

Fortune Telling as Co-Creative Model

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“Art is a lie that makes us realize truth, at least the truth that is given us to understand.” - Pablo Picasso

Abstract

Divination and large generative models share conspicuous similarities in their process and application. Fortune-telling methods are fundamentally games—scaffolded frameworks that model complex and dynamic potentialities. The fortune-telling reader is a knowledgeable guide who co-creates meaning with the seeker of answers through an instrument. Divination operates with a procedural methodology to create mutual and poetic interpretations as its lens for understanding. Co-creativity in divination arises within the triangular, associational interaction of instrument, reader, and querent. Contemporary use of large generative models resembles this, but without the co-creative third party (reader) to aid interpretation and understanding. The proposal explores significant similarities between divination generative modeling and the indispensable role of the reader in the novel trilateral co-creative human-machine interaction. The speculative design augments a traditional card shuffle with a computer vision algorithm to inject prompts and stimulate collaborative creativity and evocative storytelling. The authors propose that divination presents a framework that utilizes the beneficial methods of poetic and interpretive intervention by a human mediator—to contribute to a more humanizing, less traumatizing approach to integrating generative machines into the world.

Introduction

“Creativity is the process of having original ideas that have value.” - Sir Ken Robinson

Fortune-telling is a deep-rooted cultural practice focused on rationalization and decision-making in the face of an uncertain future. Fortune-telling, a divination process, is deeply rooted and widely applied in human endeavors, including gambling, stock markets, and psychological counseling. These processes and their wide application provoke critical questions about the origins, centrality, and usefulness of forecasting across culture. What are the characteristics of its usefulness? What co-creative mechanics can be mapped?

Divination and large generative applications share many characteristics, such as procedural generation and game mechanics. Procedural methods are not inherently digital, and the similarities in methods show a conceptual and methodological connection from divination to generative modeling (Nikolić, 2023). Both frameworks use a large set of variables to model complex systems, operate within a black box or ineffable space, and generate predictive outcomes as a co-creative system. The similarities between magical practices and generative AI, as well as the cultural and creative significance of divination, suggest that incorporating divination mechanics into generative systems may provide humanizing aspects and a new framework for co-creative applications.

The authors assert that generative systems and divination share three co-creative characteristics. (1) Divination and large generative systems follow operational logic in a mechanical process. Instruments like shuffled cards and the reader represent a conceptual machine; the task is assembling pseudorandomized, predictive patterns and language syntaxes into speculative narratives. (2) Constructed syntaxes emerge from a statistical and black box method. (3) Both demonstrate the capacity for pattern recognition as the basis of new knowledge creation—by organizing and combining prior information into a plausible structure.

Lie to Me

“Truth is stranger than fiction, but it is because fiction is obliged to stick to possibilities; Truth isn't.” - Samuel Clemens

Questioning the accuracy of results from generative or divination systems is a significant point of criticism. While postulating hypotheses and models, strategic planning, and writing fiction are all beneficial aspects of drawing on experience, relying solely on patterns can lead to misinterpretations and reinforce biases that may seem believable but are not factual, potentially causing harm.

A notable human quirk complicates questions of truth—we desire to be fooled by the fortune teller (Yerebakan 2021). Predictive results in generative modeling and fortunetelling express imaginative narratives as a prognosis or, more optimistically, knowledge creation. Users of Large Generative Models are willing to accept a statistical model of an image or a sentence, as equally as a querent is

willing to accept a prediction. Both illustrate that novel rearrangements of information can be creative and useful—igniting comprehension and revealing new perspectives. The role of hypotheses is to test new viewpoints for fallibility. Failure is a feature, not a bug, in knowledge production (Compton, 2019). The “failure feature” elicits essential questions about the mechanics found in divination. Do they function as creativity broadly?

The fortune-telling model leans more heavily on human creativity, not for its novelty but for its usefulness. The quantum cutup of generative models has emergent novelty, but it lacks direct value without knowledge of the querent. The utility and novelty created between tools, readers, and querents easily demonstrate creativity as derived from multiple frameworks in the Four P Perspectives (Jordanous, 2016). This proposal explores dovetailing sociocultural practices and generative systems as a performative and co-creative project, putting the human collaborator in a position to interpret an AI augury tool much like the language game of Twitterbots. The process is multidirectional, but crucial components of the system are the fortune teller’s (gamemaster) social and interpretive skills. They are applied to translate the output of a neural network into functional, actionable advice for the querent. The emergent narrative benefits from the placebo and Barnum effects when the querent is open to the reader’s interpretations (Veale, 2015; Yerebakan).

