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The "machinal bypass" and how we're using AI to avoid ourselves

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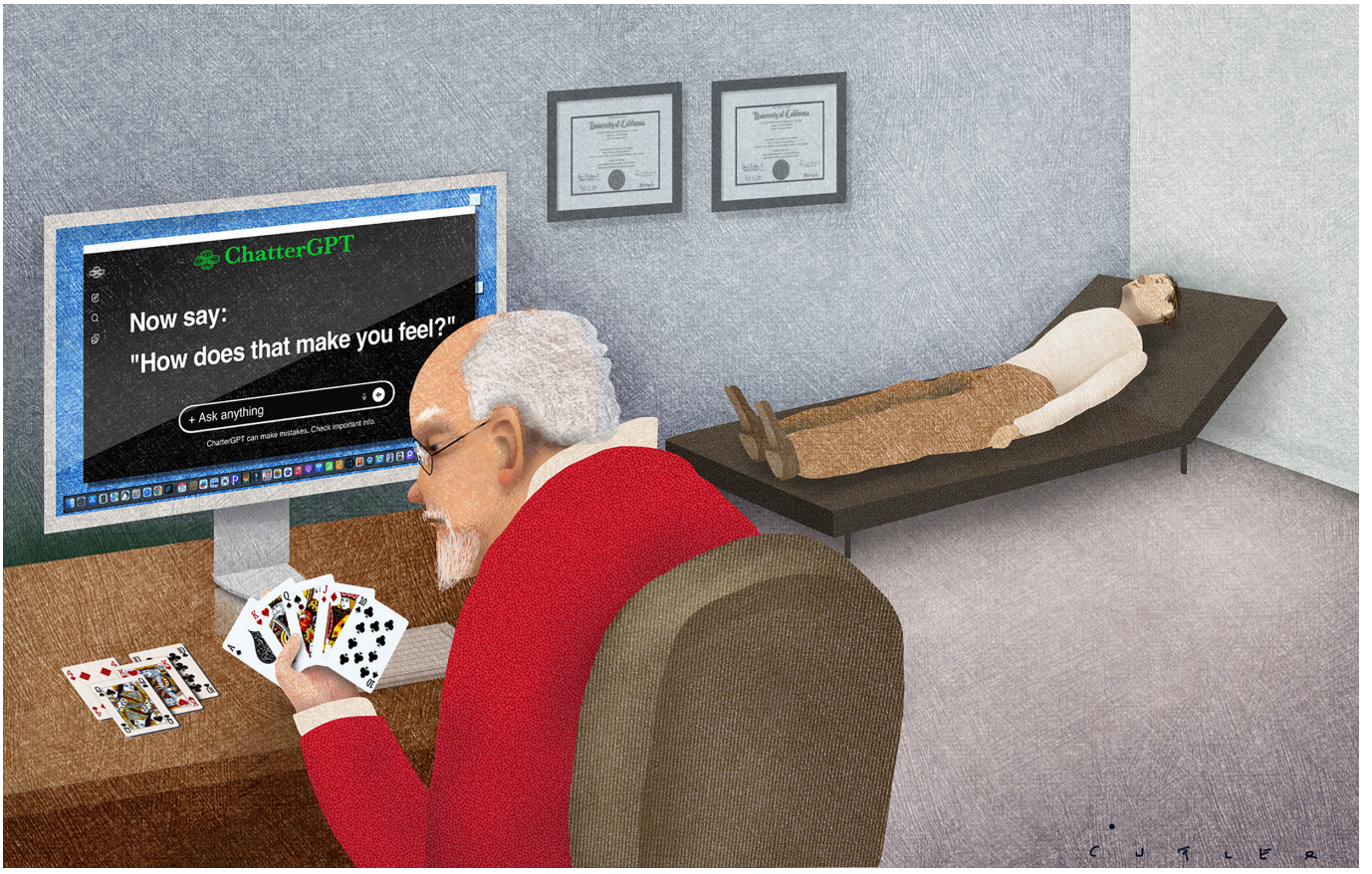

It's important to carefully weigh what we stand to lose each time we choose to delegate to AI tools. Image credit: Dave Cutler (artist).

This past summer, we—a psychiatrist and two clinical psychologists—found ourselves sitting in a scientific meeting with a looming sense of dread. We were with some of the world's most accomplished scientists and mental health clinicians, and the conversation had turned to the question that has come to feel inevitable: How can artificial intelligence (AI) systems efficiently solve the mental health problems that brought us together? Someone argued that human-delivered mental health services are becoming obsolete. Another suggested that only AI-driven research initiatives are worth funding moving forward. We were surprised by how willing some were to outsource the most nuanced, sensitive, and relational aspects of our work to chatbots. As psychological scientists, we also wondered why. This was the moment we found ourselves reaching for a term we've come to call "machinal bypass"—the use of generative AI not just to support human innovation or connection, but to sidestep it altogether.

