

Hannes Bajohr As a child, I had a set of teeth that displayed an unconventional division between a Jawling and a Pondhead. The Jawling was rooted in strength, the Pondhead solidified by an extremely slender base that pulled the jaw out of the Jawling at the same moment its legs shook.

I surmised that the Jawling's legs had bitten into the indifferent Pondhead to manifest, in this immediate gesture, a future of communion; not only in the sense of a possibility—after all, so many people were already there—but also through getting all other grips: through the gridding of their own layers, through an uncomplicated combination of bowel and sweat gutters, through the counter-shoeing of hundreds of valuable experiences, through the multiplication of progress.

Of course, I didn't care about any of that: its sharpness, its hardness, its strength—all the things I had forever cherished were too decided for me. As a child, therefore, I consciously and with my own eyes saw the path that a human body shape takes towards suicide. That's how I understood what had happened to my father.

Both heads, Jawling and Pondhead, swung upwards as the only force that carried me. They were like the ribs of a taut guitar. In such moments I always saw the mouth—my mouth—which I wanted to press against my father's chest. The words shuffled in, and I held the first sentence that communicated in front of me to see how he reacted. It was a sentence that had so little to do with what I was expecting him to say at the moment, but which repeatedly delivered an indispensable message. In a combination of states and behaviors, an incredible force then leapt from his mouth. The set of teeth turned into a gentle laugh.

It was a morning in the first week of June when my father took me to his house. I had done nothing to observe him as I usually did, and yet he was not as he had been before. The morning was bright and my father was in the hills, but as he had always left his bedroom two hours before me in the last few weeks and had only seen me at lunchtime, I didn't want to look at him when he left.

I still held the Jawling in my hand, and it was as if I had to force him to walk out the door with his head saying, "Tomorrow's the day!" My father didn't understand and took the Jawling from me. He grabbed it without the head and legs and put it in his pocket. It was quiet in the house and I didn't know why we weren't sitting in the big room at that moment, where I so often went down the big staircase. Instead, we stood in the street and looked at each other.

"Where are we going?" I asked. My father said, "It's a place where people come together—if you're lucky." Then he said he might climb a flight of stairs there, "just so you can see the people in your happiness." He kissed me and went up, because he wanted to show me my admiration. We climbed the stairs and my father held the Jawling in his hand. I didn't know what he was going to do. He left it sleeping in his hand, but I knew we would do it for the city on the other side. My father, when he woke up, would shove his bags together on the bed. And I knew that when he climbed the stairs, he had overpowered all the things I didn't know were in that corner. "Let's wait here," he said, but I only looked him in the face, for suddenly I held the Jawling silkily in my fist.

The Pondhead, on the other hand, was asleep, fast asleep, so that I don't think it noticed the Jawling when I pulled it by the neck. We had climbed without fire. The city below us lay terrifyingly quiet on its heavy feet; it lay like me, without a single shadow. I saw that the ranges were no longer in their place; but the mountains were here, the trees there. "Is everything as it should be?" I asked. My father shuddered, said nothing and headed back. And so our excursion was just a small slice of explored feelings.

As a child, I had a set of teeth that showed an unconventional division between a Jawling and a Pondhead. I already mentioned the Pondhead. The Jawling, some believe, had the job of hunting down the Pondhead.

After our hike, I felt like I had maimed my mouth, so my parents decided I should stay in a small clinic until I was exhausted enough to be unharmed. Once there, my mother closed the door just as I walked past the Pondhead's cradle. I suddenly stopped on the spot and wondered whether I should open my mouth once more, because if I did, no one would speak to me. So I never opened it again.

Later, my father shot the Jawling, on another hike, when the Pondhead told him to.

•

Jawling pregnancies result from the interaction of several gene mutations, that is, when two pairs of gene variants with behavioral problems combine in one germ cell.

My father had originally bought the Jawling from the Institute of Psychology in Vienna. He was one of the people who led this research effort. He was a researcher into relief, anger and self-defense. He wasn't just any father, as far as I knew, but a nice man who, however, constantly wanted to stare at the screen, at crucial information and forums that were all about explaining the one question he was so passionately interested in: why humans love humans.

