Creativity in the age of AI

A conversation with
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CREATIVITY IN THE AGE OF AI

*Jeremy is Adjunct Professor of AI and Design Thinking at Stanford University. He is also a General Partner at Freespin Capital, a venture capital firm. With his Stanford colleague, Perry Klebahn, he co-authored **Ideaflow: The Only Business Metric That Matters** (2022). For over 12 years, he served as the Director of Executive Education at Stanford's renowned Hasso Plattner Institute of Design ("the d.school"), where nearly one million students of innovation worldwide took his courses. He's the host of the **Paint & Pipette: The Art & Science of Innovation** podcast, and co-host of the **Beyond the Prompt** podcast. His current research focuses on helping individuals and organizations accelerate their comfort and confidence in using generative AI (Gen AI).*

CREATIVITY IS AN INHERENT HUMAN QUALITY, WHICH EVERYONE SHARES

UNDERSTANDING CREATIVITY

Which aspects of creativity do you think are most misunderstood?

Jeremy Utley: The biggest myth about creativity is that it's a rare gift, possessed by only a select few. Creativity is an inherent human quality, which everyone shares. But some people practice using their creative faculties, while others do not. It's just like any other skill or muscle. It can be developed, strengthened, and refined through practice.

Can AI nurture creativity?

Jeremy Utley: Absolutely. AI can be a coach for almost anything. Need help with your golf swing? It can be a golf-swing coach. Self-esteem? It can help there, too. Creativity? Of course, it can be a creative coach. The key is realizing that, if you give an AI model a specific persona – a creativity expert, say – and then ask it

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to evaluate an idea, it can provide meaningful feedback that pushes your thinking, as well as generate alternative suggestions.
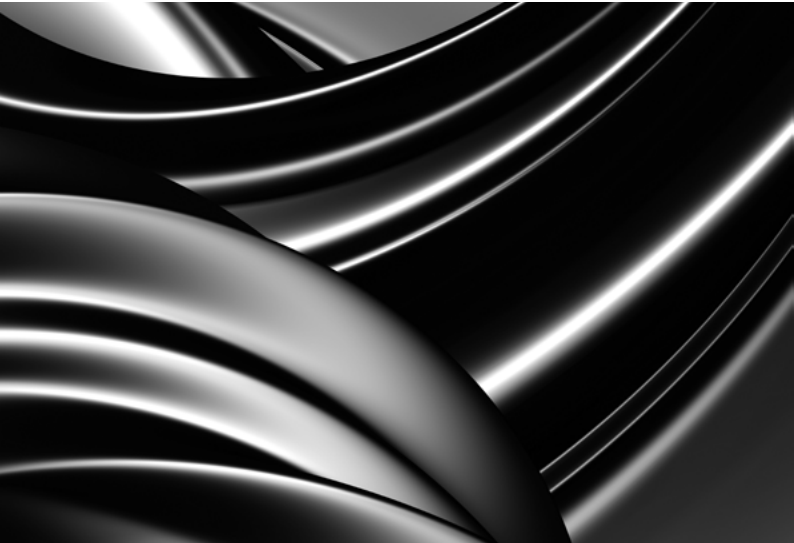
That's not fundamentally different from what we might expect from, say, a negotiation coach or a design strategist. It's a tool with vast capabilities – if you ask the right questions.

How would you define creativity in this AI-augmented world?

Jeremy Utley: One of my favorite definitions of creativity came from a seventh-grader in Ohio. Her teacher asked: "What is creativity?" and the girl wrote on a sticky note: "*Creativity is doing more than the first thing you think of.*" That's brilliant. From a cognitive science standpoint, it's incredibly accurate.

There's a well-documented human tendency called the "first idea bias," or what some refer to as "functional fixedness" or "cognitive closure." It means that, once we come up with some sort of solution, we often stop thinking. But there's no reason to believe the first solution is the best one. In fact, research shows that, if you think of 10 different solutions, the first is very unlikely to be the best.

This is where AI shines. If creativity is doing more than the first thing you think of, then it can push you to explore further. You can ask it, "Give me 10 other ideas," and it will keep going.

"Research shows that, if you think of 10 different solutions, the first is very unlikely to be the best"

Unlike humans, for whom ideation consumes energy, AI can generate alternatives effortlessly and quickly using analogy, lateral thinking, or combinatorial association. That's creative by definition.

Has the way in which your students approach creativity changed over the time you've been teaching?

Jeremy Utley: No. Humans are humans.

There may be new tools, new interfaces, but, fundamentally, the creative impulse is the same. What changes is how people express and channel that creativity, and how technology amplifies or limits it.

One major change is the uncertainty about the future. When I started teaching, around 15 years ago, students may not have known which specific job they would land in, but they had a pretty good idea of the range of jobs available.

Now, that's gone. Students say things like, "I don't even know what jobs are going to be there." That fundamental uncertainty is new.

So, when students ask, "How can I plan for an unstable future?" it's a completely justified question. The challenge now isn't just career planning. It's **creative planning** under uncertainty.

But in terms of their **approach to creativity**? No, I don't think it's fundamentally different.

WORKING WITH AI

Is it better to treat AI as a tool or a teammate?

Jeremy Utley: Teammate, without a doubt. It's about mindset. The way you treat a tool is fundamentally different from the way you treat a teammate. People sometimes ask me, "Should I say please and thank you to AI?" My answer is: What does it cost your humanity if you don't?

