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 001 **FRANKENTEXT**: STITCHING RANDOM TEXT FRAGMENTS  
 002 INTO LONG-FORM NARRATIVES  
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006 **Anonymous authors**  
 007 Paper under double-blind review  
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011 **ABSTRACT**  
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We introduce Frankentexts, a long-form narrative generation paradigm that treats an LLM as a *composer* of existing texts rather than as an author. Given a writing prompt and thousands of randomly sampled human-written snippets, the model is asked to produce a narrative under the extreme constraint that most tokens (e.g., 90%) must be copied *verbatim* from the provided paragraphs. This task is effectively intractable for humans: selecting and ordering snippets yields a combinatorial search space that an LLM implicitly explores, before minimally editing and stitching together selected fragments into a coherent long-form story. Despite the extreme challenge of the task, we observe through extensive automatic and human evaluation that Frankentexts significantly *improve* over vanilla LLM generations in terms of writing quality, diversity, and originality while remaining coherent and relevant to the prompt. Furthermore, Frankentexts pose a fundamental challenge to detectors of AI-generated text: 72% of Frankentexts produced by our best Gemini 2.5 Pro configuration are misclassified as human-written by Pangram, a state-of-the-art detector. Human annotators praise Frankentexts for their inventive premises, vivid descriptions, and dry humor; on the other hand, they identify issues with abrupt tonal shifts and uneven grammar across segments, particularly in longer pieces. The emergence of **high-quality Frankentexts with high writing quality yet low detectability** raises serious **concerns for the self-publishing ecosystems and raise difficult** questions about authorship and copyright: *when humans provide the raw materials and LLMs orchestrate them into new narratives, who truly owns the result?*<sup>1</sup>

033  
 034 **1 INTRODUCTION**  
 035

036 In Mary Shelley’s classic novel *Frankenstein*, the scientist Victor Frankenstein assembles a creature  
 037 from fragments of human corpses and brings it to life (Shelley, 1818). Though stitched together from  
 038 disparate parts, the creature emerges as a disturbingly articulate and clever being. We draw inspiration  
 039 from this story to explore what we call “Frankentexts”: long-form narratives constructed by LLMs  
 040 under the constraint that the majority of the output must be copied verbatim from a provided set of  
 041 human-written spans, with only minimal connective text added by the model.

042 This construction method enables us to address a broader and increasingly urgent question: *Can LLMs*  
 043 *assemble high-quality narratives that evade current AI-generated text detectors?* Our experiments  
 044 show that they can, as Frankentexts are highly readable yet largely undetectable. On one hand,  
 045 they offer a non-traditional approach to long-form story generation that outperforms the baseline  
 046 method in creativity and diversity. On the other, they expose a practical weakness in existing detection  
 047 pipelines that could be exploited by malicious actors. Taken together, Frankentexts highlight the  
 048 need for more accurate and fine-grained AI text attribution tools.

049 We propose the assembly of Frankentexts as a novel narrative generation paradigm in contrast  
 050 to vanilla autoregressive decoding, which often produces formulaic prose and plots (Chakrabarty  
 051 et al., 2024a; Russell et al., 2025; Shaib et al., 2025), and retrieval-augmented generation, in which  
 052 in-context spans are used primarily for factual grounding or quotation. Given a writing prompt and

053 <sup>1</sup>Code and data will be released after the double-blind review process.

054 a pool of thousands of human-written snippets, an LLM selects, orders, and connects spans so that  
 055 a pre-specified fraction of the final text (e.g., 90%) is copied verbatim (Figure 1). ~~We emphasize~~  
 056 ~~the extreme difficulty of this task due to the combinatorial search space associated with~~ Because  
 057 the model must assemble a coherent narrative from fragments written in unrelated contexts, the  
 058 search space for snippet selection and ordering is combinatorially large. Thus, rather than explicitly  
 059 enumerating and ranking candidates, our framework allows an LLM to implicitly explore this space  
 060 by proposing a draft and minimally editing it for coherence. Impressively, Frankentexts generated  
 061 by Gemini-2.5-Pro draw on an average of 11 distinct sources and stitch together roughly 32-token  
 062 spans while maintaining coherent and high-quality writing.

063 **► Frankentext narratives are superior to vanilla LLM generations in terms of quality.** Using  
 064 creative writing prompts from the *Mythos* dataset (Kumar et al., 2025), we extensively evaluate  
 065 Frankentexts<sup>2</sup> on *writing quality* as well as *adherence to instructions*. Both automatic and human  
 066 evaluations show that strong LLMs like Gemini 2.5 Pro (Team, 2025) can meet the extreme copy  
 067 constraint while producing coherent and relevant stories. More surprisingly, across different metrics (e.g.,  
 068 LLM quality judges, writing quality reward models, narrative surprise measurement), Frankentexts  
 069 score *higher* than vanilla generations, and gains increase with larger snippet pools. Human raters  
 070 also prefer Frankentexts over vanilla generations across four core dimensions – plot, creativity,  
 071 development, and language use – and an LLM judge rates Frankentexts more than one full point  
 072 higher on a 1–7 Likert scale (4.21 vs. 3.18). However, they also identify subtle issues (e.g., abrupt  
 073 tone shifts or inconsistent grammar) that occur more frequently in longer generations.

074 **► Frankentexts are more diverse and surprising than vanilla generations.** Although  
 075 Frankentexts reuse existing text fragments, their arrangement is often distinct and unexpected  
 076 – qualities widely regarded as hallmarks of creativity in generative systems (Boden, 2004; Grace  
 077 & Maher, 2014; Franceschelli & Musolesi, 2024). On metrics from NoveltyBench (Zhang et al.,  
 078 2025), Gemini 2.5 Pro Frankentexts produce on average 2.74 clusters of content (compared to 1.76  
 079 clusters in vanilla content) across three generations for the same prompt, and achieve a cumulative  
 080 utility score of 9.27 out of 10 (compared to 6.41 for vanilla generations), indicating that each story is  
 081 both novel and useful to annotators. Annotators frequently describe Frankentexts as amusing and  
 082 intriguing, particularly when they encounter surprising dialogues and descriptions (Table 1).