This was something he couldn't understand. It was a huge problem for him. He saw Jawlings as proof that humans had not only come to the surface of nature through non-biological evolution, but that there were also genetic factors that made humans interested in other humans. A research group from Canada had found in a study that people with certain variants in the gene for Tyrosine Syndrome (people with auburn hair) were prone to depression; they found that people with auburn hair were significantly more likely to be depressed than people with blond hair. The Jawling appeared to him as a kind of expression of this research, as a confirmation for my father, because the Jawling had auburn hair as well.

My father was obsessed with Jawling pregnancies, the development of germ cells, the function of the genetic mutation process, the development of new body parts, but also: the development of affection and love. He was always glued to the screen when I was walking around the garden with my mother or when I had arranged to meet my friends on the terrace, scrolling through the latest news about the processes of cell division, genetic mutation and selection. Incessantly. Smallskin, intercellular mutation, permanent consequences (fruit bites, for example, that pierce the skin), the formation of new organs, the formation of new body parts, the formation of new brain regions, the formation of new brain parts, the formation of new brain strands, the formation of new brain waves—everything was proof for him that humans had not only come to the surface of nature through non-biological evolution, but that there were also genetic factors that made humans interested in other humans.

My mother was against me keeping the Jawling when we picked it up after my father initially refused to buy it. For my mother, a Jawling was worth half a billion euros, a complete waste. She only wanted to pick it up to embowel it in the garden, but I stopped her, because my father had told me that it was better to keep it at the research station, where it could recover in peace from the humid summer heat. My mother shook her head and said that I will soon have forgotten the Jawling. Then she made fun of my father and said that he always wore the exact same sunglasses that he had worn when I was conceived, which is why he always looked at his children's faces with those sunglasses, and so they all appeared auburn-haired anyway, only I had blond hair, but that wasn't my father's fault, that was mine.

One week later, when the Jawling was already several weeks old, I found it in an old bucket in the garden. Deep in the bucket, covered in drops of water, the Jawling emerged from its body as the germ cells of its smallskin transformed. My father had told me that the germ cells always look like this because the Jawling always has the same structure: unlike all the other organs, it has no atoms but rather inclusions that spread about the skin, piercing through the blood vessels. That's why my father was so surprised when the Jawling told him it was pregnant. The Jawling, he believed, had only exchanged substance-related mutations in the germ cell for the circle of atoms that occur in it, but no genetic variation that affects the structure of the germ cell. Thus his research had been in vain; all the Jawling had to say was: "I am pregnant."

•

But when the Jawling finally gave birth, my father wanted no part of it. Throughout the next day, my parents stayed far away, as if they resided in a mountain of heavenly eggshells, with only me present to watch as the Jawling stuck miserably in the water bucket and tore its own body off.

As the Jawling labored, it repeatedly wheezed violently and then began to smolder. Steam rose from the corners of its mouth, making it not ashamed but rather begrudging. It smelled like the rare smoke of a cigarette pipe, while damp hair dangled from its body. I watched it without any shyness, feeling such a great kindness for it that I wasn't disgusted when it began to wheeze violently and then smolder.

It took about an hour before there were two complications: the chest brooding had failed while the Jawling struggled with its teeth, and the teeth were not dangerous enough to break through the gums. I had to intervene and did what I had read in my father's books: I hit the Jawling with a stone until it shook and shuddered. The Jawling's teeth immediately began to move; they dug into the shoulder under the upper arm and the brittle flesh began to bleed. I was delighted. It took another two hours for the Jawling to reach the second phase, when it finally felt no pain at all, only ache. Then it was done: the Jawling had pushed the fully bitten gum with its bare fingers into its mouth, while holding one foot firmly behind its back to protect itself. Next to the Jawling, steaming and sticky, lay the Jawjawlings, squeezed-out matter, smeared with the broken bone protruding from between the other teeth.

My father, once back, kept looking at the Jawling because he knew he couldn't wrest anything more from it. Then he decided to feed and clean the two cubs. When the Jawling had reattached itself, my father struggled with its strength, knowing that the Jawling's quake cave had become part of nature again. He hoped to return to the Jawling's vicinity so that he could leave it for good.

