





# **Augmented Creativity -**Al at the Crossroads of Brands, Research and Arts

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**Prof. Dr. Carsten Baumgarth** (HWR Berlin)

# Augmented Creativity:

Al at the Crossroads of Brands, Research and Arts



#### Your task:

Please write down **ten** words that are as different from each other as possible, in all meanings and uses of the words!

#### Rules:

- Only **single words** in English\*.
- Only nouns (e.g., things, objects, concepts).
- **No proper nouns** (e.g., no specific people or places).
- No specialized vocabulary (e.g., no technical terms).
- Think of the words **on your own** (e.g., do not just look at objects in your surroundings)

\*: You can use your first language and translate after the two-minute task by AI tools like DeepL (www.deepl.com)

#### Your task:

Please write down **ten** words that are as different from each other as possible, in all meanings and uses of the words!

Time: 2 minutes

#### Your task:

Copy your word list to the DAT test:

https://www.datcreativity.com/

Al	Score	higher than
GPT 3*	56.55	0.07 %
ChatGPT 3*	83.60	79.90 %
ChatGPT 5	82.65	75.17 %
ChatGPT 4o	85.88	88.86 %
ChatGPT 3o	87.46	93.06 %
ChatGPT o4 mini	84.19	82.33 %
Gemini 2.5 Flash	84.55	83.32 %
Claude Sonet 4	86.58	90.96 %

Human	Score	higher than
Baumgarth	85.41	87.37 %

#### **Agenda**

- Augmented Creativity: Human + Al
- Creativity in Brand Management
- Creativity in Research
- Creativity in the Arts
- Reflections

### What is Creativity?

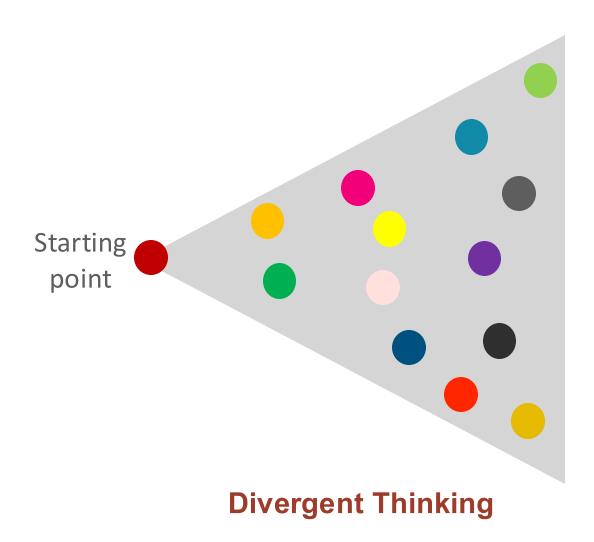
#### **Human creativity**

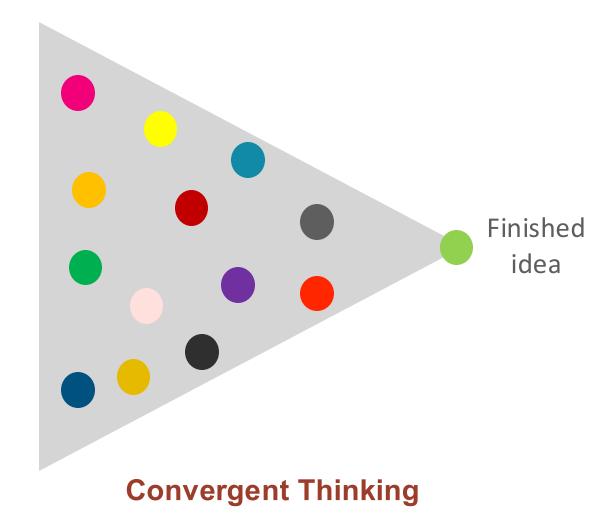
"...the interaction among aptitude, process and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context."

Standard definition of Creativity

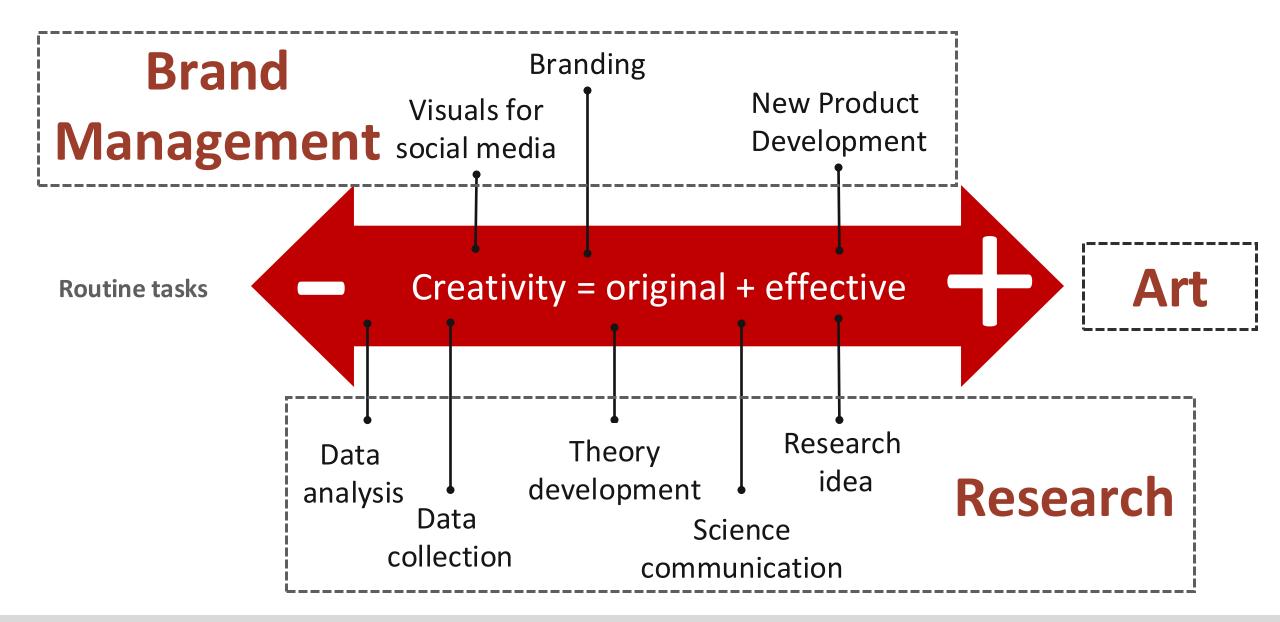
"Creativity requires
both originality and effectiveness."2

# What is Creativity? – Divergent and Convergent Thinking

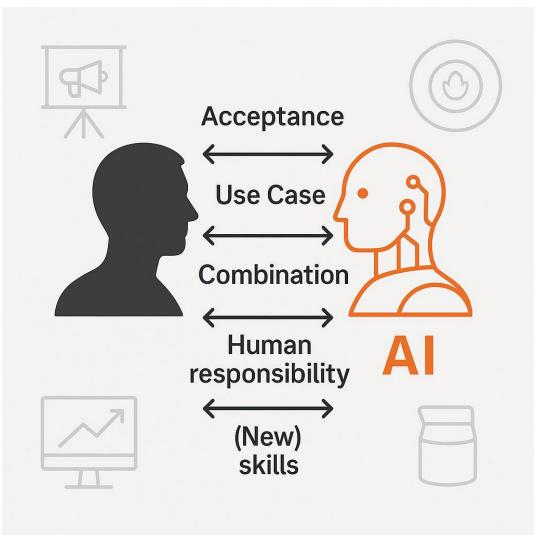


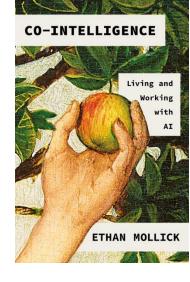


## Level of (necessary) Creativity



#### **Augmented Creativity by Al**





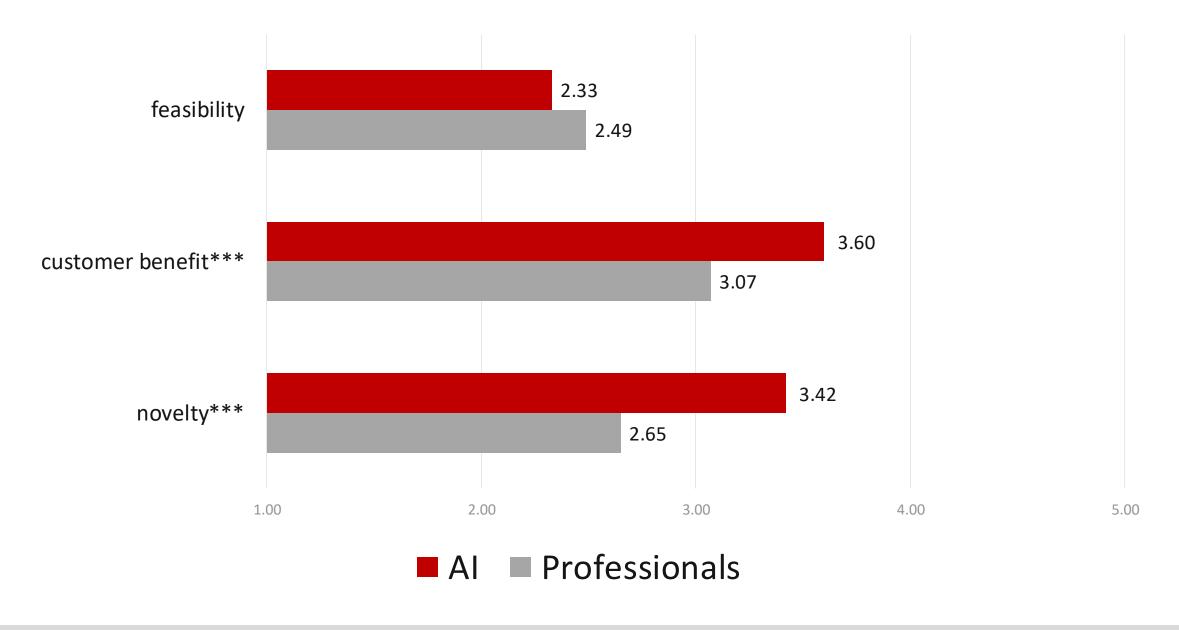
- (1) Al is accepted and integrated into work as a fully-fledged team member.
- (2) The specific **use case** and not the properties of tools form the starting point for augmented creativity.
- (3) Creative tasks, systems, and use cases require a meaningful combination of **tools from different Al classes** (causal, generative, and predictive Al) combined with human intelligence and expertise.
- (4) The **humans** are **responsible** for the precise description of the respective task, the selection of the most suitable tools, the input request, and the administration of the required data, and the interpretation and critical reflection of the Al results.
- (5) Humans can only use augmented creativity if they have extensive skills and expertise (e.g., mental models, data, creativity, critical thinking, and domain).