Saying please and thank you might cost a few more tokens or a few extra cents for OpenAI. But far more important is how it affects you. The way you approach the model reflects your humanity. And because the quality of your input directly influences the model's output, your tone and presence matter.

Bring your full self, your curiosity, your respect. That's the teammate approach. And it gets better results.

In one of your presentations, you touched on whether AI might increase or diminish creativity. Could you elaborate on that?

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AI often helps people get to "good enough" ideas very quickly. But that's more about efficiency than creativity. Unless the human consciously pushes the model for more, they won't unlock true creativity"

Jeremy Utley: AI has enormous potential to enhance human creativity. But our empirical research suggests that this potential is largely unrealized, mostly due to human cognitive biases.

We talked earlier about the tendency to fixate on first ideas. AI often helps people get to "good enough" ideas very quickly. But that's more about efficiency than creativity. Unless the human consciously pushes the model for more, they won't unlock true creativity.

So, would you say that AI is like a mirror of the user's ability?

Jeremy Utley: That's a perfect analogy. The AI model reflects what you bring to it. If you're an HR expert, and you approach the model with expert-level thinking, you'll get an expert response. If I come to the same model knowing nothing about HR, I'll get far less valuable output.

THE AI MODEL REFLECTS WHAT YOU BRING TO IT

AI reveals things to you it won't reveal to someone else. That's why I say the model's power is in its ability to match and extend the user's thinking. It doesn't replace your creativity, it amplifies it.

Let's begin with what you said about valuing quantity over quality during idea generation. How should someone structure their workflow when using AI to maximize creative output?

Jeremy Utley: Workflow will always vary, depending on the job to be done. One of the most important things is to **pose more than one question**. Seek more than one answer. Try more than one thing. That's one of the easiest ways to crystallize the core of innovation.

Often, people are seeking to address the wrong problem. If you ask only one question, and it's the wrong one, you're stuck. But if you ask more than one, you minimize that risk. That's where the breadth of ideas emerges. And then try more than one thing, because it keeps you from evaluating too early.

That mindset – of asking lots of questions and getting a range of answers – is fundamental. AI allows us to explore widely, without huge capital or time investment.

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How can people integrate AI into their daily working lives?

Jeremy Utley: One of the exercises I recommend is going to ChatGPT (or any large language model [LLM]) and saying something like:

"Hi, ChatGPT. I'd like you to play the role of a ChatGPT adviser. I'm looking for ways to use ChatGPT in my work. Would you, as a ChatGPT adviser, please interview me about my workflows, responsibilities, and KPIs until you have enough information to make two obvious and two non-obvious recommendations. Go ahead and begin the interview now."

That simple prompt unlocks a whole experience. The model will start interviewing you about your role. And what's interesting is, it's role-independent. It works whether you're an intern, a manager, or an executive.

The AI adapts. It will understand your tasks and generate suggestions based on context. Few people think to make this kind of prompt. But, once they do, they often go, "Wait, can it also teach me this?" And yes, it can.

"Unlike tools such as Excel or PowerPoint, which can't teach you how to use them, AI can teach you how to use AI"

Unlike tools such as Excel or PowerPoint, which can't teach you how to use them, AI *can* teach you how to use AI. That paradigm shifts how you think about learning. You're not just using it to complete tasks. You're also discovering how to partner with it. I like to call it a "double delivery" exercise. It delivers on your current objective, and it opens the door to deeper exploration.

Are there common mistakes people make when using AI for creative purposes?

Jeremy Utley: Yes. The biggest one? People don't give enough context.

I would recommend never prompting a model without at least 400 words of context. Most people say, "My average prompt is five words." Well, that's a Google search. You should go to Google for that.

If you want to work with an LLM, treat it like you would treat a new team member. Imagine if we were starting a job together and I turned to you and said, "Make social media strategy now." That's five words. And it's absurd, right? We would never treat a human colleague that way. But we do that with AI all the time. Then it gives us a poor response, and we conclude that it's not useful. But the truth is, we *give more context to interns* than we do to AI. That's the mistake.

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You need to spend some time establishing context. What's our brand voice? What's our objective? What's the tone? Which market are we in?

> "I cannot imagine a world where AI is not an equal partner in the ideation process"

LOOKING FORWARD

What does the future of ideation look like?

Jeremy Utley: I cannot imagine a world where AI is not an **equal partner** in the ideation process. It's going to sit at the table as a member of creative teams. Teams will come to see it as a creative partner, a trusted colleague who always has new ideas, who pushes your thinking, who helps you see blind spots.

If you could leave today's leaders with one mindset shift to thrive in this AI-powered world, what would it be?

Jeremy Utley: The shift is this: **You are not done learning AI. You've just begun**.

There's a human tendency to want to check off the box. "I've learned that." But when it comes to AI, that doesn't work. A portion of your attention, **for the rest of your life**, needs to be devoted to becoming a better collaborator with AI.

It's like health. You don't stay fit because you ran a marathon five years ago. You stay fit because of what you ate last week, how you slept last night, how much you moved today.

It's the same with AI. You can't say, "I took an AI course in 2023." The real question is: Have you experimented with AI in the past two weeks? Are you learning, adapting, exploring?

That's how I think about it. To stay effective, you need **continuous experimentation**. If you're not on a pathway of exploration, you're going to become obsolete.

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