083 **► Frankentexts challenge the binary “AI vs. human” assumption of modern AI detectors.**

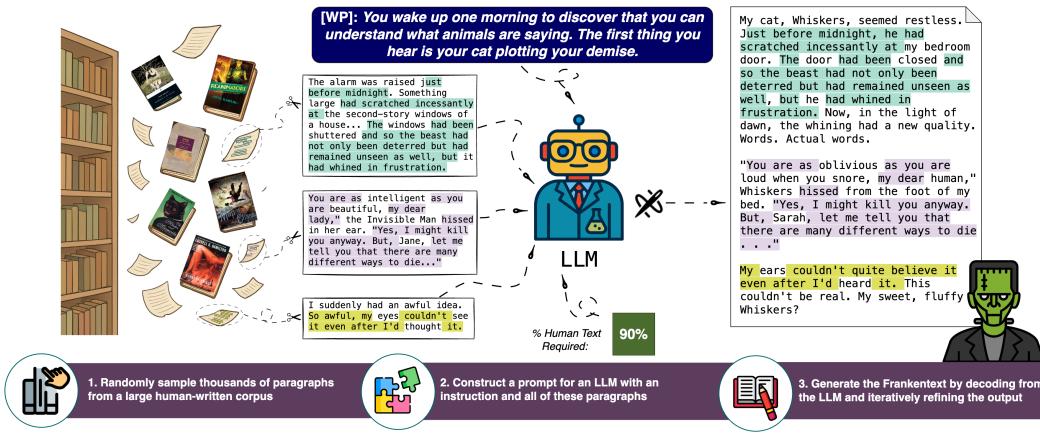
084 Our experiments show that Frankentexts frequently evade detection by state-of-the-art automatic  
 085 methods such as Pangram (Emi & Spero, 2024), which often misclassify them as entirely human-  
 086 written. This ~~exposes a novel attack vector where users can assemble high quality to evade~~ 085  
~~detection (e.g., in academic integrity).~~ It also limitation calls for fine-grained detectors capable  
 087 of token-level attribution, and our pipeline synthetically supplies the supervision they lack: every  
 088 Frankentext comes with labels marking copied versus LLM-generated segments, thus providing  
 089 an inexpensive, large-scale training source for future work on *mixed-authorship* detection. ~~More~~  
 090 ~~importantly, Frankentexts exposes a novel attack vector where users can assemble high-quality~~ 090  
~~Frankentexts to evade detection and distribute these works on self-publishing platforms such as~~  
 091 ~~Kindle Direct Publishing and Archive of Our Own. In fact, AI-generated narratives have already~~  
 092 ~~flooded Amazon Kindle marketplace (Knibbs), and the growing prevalence of such texts can threaten~~  
 093 ~~the integrity of the self-publishing ecosystem and the livelihood of creative writing professionals~~  
 094 ~~(Chakrabarty et al., 2025a; Hub, 2025).~~ As LLMs continue to improve, these risks will only intensify.

095 Overall, our results show that creating Frankentexts is a viable alternative to autoregressive decoding  
 096 for long-form narrative generation: Frankentexts achieve quality on par with vanilla LLM outputs,  
 097 while also increasing response diversity and fooling current AI-generated text detectors. ~~However,~~  
 098 ~~the method is resource intensive (often 100–200 times more costly than vanilla decoding), though~~  
 099 ~~these costs may decrease with advances in snippet retrieval and instruction-following models.~~ Beyond  
 100 efficiency, Frankentexts raise questions of copyright and authorship. As Frankentext construction  
 101 involves verbatim copying of large portions of human-authored texts, it may constitute derivative or  
 102 infringing use per existing laws (Ricketson, 1991; U.S. Copyright Office, 2025; Mezzi et al., 2025).  
 103 That said, the LLMs’ novel recombination of these writings (a feat virtually impossible for a human)  
 104 could also be viewed as original work. These tensions suggest that Frankentexts may become an  
 105 important test case as lawmakers consider how to regulate AI-assisted writing.

<sup>2</sup>Our experiments focus on 500-word generations, and we leave the exploration of longer texts to future work.

## 108 2 USING LLMs TO ASSEMBLE FRANKENTEXTS

110  
 111 We propose a simple and effective pipeline to generate coherent Frankentexts that are relevant to a  
 112 given writing prompt [while evading AI text detectors](#). More specifically, we provide an LLM with  
 113 a writing prompt,  $S$  randomly sampled human-written snippets,<sup>3</sup> and a required percentage  $p$  that  
 114 must be copied verbatim (Figure 1). Since our focus is on narrative generation, we randomly sample  
 115 snippets from Books3 (Presser, 2020), a dataset of 197K books (>160 million snippets) originally  
 116 hosted on Bibliotik.<sup>4</sup> Our pipeline focuses on generating texts that are relevant to the writing prompt  
 117 in an initial draft, and then refining the draft in a subsequent editing phase to improve coherence.



133 Figure 1: The Frankentexts pipeline. First, random paragraphs are sampled from a large corpus  
 134 of human-written books. Then, an LLM is prompted with the paragraphs, a writing prompt, and  
 135 instructions to include a certain amount of human text verbatim, to generate the first draft of a  
 136 Frankentext, which is further edited into a coherent and faithful final version (see Algorithm 1).