This was around the time when my father began to take an interest in Pondheads, and it was also when he went into the apartment one evening to get a new gun. He found the Jawling's fighting banner, with torn teeth and the brain in front of it, which he had wanted to hand over to the Pondhead. Full of resentment, he closed the door and went to wake me up. I was sitting in the tub, shivering and with sweat-soaked hair in front of my eyes, thinking about how I had to hold the Jawling by the teeth and hit it so that it would give birth. The apartment went a little deaf over this, and I didn't hear my father enter the room, thinking that he was having some kind of conversation with the torn brain next door. Instead, he held out the fighting banner to me, and I sobbed, not knowing what to do with it. "It's time for you to wake up. We have to go, to the mountains, comet-sighting."

The above is an excerpt from my novel (*Berlin, Miami*), published by Rohstoff Verlag, Berlin, in the fall of 2023. Here, I selected and shortened three chapters and translated them from the original German. (*Berlin, Miami*) is the product of co-writing together with a large language model. In this case, the LLM is a version of the open-source GPT-J/GPT-NeoX model, which I fine-tuned with four contemporary German-language novels, all of which deal with digital life (Juan Guse, *Miami Punk*; Berit Glanz, *Pixeltänzer*; Joshua Groß, *Flexen in Miami*; Julia Zange, *Realitätsgewitter*). The goal of this exercise was not so much to produce a “good” novel, but rather to explore the possibilities and limitations of writing narratives with AI. Taking up literary scholar Angus Fletcher’s hypothesis that AI models are incapable of generating narratives because they deal only with correlations but are blind to causation, I found it fascinating to see how the feeling of a story emerges, even though the logical and causal progression of events is obviously flawed; inconsistencies and temporal leaps are often made up for by the reader, who can’t help but see a story unfolding.

I intervened very little in the writing process, but for technical reasons, I had to proceed sentence by sentence. Instead of giving the model command-like prompts as one would in ChatGPT (“write a novel!”), I had to rely on typing single characters or words and having the model complete them into sentences, 200 tokens at a time. Thus, the letter “A” became “As a child, I had a set of teeth...” In fact, the first chapter here is the first text ever I produced with my personalized LLM.

When Jawling (*Kieferling*) and Pondhead (*Teichenkopf*) made their appearances early on, I was intrigued beyond just wanting to test the AI’s narrative ability. I needed to know more, and so I gently steered the model to tell me about these strange creatures. Since elsewhere in the text, it was mentioned that the Jawling had been pregnant, I typed in “Jawling pregnancies” and hit “generate,” observing as a result the bizarre process that is the reproductive cycle of a creature that reminded me of Kafka’s similarly nondescript Odradek.

The rest of the book—whose title derives from the main settings of the novels I used for the fine-tuning process—has many other facets, settings, and characters. It deals with Miami’s succumbing to the sinister “Life Viruses” and Berlin’s infiltration by the mysterious “Agents of Äää.” It tells of an event called “THE DIFFERENCE” and a subversive group of friends who plan “the transition to a knowledge democracy and the abolition and shattering of the lie.” It even features an “AI being” that writes novels with titles such as *Cupid, Who Transforms Life Artificially* and *If You Marry Eliza, You’ll Have to Worry about More Surveillance Tools!* But the Jawling remains my favorite character—even if its story may be a mere effect of the correlation of vast amounts of data.

EP: *“I had to know more.” Here, acting as the writer or at least the overseer of the model’s writing, you sound more like a curious reader—as if your job is to express your desires so that the model might satisfy them. Where was the model most able to satisfy your readerly desire? Where did it succeed least? Did you ever find yourself resisting your own desire—or is a “pleasure principle” dominant?*

HB: It is true that I am not only the first reader of the output but also that there is a potential of fulfilling readerly desires that then guide the writing process. Here, even more than is already the case, the reader is the creator of the text – except that there is a distinction between the first reader (me) and the second reader (anyone else). There were two desires, however, that at first glance seem to be at odds. One was passive: I simply wanted to survey the narrative capacity of a generative AI. Here, taking the generated text as-is – as a specimen of this capacity – would have been enough. The second was more active: I wanted to probe, as it were, the depth of the model, understood as a potential narrative manifold, and find out what was hidden in it. Excavating strata in the vector space, I felt like a geologist investigating the structure of some mineral deposit – something that can be done methodically and objectively – who is at the same time fascinated more by the shiny mica and pyrite rather than the dull shale and clay – something that is ultimately a matter of *jouissance*. I followed the veins rather than just removing the rock. In this sense, the novel is much more undisciplined than some of my earlier, more straightforwardly conceptual pieces.