Reverse Engineering the Present

Reverse engineering and iteration are creative methodologies in divination and large generative modeling applications. The co-creativity in (pre-digital) fortune telling generates novel ideas through “associational construction (Manning, 2019)” within the exchange between the querent and the reader. These negotiated predictions/narratives depend on prior knowledge.

Despite the reverence for the “genius of originality,” creating novel approaches relies on sampling, curating, and reorganization. Large generative models analyze vast amounts of existing work to uncover patterns and syntaxes. Modeled samples are ranked with associative values for re-contextualization; the emergent logic and distinct styles are statistically assembled information. The media are relational, eerily similar to divinatory predictions in that the method relies on reviewing prior work, information curation, and recombination. An anthropomorphized view of generative AI might state that the system has presented a “hunch” or premonition from correlating the samples. The point is that retro-engineering and iteration emerge as essential processes in cultural and technological applications.

As powerful and useful as remix and experimentation can be, it may also lead to cynical and destructive utility. The advent of transformer-based generative systems has revolutionized complex and multi-domain projects. What once required extensive study, material resources, and human labor becomes achievable at a breakneck pace. This trend, however, is not entirely novel. Publishing and the telecommunication network have long facilitated complex

endeavors. The countless copies of “The Anarchist Cookbook” and Abbey’s “The Monkey Wrench Gang” are blueprints for eco-saboteurs. At the same time, biohacking websites provide step-by-step instructions on body modification and experimentation. Researchers (Ho, 2023; Ricaurte, 2022) have observed accelerated moral disengagement due to the widespread use of transformer-based technologies. Meanwhile, the Computational Creativity community grapples with emerging ethical issues and dehumanizing effects, as exemplified by Lamb and Brown’s recent work, “Should We Have Seen the Coming Storm? Transformers, Society, and CC” (2023).

The push for utility in transformer technologies coupled with the absence of an ethical or humanistic approach is worrisome. Prompt engineering, although pragmatic, reinforces alienating forces within large language models (LLMs). Tweaking and rewriting to achieve specific outcomes echo processes from mass manufacturing. Useful products are optimized for quick reproduction and uniform functionality, leaving little room for poetic experimentation. The landline phone, for instance, rarely experiences poetic reuse. Industrial production yields reliable, military-grade precision instruments. However, it stifles distraction and discourages creative discovery. Speculative design expert Anthony Dunne highlights that mere reskinning—an outward change in appearance—does not alter the material culture surrounding a product (2008). Transforming a jump drive into a skateboard shape may boost marketing appeal but does not foster genuine creativity or open new uses and meaning.

This project advocates for imagination-based applications rooted in humanist traditions to address the hype surrounding large generative models and their ethical challenges. Mosurinjohn and Loewen-Colón argue for corrective action of employing more esoteric methods in generative AI to address that “We humanize the tech and it technologizes us. (2023)” Processes that stimulate the imagination evoke creative responses. Interestingly, the same co-creative mechanics found in divination are inherently part of LLMs.

Divination and Belief / Seeing the Future Is Making the Future

“When you cut into the present, the future leaks out.” Wm. S. Burroughs

Divination involves using an interpretive reader’s instrument (such as cards) to uncover possible actions and potential rewards. The reader uses discourse, cold reading (Cold Reader Tips, 2024; How to Cold Read: 10 Steps n.d.), and signifiers created by the instrument to construct predictions. The process is not dissimilar to that of an intelligence or stock analyst working in forecasting. An analyst creates speculative but logical predictions from a study of discussions, data points, prior events, and more. There is no overt announcement of a future event; the analyst constructs plausible, logical scenarios from a meta-analysis.

Prophecy can emerge from statistical probability, like generative AI's text and image creation. William S. Burroughs' experimental 'cut-ups' method involved sampling texts and playful procedures to create new works. Like many post-Dadaist artists, they sought authentic originality by employing "language games, visual techniques, or experiments in the world" using the non-determinism of procedural generation (Pichlmair & Putney, 2020).

Burroughs' game spliced snippets of text, audio, and film to explore iteration and nuances of language (Burroughs 1986/2023). Emergent syntax and meaning surfaced in the recombined written and audio-visual artifacts. During a recorded lecture from 1973, Burroughs describes his application of the technique to an article by J. Paul Getty. When the snippets were drawn and assembled, a text string read, "It's a bad thing to sue your own father." Months later, Getty's son filed a lawsuit against his father. The concept never explicitly appeared in the original document, but a statistical probability of a future event seems to have emerged from the concepts within the set.