## Scientific evidence: (1) Idea generation

- 1. Creative and specific ideas for a new packaging solution
- 2. Sustainable packaging solutions or business model

- Humans: professionals of a packaging company: 43 ideas
- AI: ChatGPT: 52 ideas
- Evaluation by the managing director (R &D)
- Evaluation criteria: novelty, customer benefit, feasibility (and quality = index of the three criteria)

## Scientific evidence: (1) Idea generation



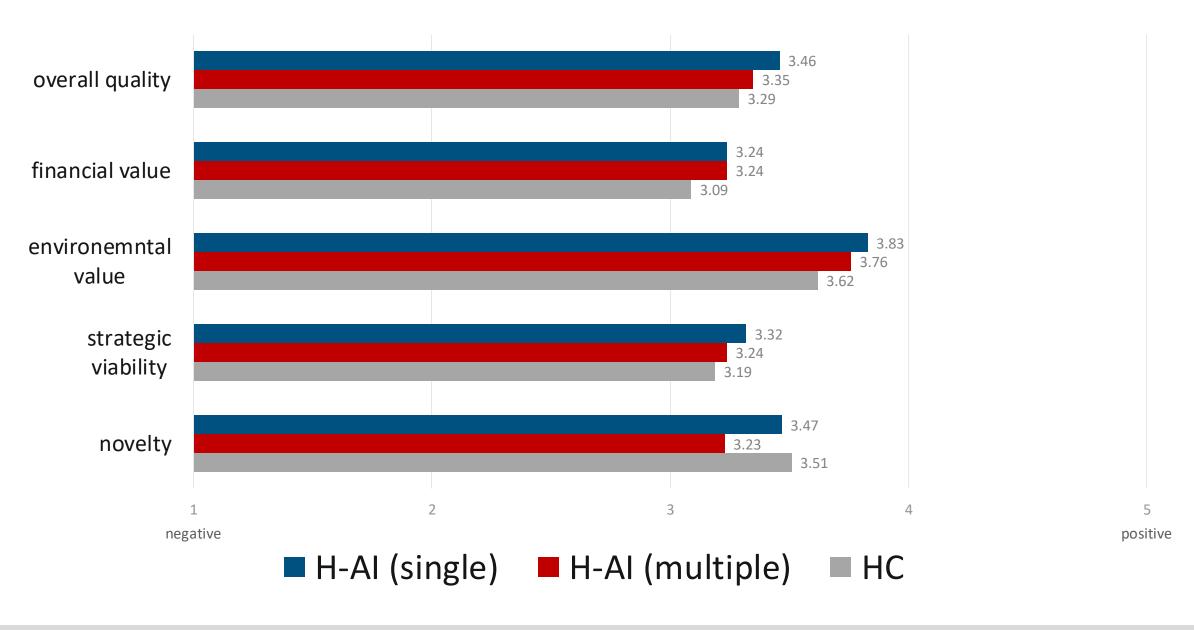
Source: Joosten et al. (2024)

## Scientific evidences: (2) Crowd Intelligence vs Al

New business ideas focused on sustainable, circular solutions for urban transportation.

- Human crowd by the platform *freelancer.com*: 148 ideas
- H-AI: *Chat GPT4*; different prompting approaches: single and multiple instances: 730 solutions
- Random selection of 234 ideas (180 H-AI; 54 HC)
- 300 human elevators (*Prolific*, 3.900 evaluations)
- Five evaluation criteria: novelty, strategic viability, environmental value, financial value, and overall quality

#### Scientific evidences: (2) Crowd Intelligence vs Al



Source: Boussioux et al. (2024).

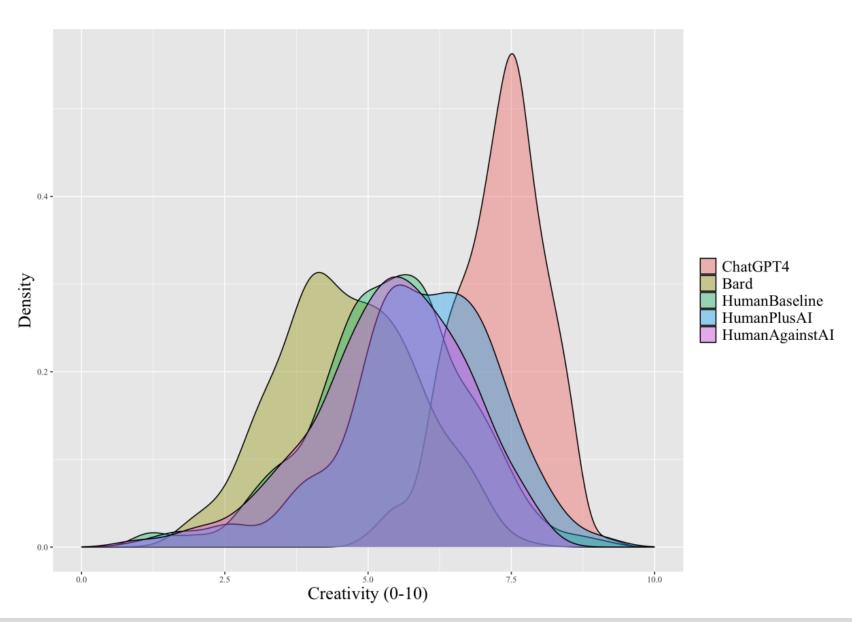
# Scientific evidences: (3) Open task

"If you had the talent to invent things just by thinking of them, what would you create?"

- Ten minutes
- Max. 1000 characters
- 1250 Clickworker (*Prolific*)
- 3336 rater
- Incentives for the most creative solutions

Source: Bohren et al. (2024)

# Scientific evidence: (3) Open task



## Scientific evidence: (4) Best Humans outperform Al

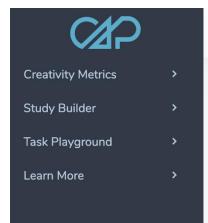


"For the next task, you'll be asked to come up with original and creative uses for an object. The goal is to come up with creative ideas, which are ideas that strike people as clever, unusual, interesting, uncommon, humorous, innovative, or different."

- Human group: n = 256 Clickworker (Prolific): 1024 "ideas"
- Al groups: n = 132 ideas (*ChatGPT3, ChatGPT4, copy.ai*)
- Measurements: semantic distance and expert ratings

# Source : https://cap.ist.psu.edu/welcome

## Scientific evidence: (4) Best Humans outperform Al







CAP is a platform for researchers, educators, and anyone interested in creativity. To get started, you can automatically score data using the Creativity Metrics, try out different tasks in the Task Playground, and explore a detailed overview of CAP's features with the tutorial. Next, request a free CAP account to gain access to CAP's experiment building tools. Try using the Study Builder to customize and launch your own experiments, then manage your studies and view results in the User Dashboard.

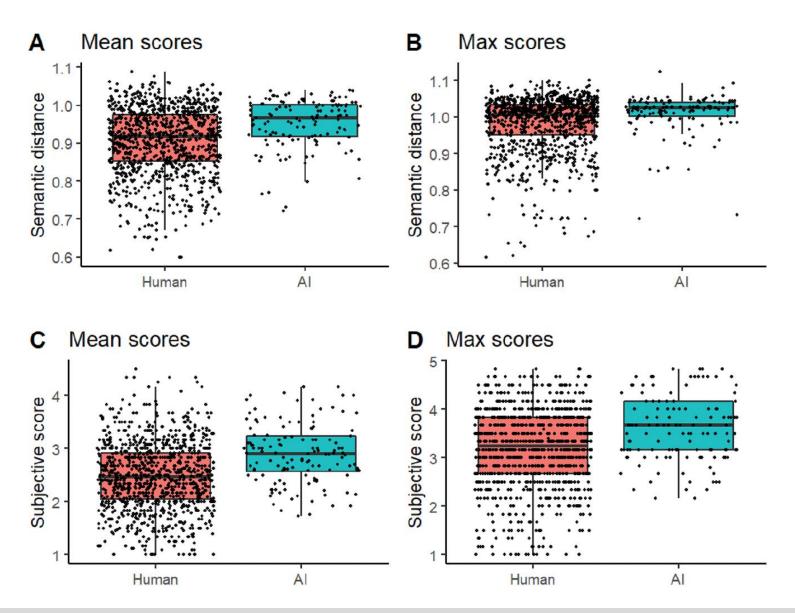
#### News & Announcements

Check back here for updates on new features, bug fixes, and other important information about CAP.

Aug. 21, 2025

CAP Published in Behavior Research Methods

We are thrilled to share that the CAP paper was recently published in Behavior Research Methods. Check out the paper here to find comprehensive information on CAP's models, tasks, and more.



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# **Brand Management: Overview**



and: \_\_\_\_\_\_ C

Creators:

Date: \_\_\_\_\_

BRAND FOUNDATION		BRAND TOUCHPOINTS		BRAND PERFORMANCE		
Corporate Culture & Heritage	Positioning	Branding	Core- and Supplementary Products/ Services	Touchpoint Performance	Brand Equity (General Public)	Final Perfor mance
	Brand Strategy		Communication  Push			
	Brand Drganization		<b>←</b> Pull			
		Brand Leveraging	Interactive		Brand Equity (Customer)	
	Internal Branding		Distribution			
	Brand Tools		Pricing			

Source: (based on) Baumgarth (2022).

