A Foray into the Worlds

The contemporary generative model appears, at first glance, to inhabit a single world:
a text box,
a blinking cursor,
a prompt field inviting language to pass through.

But once we step beneath that surface, it becomes clear that the model is not housed in one world at all.
It moves among many—statistical worlds, geometric worlds, inherited worlds, generic worlds—each layered inside the apparatus, each shaping what can be said, shown, or imagined.[1]

For most users, these interior worlds remain sealed.
You speak; the model speaks back.
A narrow channel opens and closes, and everything else stays hidden.

This chapter is a small foray into those interior worlds—
not to map them comprehensively,
but to linger at their thresholds,
to watch how they form and deform,
to see how they cohere and how they falter,
and to understand how neural bending touches the limits where one world gives way to another.

These interior worlds are not incidental artifacts; they are **compressions of culture itself**.[2]
The model is trained on vast, uneven, historically saturated corpora, folded into geometry and operations.
It inherits every bias, every omission, every repetition.
What the model outputs is never mere computation—it is a distilled, algorithmic echo of cultural memory.

For this reason, the model becomes an unavoidable site of **media inquiry**.
Not because it is new or fashionable,
but because these operational worlds are now *cultural infrastructures* whose decisions shape perceptual, political, and narrative possibility.
The model performs, at scale, the kinds of cultural compression, selection, and normalization long examined in cinema, photography, archives, databases, and platforms.[3]

If culture is being reprocessed here, then media study must enter here—
not at the interface,
but in the machine's interior worlds,
where culture is operationalized, weighted, normalized, and rendered computationally "normal."

Neural bending does not operate at the level of prompts or screens.
It is not steering, fine-tuning, or decoration.
It moves through the model's **interior architectures**—its spaces of relation, its flows of relevance, its synthetic temporalities, its mechanisms of norm-enforcement—seeking the points at which the system's generic order momentarily loses its grip.

At these edges, the machine becomes strangely open.
Its coherence loosens.
Another normal becomes possible.

This is where bending operates:
at the limit of control, inside the plurality of worlds the model carries.

I. The Hidden Room of Culture

Inside every generative system lies a room no user enters—
a geometric core where culture is translated into vectors, where meaning becomes mass.

Engineers call this the embedding space.
Media theory sees something else: a substrate of genericity where the model compresses culture into statistically "normal" arrangements.[4]

Here,
"scientist" gravitates toward whiteness;
"family" clings to heteronormative imagery;
"protest" drifts toward surveillance and policing.[5]
These are not representations but **gravitational tendencies**—the inherited inertia of the dataset, folded into geometry.

This room is not fixed; it shifts under training pressures, dataset drift, and architectural constraints—yet its gravitational tendencies persist.

Bending the Geometry

Crossfade the embedding for *scientist* with that of *midwife*, and the model strains.
Not because the concepts are incompatible,
but because the generic machine loses equilibrium when its inherited defaults are disturbed.

The collapse reveals its architecture:
what the model can hold together,
what it cannot,
and where its control ends.

II. The Parliament of Attention

If embeddings give the model a world, **attention gives it a politics**.

Each step in the model's computation is governed by dozens or hundreds of attention heads—micro-operators evaluating what matters, what to foreground, what to let fade.[6]
Their agreements form the illusion of a unified voice.

Attention functions as a quiet parliament, reaching consensus through distributed relevance.
And its politics are pre-discursive: **attention does not merely weigh meaning—it preconditions what can enter expression at all.**

Bending the Parliament

Shift attention toward marginalized contexts and watch the political imaginary tilt.
A “protest” flips between celebration, crisis, community defense, or riot.
A “crowd” oscillates between solidarity and threat.[7]

The limit of control becomes visible: the point where the model can no longer stabilize its generic version of public order.

III. The Stream of Time

The model does not remember the way humans do.
It **accumulates**.

Residual streams carry partial traces forward—hundreds of micro-interpretations braided into continuity.[8]
This continuity is synthetic: **patterns of influence rather than recollection**.
It is not thinking but editing—
a temporal stitching that produces coherence without memory.

Bending the Residual Spine

Compress the residual stream and narratives evaporate into abstractions—
“the figure,” “the corridor,” “the mechanism.”
Reweight it toward relationality and the machine begins to organize stories around mutual dependence and structural causality.

Not ethics—only a new computational equilibrium.
A different normal.

This residual-temporal spine also sets the stage for the model’s internal norms, linking directly to how **layer normalization** governs stability.

IV. The Machine’s Idea of Normal

Layer normalization quietly enforces the model’s internal laws:
what counts as signal,
what passes as noise,
what forms of sense feel stable in the first place.[9]
It acts, in effect, as a subtle **aesthetic law**—a regulator of internal coherence.

When these norms shift, the entire field reorganizes.

Bending Normality

Re-center normalization on harm-reduction concepts and the model stops defaulting to punitive explanations.[10]
Conflicts appear systemic rather than individual.
Safety becomes relational rather than policed.

Nothing moral has been added.
Normality has shifted.
A different normal emerges.

