc:** The design is completed first, and the AI model is subsequently built to fit the design requirements.
- **Model-Centric:** The AI model is at the core of the project, requiring close collaboration between designers and AI specialists.
- **Competence-Centric:** Emphasizes the diverse expertise of team members working in parallel and synchronizing their technical and design efforts.



# Educational Reform and Future Research Needs

- Design education must reform to equip students with the skills to effectively use AI and recognize its capabilities and limitations.
- When AI is a co-creator, students should be trained as "Designer Arbiters," using advanced critical analysis expertise to evaluate and integrate AI outputs.
- When AI is a design material, students should be trained as "Integrators," developing technical knowledge to incorporate AI while managing technical constraints.
- A major gap is the scarcity of neural-based studies (e.g., using brain imaging scans) to fully understand AI's impact on the brain.

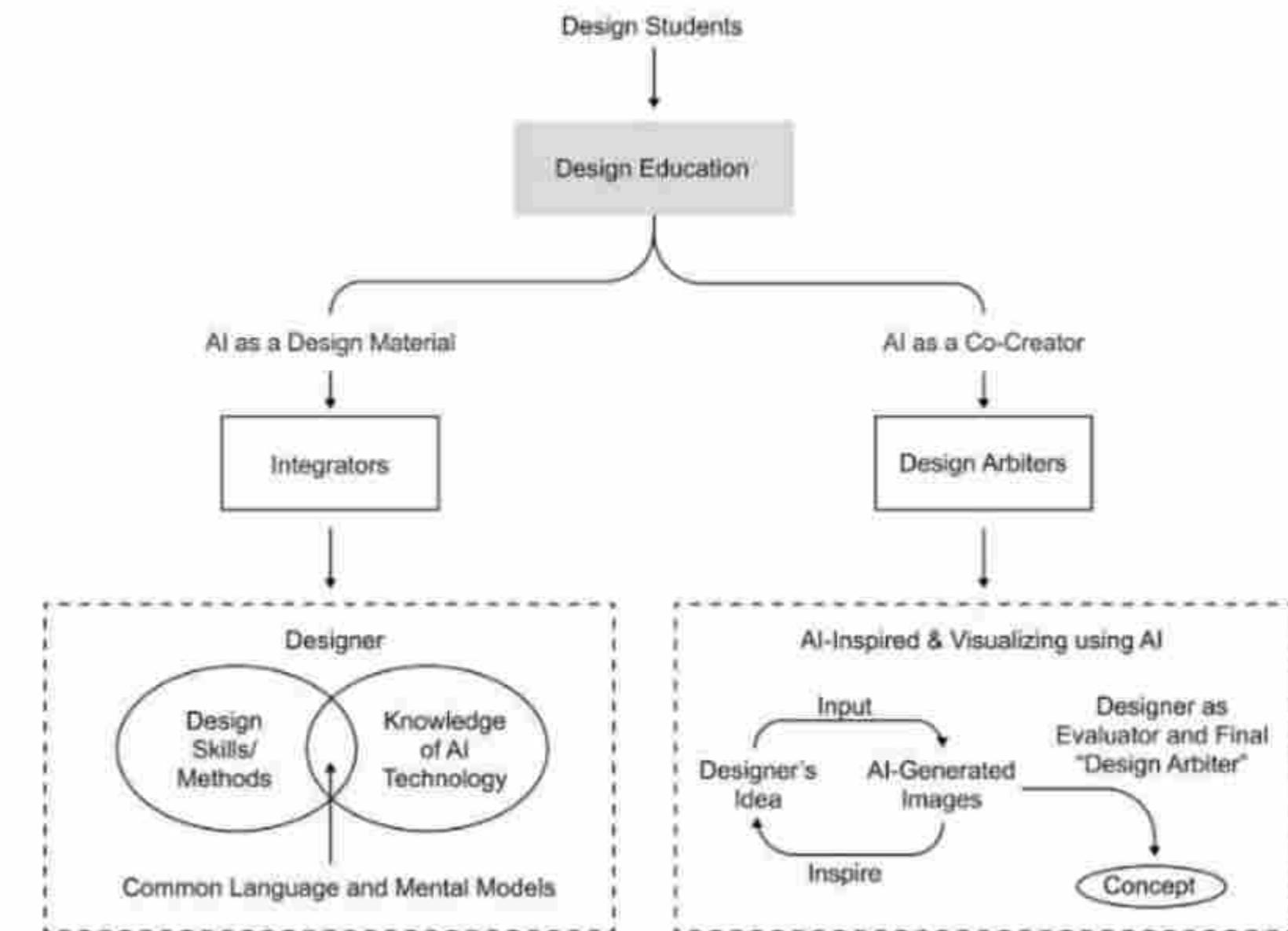


Figure 5 How design education should prepare students for AI integration.

Note. This figure was created by the author

Thank  
You!



國立雲林科技大學 設計學研究所博士班 |  
114-1 專題研討（一）

 Design Issues, Vol. 41, No. 2, Spring 2025

# **Methodology Approach to Digital Imagery Conception: The Designer Against the Homogeneity of Digital Media**

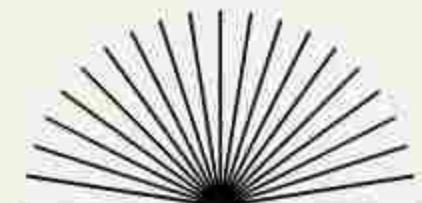
設計師對抗數位媒體同質化的影像設計方法論

Marcos García-Ergüín Maza、Jorge Fragua Valdivieso

**INSTRUCTOR:**  
李傳房 教授

**DOCTORAL ADVISOR:**  
杜瑞澤 教授

**PRESENTED BY:**  
D11430007 陳鈺琳



# 危機：結構性同質化 (Structural Homogeneity)

- 即時性 (Immediacy) 與 持續流動 (Continuous Flow)
- 所有設計 (平面/工業/時尚) -> 最終都被編碼為「圖像」
- 結果：結構性同質化 (大家都長得越來越像)



- 在同質化世界中，設計師的「個體性」 (Individuality) 如何倖存？

# Agenda

01	問題 (The Problem)
02	理論 (The Theory)
03	方法 (The Methodology)
04	結論 (The Resistance)

本文不是做實證，也不是提出新的方法；它的主要貢獻是把哲學理論轉譯為可用的影像分析框架，並提供評論及閱讀數位影像個體性的操作語彙。

# The Problem

## # 1

### 非歷史性設計師 Ahistorical Designer

- 數位時代的「去物質化」(Dematerialization)
- 設計師與「歷史過程」(Historical Process) 決裂

→ 不再關心過去的脈絡，只關心「即時」的流動

# The Problem

#1

非歷史性設計師  
Ahistorical Designer

- 定義：「我們感知和概括美學判斷的管道」



# 2

同質性媒介  
Homogeneous Medium



盧卡奇 · 捷爾吉 Georg Lukács  
匈牙利馬克思主義哲學家和文藝批評家

# The Problem



華特·班雅明 Walter Benjamin  
出身德國的阿什肯納茲猶太裔哲學家

# 2

同質性媒介

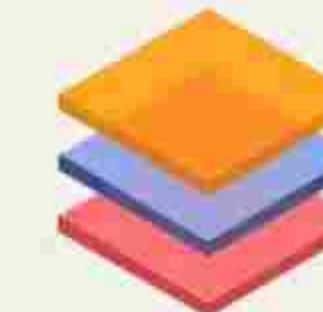
Homogeneous Medium

- 在「同質性媒介」中，個體性消失，設計師被「碎片化」(Fragmented)
- 「碎片」(Fragments) = 「圖層」(Layers)

# 3

從「碎片」到「圖層」

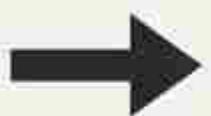
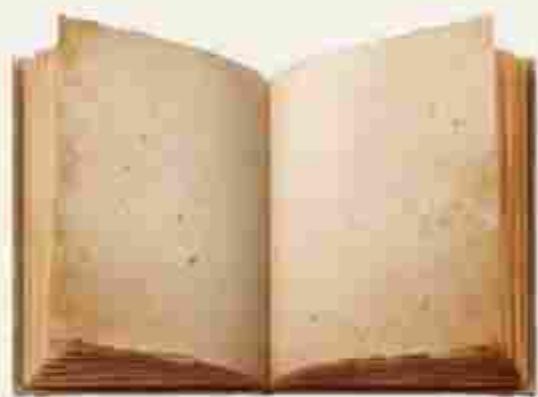
From fragmented to Layers