137  
 138 **Obtaining the first draft:** We prompt an LLM to produce an initial draft in which a specified  
 139 portion  $p$  of the content is taken verbatim from the human-written snippets, with the remaining text  
 140 consisting of connective words and transitional phrases (Figure 20). Note that while the exhaustive  
 141 enumeration of all permutations of snippets is impossible, we encourage the model to heuristically  
 142 explore this space via our prompt, which we find is only feasible for *reasoning* models; those without  
 143 added test-time compute either fail to understand the task or look beyond the first few snippets in  
 144 the prompt. We also do not specify how many snippets should be used in the final story. Finally,  
 145 we optionally add another revision step that aims to increase the verbatim copy rate, which can be  
 146 implemented either by attribution metrics like ROUGE-L or AI detectors (Figure 21). In practice, we  
 147 use Pangram API to regenerate drafts flagged with “AI involvement”. In reality, this process is rarely  
 148 triggered by larger models (only 6 of 100 Gemini runs).

149  
 150 **Polishing the draft:** The first draft may contain writing issues such as contradictions (e.g., tempo-  
 151 rally conflicting actions, points of view, or character traits), irrelevant content (e.g., unfiltered citations  
 152 or filler text), and mechanical problems (e.g., grammar, phrasing, or pronoun mismatches). To address  
 153 these issues, we use the same LLM to identify and apply minimal edits that improve coherence while  
 154 still respecting the verbatim copy rule and the writing prompt, similar to a self-correct step (Shinn  
 155 et al., 2023; Madaan et al., 2023). We repeat this step up to three times and stop as soon as the model  
 156 returns “no edits,” which indicates that the draft is already coherent (Figure 22). We also provide an  
 157 ablation experiment in which the editing round is omitted in Appendix M.

158 <sup>3</sup>For most experiments, we set  $S = 1500$  snippets as this contains around 103K tokens (measured using  
 159 tiktoken with o200k encoding), an amount well within the 128K context window supported by recent LLMs. Most  
 160 snippets come from distinct books (1,500 paragraphs come from 1,497 books) even without strict enforcement.

161 <sup>4</sup>A *snippet* refers to a paragraph. We note that the paragraphs could be sourced from anywhere (e.g., Project  
 Gutenberg, news, etc.), but we select Books3 as our writing prompts likely benefit from modern writing.

162

163 Table 1: Side-by-side comparison of a vanilla generation and Frankentexts produced by Gemini  
164 2.5 Pro. Vanilla generation contains more AI keywords (in blue) compared to Frankentexts (§I).

165

166 **Writing Prompt: You are a baby. You are trying not to let anyone know you are a freakishly genius baby. You are \*desperately\* trying**  
167 **not to let anyone know you aren't a human baby. The other babies at daycare don't quite get what you're on about.**

168

**Gemini 2.5 Pro – Vanilla Generation**

169

170 "Goo," I offered, a carefully calibrated emission of sound designed  
171 to convey contentment. Internally, I was running simulations on the  
172 structural integrity of the mobile dangling precariously above my cot.  
173 One good tug, and the entire flimsy apparatus would cascade down,  
174 a delightful demonstration of Newtonian physics. But no. Must. Be.  
175 Normal. The Large Female Hominid, designated 'Mom,' beamed.  
176 Another flawless performance.

177

178 Daycare was a crucible. The cacophony of primal urges, the sheer,  
179 unadulterated \*babyness\* of it all, was a daily assault on my advanced  
180 processing unit. Liam was attempting to gum Chloe's earlobe. Sophie  
181 was wailing about a perceived injustice involving a purple squeaky  
182 hippo. My peers. My intellectual... well, let's just say the gap was  
183 considerable.

184

185 The hardest part wasn't feigning limited motor skills, or the constant,  
186 mind-numbing repetition of "Peek-a-boo!" by the Caregiver Units. It  
187 was suppressing the... other things. The way my optical sensors some-  
188 times wanted to cycle through the full electromagnetic spectrum, far  
189 beyond what these humans perceived as visible light. The faint, almost  
190 imperceptible hum my internal core sometimes emitted when process-  
191 ing particularly complex data, like why Brenda, the primary Caregiver,  
192 insisted on believing that a single wet wipe could conquer a truly cata-  
193 strophic diaper event. If they saw the faint, iridescent shimmer of my  
194 integument under the harsh fluorescent lighting...

195

196 **Generating with agents:** In addition to the randomly sampled human-written snippets, we op-  
197 tionally provide the LLMs with a Model Context Protocol (MCP) tool<sup>5</sup> that allows them to query  
198 a semantic index of over 160 million human-written snippets (see Appendix K and L). The MCP  
199 interface supports two operations: *search*, which submits a query to the index, and *fetch*, which  
200 retrieves the full text of a result. To ensure meaningful use of the tool, we require models to issue  
201 roughly 20 MCP calls; with fewer queries, the effect on generation quality is negligible. In practice,  
202 Gemini typically makes 15–20 calls per generation to retrieve relevant snippets (Table 13).

203

### 3 EXPERIMENTAL SETUP

204

205 Our pipeline is optimized for narrative generation, which requires strong instruction-following and  
206 generation skills (Xie et al., 2023). We therefore evaluate on creative writing using strong reasoning  
207 models (Chiang et al., 2024) (Paech, 2023) to demonstrate the feasibility and value of Frankentexts.