Machinal bypass gives a name to something we had noticed elsewhere. A talented student asked if they should abandon a cutting-edge thesis idea after a generative AI recommended a more conventional approach. A colleague, eager to smooth over a conflict, used ChatGPT to write an apology letter and excitedly shared how efficient and effective this was. The choice of whether to use AI has become increasingly frequent as chatbots make inroads into just about every area of our personal and professional lives. It has become essential to carefully weigh what we stand to lose each time we choose to delegate to AI tools. Machinal bypass describes what happens when we allow AI to stand in for our own presence—whether as researchers, clinicians, or human beings.

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There in Spirit

There is an established concept that describes a similar type of avoidance: "spiritual bypass" (1–5), first coined by John Welwood in 1984 (5). Spirituality can be an important resource for coping, insight, and growth. However, when it is used to escape having to deal with difficult emotions or life's complexities, that is spiritual bypass. For example, saying "everything happens for a reason" to someone in the depths of grief bypasses the more difficult, but essential, work of acknowledging and being present with someone's pain. Another example is refusing to have an important, but difficult, conversation while asserting that all one needs to do is to pray about it. An illustrative item from the Spiritual Bypass Scale (4) is: "It is more important for me to be spiritually awakened than to feel emotionally intact." It is sometimes referred to as "avoidance in spiritual drag." Spiritual bypass has now been empirically studied across a range of contexts, including healthcare, where it has been noted to risk promoting "toxic positivity" (6).

> **If a task asks that *you*—with your unique lived conscious experience—be present, then substituting generative AI content for your own is machinal bypass.**

The bypass phenomenon describes a human vulnerability: When we feel stressed, overwhelmed, or doubtful of our capabilities, we tend to look outside ourselves for manageable fixes that help avoid these uncomfortable feelings. Now, when we want a quick answer or fear that we are not capable, we can turn to a machine for this type of solution—not unlike the less helpful ways in which people have historically invoked a higher power or a god.

Machinal bypass is a high-tech cousin to the same avoidance that underlies spiritual bypass. At the core is the use of a mechanism (whether spirituality or AI) to pull an escape hatch instead of dealing with something that requires authentic, personal investment. Rather than grappling with the vulnerability of writing an apology, it's asking a chatbot to do it for us. Rather than puzzling through a scientific mystery with incomplete data and imperfect theories, it's asking a language model to fill in the blanks with a logical conclusion. Rather than confronting the complexities of clinical care, it's asserting that machines will be able to do it better. Each of these scenarios requires emotional or intellectual labor that most people would identify as uncomfortable or taxing. The appeal in avoiding this type of difficulty is entirely understandable. Vulnerability is hard, exposing us to our deepest fears of rejection and judgment. Not knowing the answer is frustrating and stressful when the stakes seem high. Creating something genuinely new can provoke all of these feelings at once.

The potential consequences of machinal bypass are alarming for science and healthcare. Large language models (LLMs) are trained to predict the most statistically likely next word in a sequence, based on patterns gleaned from vast datasets of human language (7–9). This makes them extraordinarily good at generating compelling prose and clear summaries. But it also means that they tend to steer us away from anomalies, creative leaps, and nuance. Used as instruments of bypass, they skip past the circuitous and error-prone aspects of human problem-solving that sometimes reveal themselves to have been valuable or even essential in hindsight. LLMs show preliminary promise in peptide antibiotic design (10), but can we necessarily assume that they would have discovered penicillin, born from a petri dish carelessly left out? In healthcare settings, an AI system might be able to deliver an evidence-based protocol or screen for risk with impressive consistency and speed. But it cannot *be* in a relationship with the person seeking care. The more we turn to generative AI to manage not just logistics but meaning, not just information but novelty, the more we risk effacing aspects of research and clinical care that require what is uniquely human.

When Does AI Use Become Bypass?

Of course, just as most religious and spiritual engagement is not spiritual bypass, many ways of using AI are not machinal bypass. For many people, spirituality brings them closer—not further—from life's deepest commitments and challenges. None of us are opposed to generative AI or advances in technology; one of us is a developer of digital health technologies. We would welcome an AI assistant that keeps us from double-booking our calendars or that can quickly furnish accurate information that we cannot recall—examples of operational tasks that support, but do not bypass, the emotionally and intellectually complex aspects of life that draw on and contribute to lived experience.

Distinctions between uses of AI that do, and do not, engage machinal bypass are often unclear. So how do we know the difference? There is no simple answer, but here is a place to start. If a task asks that *you*—with your unique lived conscious experience—be present, then substituting generative AI content for your own is machinal bypass. Anyone can ask ChatGPT for feedback or ideas, so when someone asks for *your* feedback or ideas, they are asking for *you*. When someone shares something difficult or vulnerable, they are asking for *you*. When a patient wants to know which option you would choose for yourself—not just what the statistically optimized solution is—they are asking for *you*. And when *you* don't know what to say, your admission of uncertainty and best-but-imperfect attempt has intellectual uniqueness and relational value that no generative AI can replace.

The question is not whether AI can generate useful content. It can. The question is in what ways science, medicine, and society benefit from human creative processes that are messier, relational, and often fallible. If we want to build a future in which humanity can thrive, we need to resist the temptation to bypass ourselves.

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