



The Meaning Company

AI is an Opportunity. The Problem is IA.

By: James Forr, Head of Insights
Olson Zaltman

Introduction

Marketing has never had more data. And yet, somehow, it has never felt harder to say something true about the people you're trying to reach. Budgets are shrinking, headcounts are thinning, and it feels like our collective influence on strategic decision-making is fading. And somewhere in the sprint from brief to campaign, the most important question, "What do people actually want?", keeps getting skipped.

It is tempting—and timely—to point the finger at artificial intelligence, but that would not be fair. The crisis stems not from AI, but from IA: Insight Atrophy.

IA is the gradual erosion of the imagination, curiosity, and rigor that real insights require. Let's consider the results of a recent Cannes Lions survey of 1,000 marketers and creatives, which reveals that more than half of brands rate their ability to develop high-quality insights as "poor" or "very poor." And the most cited barrier? A lack of clarity on what actually constitutes a quality insight. That didn't start with AI.

AI is already transforming our field in powerful and promising ways—spotting patterns, speeding up workflows, generating outputs that look impressively polished. And, yes, we will see more of that. However, as powerful as AI is, it is not all-powerful. It doesn't dream, get hunches, ask inventive questions, feel the room, or read between the lines. That is powerful stuff, too, and that is uniquely human turf.

This paper does not frame AI as the enemy. Rather, it argues that we should think of AI as a spur to our collective flank that drives us in a better direction. A reason to stop coasting on surface-level data and start doing the deeper work that AI cannot replicate. For marketers, this is a re-definition of what good looks like: not more information, but more meaning.

The brands that will win aren't the ones who adopt AI faster. They're the ones who use AI as a tool while staying fiercely committed to understanding what their consumers are actually thinking, feeling, and wanting beneath the surface.

In short, if we hope to future-proof ourselves and thrive alongside AI, we must first confront the real enemy—IA.

Our current reality

Technological breakthroughs historically make the difficult easy, the expensive cheap, and the slow fast. That eventually forces everyone in the category either to find a new way to offer value or be left behind.

Many ad agencies have left themselves vulnerable to AI by producing an abundance of uninspiring and ineffective work. Creative produced by AI may not be brilliant, but if a brand can get mediocre work delivered instantly and cheaply, it probably won't pay more for differently mediocre work delivered slowly and expensively.

Marketers both on the client and vendor side face a similar reckoning. The very term “insight” suggests the outcome of a transformational process where the hidden becomes visible. The term suggests an element of surprise. It suggests the resolution of an important tension. It suggests an element of wonder that will inspire deeper thinking.

However, much of what passes for consumer insight is either confirmatory, too narrow, or too shallow to be really considered an insight, by the truest definition of the word. It is not necessarily wrong, it's just not fresh or interesting because it sits on the surface. AI can replicate that kind of research cheaply, quickly, and at scale.

We are capable of better, but the insights function in most organizations is under pressure to move fast and spend less. That pressure pinches our thinking. We end up with less creativity, less imagination, less experimentation. Less use of the talents that separate human from machine.

AI didn't cause the problem; it just revealed how extensively our insight atrophy had already spread, which is causing the market research discipline as we know it to slip into critical condition.

But we should treat AI as a call to do better and offer heightened value. That means raising the bar and demanding a new way of thinking about conducting, analyzing, and implementing research. At each of those levels, we must embrace our human superpower—the ability to read between the lines and the daring required to do so.

That new way of thinking begins at the beginning. **Let's start there.**

Rethinking the research process

Gathering the data. Think about someone who loves you. Someone who would die for you. Someone who couldn't bear life without you. It might be a partner, a spouse, a child, a parent, or anyone else.

How do you know they love you?

No, I mean how do you know they love you?

They have probably said the words, "I love you," but words are easy to say. How do you know they love you? How could they prove it? How could you prove it?

Is it how often they say the words? Is it how much money they spend on you? Is it how much time they spend with you? It's all of those things, yet none of those things.

You can't prove love. Still, when you know, you know. It's a look, a touch, an inside joke, a shared history, and a thousand other intangible experiences. The evidence, such as it is, is almost entirely unspoken, but we feel it in our body and our mind.

This is one major skill that separates humans from AI—our unique ability to listen for what we can't hear and bear witness to what we can't see. To be human is to feel.