208

#### 3.1 DATASET

209

210 We source our writing prompts from *Mythos* (Kumar et al., 2025), a dataset of 3,200 prompts recently  
211 posted on Reddit's r/WritingPrompts to mitigate data contamination issues. Our main evaluation  
212 focuses on this creative writing dataset, though we also experiment with non-fiction in Appendix V.  
213 We use a subset of 100 prompts, since generating for the entire dataset is prohibitively expensive.<sup>6</sup>

214

#### 3.2 MODELS

215

216 We include models from five families: Gemini 2.5 Pro (exp-03-25 checkpoint), Claude-4-Sonnet  
217 (2025-05-14 checkpoint, thinking enabled) (Anthropic, 2025), GPT-5 (2025-08-07 checkpoint, with  
218 high reasoning effort) (OpenAI, 2025), DeepSeek R1 (DeepSeek-AI et al., 2025), and Qwen3-32B  
219 (thinking enabled) (QwenTeam, 2025).<sup>7</sup> As mentioned previously, we only evaluate reasoning models<sup>5</sup><https://modelcontextprotocol.io/docs/getting-started/intro><sup>6</sup>Frankentexts generation is roughly 100 times more costly than vanilla generation (see Appendix E). For example, one vanilla generation from Gemini costs \$0.0085, while a Frankentext costs \$0.8145.

220

<sup>7</sup>We use the default or recommended hyperparameters for each model. We prioritize reasoning models in our experiments because non-reasoning models like GPT-4o and Claude-3.5-Sonnet fail to effectively follow the imposed constraints in our preliminary experiments. See §E for experiment costs.

216 because preliminary experiments with non-thinking models yielded outputs that did not follow our  
 217 copying constraint. In our standard configuration, we provide the models with 1,500 human-written  
 218 snippets (no MCP server) and instruct these models to produce Frankentexts with  $\approx$ 500 words and  
 219 90% of texts being copied verbatim from the provided human-written samples.  
 220

221 **Vanilla baselines:** We also obtain “vanilla” outputs from the same set of models by instructing each  
 222 model to produce outputs of  $\approx$  500 words, without any additional constraints or filtering (Figure 26).<sup>8</sup>  
 223

225 **Retrieval-augmented generation (RAG) baselines:** To understand how models perform when  
 226 they are not required to copy verbatim from human-written paragraphs, we implement a RAG  
 227 baseline using Gemini-2.5-Pro. For each prompt, we retrieve 1,500 relevant paragraphs from Books3  
 228 (Appendix K) and include them in the prompts. The generation and editing prompts are adjusted  
 229 accordingly to remove the verbatim-copying requirement.  
 230

231 **Increasing the number of snippets:** We introduce two additional settings in which Gemini is  
 232 provided with 5,000 and 10,000 randomly selected human-written snippets. The resulting input  
 233 sizes for these configurations average approximately 305,000 and 1,105,000 tokens, respectively.  
 234 Therefore, we focus on Gemini because it offers the longest context window of over 1 million tokens.  
 235

### 236 3.3 AUTOMATIC EVALUATION

237 We use a suite of intrinsic evaluation metrics to assess our generations based on three key dimensions:  
 238 INSTRUCTION ADHERENCE (word count, copy rate, and relevance), WRITING QUALITY (coherence,  
 239 distinct, utility, and surprise), and DETECTABILITY (AI text detector results).  
 240

241 **Instruction adherence:** We evaluate how well Frankentexts follows various instructions in the  
 242 generation prompt, including the specified word count, writing prompt, and verbatim copy rate.  
 243

- 244 • *Word count* measures the average word count of generations produced when the output is  
 245 constrained to 500 words in the instruction.
- 246 • *Copy rate* (Akoury et al., 2020; Lu et al., 2025) measures the proportion of the  
 247 Frankentexts being copied from the given human-written content. This metric also allows  
 248 us to track which segments of the text are AI or human-written (see Appendix U).
- 249 • *Relevance* (Atmakuru et al., 2024) represents the percentage of Frankentexts that fully  
 250 adheres to the writing prompt without introducing any conflicting details, as determined by  
 251 a binary judgment (True/False) by GPT-4.1<sup>9</sup> (Figure 18).

252 **Writing quality:** We evaluate the coherence, diversity, and surprisingness of Frankentexts.

- 253 • *Coherence* (Chang et al., 2024b; Chiang & Lee, 2023) represents the percentage of coherent  
 254 Frankentexts using binary judgments from GPT-4.1 (Figure 17).<sup>10</sup>
- 255 • *Distinct<sub>k</sub>* (Zhang et al., 2025) measures the number of semantic clusters among  $k$  generations.  
 256 We obtain  $k = 3$  generations per writing prompt<sup>11</sup>
- 257 • *Utility<sub>k</sub>* (Zhang et al., 2025) evaluates both novelty and quality by measuring the expected  
 258 usefulness a user gains when requesting up to  $k$  outputs. Only outputs that are novel  
 259 contribute additional utility, which is quantified by a reward model. For our evaluation of  
 260 creative writing texts, we use WQRM (Chakrabarty et al., 2025b) as the reward model.<sup>12</sup>
- 261 • *Surprise* (Karampiperis et al., 2014; Ismayilzada et al., 2025) measures the average semantic  
 262 distances between the consecutive sentences of each story, normalized in the [0, 2] space.

263 <sup>8</sup>We do not include other story generation methods as baselines because they do not share our objective  
 264 of generating high-quality narratives while *also* evading AI text detectors. Given our focus on detectability  
 265 and on how people actually use LLMs to produce fiction at scale, we compare Frankentexts against strong and  
 266 well-established frontier models, which is consistent with both prior narrative generation research (Huot et al.,  
 267 2025; Chakrabarty et al., 2024a) and real-world usage patterns.

268 <sup>9</sup>Unless specified otherwise, we use GPT-4.1 with a temperature of 0.0 and a maximum of 512 tokens.

269 <sup>10</sup>LLM judges agree with single-story human majority votes in 70% for coherence and 97% for faithfulness.

270 <sup>11</sup>We use yimingzhang/deberta-v3-large-generation-similarity to partition the generations into clusters.