# The Theory

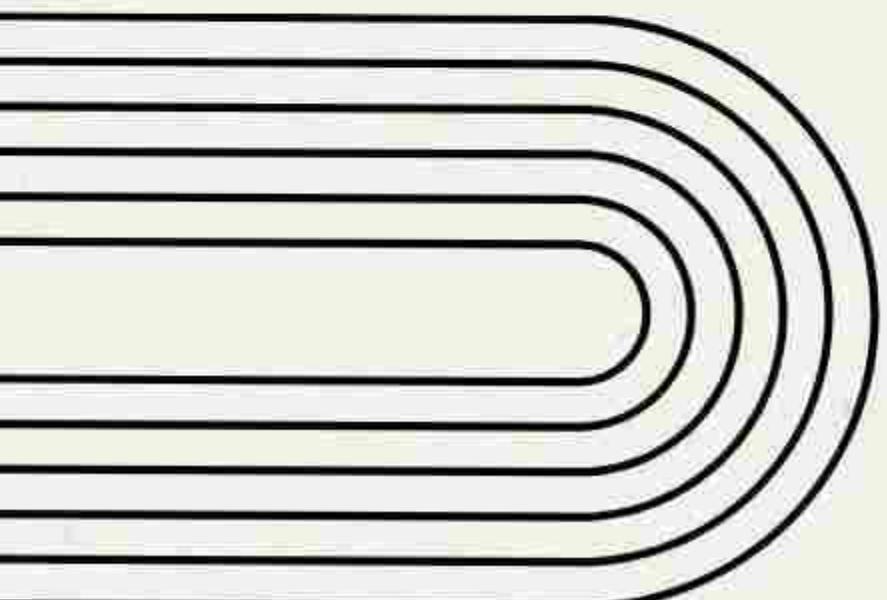
問題 → 同質性

物件 → Layers



## 數位「再媒介化」(Re-mediation)

數位媒介（新）「吞噬」並「重塑」傳統媒介（舊）



# The Theory

- Y 軸 (垂直): 傳統創作  
歷史知識、先例、敘事性
- X 軸 (水平): 數位創作  
沒有歷史意義、即時、同質性

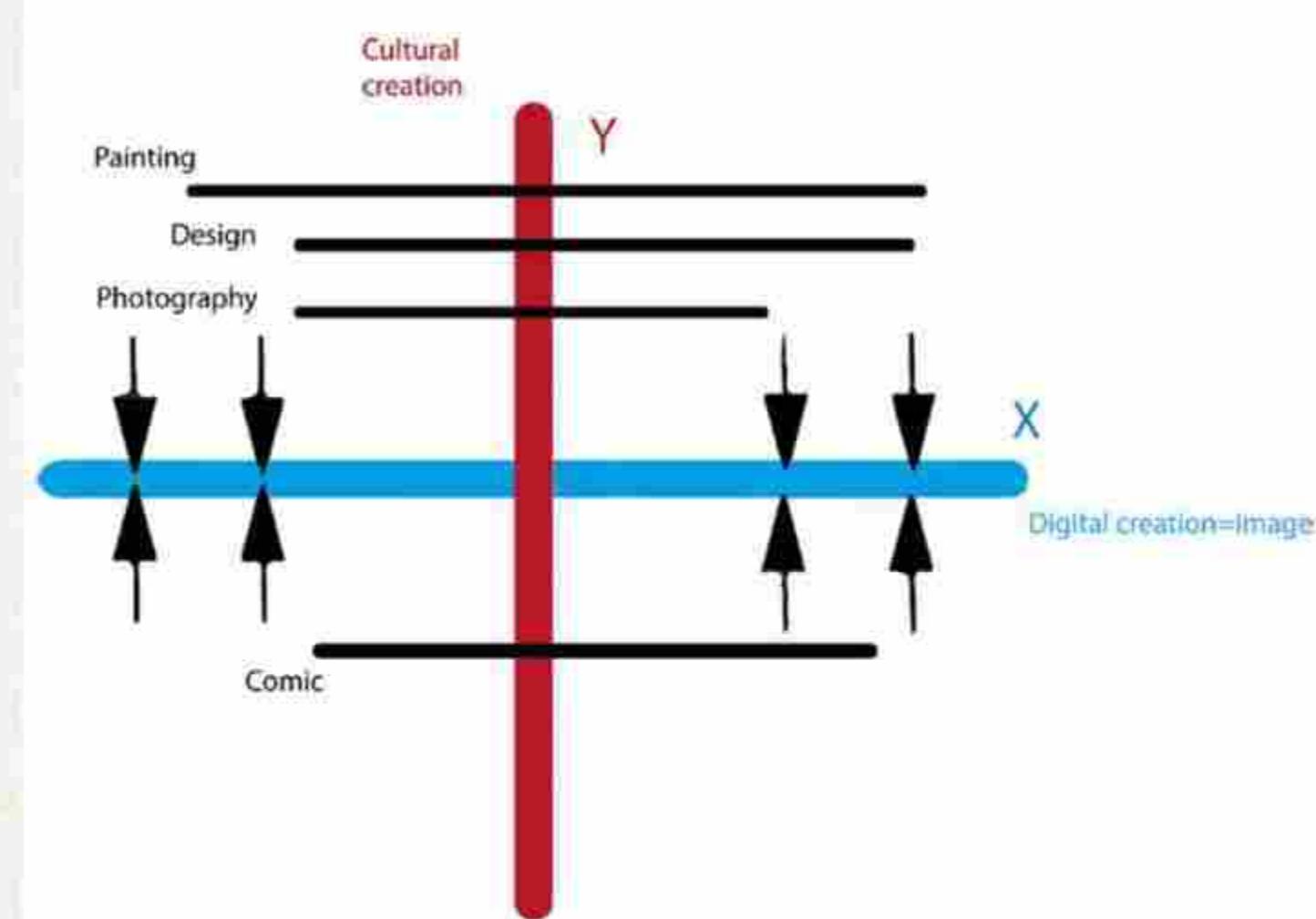


圖 1 X、Y 軸並存

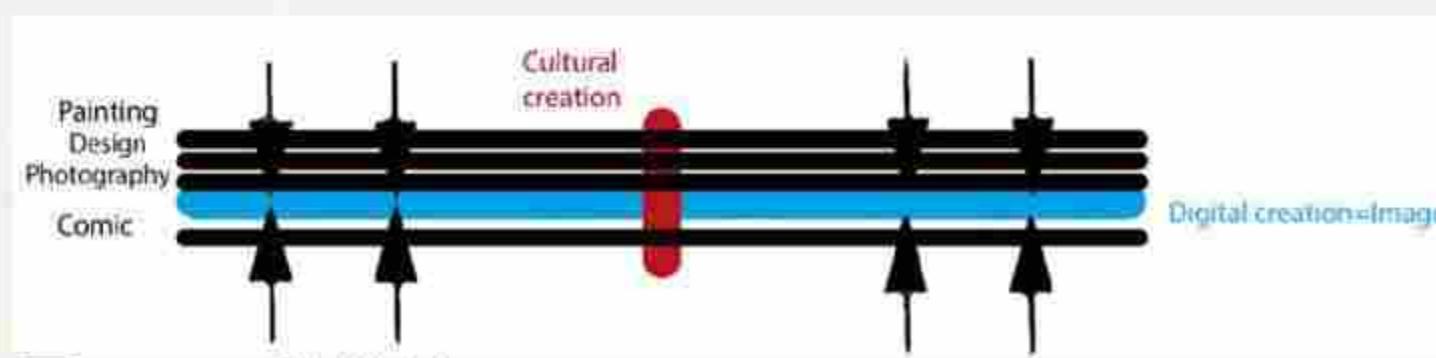


圖 2 Y 軸收縮

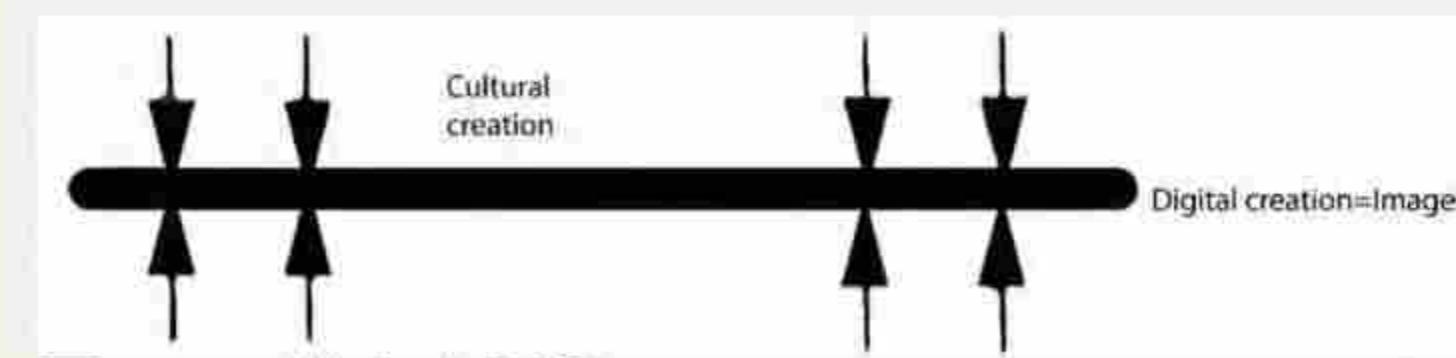


圖 3 Y 軸完全塌陷

# The Theory

## 組裝理論 (Assemblage Theory)

- 又稱「裝配理論」或「集結理論」
- 解釋了「演算法、機器學習、AI、Adobe 軟體」的非線性運作方式
- 完美描述 X 軸的「根莖狀」(Rhizomatic) 結構



曼紐爾·德蘭達 Manuel DeLanda  
墨西哥裔美國哲學家、實驗電影導演

# The Theory

- Y 軸 (歷史) → 塌陷至X軸  
數位再媒介化
- X 軸的作業系統  
德蘭達的組裝理論
- 組裝的零件 = 圖層  
班雅明論點中，碎片的概念

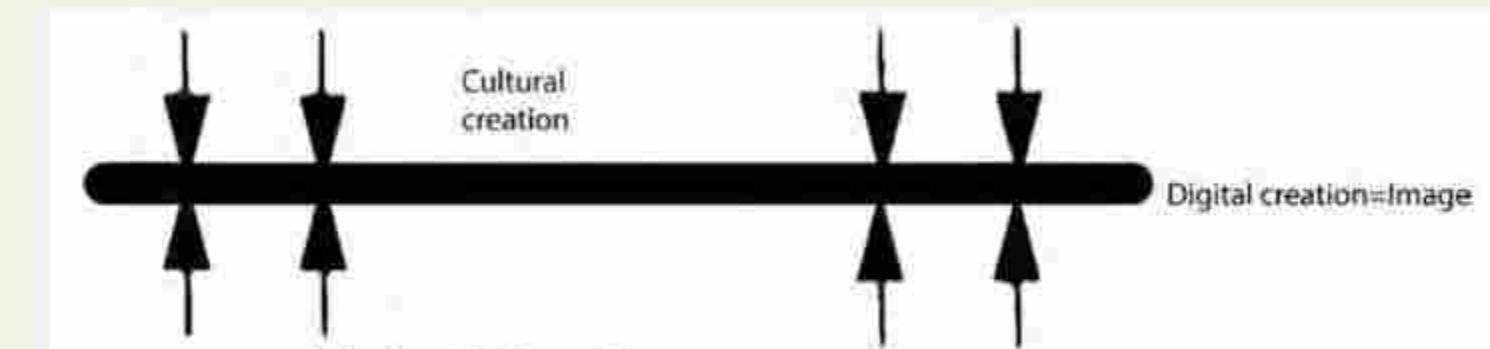


圖 3 Y軸完全塌陷

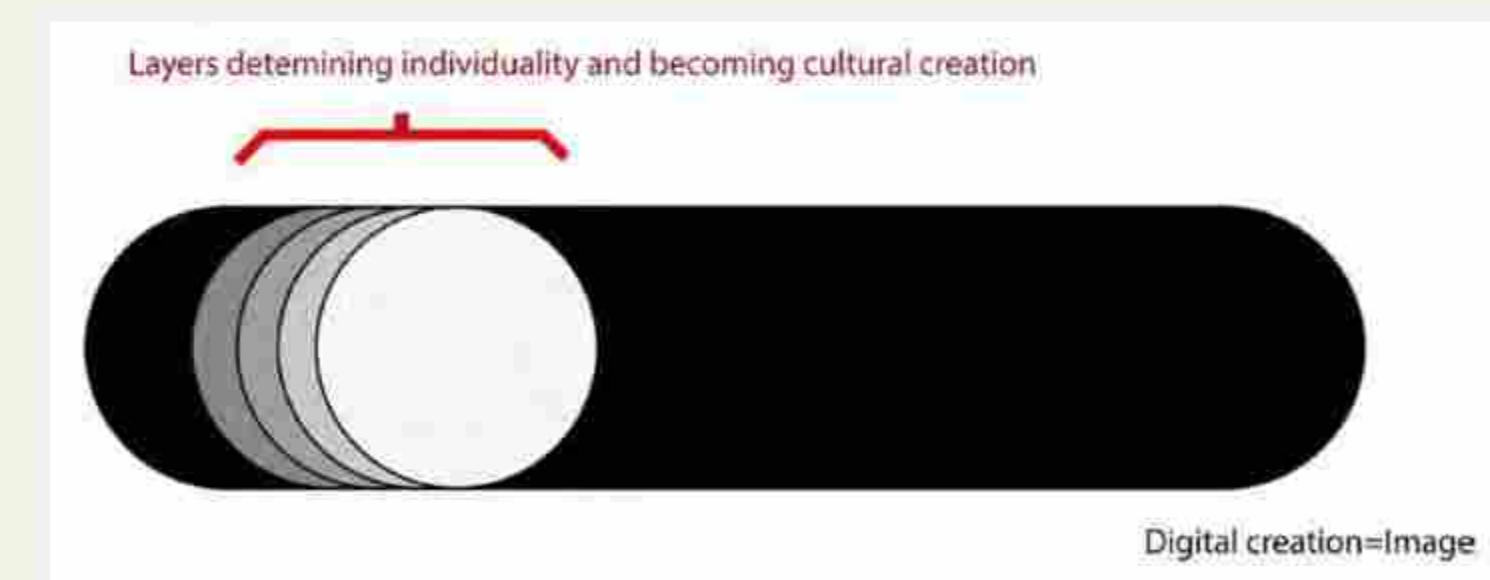


圖 4 X軸放大圖

# The Methodology

## 分析框架 (一): 透明 vs. 不透明

### 透明度 (Transparency / T)

- 定義: 忠實再現
- 目的: 隱藏人為痕跡
- 範例: 完美的 CGI 背景

### 不透明度 (Opacity / O)

- 定義: 再現的框架與行為本身
- 目的: 突顯人為痕跡/過程
- 範例: 看得到拼貼痕跡

# The Methodology

## 分析框架 (二): 強度 vs. 廣度

### 強度 (Intensity / I)

- 定義: 圖層「沒有空間」、完美「融合」
- 來源: 單一來源 (如: 同一台相機)