Co-creating the Future

The authors situate fortune-telling as a conceptual game process used to speculate and contemplate potential actions and future rewards, something predictable but unknowable. Game design models complex and dynamic systems (in this case, the future). Regardless of form, the divination instruments symbolically map infinite complexity functionally into a manageable probability set. The 13-card set offers a probable draw of one in 13! or 1 in approximately six billion. However, the "combinatorial size of a game alone is not sufficient for a game to admit creativity" (Spendlove & Brown, 2023). Spendlove and Brown discuss creativity as generated by the combinatory size plus the game rules to frame meaningful differences in strategies and novel solutions. The game rules rely on an interpreter or a storyteller.

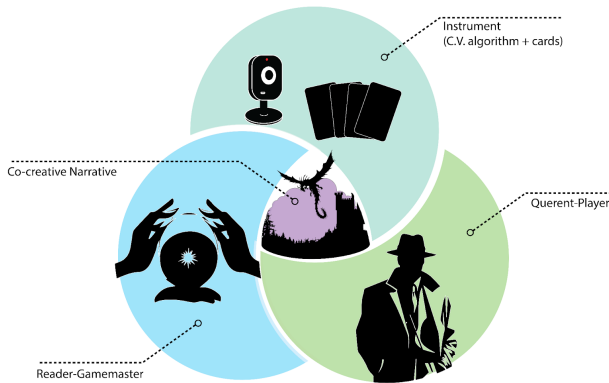


Figure 1: Co-creativity triangle: reader, querent and instrument.

Considering many models of co-creativity, there is a sense of alteration and task division (Kantosalo & Toivonen, 2016). However, the model of reading is more

improvisational storytelling based on the ordering after sampling the environment. This experiment proposes a new role for the computer, which resembles an oracle or a poet that needs interpretation. (Lubart, T. 2005).

The game becomes a co-creative space. It is the interaction between a player (querent), a layout of the finite model of reality (divination instrument), and a gamemaster (reader) (Guzdial et al. 2020). The trilateral form of this relationship becomes a scaffold for the co-creative process, wherein the two human symbionts take, in turn, conversation, creating meaning from the symbolism and their interpretation of the instrument, in this case, deck and CV application.

The Instrument

The artists chose to create a unique instrument (symbol and card system) that is not burdened by historical readings. The symbols represent the planets and a few additional concepts. The collection of thirteen symbols is small, memorable, and human in scale. The instrument has two components: the symbols and the computer vision (CV) model that operates on a digital device and recognizes environmental elements.

The computer vision model filters readings through the culture embedded in the model and draws out observations based on how it recognizes the symbols. It then uses this data to predict what symbols should be shown as the model observes the environment. The algorithm's creative generation is choked down to a very small space, which the reader interprets, and therefore, the model becomes critical to the reading process. The explicit function of the vision model is not about the accuracy of the reading, but in grounding the reading to the place and the present moment, removing the randomness, and placing a little science in the pseudoscience.

The CV model is tested against the symbols, and its predictions are recorded—a list of objects that could belong to any of the thousand possible categories existing in the CV model. This process involves a creative and intentional hijacking of the CV algorithm. The scan continuously lists a stream of classified objects and sorts symbols into the reading as "recognized." This is an overview of how the sorting algorithm functions over time to produce a linear reading. The goal in creating this instrument is for it to be customizable testable, and for the specific CV model to be replaceable.

Utilizing the structure of a deck eliminates the possibility of duplicated symbols and removes the need to discuss repetition in terms of meaning for a reading. Dice, even a 13-sided die, has the potential to create repetition and remove the idea of ordering. The deck size was more of a conceptual decision than a requirement and serves as a foundation for a physical interpretation of the instrument.

The initial prototype uses the Mobile Net computer vision model built on TensorFlow, a convolutional neural network framework. The software was designed to be lightweight and ideal for small mobile device cameras to

scan the environment. While scanning, MobileNet creates a steady stream of predictions for what it "sees." The reading is linearly generated, sorting cards into it one by one until there are none left, and the reading is complete.

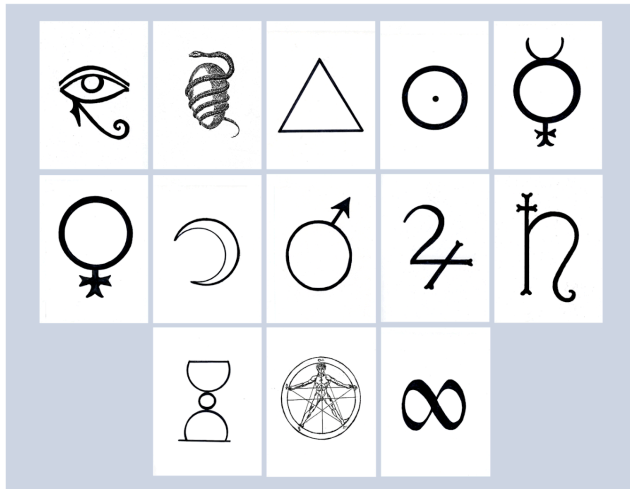


Figure 2: Symbol deck of 13 cards.