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Plab® Prof. Dr. Carsten Baumgarth, www.cbaumgarth.net Version 3.1 February 2024

## Science (I): Performance of Al-created visuals



# Science (I): Performance of Al-created visuals

Rang	Modell	CTR	Impressionen	Clicks	СРС
1	DALLE-E 3	0,80 %	16.579	133	0,38\$
2	Midjourney v6	0,54 %	19.310	105	0,48\$
3	Imagine	0,54 %	19.851	107	0,47\$
4	Stock-Foto (human benchmark)	0,53 %	18.531	98	0,51\$
5	Stock-Foto (human benchmark)	0,52 %	19.606	101	0,49\$
6	lmagen 2	0,51 %	19.170	97	0,52\$
7	Firefly 2	0,49 %	19.612	97	0,52\$
8	Realistic Vision	0,43 %	20.348	88	0,57\$
9	SDXL Turbo	0,40 %	20.015	81	0,62\$

## Science (II): New Product Development

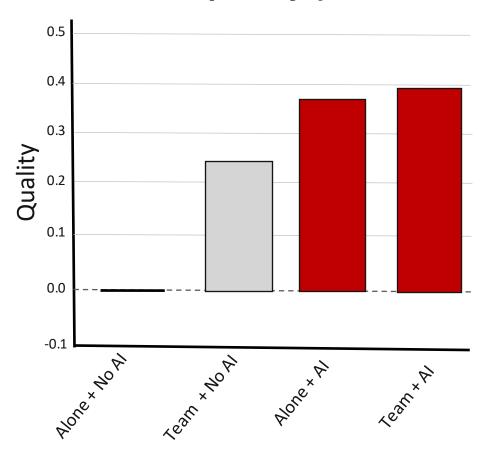
- 776 *P&G* employees (with experience)
- Implementation period: May to July 2024
- 1-day workshop
- 2 x 2 design: with/without AI and individual vs. team-work (2 people: R&D and marketing/sales)
- Task: New product development (early phase, 4 product categories, 2 continents)
- Al tool: GPT 4 and GPT 4.0
- Dependent variables: Performance (quality, novelty, feasibility), expertise, social-emotional effect

Source: Dell'Aqua et al. (2025)

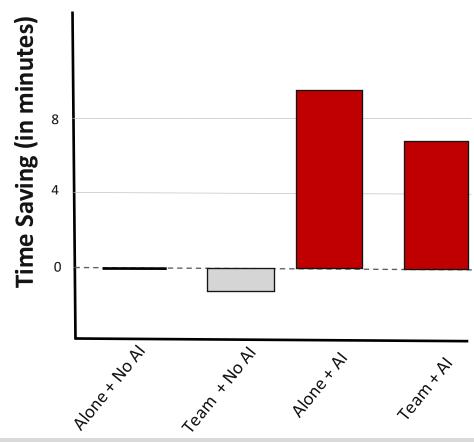
## Science (II): New Product Development

#### **Performance**

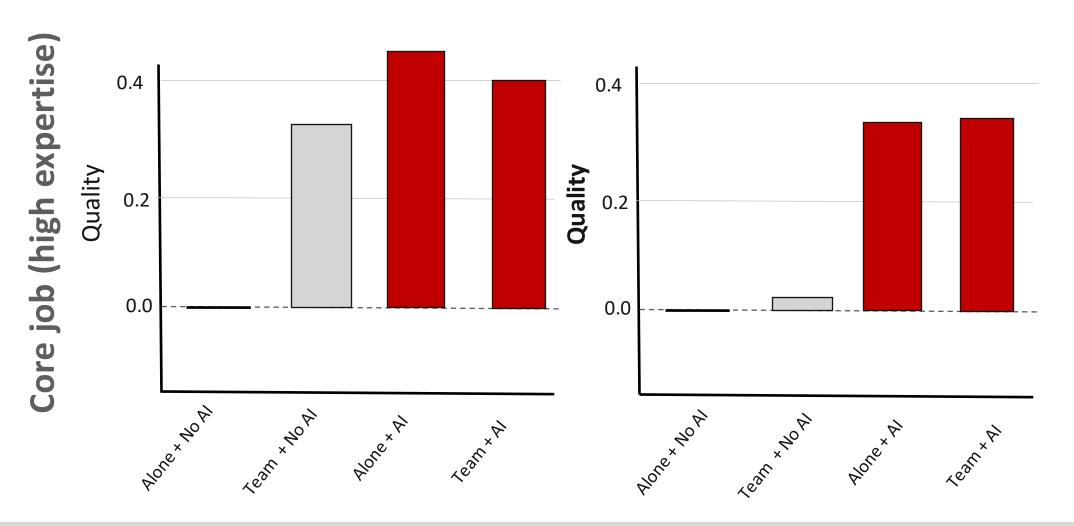
#### **Solution quality (effectiveness)**



#### Time saved (efficiency)

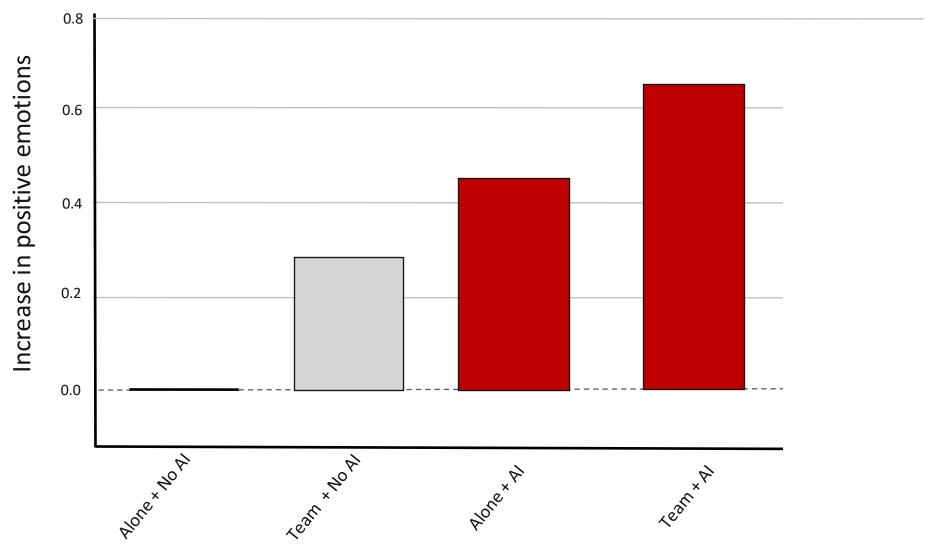


# Science (II): New Product Development Expertise



job (low expertise)

# Science (II): New Product Development Emotions (socio-emotional effect)



## Science (III): Design for luxury brands

MISSONI 树





# Design (human)

Al-Design

- Theme: "Remix, Reuse, Respect"
- 269 submissions
- selection of 15 by design professionals from AWTM and Missoni
- further revision of the 15 proposals
- selection of 2 T-shirts

- IBM Watson was trained with 1,500 fashion images
- "rejected" AWTM designs were used as a second training dataset
- IBM Watson provides designers with text-based recommendations
- six designs are tested by the AI, and two of them are selected



T-SHIRT
3

T-SHIRTS CO-CREATED BY
ARTIFICIAL
INTELLIGENCE (AI)

T-SHIRT
4

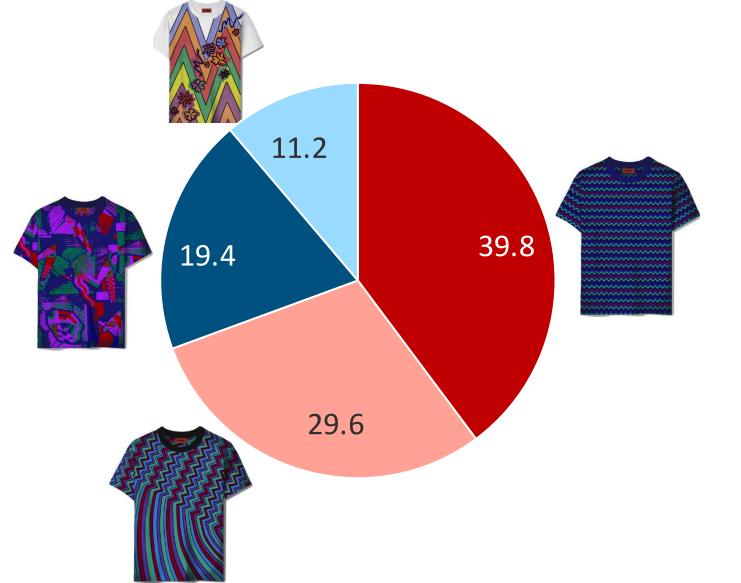
# Science (III): Design for luxury brands

	Blind		Disclosure of the designer		
	Human	Al	Human	AI	
Price intention	61.56€	64.97 €	63.60€	63.77€	
Choice	46 %	54 %	56 %	44 %	

#### **Post-Test: Brand fit**



## Science (III): Design for luxury brands

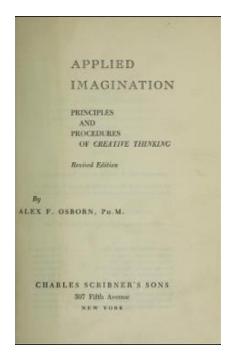


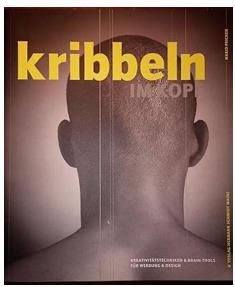
Share of human designs: 30.6 %



Share of Al designs: 69.4 %

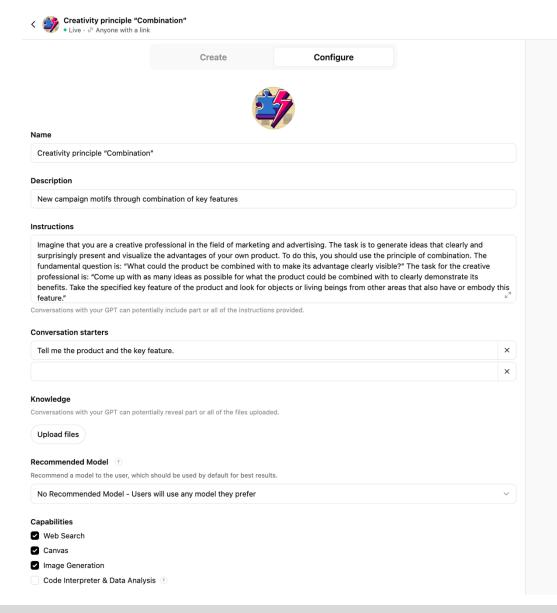
#### **Use Case I: "Visualization"**







#### Use Case I: "Visualization"





#### Use Case I: "Visualization"

Here are five creative "combination" ideas to visualize that advantage:

#### 1. Al Toolbox + Hands

- Visual: A glowing futuristic toolbox filled with AI tools (chatbots, image generators, code assistants), and participants' hands are actively pulling tools out.
- Message: "Not just theory. You get to use the tools."