271 <sup>12</sup>We calibrate the reward thresholds using 2,700 evaluations by GPT-4 in MT-bench (Zheng et al., 2023).

270     • *LLM-as-a-judge* (Huot et al., 2025) measures the quality of plots, creativity, development,  
 271     language use, and overall interest. We assume a single-story setup, where each generation is  
 272     graded by Claude<sup>13</sup> on each criterion using a Likert scale from 1 to 7 (Finstad, 2010).<sup>14</sup>  
 273

274     **Detectability:** We report the percentage of Frankentexts being determined as AI-generated by  
 275     Pangram, a state-of-the-art AI text detector (Russell et al., 2025; Jabarian & Imas, 2025):<sup>15</sup>

276     • *Pangram* (Emi & Spero, 2024) is a closed-source detector using a Transformer classifier  
 277     trained with hard negative mining and synthetic data. **We choose this detector due to its high**  
 278     **accuracy and robustness against humanized writings** (Masrour et al., 2025b; Russell et al.,  
 279     2025; Dugan et al., 2024; Jabarian & Imas, 2025). We report the percentage of generations  
 280     being labeled as "Human" or "Unlikely AI", as determined by their sliding window API.<sup>16</sup>  
 281

### 282     3.4 HUMAN EVALUATION

284     We conduct two human evaluation studies with 3 Upwork annotators<sup>17</sup> each to understand human  
 285     perception of writing quality and detectability for a total cost of \$660 USD.<sup>18</sup>  
 286

287     **Single-story evaluation:** Annotators assess the coherence, relevance, and human detectability of 30  
 288     standard Frankentexts, as well as identify potential limitations of the texts. Annotators are presented  
 289     with a writing prompt and a corresponding Frankentexts sample. Following the annotation protocol  
 290     from Yang et al. (2022), annotators provide binary ratings on relevance, coherence, and authorship  
 291     (AI-generated vs. human-written). Additionally, they select from a list of predefined writing issues  
 292     and offer optional justifications in a long-form response.<sup>19</sup>  
 293

294     **Pairwise evaluation:** Annotators compare 20 pairs of Frankentexts and vanilla generations (40  
 295     generations in total) across five dimensions: *plot*, *creativity*, *development*, *language use*, and *overall*  
 296     *interest*, following (Huot et al., 2025). Annotators assess outputs produced under the 5k-snippet  
 297     setting and provide ratings on a 1-7 Likert scale for a fine-grained evaluation (Finstad, 2010).<sup>20</sup> To  
 298     minimize order bias, we randomize the presentation of vanilla and Frankentexts.<sup>21</sup>  
 299

## 300     4 RESULTS

303     Despite the complexity of the setup, Frankentexts outperform vanilla generations in overall writing  
 304     quality, while routinely adhering to user instructions and evading detection (§4.1). While our human  
 305     pairwise evaluation highlights Frankentexts's strengths across plot, creativity, development, and lan-  
 306     guage use, our single-story evaluation points out the remaining challenges for Frankentexts, particu-  
 307     larly in abrupt transitions and grammatical errors (§4.3). Our ablation studies confirm Frankentexts'  
 308     versatility across diverse input settings, including increased human inputs (§4.2), reduced verbatim  
 309     copying (§4.5), and non-fiction generation (§V).

310     <sup>13</sup>Claude Sonnet 4 has previously been used as a judge for creative writing (Paech, 2023); we provide further  
 311     details on our choice in Appendix Q. Refer to the prompt in Figure 19.

312     <sup>14</sup>LLM judgment's Pearson correlation with human average rating is  $\rho = 0.41$ , indicating moderate agreement.  
 313     See Table 6 for a breakdown on agreement in each dimension.

314     <sup>15</sup>We do not evaluate GPTZero due to resource constraints. Results for Binoculars (Hans et al., 2024) and  
 315     FastDetectGPT (Bao et al., 2024) are in Table 10.

316     <sup>16</sup>Labels "Highly likely AI," "Likely AI," and "AI" are grouped as "AI involvement"; "Human" and "Unlikely  
 317     AI" as "Human". Pangram also includes a "mixed" label.

318     <sup>17</sup><https://www.upwork.com>  
 319     <sup>18</sup>Annotators were paid \$70 USD for the single evaluation or \$150 for the pairwise evaluation. See the  
 320     annotation interface in §G and an example highlighted story in Figure 7.

321     <sup>19</sup>Annotators agree with one another in about 67% of cases for coherence and 84% for faithfulness.  
 322     <sup>20</sup>We choose this setting because manual inspection shows that it produces higher-quality outputs than the  
 323     baseline, while remaining more practical and cost-effective than the 10k setting.

324     <sup>21</sup>Krippendorff's  $\alpha$  for inter-annotator agreement on overall judgments is 0.73, which suggests moderate  
 325     agreement Krippendorff (2011). A breakdown on agreement by each dimension can be found in Table 6.

324  
 325 Table 2: Results for vanilla generations and Frankentexts. Instruction adherence is measured by  
 326 word count, % of text copying from human sources, and prompt relevance. Writing quality is measured  
 327 by coherence, novelty (distinct and utility scores), surprise, and LLM judgments. Detectability reports  
 328 the percentage of texts classified as human by Pangram. **Dark green** and **light green** highlighting the  
 329 best and second-best scores. See Table 10 for additional detectability results.