As humans, we read between the lines because we can sense and feel. Yet much of market research adheres oh-so-rigidly to the lines: surveys that track self-reported behavior and beliefs, focus groups in which consumers get 5-10 minutes each to weigh in on a set of predetermined questions, or traditional IDIs in which moderators rattle off a series of scripted prompts with limited space for deeper exploration.

AI can often replace those forms of research, either because they involve straightforward fact-gathering or, in the case of focus groups, because they are shallow and not especially insightful. AI struggles, however, to replace a genuine human-to-human conversation in which interviewers listen not just to what is said but also to what isn't said. Between the cracks of the dialogue often lie profound insights that a client has never considered.

According to one estimate, 65 percent of communication in a conversation is non-verbal, much of it in the form of paralanguage. These are our intonations, rate of speech, facial expressions, and gestures. You won't find them in a written transcript but a good interviewer is tuned into them.

In other words, a respondent who yawns and mutters, “That was a good ad,” likely means something different than the next participant who points at the screen and exclaims, “THAT was a GOOD ad!”

Text-based AI interview platforms that claim to understand the heart of consumers miss this entirely. Moreover, research suggests that text responses are shorter and less emotional than off-the-cuff spoken responses. When people respond to a market research question in writing, they are reflective and deliberative, and thus they censor themselves, which is precisely what we don’t want people to do. Even AI moderators who invite respondents to answer questions verbally may struggle to interpret and follow up appropriately when the paralinguistic is saying something different than the words.

Furthermore, another talent that makes us uniquely human is our ability to tell ourselves stories about things that haven’t happened. When we are watching a movie or reading a novel, we constantly go beyond the page or the screen and ask ourselves, “What’s next? What would make sense? Where is this all headed?” Such questions, unique to us as readers or viewers, drive us on to the next page or scene deepening our engagement with a story.

This is what it means to have intuition, a trait that is hard-wired in us and critical to evolution. Our ancestors who survived in the wild constantly had to make quick decisions with little information—and those decisions had to be largely accurate. Are those footfalls friend or foe? Is that a vine or a snake? Without intuition, we wouldn’t be here.

Similarly, in any conversation, our antennae vibrate when our interlocutors drop little breadcrumbs that imply, “There is more than what I am saying here.”

The best qualitative interviewers, when they aren’t handcuffed by a script, follow those trails with an eye toward avoiding IA. They use intuition to anticipate what a respondent may be concealing, and then decide whether and how to formulate a question that could bring the person’s true meaning to the surface. Because we are human, most of us find this process as natural as walking; we do it whether we want it to or not, and it is all quite unconscious.

For example, in a recent food and beverage study focused on our client’s brand, a consumer told us, “You have to be sure you are eating healthy these days.” Although we could have—and later did—explore the importance of eating healthy, the most intriguing part of that statement was the phrase “these days.”

When we asked, “What do you mean ‘these days?’” the respondent unleashed a cascade of opinions about reckless corporations tainting our food with chemicals; the FDA sleeping on the job; a rapacious health care system; and sheep-brained American consumers allowing “big food” to lure them into an early grave.

Although this wasn’t a perspective we had encountered much in previous food and beverage studies, we started hearing echoes of it everywhere in innocuous sounding phrases such as, “You have to be mindful,” “Not everyone pays attention,” and “It’s important to eat real food” that were pregnant with meaning. And it makes sense, given the increasing suspicion about vaccines, fluoride in water, and GMO food, and a highly publicized campaign by U.S. Secretary of Health and Human Services Robert F. Kennedy Jr. against ultra-processed food.

In a traditional focus group or survey, these phrases would have been explored at a cursory level, at best, and probably not at all. An AI interviewer might not have “known” to follow-up because it is not a human living in our culture and lacks intuition. It might have followed up if it had been trained to do so, but you can’t train AI to follow up on a topic you can’t foresee.

But our human intuition caught it. And that instinct led us to a rich, differentiating insight that our client had not heard in such depth in all their prior research. Intuition was the antidote to IA.

Catching an insight is only part of the job. The next phase is knowing what it all means and what to do with it. That’s where another uniquely human strength comes in: interpretation.

Analyzing the data. The so-called “replication crisis” in behavioral science has made researchers more transparent and rigorous about their methodologies. But unlike research in the physical sciences, replication in behavioral science will always be tricky.

In the hard sciences, variables can be isolated and examined systematically. Atoms, cells, enzymes, and cold fronts have been studied in this way for decades, and their behavior is relatively predictable.