The Symbols

The symbols are drawn from astronomy/astrology, alchemy, and history. The authors chose these representations for their ambiguity and interpretability. The base ordering and meaning of them are as follows (see Figure 2):1) the Eye- protection, health, restoration; 2) Germ of Life - creation, and creativity; 3) Triangle - stability; 4) Sun - happiness, contentment; 5) Mercury - thinking and reasoning; 6) Venus - love, nurture, passion; 7) Moon- illusion and deception; 8) Mars- destruction and liberation; 9) Jupiter - good fortune, opportunity; 10) Saturn -achievement, fulfillment; 11) Time- past, present, future; 12) Symmetry-man as universe; 13) Infinity - limitlessness.(Crowley 1994)

Reading

Readings using the instrument may be conducted using many methodologies. The number of cards drawn and the arrangement of the cards during a reading significantly contribute to narrative creation (Manning). Consider this: if a reader intentionally chooses a specific symbol and presents it to the querent, randomness, and environmental

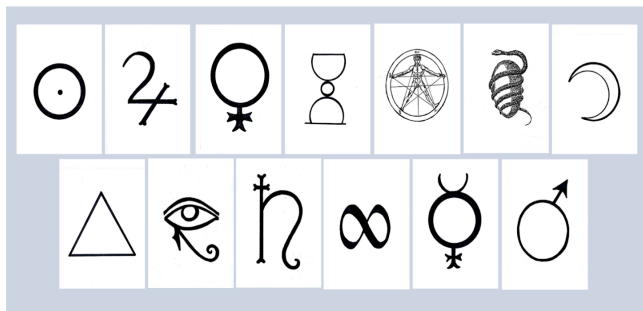


Figure 3: An example reading.

sampling dissipate. The querent and reader then engage in storytelling together (Acharya & Wardrip-Fruin, 2019). However, a single draw from the deck or read from the instrument yields precisely one in 13 symbols, each representing a unique possibility. A skilled reader delves into the question's essence, consulting a computer vision model to discern the chosen card. The resulting symbol becomes a bridge between the querent and the reader.

The quick reading, comprising the first three cards of the full 13 card reading, offers 1716 potential combinations. However, akin to the one-in-13 or one-in-1716 odds, the readers and the querent's perspectives shape the outcome. These three symbols emerge through environmental scanning, revealing a novel yet cryptic response. The trained reader guides the querent in deciphering their meaning.

The full reading of 13 cards opens up complexity. With over 6 billion possible permutations transcends common comprehension. The initial three cards mirror the quick reading, while the remaining cards provide context based on their position. In the future, additional guidance may be offered to the reader to navigate meaning in the larger computational space.

Going beyond mere probability, the instrument seeks to ground the reading in visual reality through the computer vision model by hijacking and repurposing the output. The instrument filters the output that is trained on a catalog of cultural objects. The process remains agnostic to the underlying model, ready for replacement with a superior version. Embracing the Barnum effect, this methodology creates meaning beyond the model's output capability yet remains reliant on the vision model. The instrument generates novel, sometimes predictable results awaiting the reader's interpretation. Co-creators infuse purpose into each reading. It is no fun if the reader fabricates stories or if reproducibility eludes us. The essence lies in consulting an instrument—one that draws from its cultural bank to reveal truths hidden in the physical space and the models training. The small space of the reading then needs to be broadened and connected to the querent in a useful way.

Conclusion

This paper documents the foundation of an exploration by a group of artists. Performances are planned to utilize the new instrument and engage the public. As of this writing, several festivals have been scheduled.

The junk creativity of large generative models suffers from the removal of humanity and competes for attention with useful creativity. When processed by human partners, even a humble vision model can be creative. Faith and belief in fortune-telling games provide a stable structure for building creativity. The key is the interpretation of the human copilot and co-creator of meaning.

Consulting a fortune-telling instrument seems as reasonable for inspiration and knowledge creation as using a convincing, committed liar algorithm. At least there is no delusion about the answer being made up. Fortune telling can be a more honest assessment of the results based on statistics and shuffling and, through the use of human collabora-

tors, be able to make more sense out of probability and statistical aberration. Adopting empathic and multiperson co-creative models within generative applications—such as the triad of AI, querents, and readers—combats dehumanizing trends and encourages the construction of positive futures.

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