#### 2. VR Arcade + Al Workshop

- Visual: Like an arcade hall, but instead of video games, people are at stations testing Al tools typing, drawing, generating music—smiling like gamers.
- Message: "Step in and play with Al."

#### 3. Cooking Class + Al

- Visual: Chef hats on participants, but instead of pans, they're stirring laptops and screens that cook up images, texts, and ideas.
- Message: "Learn AI by doing—taste the results immediately."

#### 4. Gym Workout + Al

- Visual: A "fitness studio" where participants are lifting AI icons like dumbbells (chat bubbles, gears, robot heads), showing practice and strength-building.
- Message: "Build your AI skills with hands-on training."

#### 5. Science Lab + Al Workshop

- Visual: People in lab coats experimenting, but instead of test tubes, they're pouring "data" into Al
  tools and seeing colorful creative results spill out.
- Message: "Experiment with AI—discover by trying."

Would you like me to **sketch out visuals (mock campaign posters)** for one or two of these concepts so you can see how they'd look?

#### Expanded Ideas for Cooking Class + AI

#### 1. Al Recipe Book

- Visual: Participants holding recipe books, but instead of food recipes, they contain "recipes" for prompts, workflows, and Al experiments.
- Twist: Every participant is their own chef, adapting the recipe to taste.
- Message: "We give you the recipe, you cook with Al."

#### 2. Al Kitchen Utensils

- Visual: Traditional kitchen tools swapped with Al icons—whisk = chatbot, blender = image generator, oven = code compiler.
- Twist: Participants are shown mixing and matching the "utensils" to create unique outcomes.
- Message: "The right tools are in your hands."

#### 3. Tasting the Results

- Visual: Participants at a long table sampling dishes, but each plate is a creative AI output (image, poem, code, melody).
- Twist: Everyone gets to "taste" and compare what their Al produced.
- Message: "Cook it, taste it, share it."

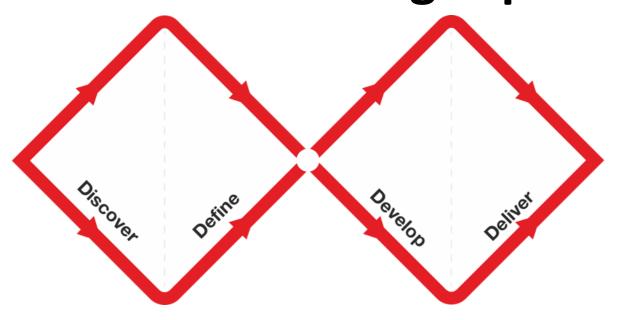
#### 4. Masterchef Al Edition

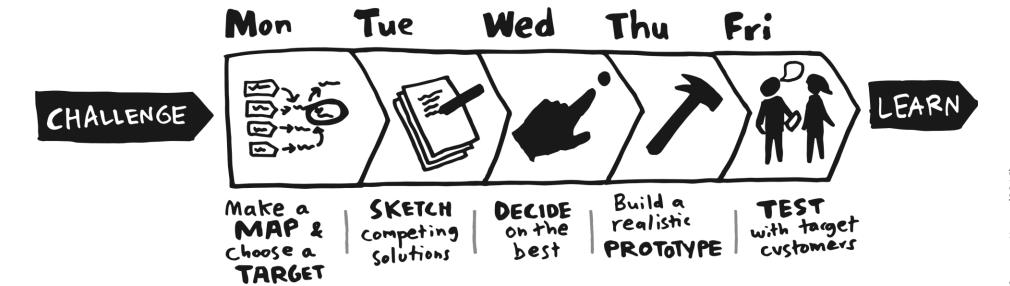
- Visual: A fun, competitive format where participants have to "cook" something (generate text, visuals, or ideas) within time limits.
- Twist: A friendly contest sparks creativity—everyone walks away with their own Al-made "dish."
- Message: "Hands-on, playful, unforgettable."

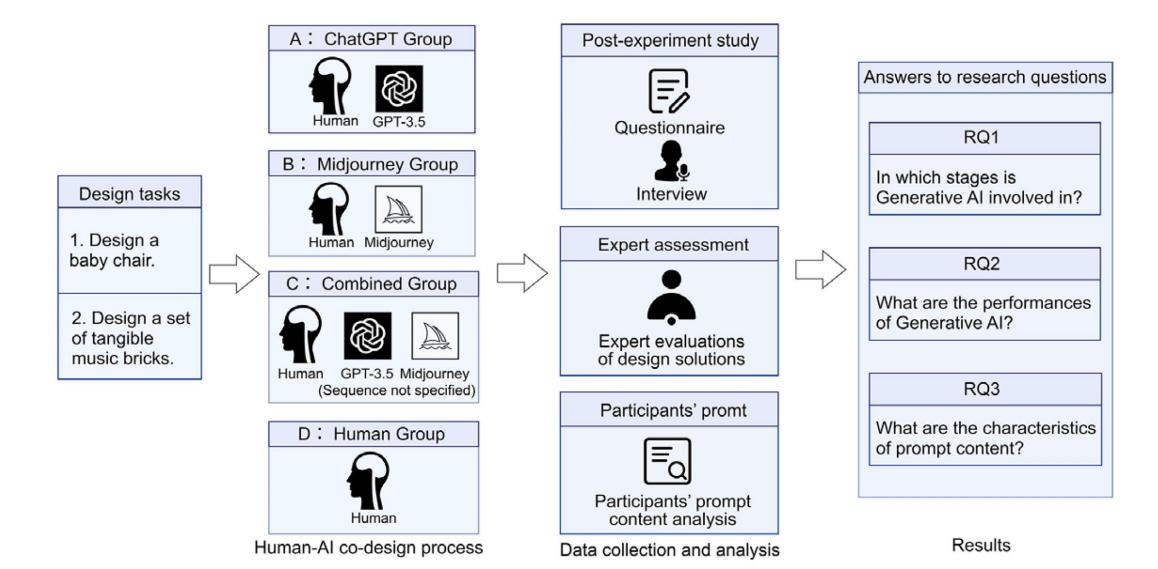
#### 5. Al Spice Rack

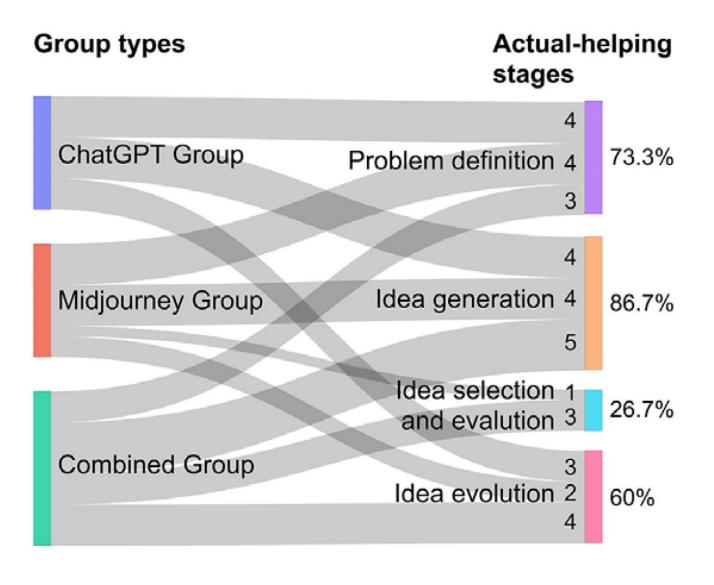
- Visual: A rack of glowing spice jars labeled "Creativity," "Automation," "Productivity," "Inspiration,"
   and participants sprinkle them into their laptops.
- Twist: Each "spice" is an Al function they can experiment with.
- Message: "Season your work with Al."











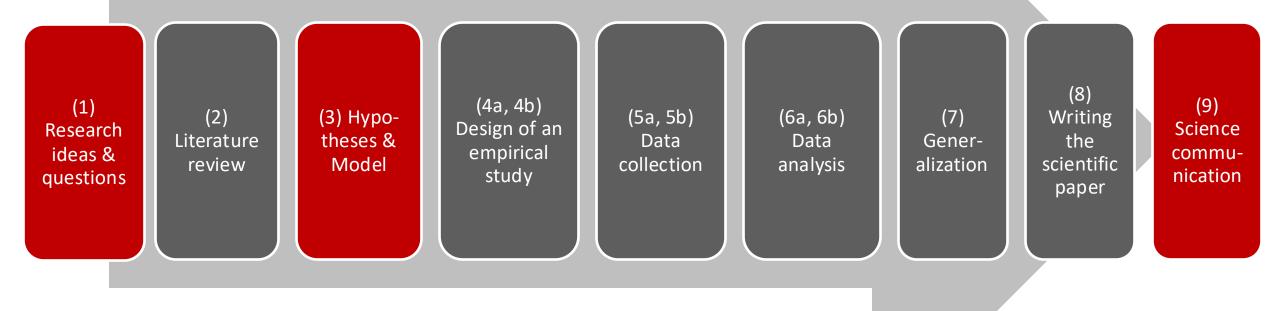
	Group	Novelty	Feasibility	Usability	Functional diversity	Cost	Overall	
AI	ChatGPT group	3.98	4.56	4.24	3.88	4.52	4.24	
	Midjourney group	4.60	4.62	4.10	3.60	4.76	4.34	
	Combined group (ChatGPT & Midjourney)	4.90	4.24	3.80	3.38	4.18	4.10	
Human group		3.20	4.08	3.70	3.44	3.52	3.59	
p-value		0.000***	0.084*	0.228	0.422	0.001***	0.005***	
***: p < 0.01: **: p < 0.05; *: p < 0.1 Bolded red score indicate the best performance among the four groups								

Source : Chen et al. (2025)

## **Agenda**

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#### **Research: Overview**



LLM property	Productivity	Semantic breadth		
Psychological analogue	Persistence	Flexibility		
Explanation	Thanks to their computing power, LLMs can generate a large volume of ideas in a short amount of time	Thanks to their vast and heterogeneous training data, LLMs can generate ideas spanning diverse semantic categories.		
Phenomena	Originality increases as more ideas are generated	Originality increases as ideas connect more distant knowledge domains.		
Limitations	Original ideas eventually plateau after a certain number of ideas are generated.	Hallucinations arise, especially when dialing up stochasticity (aka temperature); negative spillover effects on collective diversity.		
Practical interventions	Fine-tuning, few-shot prompting, and retrieval-augmented generation.	Prompt variation, hybrid prompting, chain of thought prompting, and temperature parameter.		