Humans, though, are a mess. Our thoughts, feelings, and behaviors can be influenced by anything and everything: the color of the walls, the temperature, the day of the week, the song we heard this morning, what our parents were like. We might think we enjoy that brand of soda because it tastes good, but the real reason might be that we drank it on the front porch with our best friend one sunny day after school in second grade.

Not only are good market researchers attuned to these unconscious influences when gathering data, but they are also looking for them during analysis. Research designed to understand the surface level of what people think is at risk of being replaced by AI. But research that explores why they think the way they do still requires a human touch because AI doesn't see the world in the same way that a human does.

A good human analyst looks for what isn't there. This often requires breaking familiar patterns of thinking. Schools teach us to think using what is known as symbolic logic: $5 > 4$, therefore $4 < 5$. That logic serves us well, but it can lead to IA because too often it oversimplifies.

Symbolic logic is effective in identifying facts, probabilities, and associations, but it is ill-suited to look deeper to explore causes and the nature of their associations. People say they hate airport delays. And they do. But what they really hate is feeling bored and out of control. It takes an imaginative human mind to reframe the stated problem, and then use that new perspective to address the real concerns that are below the surface.

AI, in theory, has been trained to think like a human, but its flaw is that its trainers are, indeed, human, and we don't truly understand how our own thinking works because the mechanisms are largely unconscious. In the end, AI thinks the way we think we think, which isn't really how we think at all.

To be more precise, AI does not literally "think." A large language model (LLM) may offer tasty morsels that suggest thinking—phrases like, "A-ha!" or "I see" or "But wait." But this is just the LLM parroting human language, as it has been trained to do, to provide a better user experience. We should not suspend disbelief and infer that there is a mind behind the curtain.

In our research at Olson Zaltman, we look closely at the metaphoric language that consumers use and then interpret it using context and intuition. AI can be trained to identify metaphors and even organize them in a rudimentary way. It even can be taught to spot subtle metaphors that most people wouldn't even recognize as metaphors. But it struggles to take the next step and interpret their significance, and the true value of metaphors is in what they say about the meaning of an experience.

For example, in a study about rosacea, a skin condition that causes redness in the cheeks, focus groups and quantitative research had suggested that the condition was no big deal. It didn't affect people's lives in any significant way—or so they said.

However, when we explored the topic on a more metaphorical level, we heard this:

- **“It damages you.”**
- **“It turns me into a big, red ball you would hang on a Christmas tree.”**
- **“It consumes your whole face.”**
- **“It’s agonizing to look in a mirror.”**
- **“It is emotionally scarring.”**
- **“You want to hide.”**
- **“It engulfs you.”**
- **“It destroys your self image.”**
- **“I had a flare-up.”**
- **“No one knows what sparked it.”**
- **“Your face feels hot.”**

Training an LLM to recognize all these metaphors, some of which we wouldn’t consciously think about as metaphors, is challenging enough. But training AI to understand that these metaphors are important, to prioritize them out of the thousands that arose in more than 40 hours of interviews, to connect them meaningfully, and to extract their strategic value? That still requires a human who can read between the lines and apply experience, judgment, and instinct, capacities that AI cannot replicate. Even when AI mimics intuitive leaps, it lacks the lived, embodied experience and emotional stakes that make human intuition meaningful.

So, yes, an LLM could identify key themes like shame, trauma, powerlessness, chaos, and alienation in the language above, but that isn’t enough. It would struggle, on its own, to interpret those themes and identify an unconscious emotional story that ties them together.

In this case, the story is that rosacea patients share the psychology of burn victims. Further desk research revealed that the psychological profile of severe burn victims, although their situation is much more severe, maps closely onto the felt experience of the rosacea patient.

Identifying that pattern, shaping it into a story, and then explaining what it means for a client’s brand is the kind of interpretive meaning-making work that AI cannot do because AI doesn’t think in stories. It can generate story-shaped content using pre-learned templates and tropes, but those are not stories in the truest sense. Structurally, the output may look like a story, but it won’t reveal important unconscious truths that are hidden within the data.

Even when we uncover a powerful insight, the work isn't done. Clients next need to move from insight to action.

Applying the data. Like a Bob Ross painting, the innovation landscape is sprinkled with happy accidents.