圖 6 強度

### 廣度 (Extensiveness / E)

- 定義: 圖層「個體化」、彼此「疏遠」
- 來源: 不同來源 (如: 照片 + 3D)

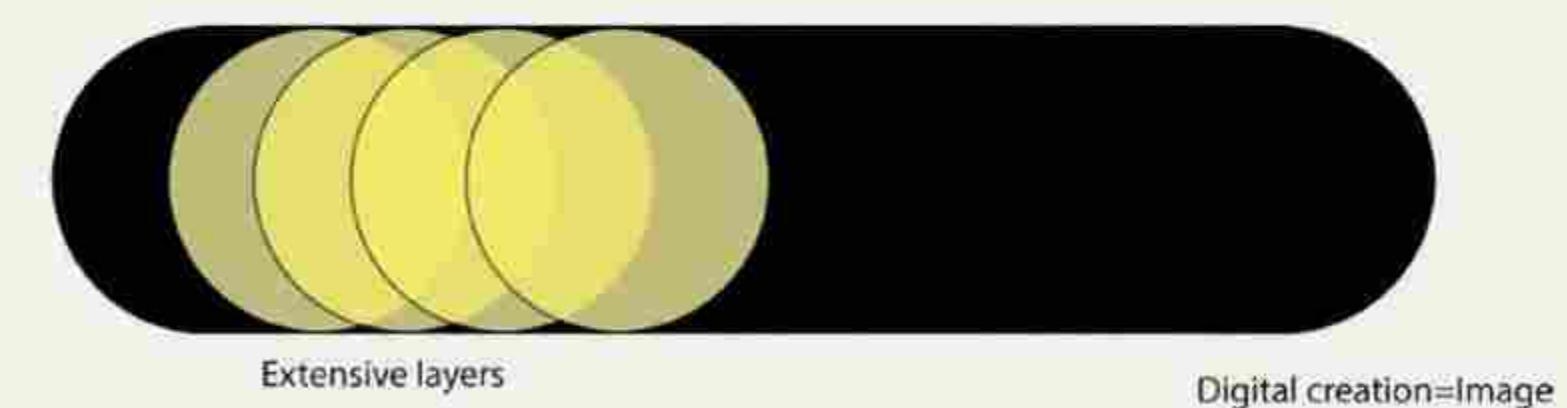


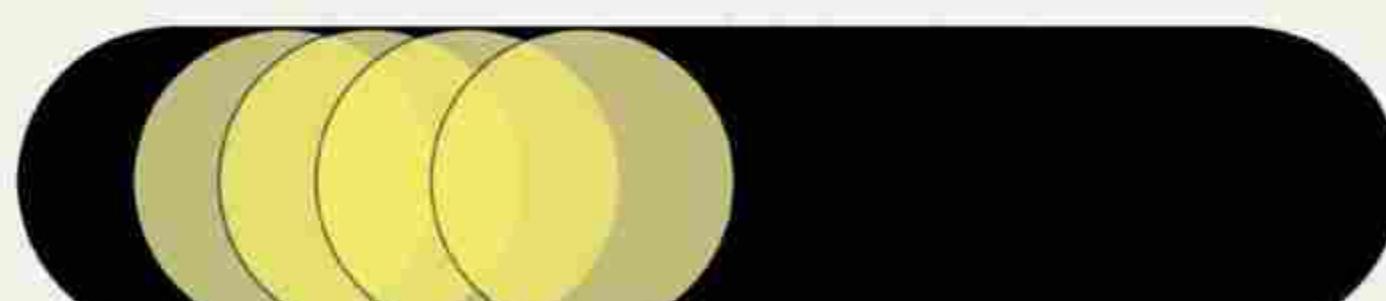
圖 5 廣度



Intensive layers

Digital creation=Image

圖 6 強度



Extensive layers

Digital creation=Image

圖 5 廣度

# The Methodology

## 案例A：HDR 照片-同質性範例

- 構成:  $T+T+T$  (來自「同一台相機」)
- 來源: 單一來源  $\rightarrow$  強度 (I)
- 結果(左): 效果自然  $\rightarrow I/T$  (強度/透明)
- 結果(右): 效果誇張  $\rightarrow I/O$  (強度/不透明)

## I/T (強度/透明) 是數位同質性的「預設狀態」

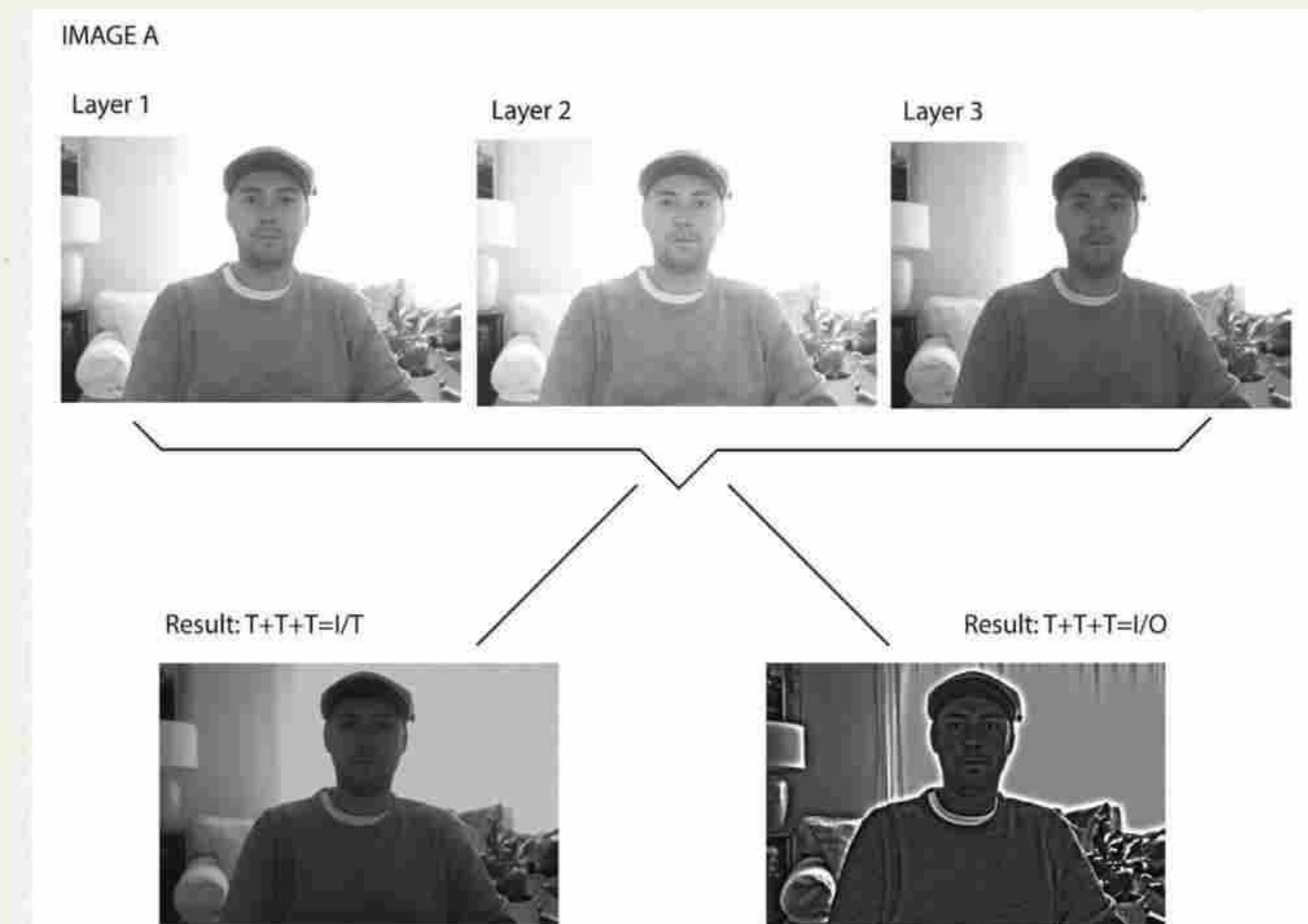


圖 7 HDR 照片-同質性範例

# The Methodology

## 案例B：混合媒介肖像-抵抗性範例

- 構成:  $O+O+O$   
(來自「不同媒介」: 相機 + 3D + 2D)
- 來源: 不同來源  $\rightarrow$  廣度 (E)
- 接縫: 人為感強烈  $\rightarrow$  不透明 (O)
- 結果: I/O(廣度/不透明)