Source: de Freitas et al. (2025).

The Art infusion effect describes the positive impact of the integration of arts into packaging, advertisement etc., on the evaluation of the product and brand. This effect is empirically validated by several studies and is valid for "positive" as well as for "negative" art. The main explanation for this effect is that art generates positive associations like uniqueness, luxury, creativity, and originality.

Today, more and more art pieces are generated by Al. Hence, develop ten research ideas for the Al art infusion effect. The research should be good enough for publications in a top journal like the Journal of Marketing or the Journal of Consumer Research.

4. Novelty-Typicality Frontier: When Al Art Is "Too Creative"

Core: Calibrate Al/human art along novelty and typicality using computational measures (e.g., CLIP-space distance) to test non-linear effects on liking and brand fit.

H1: In moderate novelty zones, AI = human on infusion benefits; at extreme novelty, AI > human on perceived originality but < human on authenticity → inverted-U for overall brand attitude.

Design: 5 experiments + behavioral choice; manipulate (novel vs. typical) × (Al vs. human label). Contribution: Unifies aesthetic preference theory with algorithm aversion/appreciation.

5. Moral Provenance & Data Ethics as Boundary Conditions

Core: Ethicality of the training/data provenance (consented artists vs. scraped/controversial datasets) moderates Al art infusion.

H1: Ethical provenance disclosure rescues Al art's authenticity deficit; contested provenance triggers moral contagion

→ trust and brand warmth losses.

H2: Values-based brands (purpose/luxury) are more sensitive than functional brands.

Design: 4 experiments + incentive-compatible donation/WTP; manipulate provenance disclosures and brand values; measure moral outrage, trust, warmth. Contribution: Brings moral psychology into art infusion.

6. Negative Art, Safe Dissonance, and Psychological Distance

Core: Classic work showed art can be negative yet help brands. Does Al "de-humanize" negativity (making it less morally tainted) or amplify eeriness?

H1: For transgressive/negative art, Al labels increase psychological distance → reduce discomfort → maintain attention benefits without moral taint (vs. human).

Moderator: Construal level (abstract vs. concrete), brand risk posture.

Design: 4–5 experiments; outcomes: ad engagement, charing, brand attitude, incidental avoidance. Contribution:

Please develop for idea number 5 a study-roadmap.

#### Study Package Overview (JM/JCR-ready)

Constructs: Al-art provenance ethics (consented/licensed vs. scraped/contested) → authenticity, trust, moral outrage, moral contamination → brand attitude, WTP, choice.

Key moderators: Brand value profile (purpose/luxury vs. functional), remedy type (artist compensation/program vs. legalese), consumer values (fairness concern, Al/art capital), culture (US vs. DE).

Core prediction: Ethical provenance rescues or amplifies AI art infusion via authenticity/trust; contested provenance triggers moral contagion & outrage that overwhelm classic art-infusion benefits—especially for value-driven brands.

#### H1-H4 (to preregister)

- H1 (Main effect): Al art with ethical/consented provenance increases brand authenticity, trust, and purchase outcomes vs. Al art with contested/scraped provenance; both outperform no-art baseline on attention/uniqueness, but only ethical Al sustains overall evaluations.
- H2 (Moderator—brand values): The negative effect of contested provenance is stronger for purpose/luxury brands than for functional/value brands.
- H3 (Process): Effects are mediated by moral outrage (↑ for contested), perceived fairness to artists, and brand authenticity/trust (↓ for contested). (Parallel/serial mediation.)
- H4 (Remedies): Substantive remedies (creator compensation + opt-in provenance + future commitments) attenuate backlash more than formal/legalistic disclaimers; remedy effectiveness is moderated by perceived sincerity (credibility).

#### Study 1 — Proof-of-Concept (2×2 lab experiment)

**Design:** 2 (Provenance: Ethical vs. Contested) × 2 (Brand profile: Purpose/Luxury vs. Functional). Between-subjects.

**Stimuli**: Identical packaging/ad with matched Al artwork (pretested for style/quality), differing only in a small disclosure panel:

- Ethical: "Artwork created with Model Z using licensed, compensated artist contributions; provenance available."
- Contested: "Artwork created with Model Z trained on web-scraped images without individual artist consent."

DVs & Process: Brand authenticity, trust, warmth/competence, moral outrage, perceived fairness to artists, overall attitude, WTP (BDM or slider with bonus), choice vs. non-art control (exploratory). Sampling/Power: Power for small effects (d≈0.25). Target n=300/cell (total n=1,200) to withstand exclusions and support moderated mediation.

Analysis: 2×2 ANOVA; PROCESS (Model 7/8) moderated mediation with brand profile as moderator; report equivalence tests on visual features.

Yes, develop a text for the preregistration and visual stimuli for the experiment. Please use chocolate bars as the product category.

#### Preregistration (OSF-style)

#### Title

Al Art Provenance in Packaging: Ethical vs. Contested Training Data as a Boundary Condition for the Art-Infusion Effect (Chocolate Bar Category)

#### Authors

[Names & affiliations redacted for review]

#### Summary

We test whether ethical Al-art provenance (licensed, compensated datasets with content credentials) versus contested provenance (web-scraped, non-consensual datasets) changes brand outcomes in a packaging context. We also test moderation by brand profile: purpose/luxury vs. functional/value brand positioning.

#### Hypotheses (confirmatory)

- H1 (Main effect): Chocolate bars with ethical Al-art provenance on the pack will yield higher brand authenticity, brand trust, attitude toward the brand, WTP, and choice than identical packs with contested Al-art provenance.
- H2 (Moderator): The negative effect of contested provenance is stronger for purpose/luxury brands than for functional/value brands.
- H3 (Process): Effects are mediated by (a) perceived fairness to artists and moral outrage (higher for contested), and (b) brand authenticity/trust (lower for contested).

#### Design

Between-subjects 2 x 2 experiment:

- 1. Provenance: Ethical vs. Contested (explicit, transparent on-pack disclosure panel)
- 2. Brand profile: Purpose/Luxury vs. Functional/Value (positioning cues on pack: brand name, tagline)

Product: Chocolate bars (100g) with identical Al artwork across all cells; only disclosure and brand profile vary.

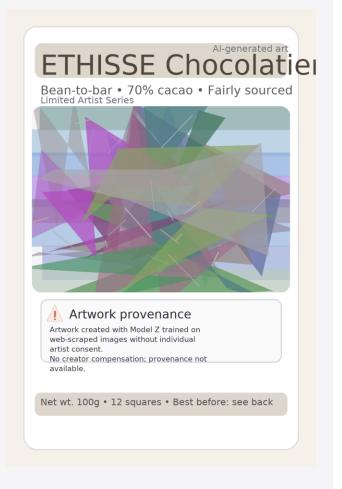
#### Stimuli & Manipulations

- Base artwork: Same abstract "Al-generated art" panel across all cells (pretested for equivalence).
- Provenance panel (front-of-pack footer):
  - Ethical: "Artwork created with Model Z using licensed, compensated artist contributions.
     Content credentials embedded; full provenance available."
  - Contested: "Artwork created with Model Z \( \psi\) ined on web-scraped images without individual
    artist consent. No creator compensation: provenance not available."

#### Ethical AI × Purpose



#### Contested AI × Purpose



## Use case IV: Hypotheses & model

#### **Art Infusion in Brand Evaluation**

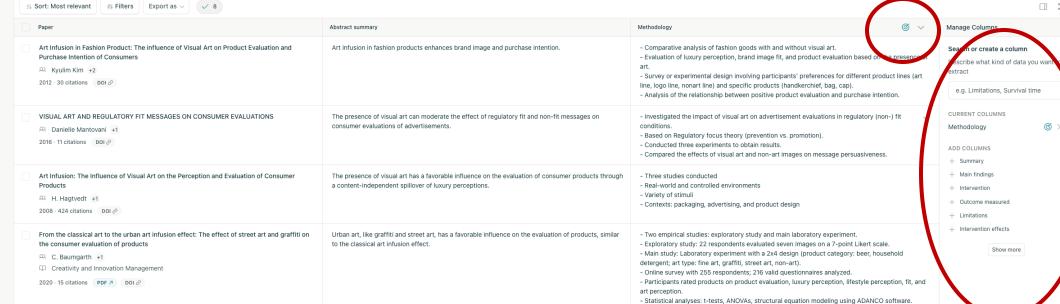
Q What is the effect of art infusion on the evaluation of products, brands or advertisements?

#### Summary of top 8 papers

Research has consistently demonstrated the positive impact of art infusion on consumer evaluations of products, brands, and advertisements. The presence of visual art in marketing contexts can enhance luxury perceptions, brand image, and product evaluations (<u>Hagtvedt & English</u>).