- The inspiration for Velcro struck when an engineer grew fascinated with how burrs from plants attached themselves to his dog's fur.
- Gutenberg couldn't have envisioned the printing press had he not been familiar with the wine press.
- A naval engineer knocked a spring off a shelf, became intrigued by how it bounced, and thus begat the Slinky.

In a working paper, Teppo Felin, Mari Sako, and Jessica Hullman argue that AI struggles most with what they call actor-specific decisions—ones that are forward-looking and idiosyncratic, and require reasoning and some degree of experimentation or intervention. Breakthrough innovations or new business strategies, and brand positioning are all actor-specific decisions.

Put another way, all new ideas start with someone saying, "What the heck?"

- **What the heck just happened?**
- **What the heck could happen?**
- **What the heck was I thinking?**
- **What the heck were they thinking?**
- **What the heck, let's try it!**

It's a mindset of curiosity driven wonder.

AI is a doer, not a wonderer. It doesn't imagine. It does things right; it doesn't have constructive accidents.

That makes it exceptional at solving problems and puzzles. It can beat you at chess. It can outperform you on the LSAT. More materially, it will continue to help advance breakthroughs in science because it can process vast data sets and generate complex, data-based predictions.

But it can't look between the lines and wonder, "What the heck?" Even in the hard sciences, AI requires a skilled human hand on the wheel; it doesn't wake up in the

morning and declare, “Let’s figure out a way to correct bias in weather prediction models.” A person has to ask the right questions, define the problem, and provide the data before AI can conjure its magic.

One challenge AI faces in creatively applying market research insights is that it cannot engage in counterfactual reasoning, which is the ability to imagine alternate versions of events that didn’t happen. That also renders it incapable of gazing into the future and simulating unique, unknown outcomes.

Without that talent, AI can still make predictions based on existing data, but it can’t forecast something that hasn’t yet been imagined. For instance, AI has been shown to help venture capitalists avoid big mistakes and rack up small wins, but it also consistently misses the crazy, high-risk, high-reward plays that offer VCs their greatest returns.

Another challenge for AI is that it doesn’t learn from itself or from its own missteps. Ernest Hemingway put it so eloquently, “The first draft of anything is shit.” Breakthroughs usually come from swimming through the shit—bashing half-formed ideas together, alone or with others; looking back at the past; looking ahead at the future; imagining what could go right; and imagining what could go terribly wrong.

AI’s gears don’t turn that way. Its first draft of anything is...not bad. It can produce answers and solutions that are true to the data. But it doesn’t refine its output autonomously, so it can’t push itself to make its “not bad” solution better.

On the surface, it may appear that AI learns from itself. LLMs, for instance, have become better at writing. But they didn’t get better at writing by critiquing their early work or pondering sentence structure and verb choice. They became better because humans made them better through continued training on good writing crafted by other humans.

In other words, AI sticks to the data, but the best branding ideas and innovations have arisen from people who dare to go against the data and use their imagination to create mental stories about what a new world could look like.

AI never could have dreamed up an iconic brand such as Dyson, Red Bull, or Liquid Death because there was nothing in historic marketplace data that suggested these products would be successful. And yet, the people behind these brands trusted their informed intuition—shaped by their understanding of culture, human needs and human emotions—to lead them successfully into completely virgin territory.

Some dumb ideas, it turns out, are really smart, but AI doesn't traffic in dumb ideas. Of course, sometimes dumb ideas are just dumb. Or, if not dumb, just poor ideas for their time. For every iPhone, there is an Apple Newton. For every Prius, a DeLorean. Human judgment is not infallible. However, brands are always looking for something new, whether that is white space in the market or simply a fresh way to stay emotionally relevant. Felin, Sako, and Hullman write, "Strategy, at its core, is about outliers and extremes—exceptional firms making idiosyncratic bets that cannot be derived from industry averages. This is precisely why many of the most successful strategies have gone against prevailing frameworks."

AI can support that pursuit, but it requires a human to take it by the hand and lead it outside IA's safe, comfortable dimension of the known.

And ultimately, it is the human element that offers strategic advantage. The more powerful AI becomes, the more essential it is that we show up fully human because strategy begins where the data ends.

So what does it mean?

As Miles Davis famously advised young bucks on the jazz scene: "Don't play what's there, play what's not there."

AI is exceptional at playing what is there, and it's getting better all the time. It is an invaluable tool for market researchers and insight professionals that is already helping us do our jobs more efficiently and think differently about what we do. It can play every note we can and more.