## E/O (廣度/不透明) 是「設計師意圖」的展現

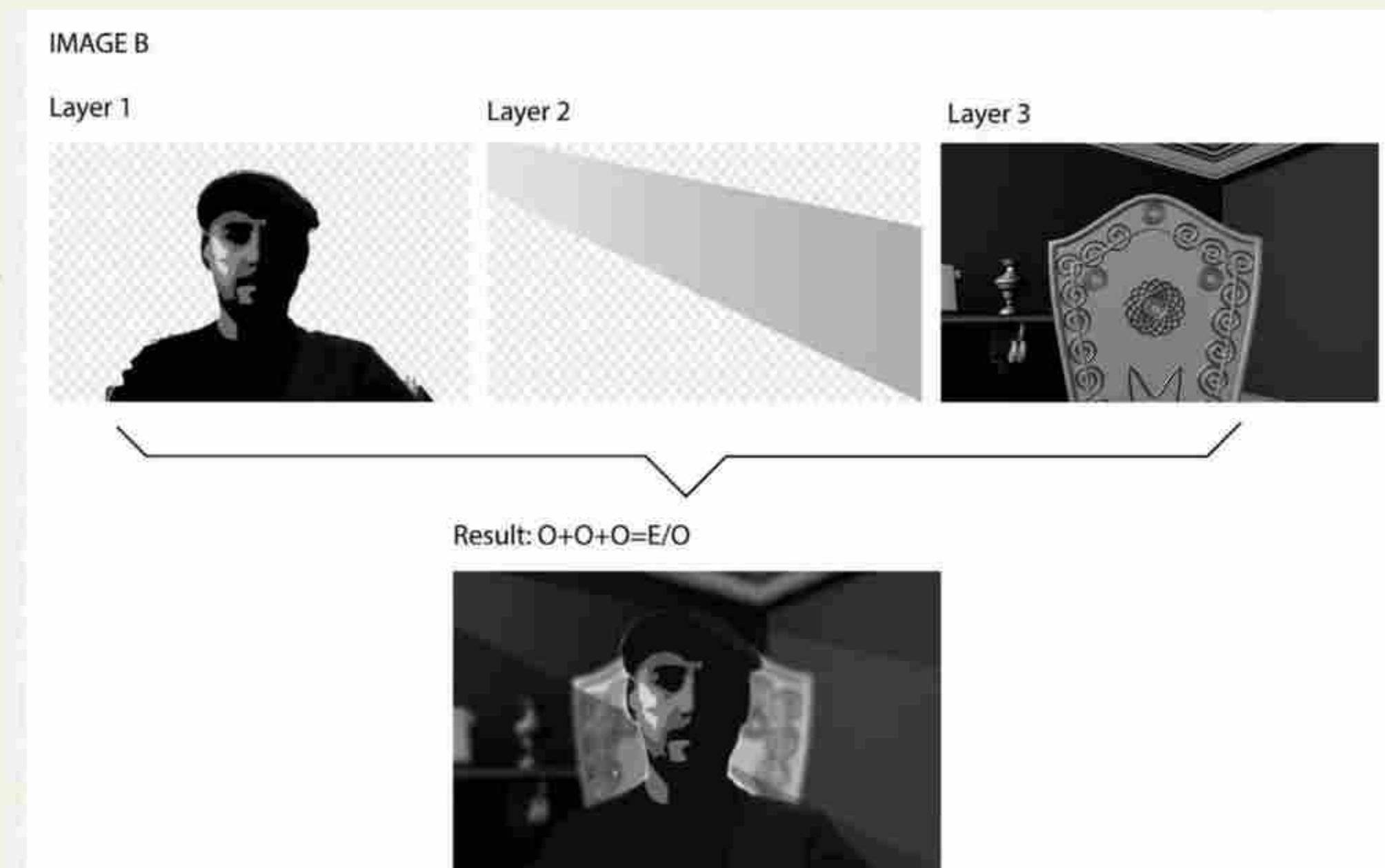


圖 8 混合媒介肖像-抵抗性範例

# The Resistance

## E/O (廣度/不透明) 作為抵抗策略

### 敵人：I/T (強度/透明)

- AI / 數位工具的目標
- 同質化、無個人色彩



### 我們：E/O (廣度/不透明)

- 設計師的價值不再是「技術技能」
- 而是「維持不透明度 (Opacity) 的能力」
- AI 追求 T，我們擁抱 O ; AI 追求 I，我們擁抱 E



# The Conclusion

在 X 軸內部，恢復 Y 軸

## 數位時代的「靈光」(Aura)

- 從傳統創作中「獨一無二的物件」
- 變成「圖層之間的平衡與對話」

## 「對話」與「對抗」=「敘事」(Narrative)

- 1950年代的『不透明』(O) 圖層 與  
2030年代的 3D 模型的『不透明』(O) 圖層 融合

設計師使用 E/O 策略，在 X 軸上創造「位移」

→ 恢復原本屬於 Y 軸的歷史、社會和文化成分



國立雲林科技大學 設計學研究所博士班 |  
114-1 專題研討（一）

**i** Design Issues, Vol. 41, No. 2, Spring 2025

# Thank You For Your Kind Attention.

**INSTRUCTOR:**  
李傳房 教授

**DOCTORAL ADVISOR:**  
杜瑞澤 教授

**PRESENTED BY:**  
D11430007 陳鈺琳

## 114-1專題討論

Design education is too important to be left to designers

設計教育太重要了，不能只交給設計師

報告者:D11430010馬惠君

授課教授:李傳房 教授

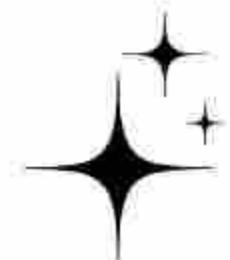
2025-11-26



# CONTENTS

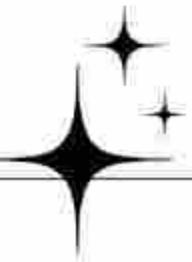


- 1: Author's Background & Core Perspective**
- 2: The Core Problem**
- 3: Stagnation: The “Things” Focus**
- 4: Stagnation: Process Over Knowledge**
- 5: Excluding People: Curriculum Gaps**
- 6: Call to Action**
- 7: Conclusion: A Reimagined Discipline**



# Author Introduction

Dan Formosa is a member of ThinkActHuman, LLC, serving as a design consultant collaborating with design teams across companies and organizations. With a background in industrial design, ergonomics, and biomechanics, he is an early advocate of inclusive design and design research, and a strong proponent of leveraging design to enhance quality of life. He has been invited as a guest lecturer and speaker at international design events, focusing on usability issues related to physical interaction, perception, and research methods. He also co-founded programs at the School of Visual Arts in New York City.



Dan Formosa

## Selected Design and Innovation Projects

1. DialPak III
2. OXO Good Grips
3. Ford SmartGauge
4. XM Satellite Radio
5. Baseball Stadium Guide
6. Johnson Reach Wonder Grip
7. Cimzia Arthritis Injector
8. Cimzia Package
9. Apple iPad, 1989

Career development should be people-oriented, not product- and technology-oriented.



1



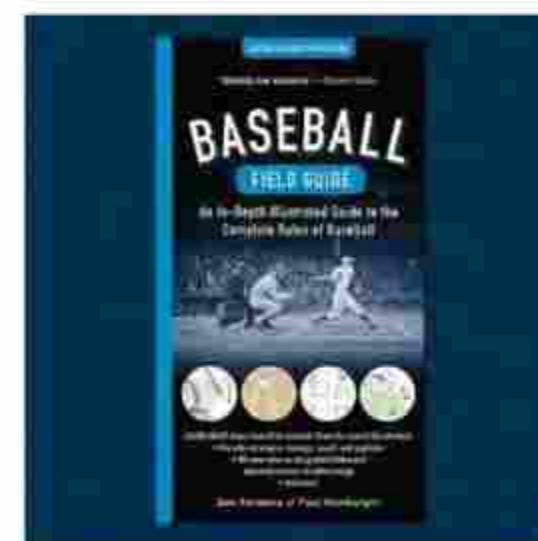
2



3



4



5



6



7



8



9

## Selected Design and Innovation Projects

1. DialPak III
2. OXO Good Grips
3. Ford SmartGauge
4. XM Satellite Radio
5. Baseball Stadium Guide
6. Johnson Reach Wonder Grip
7. Cimzia Arthritis Injector
8. Cimzia Package
9. Apple iPad, 1989

職業發展應該以人為本，而不是以產品和技術為本。



1



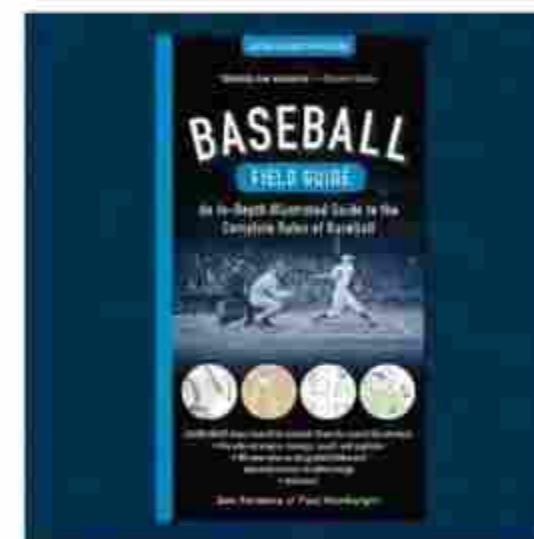
2



3



4



5



6



7



8



9



## Author's Perspective

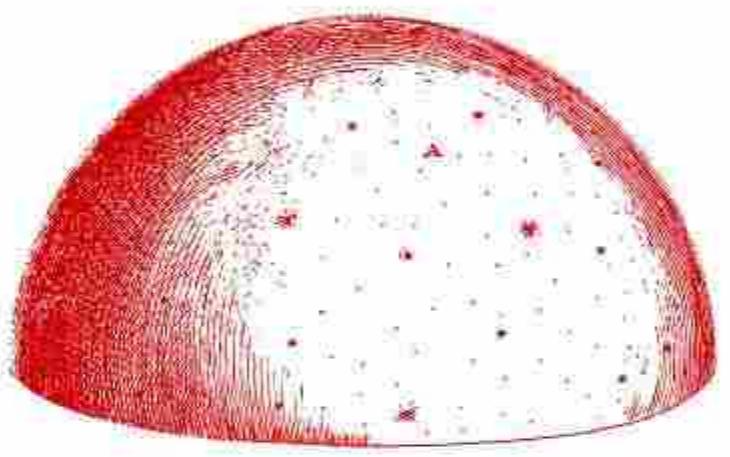
1. Observes global design education and practice from an outsider view
2. Design won't be inclusive anytime soon



# The Core Problem

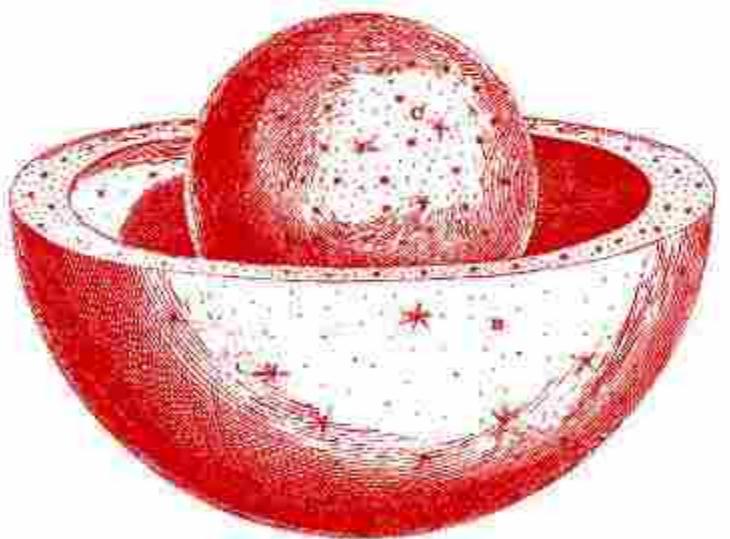
## 1. Design Stagnancy

- Focus too much on things, not people
- Curriculum too similar to 50+ years ago



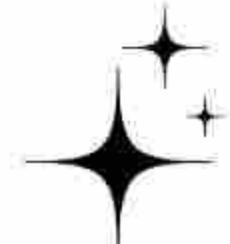
## 2. Limitations of Methodology

- Design reduced to scripted processes, celebrating process over knowledge
- Suppresses creativity and prevents innovation