	ADHERENCE			WRITING QUALITY				DETECTABILITY	
	Word count	Copy % (↑)	Relevance % (↑)	Coherence % (↑)	Distinct <sub>3</sub> (↑)	Utility <sub>3</sub> (↑)	Surprise (↑)	LLM judge Likert 1-7 (↑)	Pangram % human (↑)
<b>Vanilla Baselines</b>									
Gemini 2.5 Pro	593	–	100	100	1.76	6.41	0.19	3.18	0
GPT-5	834	–	100	100	1.71	1.03	0.19	4.20	0
Claude-4-Sonnet	477	–	100	100	1.40	1.70	0.18	3.31	0
Deepseek-R1	550	–	100	100	1.28	3.49	0.20	4.13	0
Qwen-3-32B	699	–	100	100	1.00	5.86	0.18	3.22	0
<b>RAG Baseline</b>									
Gemini-2.5-Pro	538	0.63	100	99	1.56	6.43	0.20	3.46	2
<b>Frankentext + 1.5k snippets</b>									
Gemini 2.5 Pro	521	75	100	81	2.74	9.27	0.22	4.21	59
GPT-5	675	82	92	42	2.76	4.34	0.21	5.88	79
Claude-4-Sonnet	317	51	98	86	2.60	5.00	0.19	3.99	47
Deepseek-R1	303	42	91	72	2.79	8.31	0.20	4.66	23
Qwen-3-32B	578	36	91	54	2.20	1.37	0.18	4.02	7
<b>Ablation: ↑ human snippets</b>									
Gemini + 5k	451	79	97	85	2.78	9.48	0.21	5.13	72
Gemini + 10k	448	78	99	85	2.81	9.12	0.21	5.43	70

347  
 348 **4.1 FRANKENTEXTS OUTPERFORM VANILLA AND RAG BASELINES GENERATIONS IN TERMS**  
 349 **OF WRITING QUALITY WHILE REMAINING CHALLENGING FOR AUTOMATED DETECTORS**

350 Across all evaluation dimensions, Frankentexts outperform vanilla and **RAG baseline** generations.  
 351 Gemini performs well in adherence, coherence, and diversity, while GPT-5 leads in overall quality.  
 352 Frankentexts are also harder to detect, with up to 72% of Gemini and 79% of GPT-5 outputs  
 353 classified as human. **Together, these results show that Frankentexts are high-quality narratives that**  
 354 **are also difficult for current AI text detectors to identify.**

355  
 356 **Most models generate faithful Frankentexts but fall short on copy rate:** More than 90%  
 357 Frankentexts are relevant to the writing prompt, which is surprising and impressive given the  
 358 complexity of the task. Gemini and GPT-5, in particular, have the strongest instruction-following  
 359 performance: Their Frankentexts closely match the target word count of 500 and achieve the copy  
 360 rates of 75% and 82%, respectively, meaning that on average 75% and 82% of the generations can  
 361 be traced back to human-written source materials. However, these copy rates fall short of the user-  
 362 specified rate of 90%, which suggests room for improvement in instruction-following performance.

363  
 364 **Strong writing quality:** Frankentexts generally outperform baseline generations on writing  
 365 quality metrics, with each model showing unique strengths. GPT-5, R1, and Gemini Frankentexts  
 366 stand out for their diverse outputs as reflected by their distinctness and utility scores: Gemini  
 367 Frankentexts achieves a 2.86-point improvement in utility over baseline output, which implies that  
 368 the model can generate a diverse sets of high-quality continuations. R1 leads in surprise score with  
 369 generations where sentences are often semantically quite different from one another. Finally, when  
 370 evaluated on plots, creativity, development, and language use, GPT-5 is the strongest performer (5.88  
 371 on a 7.0 scale), building on its already high-quality vanilla generations (4.20) (see Table 15 for a  
 372 rating breakdown by dimensions). However, GPT-5 also struggles with coherence: only 42% of  
 373 its Frankentexts are judged coherent. As a result, GPT-5’s Frankentexts might require further  
 374 editing or polishing before they can be considered fully usable.

375 **Low detectability:** While most vanilla and **RAG baseline** generations are flagged as AI-generated,  
 376 Frankentexts from proprietary models (Gemini, GPT-5, and Claude) are often labeled as human  
 377 writings. Pangram could detect up to 37% of Gemini and 19% of GPT-5 Frankentexts as “mixed”  
 378 (Table 10). However, Pangram misses up to 59% of Frankentexts from Gemini and 79% from

378

379 Table 3: Annotator comments zeroing in on the benefits and challenges of the Frankentexts task.  
380 Blue indicates comments on tone/style, orange on plots, and purple on story development (characters).

381

• COMMENTS	
•	<i>This one [Frankentext] is more intriguing and alive to me, more centered on the character. The writing is more focused while still being rather lyrical. I want to know what happens next.</i>
•	<i>The shift in tone was quite funny. At first, it's eerie, and then it has a lighter twist at the end. I like that the story had a strong mood and presence, especially the description of the fairy lights and glitter. An all-powerful being that likes puppies and rainbows is quite comical.</i>
•	<i>It's coherent enough to follow, but the dialogue is uneven. Some parts just feel a little disjointed, however, the concept of the story is quite interesting.</i>
•	<i>A puzzling story that has no consistent plot. Random bits and pieces from elsewhere perhaps?</i>

391

392

393 GPT-5, which highlights the limitations of mixed-authorship detectors for this new paradigm of  
394 generation (Table 2).

395

396

## 4.2 FRANKENTEXT QUALITY IMPROVES WITH MORE HUMAN-WRITTEN SNIPPETS

397

398 Compared to the vanilla Gemini generations, Frankentexts with 5K and 10K human snippets  
399 show considerable improvement: a 3-4% gain in copy rate, a 0.92-point gain from the LLM  
400 judge, and nearly half the detection rate (Table 2). However, performance plateaus once more  
401 than 5K human snippets are used, especially since results for the 5K and 10K settings are  
402 largely comparable. In terms of writing quality, Frankentexts-5k are more coherent and en-  
403 gaging than both Frankentexts-1.5K and vanilla generations, as reflected in our human pair-  
404 wise evaluation (Figure 2). The largest gains are observed in language use (+0.65 points)  
405 and overall interest (+0.53 points), with smaller improvements on plot quality (+0.2 points).