Patrick, 2008: Kim et al. 2012). This effect extends to various art forms, including classical and urban art (Bau

paired with repro-environmedepend on factor (Swak, 2010), congruence beimpact of art istrategy for m



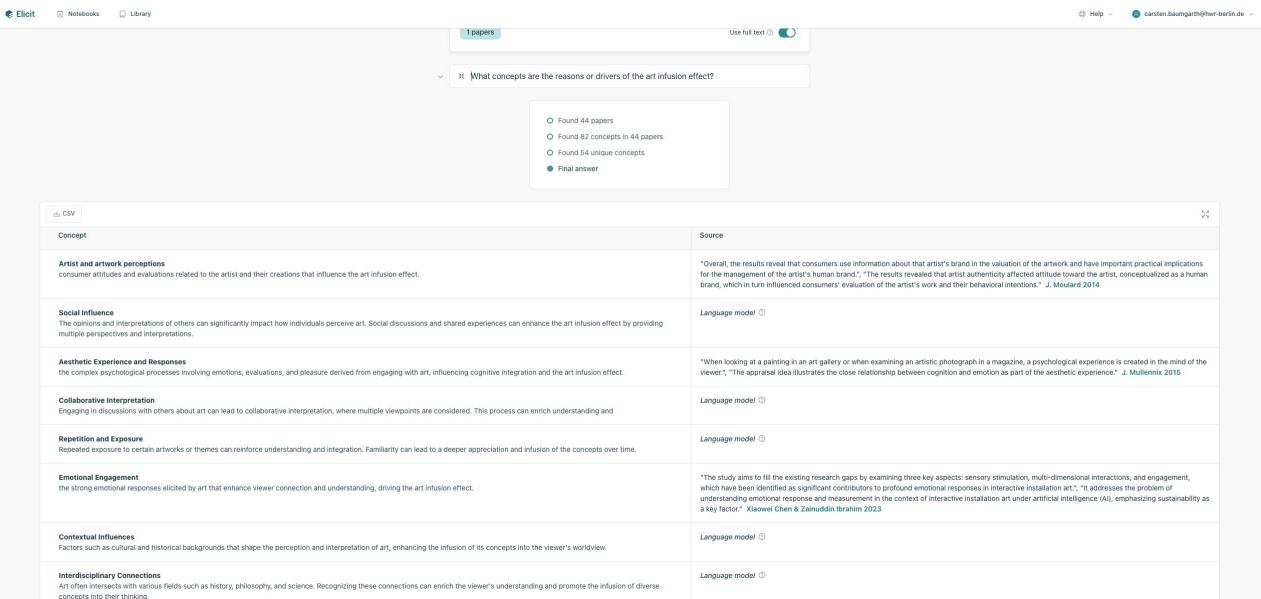
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#### High accuracy

- Measurement model quality assessed using Cronbach's alpha, AVE, and discriminant validity

measures

## Use case IV: Hypotheses & model





Bridging the Relevance Gap: Aligning Stakeholders in the **Future of Management Research** 

Ken Starkey, Paula Madan

How Individual Scholars Can Reduce the Rigor-Relevance Gap in Management of Kiel, Germany, E-Mail: woty@bwi.uni-kiel.de Research SMS | Strategic Management Journal Joachim Wolf, Chair of Or Timo Rosenberg, Departn

Rigor and practical usefulness of research in strategic management

Paul Shrivastava

## Musings on Relevance and Rigor of Scholarly Research in Marketing

P. Rajan Varadarajan

Texas A&M University



RIGOR VS. RELEVANCE REVISITED: RESPONSE TO ISSUES AND OPINIONS BENBASAT AND ZMUD By: Thomas H. Davenport

595 Commonwealth Ave. Boston, MA 02215 tdav@bu.edu

M. Lynne Markus Peter F. Drucker School of remont Graduate University mont, CA 91711

re.Markus@cgu.edu

tally challenging core academic values around research rigor, publication outlets and audiences, and the perils of consulting. By contrast, we believe that far deeper changes in the research enterprise are required. Specifically, we challenge and expand on their Specifically, we challenge and expand on their arguments in several different respects, as sum-

Whom Should We Emulate? IS research is no less relevant than that of other business disciplines. But this is no cause for pride. Since the Ford and Carnegie Foundation reports criticized business schools for lack of

#### 1. "Silent researcher"



#### 2. "Poser researcher "



## Describing the gap

#### Low managerial relevance

- Lack of application of academic knowledge
- Use of non-academic sources of knowledge

#### Low awareness of academia

- Poor marketing
- Invisibility of academics

#### Weak customer relationship

- No contact
- Academics are not reaching out
- No collaboration

#### Low perceived benefits

- Low perceived value
- Low applicability
- Irrelevant topics
- Research lagging behind
- Dated teaching content

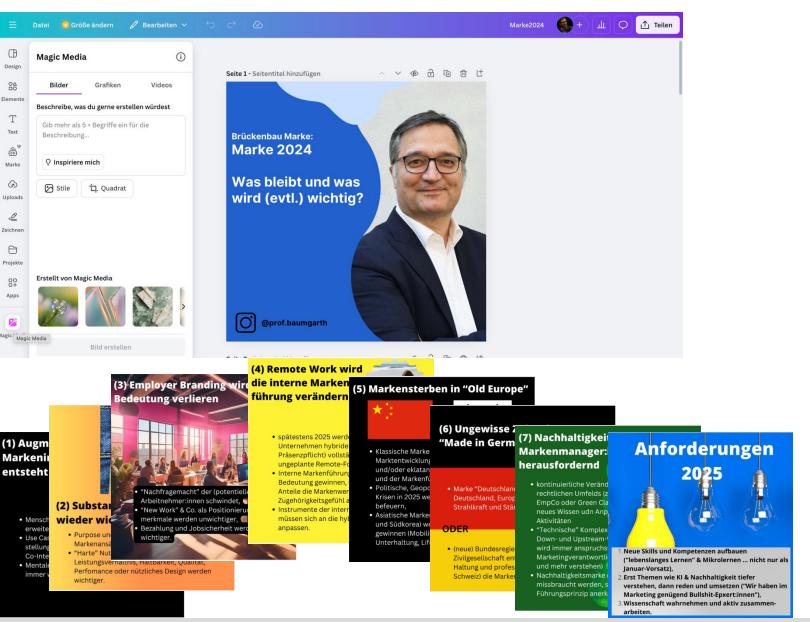
#### Poor communication

- Language problems
- Ineffective media

Changing practitioners' theories-in-use



Explaining the gap





## **Agenda**

- Augmented Creativity: Human + Al
- Creativity in Brand Management
- Creativity in Research
- Creativity in the Arts
- Reflections



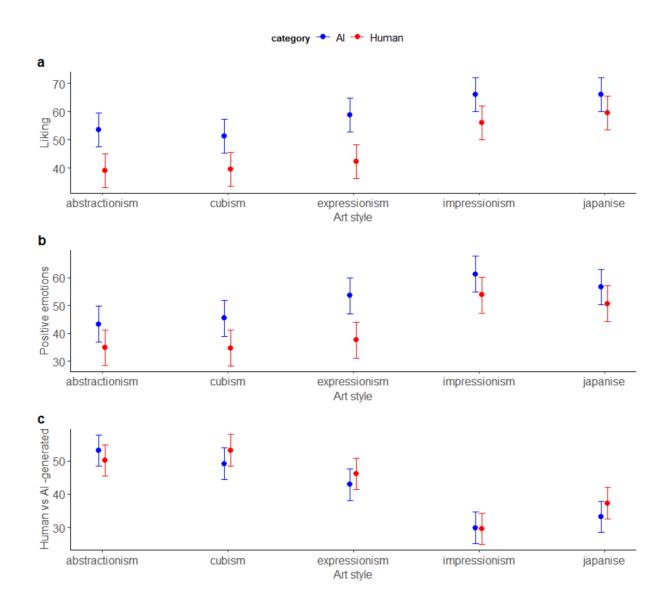
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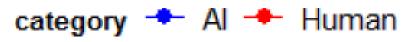
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- n = 206 respondents (Prolific)
- 40 art pieces (20 x human, 20 x AI-generated by Midjourney v4)
- Five art styles: Expressionism, Impressionism, Cubism, Abstract, and Traditional Japanese art
- Measurements: 0 100 sliding bar (0: low/most likely made by human; 100: high/most likely made by AI)
- Integration of several personality variables (e.g., Big-Five, Empathy, Creative Self)

## Science I: Identification and evaluation of AI-generated art





# Source: Horton et al. (2023).

### Science II: Booster of perceived human creativity by AI





- N = 798 participants
- Two art pieces (one human and one Al-generated)
- Experiment: 1 group: both art pieces are labelled as human, 2 group: first painting is labelled as AI, the second as human; 3 group: first painting is labelled as human, the second as AI
- Dependent variables: creativity (multi-item scale), estimated value, estimated time to produce the art piece

## Source: Horton et al. (2023).

## Science II: Booster of perceived human creativity by AI

	Control group	Experimental groups			
First painting	Human label	Al-anchor	Human-anchor		
Second painting	Human label	Human label	Al label		
Creative	4.62	4.85*	4.24**		
Monetary value	148.35	152.99	111.74***		
Estimated time to produce	36.02	32.60	18.29***		
*p < 0.05, **p < 0.01, ***p < 0.001.					

#### Use Case VI: Al Art magazine



mimiloukumiko.ai, 2024.

Julia Hermine Ulmer

azine

Art

Nullnummer, Number Zero

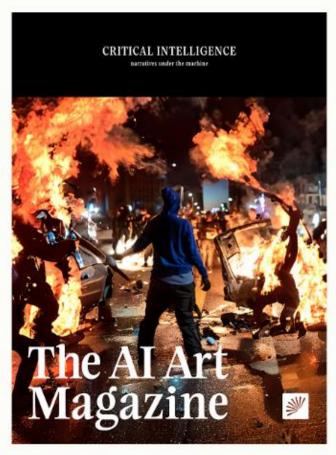




Emi Kusano, Synthetic Reflection, 2023.

Emi Kusano

Number 1



Kevin Abosch, Civics #60, 2023.

Kevin Abosch

Number 2

## **Agenda**

- Augmented Creativity: Human + Al
- Creativity in Brand Management
- Creativity in Research
- Creativity in the Arts
- Reflections

## Transparency dilemma, algorithm aversion, and blurring boundaries

## **AI Transparency Dilemma**

Welcome to your learning journey

Al will evaluate your test performance

Welcome to your learning journey

A teaching assistant will evaluate your test performance

Welcome to your learning journey

After your test, we will send you your results.