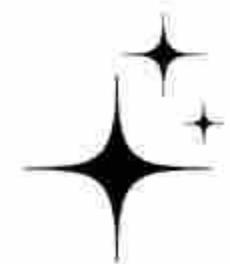
## 3. Solution

- Center design education on people: psychology, physiology, research methods, statistics
- Create an entirely new people-centered design discipline



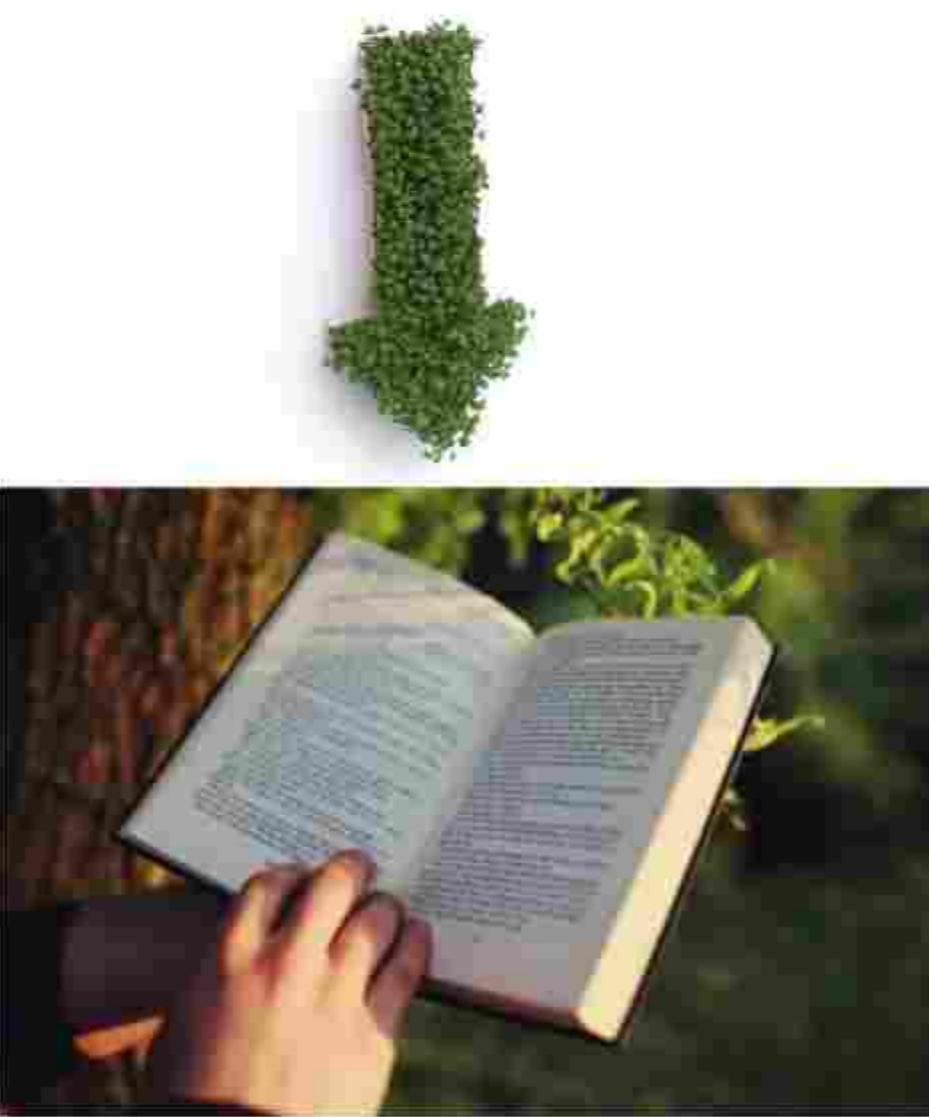
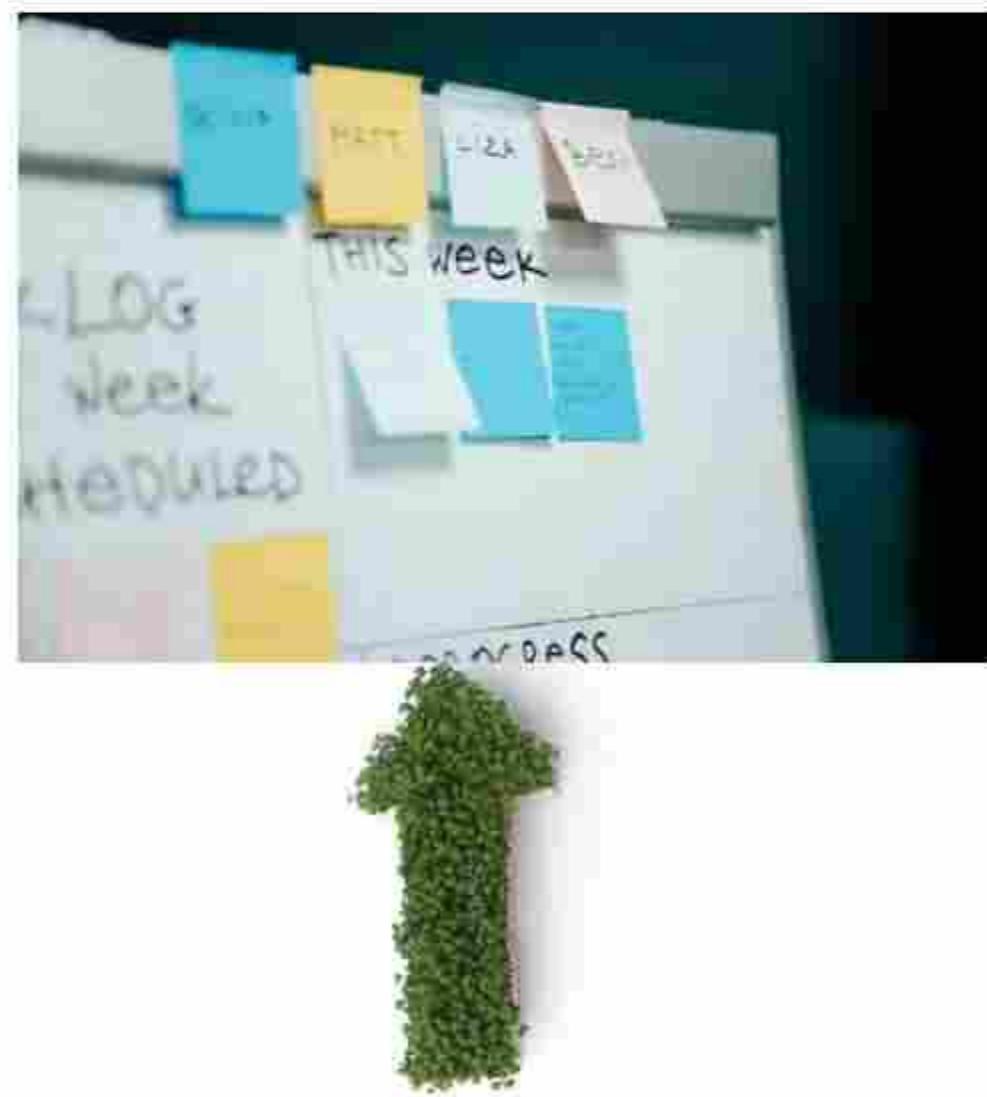
## Design Stagnancy

- Focus too much on things, not people
- Curriculum too similar to 50+ years ago



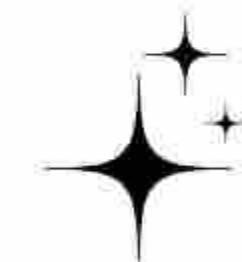
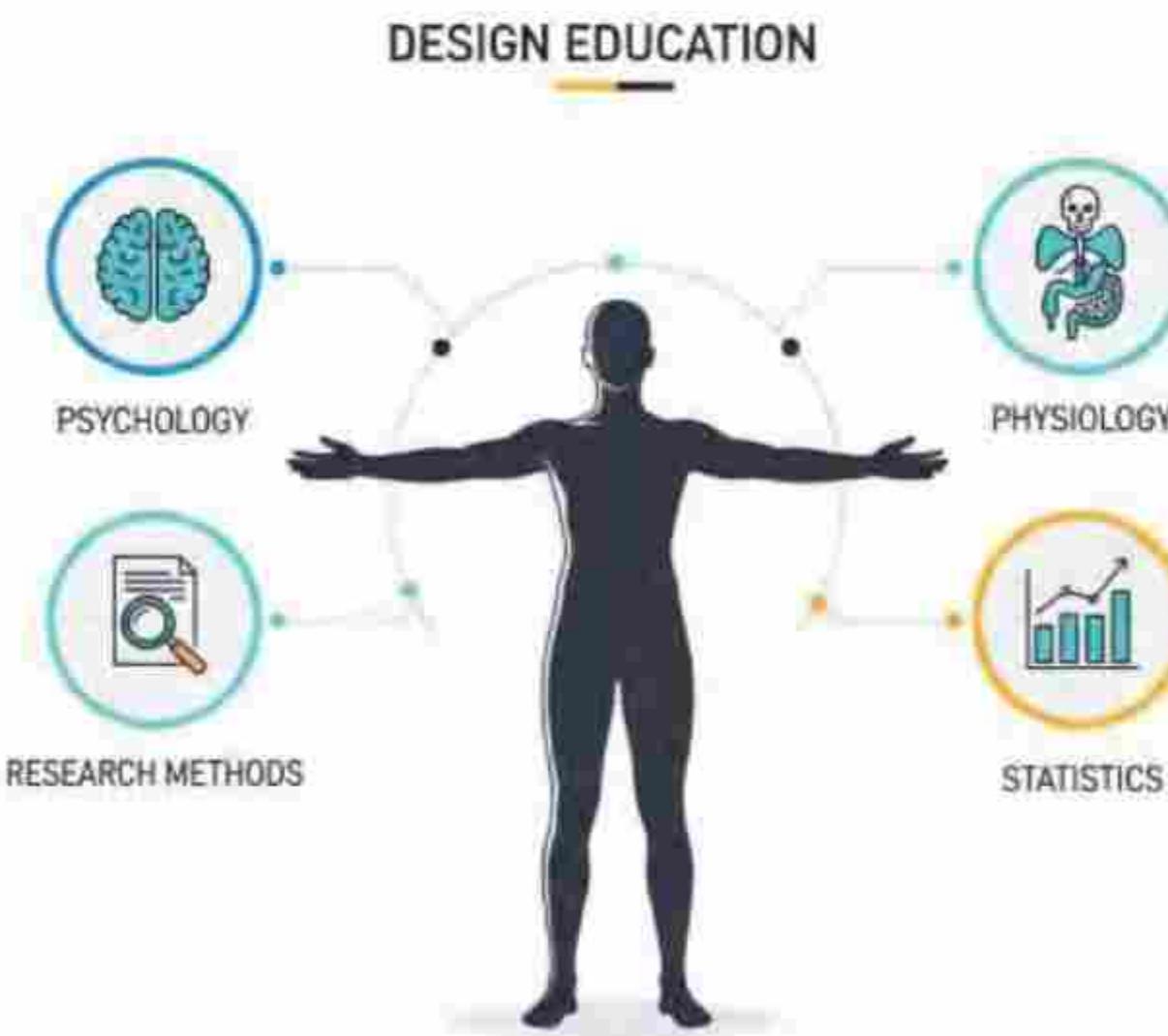
# Limitations of Methodology