But only we have the innate ability to play what isn't there—through imagination, storytelling, intuition, and a feel for culture and emotion.

That requires asking better questions, thinking more broadly about marketing challenges, and focusing less on fact-gathering and re-examinations of the obvious and more on uncovering and embracing true insights—the eureka moments, the things that make you go, "Hmmm...."

In response to the argument that AI can't see the unseeable or hear the unheard, one might argue, "Most people struggle with that, too." True. But that's exactly the point. That's the call to action.

Classic advice to new hires is, “Find something your colleagues are bad at and then get really good at it.” Do that, and not only do you learn a new skill but you make yourself indispensable.

We should approach AI the same way. Look at it as an exceptionally talented colleague, one who is awesome in the most literal sense of that word, but one with important limitations and blind spots.

AI can't feel, and therefore it can't read between the lines to fully explore and interpret meaning. We can, but often don't. We might be in a corporate culture that doesn't support curiosity and wonder. Maybe we feel shy about asking the kinds of “stupid questions” that are deceptively insightful. Perhaps our calendars are so crammed that we don't have the space to sit still and just think. These are the conditions that lead organizations to develop IA—insight atrophy. But over-relying on AI at the expense of the human perspective will just unleash a new strain of IA.

Finally, this is also an exhortation for the insights function and research agencies to use AI and the changes it has wrought as a reason to take ourselves more seriously.

A true profession, like law or medicine or architecture, operate within a shared framework of standards, precedents, and norms. A physician practicing with only the diagnostic tools and treatments of the 1950s would lose her license. Yet, within that structure, creativity and innovative thinking can flourish.

Marketing doesn't behave like a profession because there are no standards. Too many of us flitter willy-nilly from one methodology to another or grasp desperately at ideas without grounding our choices in a rigorous understanding of the science behind human behavior and decision making.

In summary, here are three big things we can do to avoid IA:

- When **gathering the data**, unleash your curiosity. Think about what the unspoken drivers of consumer behavior might be. Listen for the subtle signs that consumers flash that tell you there is more here if you think to look.
- When **analyzing the data**, embrace the mess. The question we want to answer is not always the question we should ask. People can tell us what they feel, but they can't always tell us why, and that's usually the critical part. Consumers can hint at it and drop clues, but like a detective at a crime scene, it is the researcher's job to interpret those clues and make meaning.
- When **applying the data**, wonder harder. Make it OK to ask, "What the heck?" Sometimes true insights feel scary; we may want to turn our heads and limit ourselves to ideas that feel safe. But safe creative is invisible creative. Safe innovations aren't innovations at all. Big, new ideas are a little risky, but it is even riskier to spend a lot of money on a nice, safe little idea no one is going to notice.

Just as humans train AI, we need to continue to train ourselves to do what AI can't. The other long-term option, unfortunately, is extinction. But if we root ourselves in the science of our work and look for the why behind the what, we will give ourselves the stability—and the freedom—to bring deeper value to the clients, brands, and organizations we serve. AI may run the models, but we can still write the stories.

Sources

Alexander, Luna. "Nonverbal Cue Analysis in Video Interviews." (2025). https://www.researchgate.net/profile/Luna-Alexandra/publication/392404491_Nonverbal_Cue_Analysis_in_Video_Interviews/links/6840f2bf8a76251f22eb8af6/Nonverbal-Cue-Analysis-in-Video-Interviews.pdf.

ARC Prize. "The ARC Prize." Accessed June 22, 2025. <https://arcprize.org/arc-agi>.

Babar, Zia. "Evolution of Symbolic AI: From Foundational Theories to Contemporary Advances." Medium, June 11, 2024. <https://medium.com/@zbabar/evolution-of-symbolic-ai-from-foundational-theories-to-contemporary-advances-5ef74b179fa9>.

Bangia, Ajay, Rollo McIntyre, and Jim Legg, "Empathy or Emptiness? Unravelling the Impact of AI on Human Connection in Qualitative Research," WARC, 2024, <https://www.warc.com/content/article/empathy-or-emptiness-unravelling-the-impact-of-ai-on-human-connection-in-qualitative-research/157973>.

Berger, Jonah, Matthew D. Rocklage, and Grant Packard. "Expression Modalities: How Speaking Versus Writing Shapes Word of Mouth." Journal of Consumer Research 49, no. 3 (2022): 389-408. http://lexicalsuite.com/papers/EL_Modality.pdf

Bonelli, Maxime. Data-Driven Investors. SSRN Working Paper, revised May 25, 2025. <https://ssrn.com/abstract=4362173>.