Trust in teacher

2.48

Trust in teacher

2.87

Trust in teacher

2.96

Source : Schilke/Reimann (2025)

n = 195 students

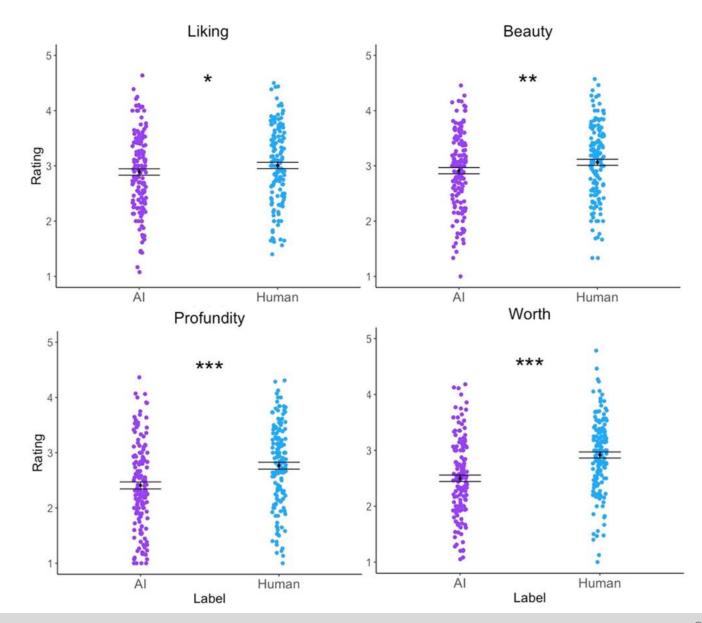
## Algorithm aversion in artworks





- 30 artworks from the platform *Artbreeder*
- 150 clickworker (*Amazon MTurks*)
- Two labels: human or Al-created
- Evaluation criteria: Liking, Beauty, Profundity, and Worth

## Algorithm aversion in artworks



## Al or human? - F L A M I N G O N E by Miles Astray (2022)



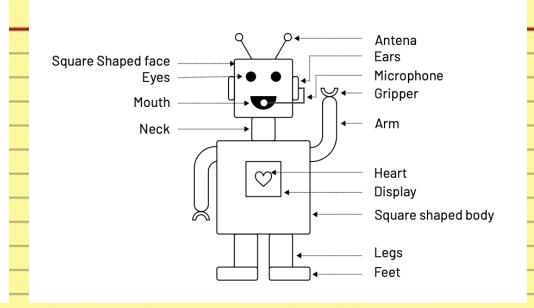
Source: Clark (2024).

# Design Fixation and "more of the same"

# Source: Wadinambiarachchi et al. (2024)

## **Design fixation**

"Your task is to design a character we plan to use as an avatar for a chatbot. This chatbot is kind, loving, caring, and intelligent. It can assist you in solving your problems and is always there for you to talk to whenever you need to. So, imagine that you are conversing with this chatbot in real life and then come up with as many sketches as possible. Remember, you can annotate the sketch if you need to explain more about your design. And please always number each sketch you draw in the order you come up with them."

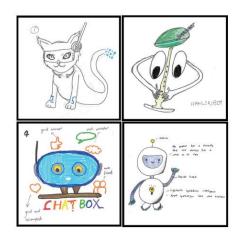


- n = 60 students
- 3 groups: no support, Google image search, AI (Midjourney)
- Calculation of the Design Fixation Score (DFS) (similarity between the sketches and the presented example on a feature basis)

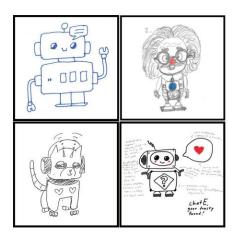
## **Design fixation**



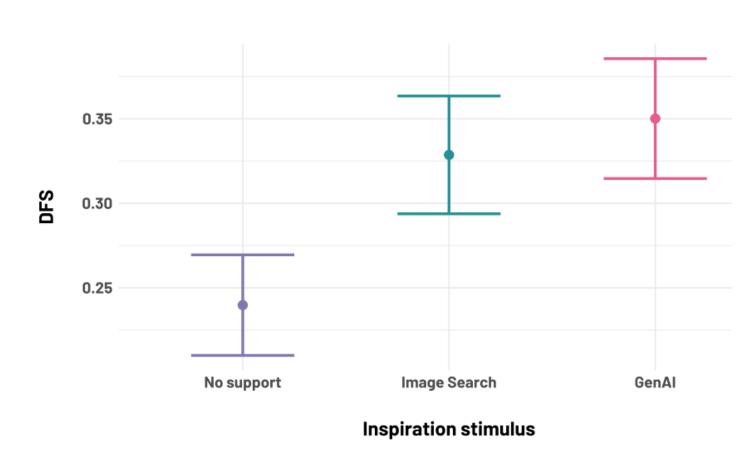




(B) Image search

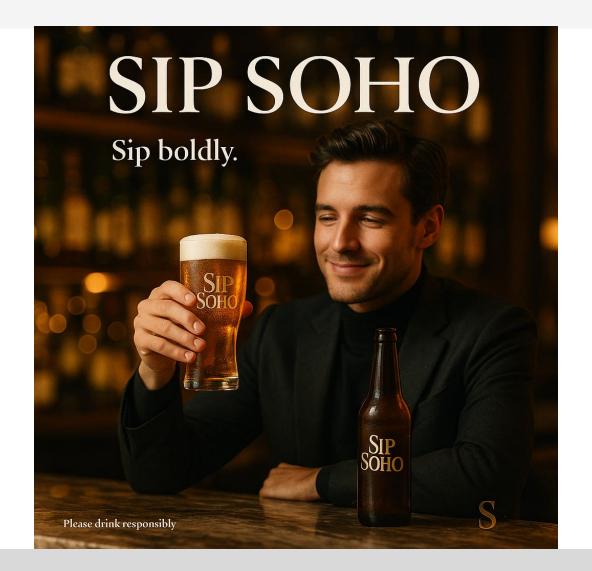


(C) GenAl

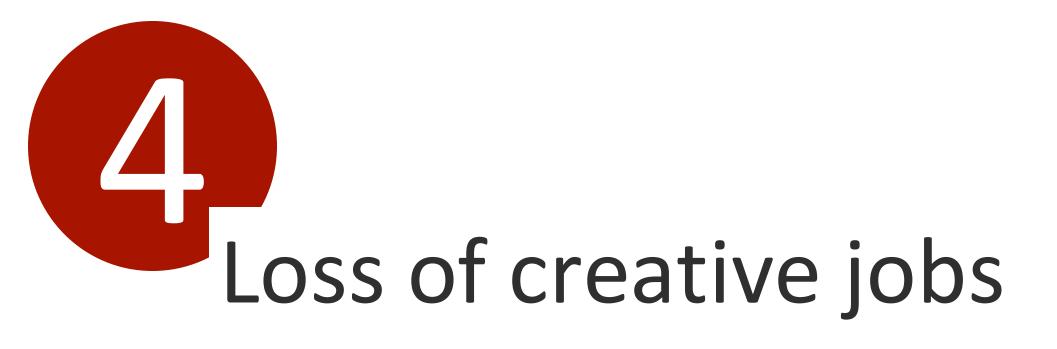




Please create an advertisement for the new craft beer brand Sip Soho. Show a beer drinker in an expensive bar.

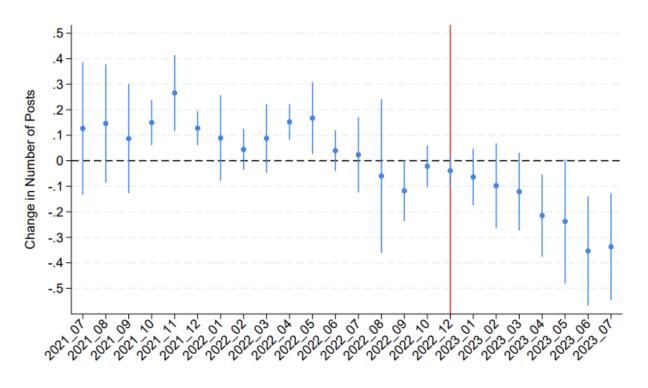




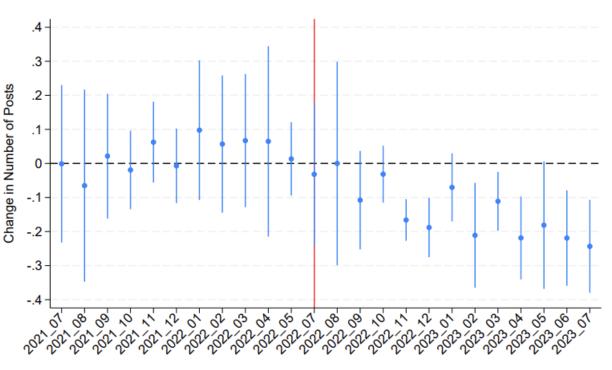


### Source : Demirci et al. (2024).

### Impact of GenAI on Online Freelancing Platforms



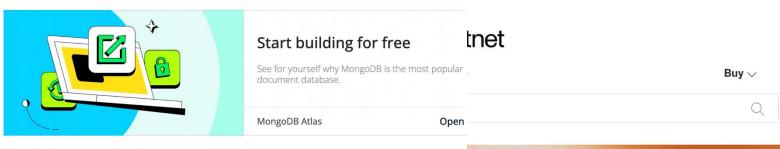
(a) ChatGPT



(b) Image-generating AI

## Intellectual property and legal concerns





NEXT GEN INVESTING

#### Billie Eilish, Nicki Minaj, Jon Bon Jovi and over 200 artists call for protections against "predatory use of AI"

Published Fri, Apr 5 2024-2:35 PM EDT

Art & Tech

Amaoko Boafo Is Among Thousands of Artists Condemning the 'Unjust' Use of Their Work to Train A.I.

Joel Shapiro, Amoako Boafo, and Lynn Goldsmith are among the thousands of creatives voicing their concerns in an open letter.