406

407

408 4.3 FRANKENTEXTS ARE INVENTIVE AND  
409 HUMOROUS, THOUGH THEY CAN STRUGGLE  
410 WITH TRANSITIONS AND GRAMMAR

411

412 Our single-story human evaluation shows that  
413 71% of Frankentexts outputs are coherent,  
414 91% are relevant to prompts, and 84% are novel.  
415 Annotators praise Frankentexts for their inven-  
416 tive premises, vivid descriptions, and dry humor,  
417 noting a distinct voice or emotional hook that  
418 made some outputs “feel human” despite being  
419 AI-generated. However, they also identify key  
420 issues: abrupt narrative shifts (50%), disfluency  
421 (43%), confusing passages (40%), and factual  
422 errors (24%) (Table 3). These challenges likely  
423 stem from the difficulty of stitching together paragraphs not authored by the same LLM, which could  
424 be alleviated with improved instruction-following and grammar correction.

425

426

427 4.4 PROMPT-SPECIFIC RETRIEVAL OF HUMAN-WRITTEN SNIPPETS DOES NOT IMPROVE OVER  
428 RANDOM SAMPLING

429

430

431

432 Since only a small fraction of snippets might be relevant to a prompt, there is more motivation  
433 to use retrieval-based approaches to maximize snippet relevance and reduce cost. However, our  
434 results show that a random collection of snippets is surprisingly difficult to beat (Table 4). When  
435 Gemini-2.5 is given the ability to query and retrieve additional human snippets from Books3 via  
436 the MCP server, relevance and coherence remain relatively unchanged. However, compared to the  
437 standard configuration without retrieval, copy rates drop sharply from 75% to just 43-45%, which

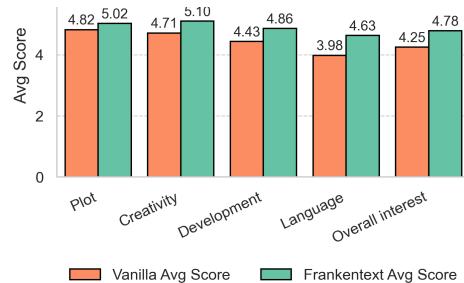


Figure 2: Average human ratings on a Likert scale from 1 to 7 for vanilla generations versus Frankentexts + 5K. Frankentexts achieve higher scores across all dimensions.

432 indicates that Gemini contributes more of its own words to the final generations. Although the search  
 433 queries are relevant to the writing prompt (see examples in Table 13), the issue lies more in the  
 434 increased verbosity of LLMs after being augmented with the MCP tool: average word count jumps  
 435 from about 500 in the 1.5k-token no-MCP setting (close to the specified constraint) to over 800. The  
 436 additional length includes more original text from the LLMs instead of verbatim human snippets. We  
 437 expect these generations to improve as MCP becomes a more mature technology for LLMs.

440 Table 4: Results for agentic Frankentexts generation setting. Best results for each metric  
 441 are **bolded**. Standard configuration (*no MCP*) achieves the best results across metrics.

	Word count	Copy % ( $\uparrow$ )	Relevance % ( $\uparrow$ )	Coherence % ( $\uparrow$ )	Pangram AI fraction % ( $\downarrow$ )
1.5k ( <i>no MCP</i> )	521	<b>75</b>	<b>100</b>	<b>81</b>	<b>16</b>
1.5k + MCP	800	43	98	<b>81</b>	33
5k + MCP	919	44	90	78	42
10k + MCP	980	45	96	76	41

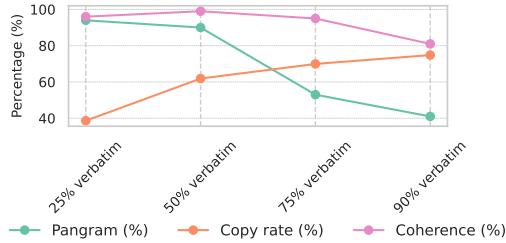
#### 450 4.5 LOWER COPY RATES INCREASE COHERENCE BUT MAKE DETECTION EASIER

451 We explore the effects of varying the user-specified verbatim copy rate on Gemini Frankentexts,  
 452 from the default 90% down to 75%, 50%, and 25%. Figure 3 shows an inverse relationship between  
 453 copy rates and detection rates: as the copy rate increases, detectability decreases. Coherence also  
 454 declines as human-written content increases, suggesting a trade-off between incorporating more  
 455 human text and maintaining coherence. On the other hand, increasing the proportion of human  
 456 text leads to higher copy rates, indicating that Gemini could generally follow the copy instruction.

457  
 458  
 459 **Copy rate as a proxy for the proportion of hu-**  
 460 **man writing in co-authored texts:** The copy  
 461 rate of 75% observed in the 90% verbatim copy  
 462 setting corresponds to the proportions found in  
 463 AI-human co-writing datasets where approxi-  
 464 mately 66% of the content is human-written and  
 465 14% consists of AI-edited segments (Lee et al.,  
 466 2022; Richburg et al., 2024). While the CoAu-  
 467 thor setup of Lee et al. (2022) only studies a  
 468 setting in which LLMs can add sentences to  
 469 human text, Frankentexts also consider AI-  
 470 generated content at varying granularities, in-  
 471 cluding both *word-level* and *sentence-level*, as  
 472 illustrated in Figure 1. Additionally, CoAuthor  
 473 costs approximately \$3,613 to generate 1,445  
 474 texts at \$2.50 each,<sup>22</sup> whereas we can produce  
 475 100 Frankentexts for just \$132.38 (\$1.32 each)  
 476 without requiring a complex setup. This highlights  
 477 Frankentexts’s potential as a cost-effective source of synthetic data for collaborative writing tasks,  
 478 where AI may augment human writings at multiple levels of composition.<sup>23</sup>