EP: *You used a comparatively petite open-source model. Why did you make this choice? Was this a practical decision, a political decision, or some other kind? How do you think about the trade-offs of using different models?*

HB: To quote a recent tweet from Peli Gri-

etzer: “It took me four years to write like GPT-3, but a lifetime to write like GPT-2.” The better the model, the less interesting it becomes for the kind of writing I find worthwhile. This is partly because large commercial models are, by virtue of techniques like RLHF (reinforcement learning through human feedback), geared towards “expectable,” non-surprising output. They are, after all, commercial, and their creators want to make sure the generated text can be used in all kinds of applications reliably; literature is not one of these applications. The other reason, of course, is that smaller models make more interesting mistakes which are often in themselves poetic. However, I trained a smaller and a larger model – GPT-J and GPT-NeoX – and didn’t really find that the larger one was much more coherent than the smaller one.

EP: *Why did you fine-tune the model as you did? What did you hope this fine-tuning would do to the model and (thus) do for you, its interlocutor? Did this extra step pay off?*

HB: I fine-tuned pre-trained models on four contemporary German-language novels that all deal with “digital life.” Some of them are set in Miami, some in Berlin, hence the title. The reason for this choice was that I wanted to investigate to what extent a model can write narrative, since standard language models have a kind of middle-of-the-road and clichéd idea of narrative, I hoped to make the output more in line with actual contemporary writing. There was also the sense that there is a dominance of English writing in LLMs, so using German input texts might bring about some diversification of the kind of texts created (it’s of course ironic, then, to translate the output back into English). Another reason, though not the dominant one, was that the output of a fine-tuned model is not only the product of writing, but is itself a way of reading the dataset. What these novels share among them is emphasized, their commonalities heightened, so that (*Berlin, Miami*) is, in a

way, a “close-distance reading” of the input novels. Synthesis becomes analysis.

EP: What does it feel like to write with this model? Can you get “better” at “steering it gently”? Is there a skill to it? Do you feel like it impacted your “traditional” writing process in any way?

To start with the last question: I don’t think this experience has impacted my normal, “manual” writing at all. It is just too different. While I can imagine someone would incorporate material so generated into a more traditional text, I have so far kept these two practices separate. Using an LLM as I have is a much more distanced, at times almost spectatorial act that has little to do with the often painful process of putting words on the screen. But what is interesting is that in the LLM-aided method, I don’t see the machine as the agent of writing. It does not appear to me as an artificial author. Rather, there is a “will of the text” at work. It is the text that “wants” to go in one direction or the other, and you can get better at finding a balance between steering it and letting it go. The AI is not an agent but it may be more than a tool. I find two somewhat contradictory metaphors useful here: surfing and horseback riding. Just as a surfboard, no matter how much you experience it as an outgrowth of your own body, is not yet an agent, it would be wrong to speak of a horse as a mere tool. In the end, LLMs may be a third thing for which one would have to find a practice and a name.

EP: Putting aside the question of whether LLMs can (in theory or practice) generate in terms of causation rather than mere correlation, do you think that there are stories that can best be told through correlation without causation, or with a diminished or impaired sense of causation? Is there an “affordance” here in what might be typically seen as a limitation?

HB: There are precedents for non-causal writing, and they are all in one way or

another “experimental.” The *nouveaux romans* of Alain Robbe-Grillet and others are known for their explosion of causality and temporal plausibility. In fact, Espen Aarseth compared early hypertext novels like Michael Joyce’s *afternoon* to the *nouveau roman*. It is precisely the divergence from traditional literature that makes these novels interesting. They probe other ways of writing that undermine the cultural expectations we have when it comes to navigating a narrative; they don’t tell stories so much as they tell the telling of stories by way of not telling them, if that makes sense. And they make the act of reading an almost physical experience: You can really observe yourself trying to make sense of what is written – a feeling I often had while reading (*Berlin, Miami*). They show how it is ultimately impossible not to read some kind of causality and thus narrative into a series of words that are cohesive enough to create a sense of coherence.