1. Design reduced to scripted processes, celebrating process over knowledge
2. Suppresses creativity and prevents innovation



# Solution

- Center design education on people: psychology, physiology, research methods, statistics
- Create an entirely new people-centered design discipline





## Stagnation: The “Things” Focus

### 1. Historical Legacy

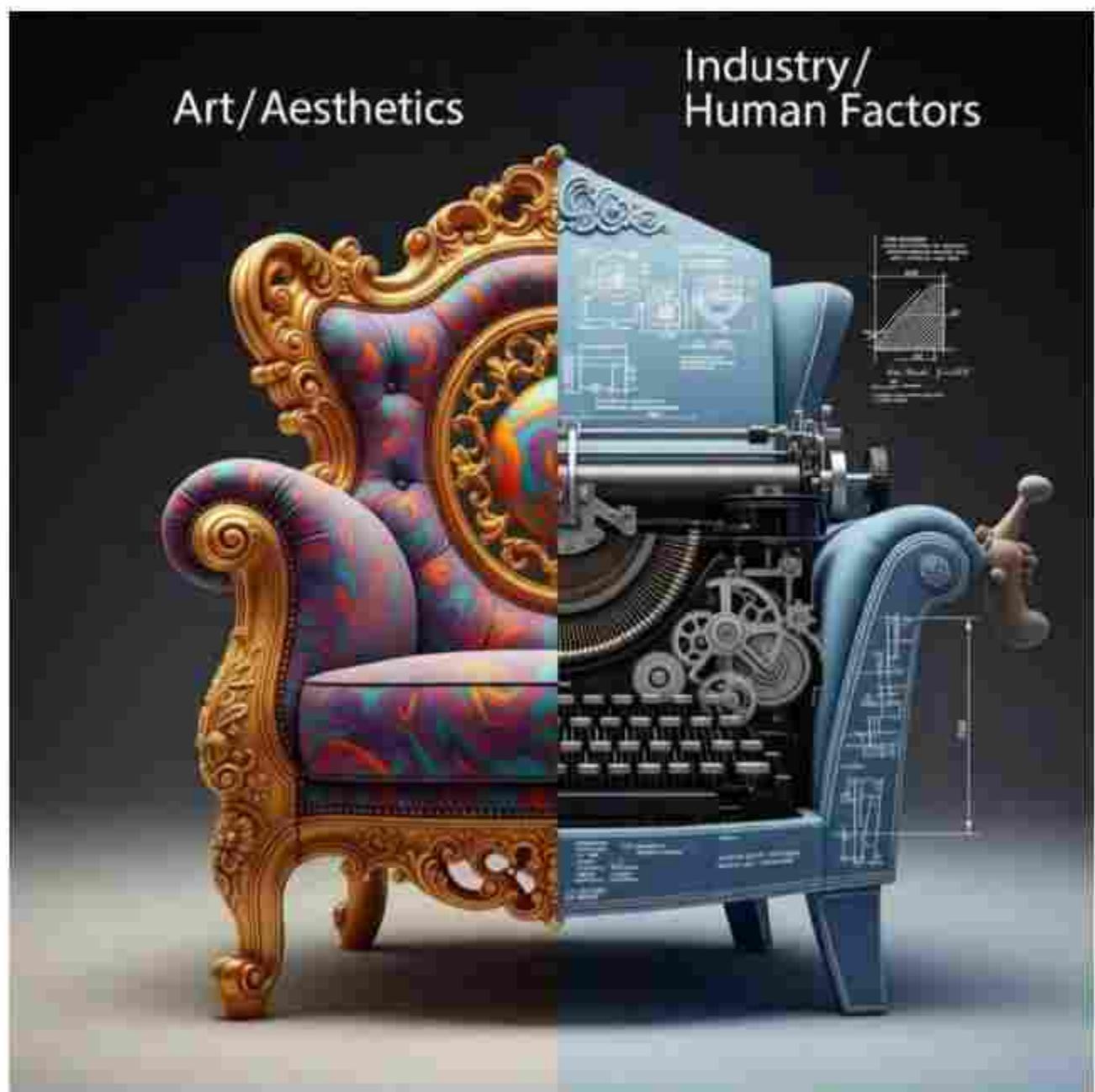
- Design rooted in art & industry; early designs seen as commercial art
- Papanek's 1972 critique remains relevant

### 2. Education & Practice

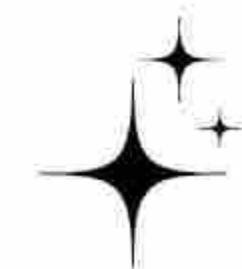
- Focusing on "things" early creates a locked mindset
- Google “industrial design” shows objects, not people
- Instructors still explain basics like gravity, balance, leverage



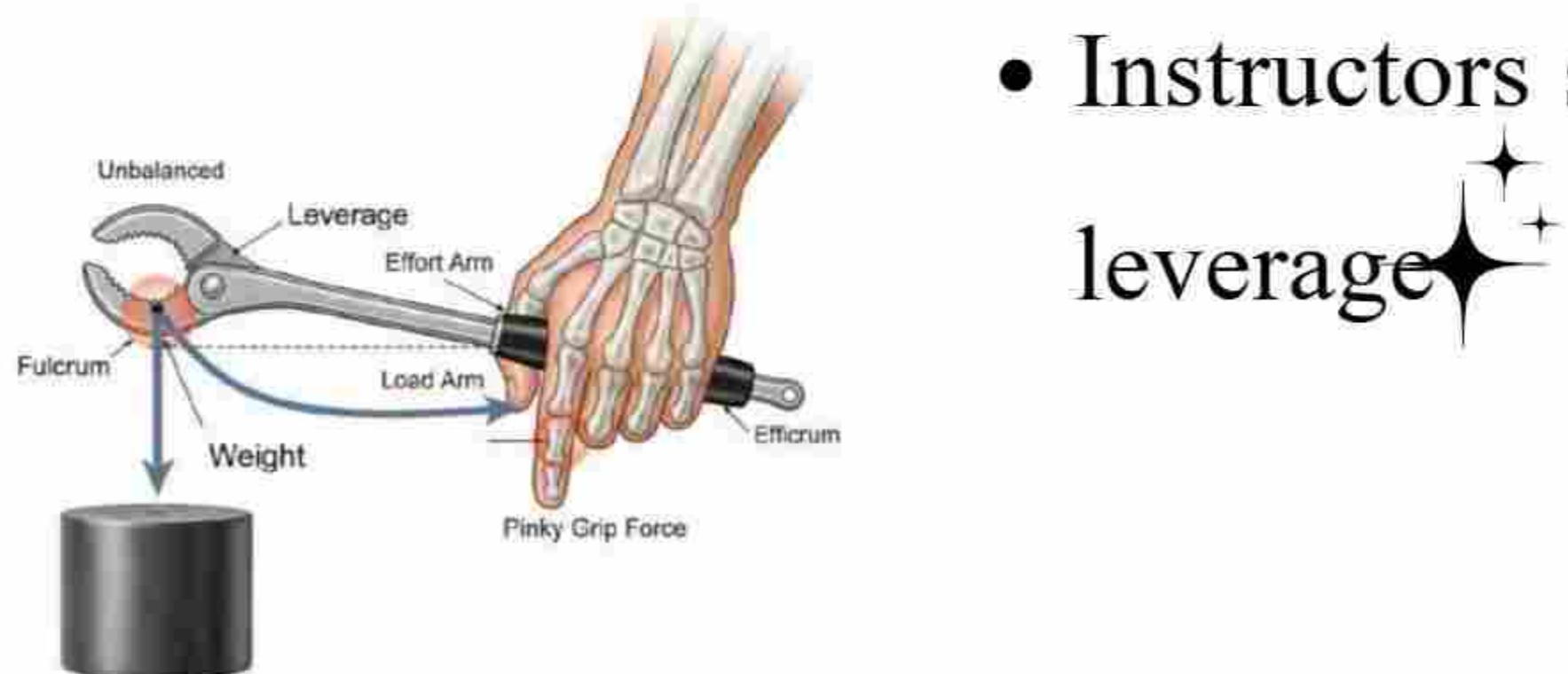
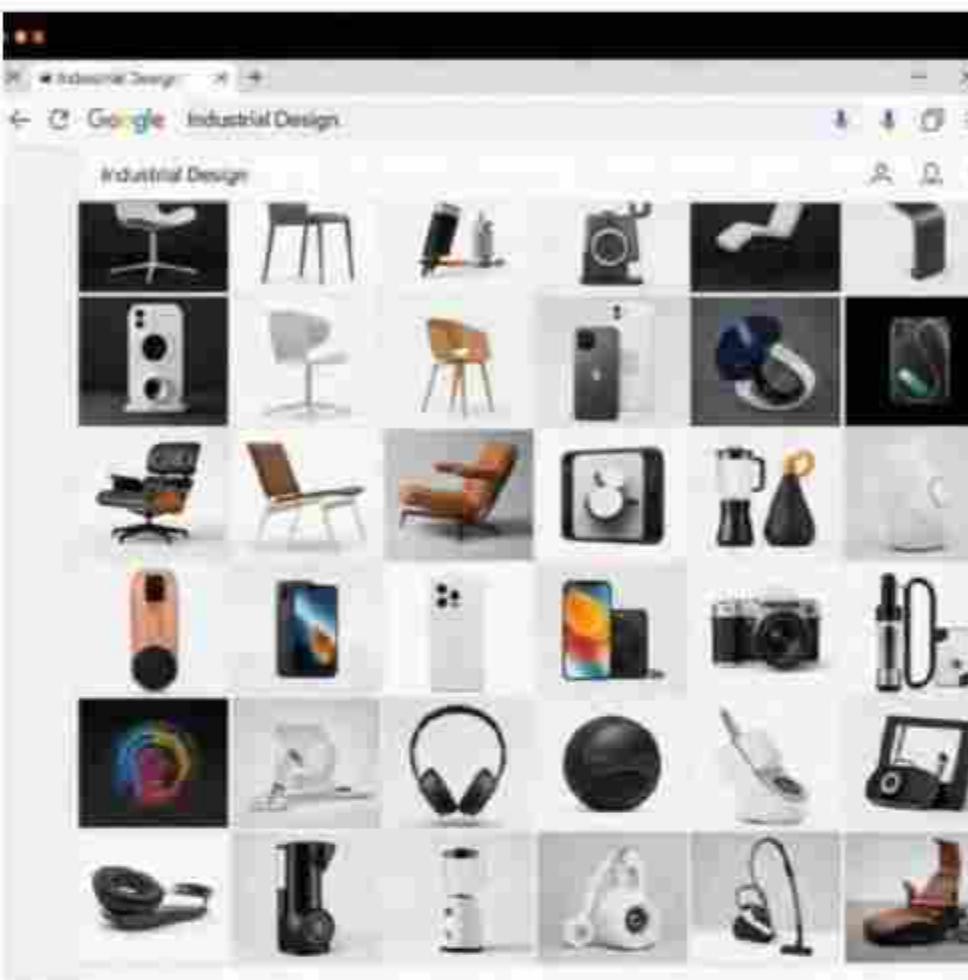
# Historical Legacy