Cannes Lions, State of Creativity 2025: A Call for Confidence, LoveTheWork.com, April 30, 2025, <https://www.lovethework.com/reports-rankings/reports/4RqhSyLpbzZMq0aa6hACuG>.

Catalini, Christian, Jane Wu, and Kevin Zhang. "What Gets Measured, AI Will Automate." Harvard Business Review, June 14, 2025. <https://hbr.org/2025/06/what-gets-measured-ai-will-automate>.

Clark, Cynthia, Neal Strudler, and Karen Grove. "Comparing Asynchronous and Synchronous Video versus Text-Based Discussions in an Online Teacher Education Course." Online Learning 19, no. 3 (2015): 48-69. <https://doi.org/10.24059/olj.v19i3.668>.

Clarke, Maggie. "We Tried ChatGPT's Dating Advice. Here's How It Went." Futurism, February 13, 2024. <https://futurism.com/chatgpt-dating-advice-results>.

Dickson, Ben. "Why We Misinterpret LLM 'Reasoning.'" TechTalks, June 16, 2025. <https://bdtechtalks.com/2025/06/16/why-we-misinterpret-llm-reasoning/>.

Felin, Teppo, Mari Sako, and Jessica Hullman. Artificial Intelligence and Actor-Specific Decisions. SSRN Working Paper, posted June 2, 2025; last revised June 8, 2025. <https://ssrn.com/abstract=5279401>.

Fletcher, Angus. "Why Computer AI Will Never Do What We Imagine It Can." Narrative 30, no. 1 (2022): 114-137. https://www.angusfletcher.co/s/Narrative_301.pdf

Fletcher, Angus and Mike Benveniste. Narrative Creativity: An Introduction to How and Why. Elements in Creativity and Imagination. Cambridge: Cambridge University Press, 2025.

Hern, Alex. "Apple's AI Ambitions Questioned after Study Finds Tools 'Collapse' under Pressure." The Guardian, June 9, 2025. <https://www.theguardian.com/technology/2025/jun/09/apple-artificial-intelligence-ai-study-collapse>.

Kambhampati, Subbarao, Kaya Stechly, Karthik Valmeekam, Lucas Saldyt, Siddhant Bhambri, Vardhan Palod, Atharva Gundawar, Soumya Rani Samineni, Durgesh Kalwar, and Upasana Biswas. 2025. Stop Anthropomorphizing Intermediate Tokens as Reasoning/Thinking Traces! <https://arxiv.org/abs/2405.09555>.

Lai, Natalie. "Harnessing AI for Qualitative Interviews." Discovery at Nesta (Medium), August 1, 2024. <https://medium.com/discovery-at-nesta/harnessing-ai-for-qualitative-interviews-76244ed992c6>.

McQuater, Kate. "Lions Report Finds Lack of Quality Insight Hampering Advertising Creativity," Research Live, May 6, 2025, <https://www.research-live.com/article/news/lions-report-finds-lack-of-quality-insight-hampering-advertising-creativity/id/5138623>.

National Academies of Sciences, Engineering, and Medicine. "How AI Is Shaping Scientific Discovery." National Academies, November 2023. <https://www.nationalacademies.org/news/2023/11/how-ai-is-shaping-scientific-discovery>.

Neumeier, Marty. Metaskills: Five Talents for the Robotic Age. San Jose, CA: New Riders, 2012.

Ovide, Shira. "You Are Hardwired to Blindly Trust AI. Here's How to Fight It." The Washington Post, June 3, 2025. <https://www.washingtonpost.com/technology/2025/06/03/dont-trust-ai-automation-bias/>.

Sako, Mari, and Teppo Felin. "Does AI Prediction Scale to Decision Making?" Communications of the ACM 68, no. 4 (2025): 18-21.

Shojaee, Parshin, Maxwell Horton, Iman Mirzadeh, Samy Bengio, Keivan Alizadeh, and Mehrdad Farajtabar. The Illusion of Thinking: Understanding the Strengths and Limitations of Reasoning Models via the Lens of Problem Complexity. Apple. (2025) [Sources](#)

Alexander, Luna. "Nonverbal Cue Analysis in Video Interviews." (2025). https://www.researchgate.net/profile/Luna-Alexandra/publication/392404491_Nonverbal_Cue_Analysis_in_Video_Interviews/links/6840f2bf8a76251f22eb8af6/Nonverbal-Cue-Analysis-in-Video-Interviews.pdf.