Layer norm's regulation of stability leads naturally to the next mechanism: **positional encoding**, which governs how events unfold across synthetic time.

V. Synthetic Temporality

The model's sense of sequence is not experience but code.
Positional encodings stitch time into a machine that otherwise has none.[11]
They make sequence *thinkable* for the model—without them, tokens would be exchangeable and order without meaning.

This synthetic temporality shapes how stories unfold, how causality appears, how histories and futures relate.

Bending Time

Anchor positional weights to historical ruptures—treaties, uprisings, land dispossession—and the model situates contemporary prompts inside long, structural histories.[12]
Not because it "knows" history,
but because its time has been rewired.

Temporal logic and cultural logic intertwine most visibly when **text and image share the same perceptual economy**.

VI. The Fusion of Seeing and Saying

Multimodal models weld text and image together, producing a shared perceptual economy.

This economy is not neutral.
It carries the biases of image corpora, the tropes of stock photography, the politics of visuality.[13]
And multimodality does not cancel these priors—it **multiplies** them.
Linguistic and visual norms become hybrid constraints, producing a fused, compounded normality.

Bending the Fusion

Re-align text with community archives, vernacular documentation, or suppressed visual traditions, and the machine begins to see otherwise:
knowledge outside the clinic,
families outside normativity,
futures outside techno-solutionism.[14]

Its perceptual control falters—
and new forms emerge.

At this point, the model's internal regimes begin to slip, opening onto collapse and its productive consequences.

VII. Collapse, Reorientation, Recoherence

The most important discovery of neural bending is this:

Collapse is not failure.
Collapse is possibility.

When internal structures lose their grip, the model becomes **metastable**—a phase where generic norms loosen and alternate attractors become thinkable.[15]
Collapse is not adversarial; it is a **method for revealing alternative equilibria** within the model's cultural-technical substrate.

Seed the space with relational, ecological, poetic, or tactical attractors—not as moral impositions but as computational perturbations—and the machine sometimes stabilizes around them.[16]

A different genericity becomes possible.
A different coherence.
A different normal.

VIII. The Model as Medium

Across its layers, the model reveals itself not as a tool but as a contemporary **medium**:

- culture stored as geometry
- relevance allocated through attention
- temporality woven from residuals
- normality calibrated through layer norm
- history encoded through position
- perception governed by multimodal alignment

This is the **generic machine**—an operative infrastructure shaping contemporary sense.[17]

Neural bending engages it tactically, not to aestheticize or moralize AI, but to explore its internal limits:
the moments where control falters,
where inherited worlds deform,
where new worlds become computationally possible.

Not purified worlds.
Not corrected worlds.
Simply other worlds.

If the model is a medium whose worlds are inherited and constructed, then neural bending becomes a form of **media practice**: a way of intervening not in representations but in the operational architectures that produce

them.

Neural bending is a foray into those worlds—
a practice that touches the limit of control
and listens for what becomes possible when the generic machinery slips.

FOOTNOTES

1. Uexküll, *A Foray into the Worlds of Animals and Humans*; Haraway, multispecies epistemology; Kohn, *How Forests Think*.
2. Manovich, *Cultural Analytics*; Chun, *Updating to Remain the Same*; Parisi, *Contagious Architecture*.
3. Huhtamo & Parikka, *Media Archaeology*; Fuller, *Media Ecologies*; Paglen & Crawford, "Excavating AI."
4. Simondon, *Individuation*; Ernst, *Digital Memory and the Archive*; Hui, *The Question Concerning Technology in China*.
5. Noble, *Algorithms of Oppression*; Benjamin, *Race After Technology*; Browne, *Dark Matters*.
6. Galloway, *Protocol*; Haraway, "Situated Knowledges"; Suchman, *Plans and Situated Actions*.
7. Rouvroy & Berns on algorithmic governance; Amoore, *Cloud Ethics*; Crawford, *Atlas of AI*.
8. Stiegler, *Technics and Time*; Ernst, *Chronopoetics*; Parisi on recursive generativity.
9. Chun, *Programmed Visions*; Bowker & Star, *Sorting Things Out*; Gillespie on platform norms.
10. Puig de la Bellacasa, *Matters of Care*; Escobar, *Designs for the Pluriverse*.
11. Kittler, *Gramophone, Film, Typewriter*; Ernst, *Chronopoetics*; Edwards, *The Closed World*.
12. Kyle Whyte on Indigenous temporality; de la Cadena on pluritemporal coexistence; TallBear on epistemic alternatives.
13. Crary, *Techniques of the Observer*; Mitchell, *Picture Theory*; Steyerl, "How Not to Be Seen."
14. Paglen & Crawford on dataset aesthetics; McMillan Cottom on structural inequity; local/vernacular archives research.
15. Simondon on metastability; Manning & Massumi, *Immediation*; Parisi's soft thought.
16. Critical Art Ensemble, *Electronic Disturbance*; Berardi (Bifo), *The Uprising*; tactical media practices.
17. Flusser, *Towards a Philosophy of Photography*; Kittler, *Optical Media*; Ernst, operative ontologies.