- Design rooted in art & industry; early designs seen as commercial art
- Papanek's 1972 critique remains relevant



# Education & Practice



- Focusing on "things" early creates a locked mindset
- Google "industrial design" shows objects, not people
- Instructors still explain basics like gravity, balance, leverage

# Stagnation: Process Over Knowledge

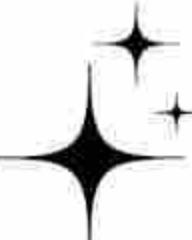


## 1. Innovation vs Fear

- Education favors answers, punishes failure; students avoid risk
- Portfolios show final outcomes without justification

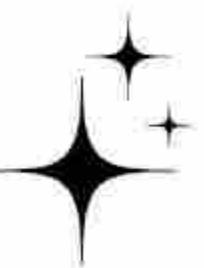
## 2. Design Thinking Blind Spot

- Design Thinking became a restrictive "how-to"
- Ignores implementation and long-term consequences
- Without knowledge, designers just create offerings



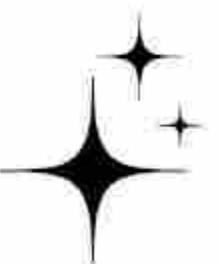
## Inventions Fair

- Education favors answers, punishes failure; students avoid risk
- Portfolios show final outcomes without justification



# Design Thinking Blind Spot

- Design Thinking became a restrictive "how-to"
- Ignores implementation and long-term consequences
- Without knowledge, designers just create offerings



# Excluding People: Curriculum Gaps

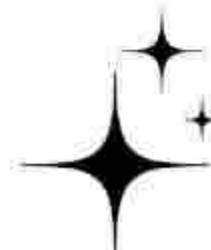
## 1. Human-Centered Topics Marginalized

- Psychology, physiology, ergonomics treated as electives
- Schools need psychologists, ergonomists, statisticians



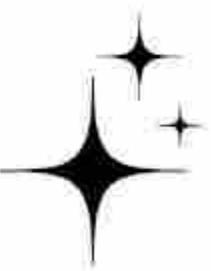
## 2. Ignoring Inclusivity & Diversity

- Lack understanding of physical differences (hand/hip differences)
- Profession developed in male-dominated culture
- Every designer is a social-impact designer



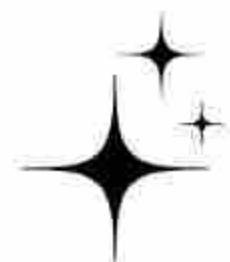
# Human-Centered Topics Marginalized

- Psychology, physiology, ergonomics treated as electives
- Schools need psychologists, ergonomists, statisticians



## Ignoring Inclusivity & Diversity

- Lack understanding of physical differences (hand/hip differences)
- Profession developed in male-dominated culture
- Every designer is a social-impact designer



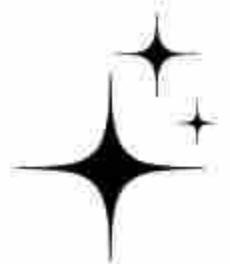
# Call to Action

## 1. Human Knowledge as Foundation

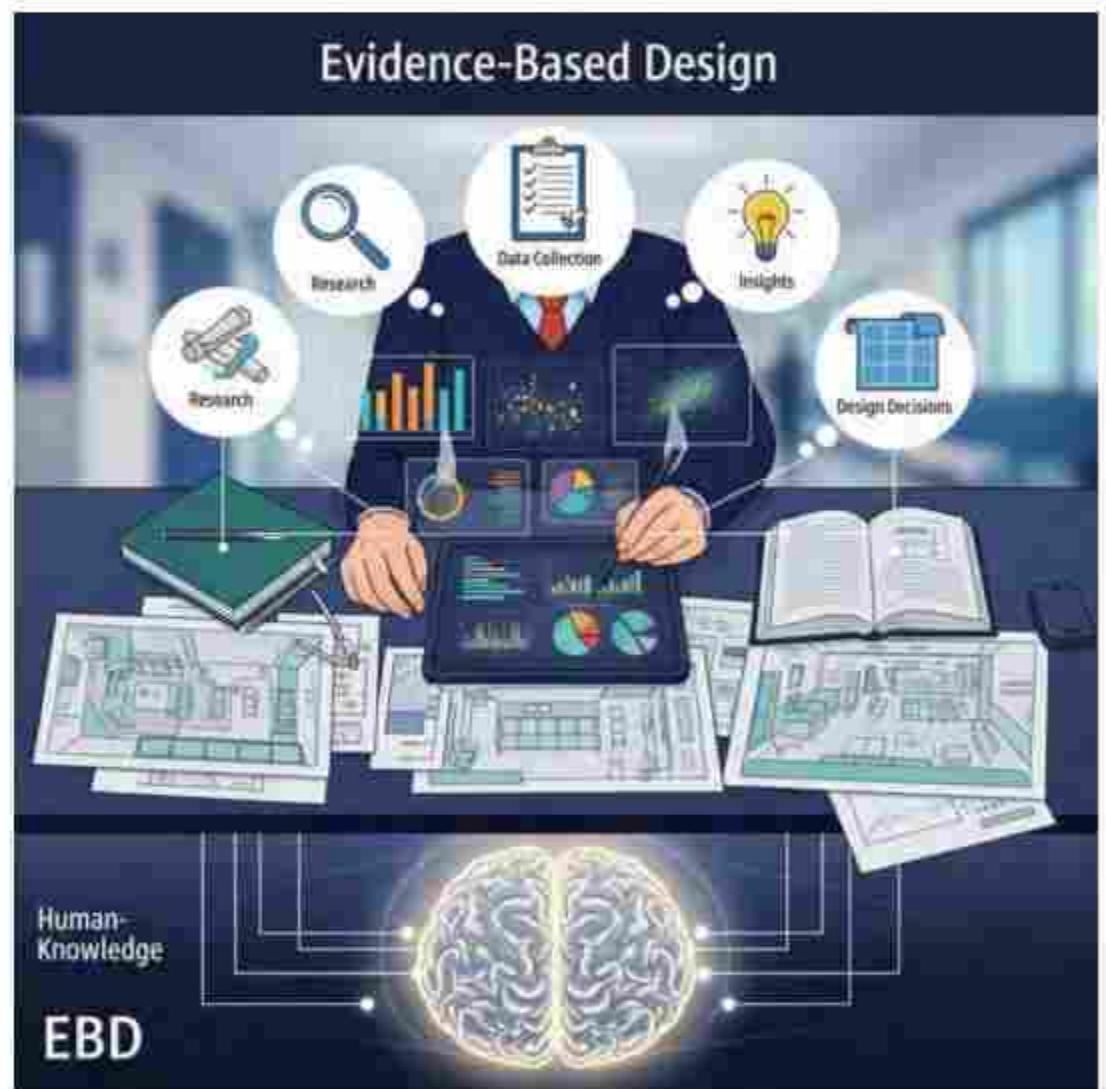
- Must learn research methods & statistics; adopt evidence-based design

## 2. Critical Disciplines

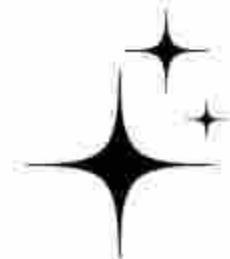
- Physiology: sensory systems
- Acoustics: product sound as communication
- Sustainability: energy, renewal, end-of-life



# Human Knowledge as Foundation

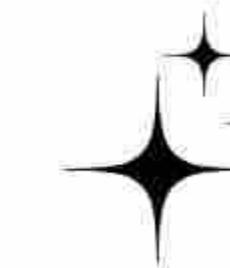
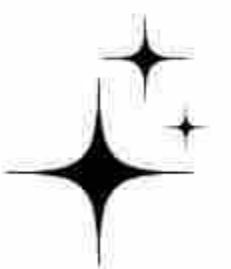


- Must learn research methods & statistics; adopt evidence-based design



# Critical Disciplines

- Physiology: sensory systems
- Acoustics: product sound as communication
- Sustainability: energy, renewal, end-of-life



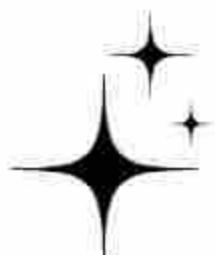
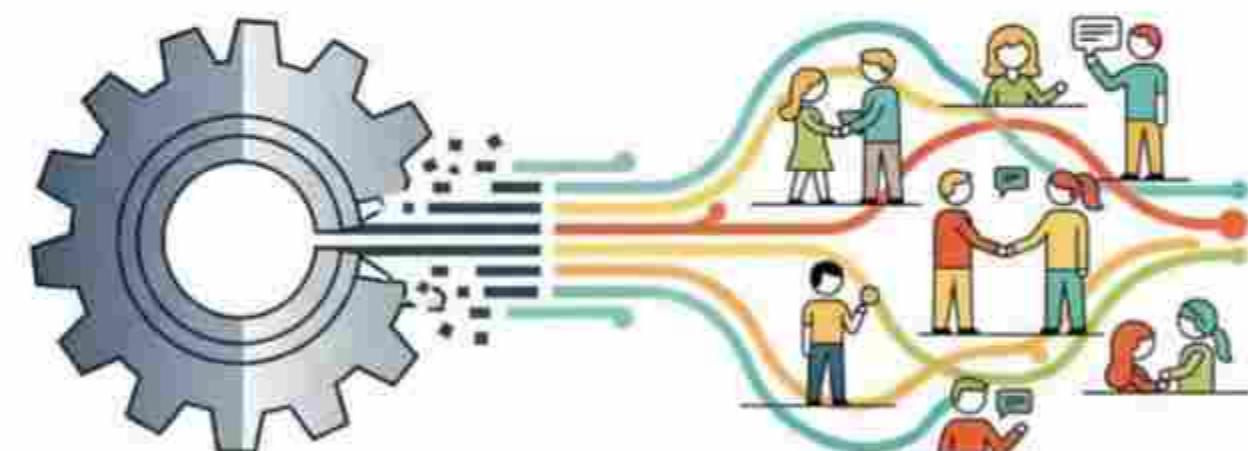
# Conclusion: A Reimagined Discipline

## 1. Hard to Change

- Too much legacy to change quickly
- Loewy reinterpreted: Design education is too important