ARC Prize. "The ARC Prize." Accessed June 22, 2025. <https://arcprize.org/arc-agi>.

Babar, Zia. "Evolution of Symbolic AI: From Foundational Theories to Contemporary Advances." Medium, June 11, 2024. <https://medium.com/@zbabar/evolution-of-symbolic-ai-from-foundational-theories-to-contemporary-advances-5ef74b179fa9>.

Bangia, Ajay, Rollo McIntyre, and Jim Legg. "Empathy or Emptiness? Unravelling the Impact of AI on Human Connection in Qualitative Research," WARC, 2024, <https://www.warc.com/content/article/empathy-or-emptiness-unravelling-the-impact-of-ai-on-human-connection-in-qualitative-research/157973>.

Berger, Jonah, Matthew D. Rocklage, and Grant Packard. "Expression Modalities: How Speaking Versus Writing Shapes Word of Mouth." Journal of Consumer Research 49, no. 3 (2022): 389-408. http://lexicalsuite.com/papers/EL_Modality.pdf

Bonelli, Maxime. Data-Driven Investors. SSRN Working Paper, revised May 25, 2025. <https://ssrn.com/abstract=4362173>.

Cannes Lions, State of Creativity 2025: A Call for Confidence, LoveTheWork.com, April 30, 2025. <https://www.lovethework.com/reports-rankings/reports/4RqhSyLpbzZMq0aa6hACuG>.

Catalini, Christian, Jane Wu, and Kevin Zhang. "What Gets Measured, AI Will Automate." Harvard Business Review, June 14, 2025. <https://hbr.org/2025/06/what-gets-measured-ai-will-automate>.

Clark, Cynthia, Neal Strudler, and Karen Grove. "Comparing Asynchronous and Synchronous Video versus Text-Based Discussions in an Online Teacher Education Course." *Online Learning* 19, no. 3 (2015): 48–69. <https://doi.org/10.24059/olj.v19i3.668>.

Clarke, Maggie. "We Tried ChatGPT's Dating Advice. Here's How It Went." *Futurism*, February 13, 2024. <https://futurism.com/chatgpt-dating-advice-results>.

Dickson, Ben. "Why We Misinterpret LLM 'Reasoning.'" *TechTalks*, June 16, 2025. <https://bdtechtalks.com/2025/06/16/why-we-misinterpret-llm-reasoning/>.

Felin, Teppo, Mari Sako, and Jessica Hullman. *Artificial Intelligence and Actor-Specific Decisions*. SSRN Working Paper, posted June 2, 2025; last revised June 8, 2025. <https://ssrn.com/abstract=5279401>.

Fletcher, Angus. "Why Computer AI Will Never Do What We Imagine It Can." *Narrative* 30, no. 1 (2022): 114–137. https://www.angusfletcher.co/s/Narrative_301.pdf

Fletcher, Angus and Mike Benveniste. *Narrative Creativity: An Introduction to How and Why*. *Elements in Creativity and Imagination*. Cambridge: Cambridge University Press, 2025.

Hern, Alex. "Apple's AI Ambitions Questioned after Study Finds Tools 'Collapse' under Pressure." *The Guardian*, June 9, 2025. <https://www.theguardian.com/technology/2025/jun/09/apple-artificial-intelligence-ai-study-collapse>.

Singh, Manpreet. "Significance of Nonverbal Communication and Paralinguistic Features in Communication: A Critical Analysis." *International Journal of Research and Analytical Reviews* 9, no. 4 (2022): 367–373. <https://www.researchgate.net/publication/364670475>.

Stanford Institute for Human-Centered Artificial Intelligence. "Humans Use Counterfactuals to Reason About Causality. Can AI?" *Stanford HAI*, May 24, 2024. <https://hai.stanford.edu/news/humans-use-counterfactuals-reason-about-causality-can-ai>

Sutherland, Rory. *Alchemy: The Dark Art and Curious Science of Creating Magic in Brands, Business, and Life*. New York: William Morrow, 2021.

Worthington, Paul. "Volume 176: Oops AI Did It Again," *Off Kilter*, Substack, May 30, 2024, <https://offkilter.substack.com/p/volume-176-oops-ai-did-it-again>.