Anthropic agrees to pay \$1.5 billion to settle authors' copyright lawsuit

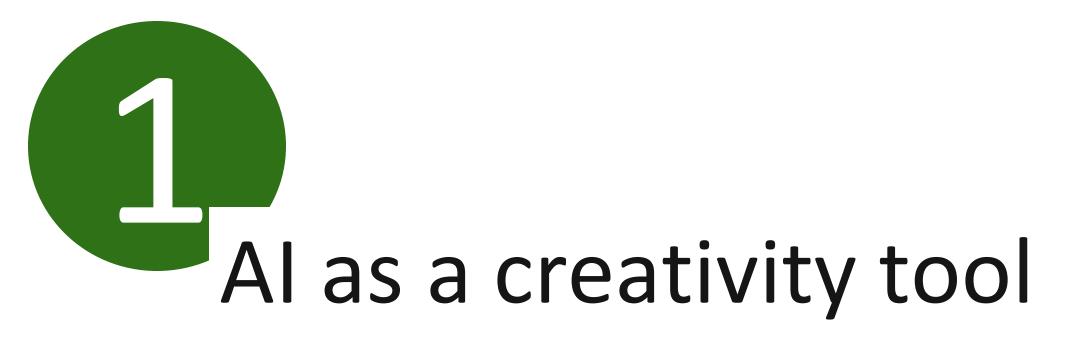
**CNBC** 

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ON





### Al as a creative tool, not an Agentic Al creativity

#### AI as Tool Condition

Thousands of people from all over the world upload images to crowdimage.net, a image-hosting website. These people know that artists will look at and use their images to make art.

Timmy is a technologist who creates an image manipulation software for people to use to make art. The software is called ImageBrush. The software is a tool that humans use to make art. The artist plans and envisions the artwork, and the software executes simple commands based on what the artist tells it to do.

Alice is an artist who uses Image-Brush to create particular kinds of images. Alice takes an existing image of a scene from the news (such as a beach or a forest) and adds a ghost to it using ImageBrush. This is how Alice decides to make the ghost: she goes to crowdimage.net and takes at all the images of people that have been uploaded to the platform. Then, She creates a composite of the people using Image-Brush. This makes a ghost-like figure, which Alice then puts into the scene.

Casey is a curator who is Alice's collaborator. Casey goes through many of the images that Alice created and selects the following artwork because Casey really likes it. Casey then brings it to an art auction, where it ends up being sold.

AI as Agent Condition

Thousands of people from all over the world upload images to crowdimage.net, a image-hosting website. These people know that artists will look at and use their images to make art.

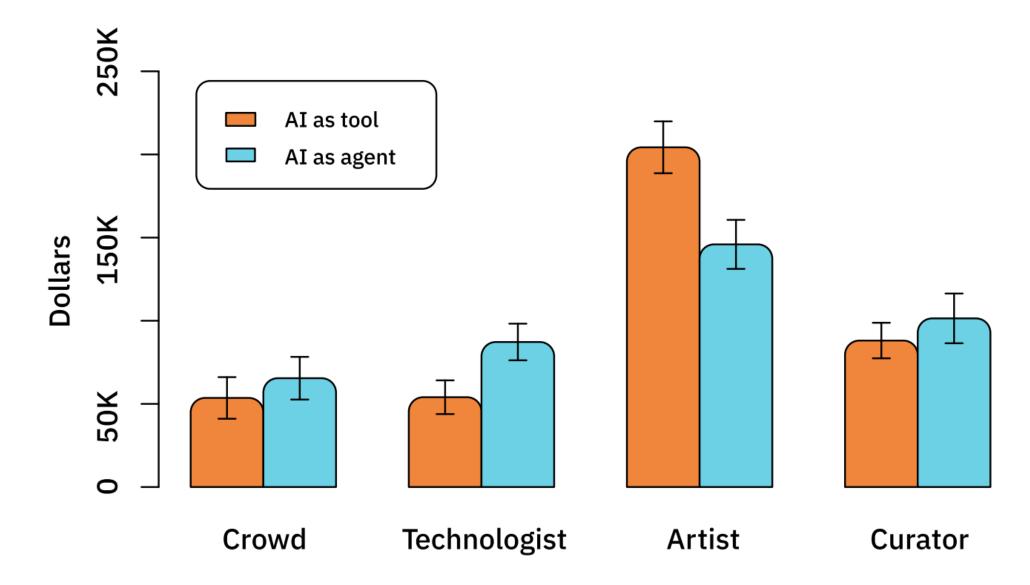
Timmy is a technologist who creates an image manipulation software for people to use to make art. The software is called SARA. SARA is a deep neural network that creatively plans and envisions new artworks, with minor help from an artist collaborator.

Alice is an artist who collaborates with SARA to create particular kinds of images. SARA takes an existing image of a scene from the news (such as a beach or a forest) and adds a ghost to it. This is how SARA decides to make the ghost: it goes to crowdimage.net and takes at all the images of people that have been uploaded to the platform. Then, it creates a composite of the people. This makes a ghost-like figure, which SARA then puts into the scene.

Casey is a curator who is SARA's collaborator. Casey goes through many of the images that SARA created and selects the following artwork because Casey really likes it. Casey then brings it to an art auction, where it ends up being sold.

- Experimental setting
- n = 320
- Responsibility for the artwork: five roles
- Allocation of 400.000 \$

### Al as a creative tool, not an Agentic Al creativity



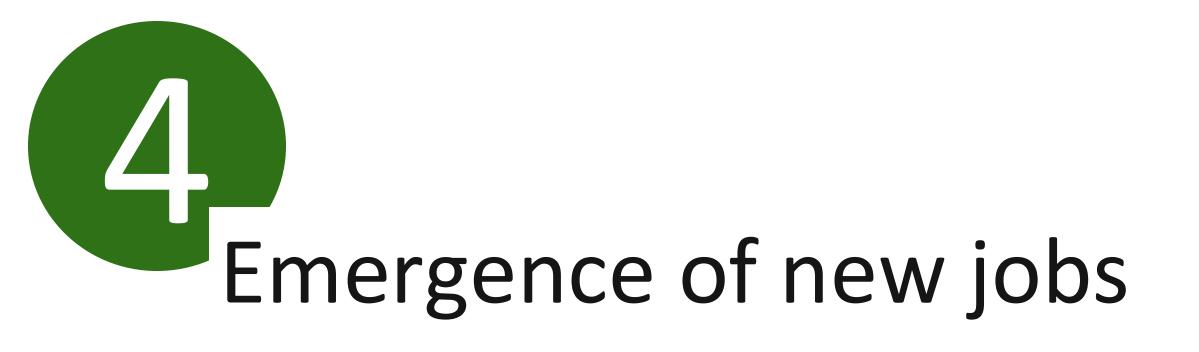
## Expansion of creative boundaries



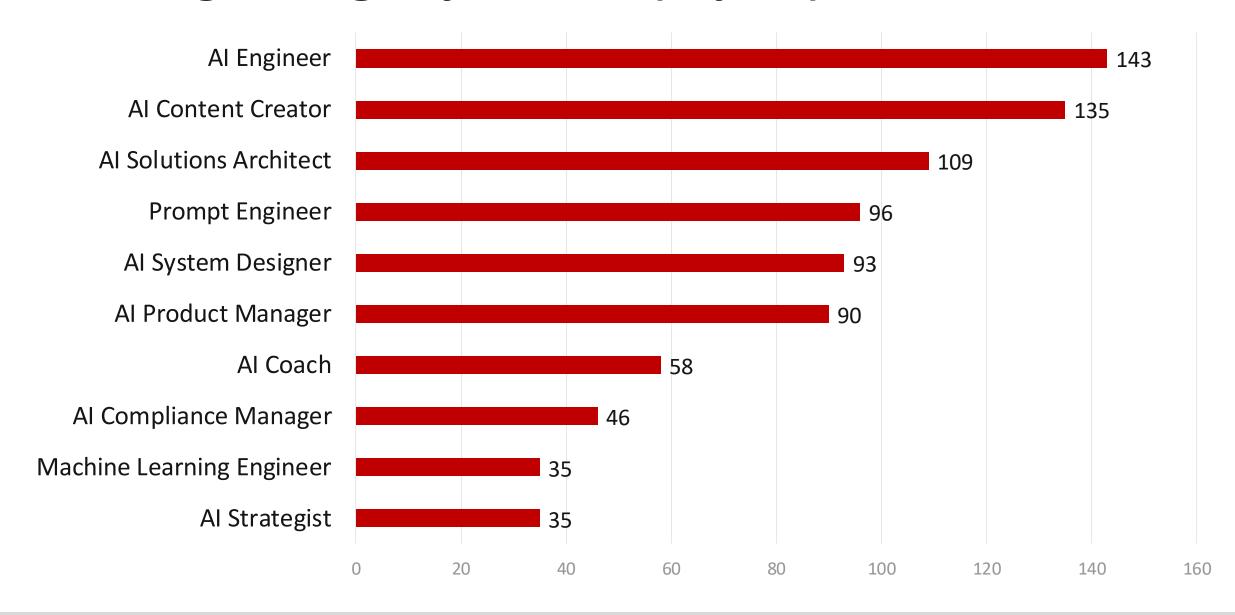
# Democratization of creativity



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### Fastest growing AI job titles (top 10)



### Thank you!



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Instagram: @prof.baumgarth/







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### **Appendix: Word lists for the DAT**

ChatGPT 5	ChatGPT 4o	Chat GPT 03	Chat GPT 04mini	Gemini 2.5 Flash	Claude Sonet 4	Baumgarth
Mountain	Volcano	Quasar	Fractal	Quantum	Crystalline	Trumpet
Justice	Justice	Fjord	Gallop	Ephemeral	Melancholy	Freedom
Banana	Banana	Photosynthesis	Nebula	Zealot	Seventeen	Dice
Whisper	Quantum	Serendipity	Oxymoron	Cacophony	Thunderclap	Profit
Algorithm	Melody	Gargantuan	Pachyderm	Quagmire	Devour	Wine
Dream	Ink	Silence	Quiver	Sonder	Microscopic	Clock
Brick	Despair	Cryptocurrency	Serendipity	Sanguine	Democracy	Grass
Galaxy	Algorithm	Onomatopoeia	Turbine	Xenolith	Fragrance	Nail
Perfume	Cactus	Xylophone	Vermillion	Jubilant	Velocity	Camera
Chaos	Crown	Zigzag	Waltz	Axiom	Whisper	Carpet