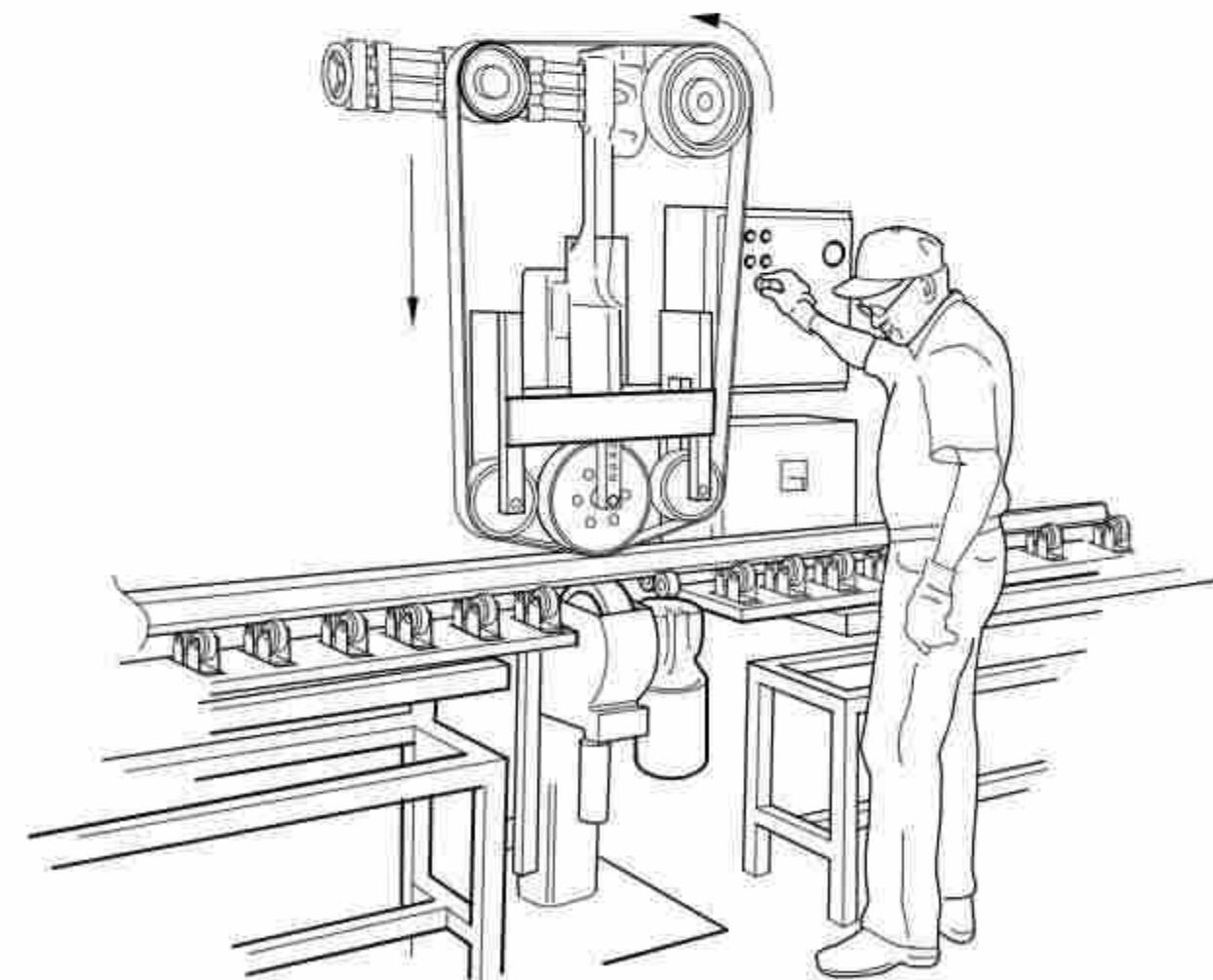
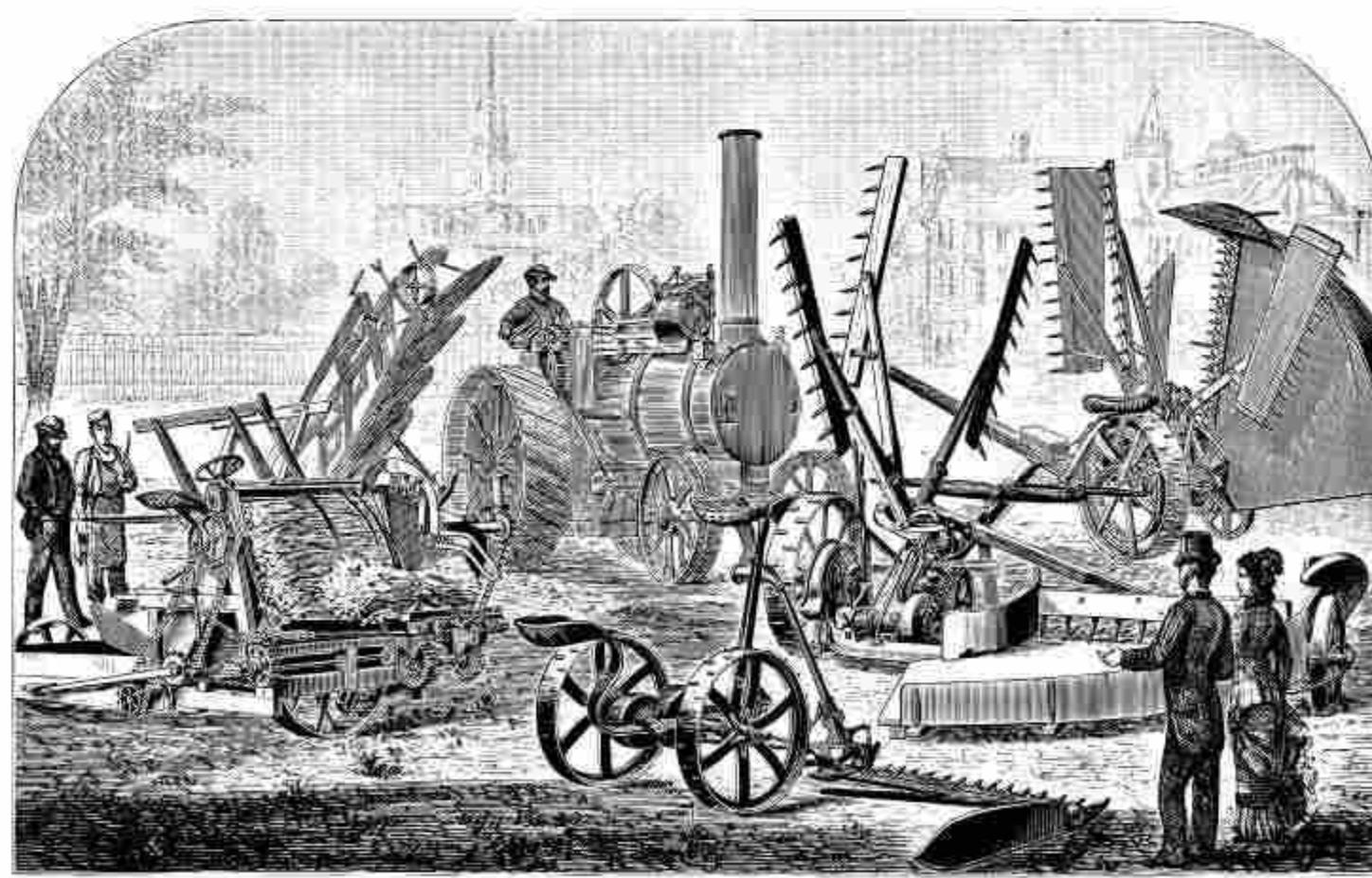
## 2. Final Solution

- Create a new design discipline
- Shift focus from objects to people
- Train experts who can guide traditional designers

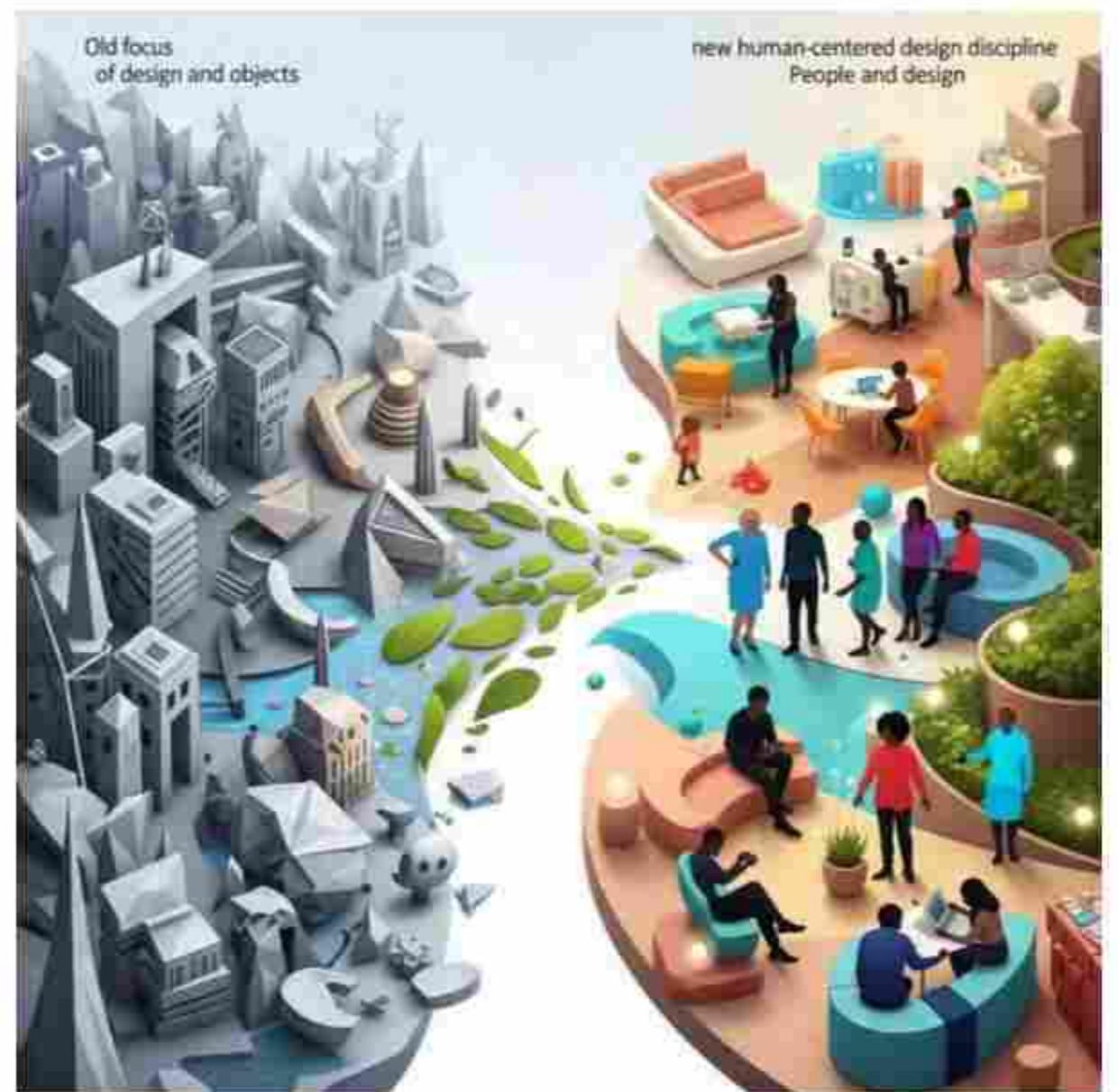


# Hard to Change

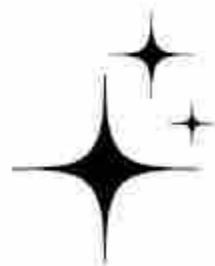
- Too much legacy to change quickly
- Loewy reinterpreted: Design education is too important



# Final Solution



- Create a new design discipline
- Shift focus from objects to people
- Train experts who can guide traditional designers



THE END

THANKS