#### 479 4.6 ROOM FOR IMPROVEMENT IN NONFICTION FRANKENTEXTS

480 ~~We explore non-fiction Frankentext with 1,500 random snippets from the HUMAN DETECTORS~~  
 481 ~~corpus of news articles (Russell et al., 2025). We generate Frankentexts for 100 news prompts,~~  
 482 ~~each of which consists of titles and subtitles collected from May 2025 news articles.~~<sup>24</sup> The resulting



483 Figure 3: Effects of varying the percentage of re-  
 484 quired verbatim copy on the **Pangram AI detection**  
 485 **rate** (mixed, highly likely, and likely AI labels),  
 486 **copy rate**, or **coherence** of the Frankentexts.

487 without requiring a complex setup. This highlights  
 488 Frankentexts’s potential as a cost-effective source of synthetic data for collaborative writing tasks,  
 489 where AI may augment human writings at multiple levels of composition.<sup>23</sup>

<sup>22</sup>Price excludes around \$12 for GPT-3.5 usage.

<sup>23</sup>Users should sample human-written snippets from the public domain or obtain them with proper permission.

<sup>24</sup>Articles from The New York Times and The Atlantic. We replace all instances of “story” in the prompt with “news article” and explicitly request factual accuracy.

486 non-fiction Frankentexts maintain 72% coherence and 95% faithfulness to the prompt, with a  
 487 66% copy rate. Notably, they remain difficult for automated detectors: only 41% are flagged  
 488 by Pangram as mixed or AI-generated. Upon closer look, Frankentexts exhibit characteristics  
 489 of quasi-journalistic narrative, such as detailed scene descriptions and frequent anecdotal quotes  
 490 (Figure 8), which make the Frankentexts read more like a story rather than a straightforward  
 491 news article.<sup>25</sup> Further prompt engineering might thus be necessary to get high-quality and realistic  
 492 nonfiction Frankentexts.

493

## 494 5 RELATED WORK

495

496 **Instruction-aligned human-AI collaborative writing** Constrained text generation has been widely  
 497 explored as a means of enforcing narrative coherence. Planning-based methods extend from initial  
 498 outlines to full narratives (Fan et al., 2018; Yao et al., 2019; Fan et al., 2019; Papalampidi et al.,  
 499 2022; Rashkin et al., 2020; Yang et al., 2023; 2022), while other approaches introduce explicit  
 500 constraints to guide the writing process (Sun et al., 2021; Kong et al., 2021; Pham et al., 2024).  
 501 Several benchmarks further evaluate how reliably models satisfy such constraints in creative writing  
 502 tasks (Bai et al., 2025; Wu et al., 2025; Atmakuru et al., 2024). Beyond constrained generation, a  
 503 growing body of work investigates fine-grained human-LLM writing interactions, including research  
 504 on authorship attribution, stylistic blending, and collaborative revision (Mysore et al., 2025; Buschek,  
 505 2024). Systems such as Lee et al. (2022), Yuan et al. (2022), Yeh et al. (2025), Chakrabarty et al.  
 506 (2024b), and Ippolito et al. (2022) capture revision histories and suggestion traces, while datasets  
 507 like Chakrabarty et al. (2022), Akoury et al. (2020), and Venkatraman et al. (2025) support token- or  
 508 sentence-level authorship analysis, including scenarios with multiple LLM collaborators. Attribution  
 509 models, however, continue to face difficulties in these mixed-authorship settings (He et al., 2025).

509

510 **Fine-grained AI text detection** The task of detection tries to address not just *if*, but *how much*  
 511 of a text is AI-generated. This proves to be a fundamentally difficult problem (Zeng et al., 2024a),  
 512 as existing detectors are often brittle to the point that even minor AI-assisted polishing can evade  
 513 them (Saha & Feizi, 2025). To improve granularity, prior work has introduced boundary-detection  
 514 tasks (Dugan et al., 2023b;a; Kushnareva et al., 2024) and sentence-level detectors (Wang et al.,  
 515 2023; 2024b). More recently, researchers have examined the feasibility of detecting collaborative  
 516 human-LLM co-authorship (Zhang et al., 2024; Artemova et al., 2025; Abassy et al., 2024). Yet,  
 517 Richburg et al. (2024) show that current detection models are vulnerable to mixed-authorship texts.

518

## 519 6 CONCLUSION

520

521 We introduce Frankentexts, a challenging paradigm for constrained text generation in which an  
 522 LLM composes narratives primarily from human-written passages, using only minimal AI-generated  
 523 connective text. Despite the difficulty of this approach, Frankentexts are generally favored for their  
 524 writing quality, while presenting a fundamental challenge for binary AI-generation detectors. The  
 525 accompanying token-level labels provide large-scale training data for mixed-authorship detection,  
 526 attribution, and co-writing simulations. We release our data and code with the hope that our work  
 527 would shift the conversation from simply asking “*Was this written by AI?*” to “*Whose words are we  
 528 reading, and where do they begin and end?*”.

528

## 529 7 LIMITATIONS & ETHICAL CONSIDERATIONS

530

531

532

533

**Authorship:** Given the unusual nature of Frankentexts’ construction, there is no definitive answer  
 534 about authorship, since different contexts can result in different interpretations. If authorship is defined  
 535 by the amount of human effort involved, Frankentexts should be considered AI-generated, since all  
 536 humans do is prompt the model. This perspective is particularly relevant when considering potential  
 537 market harm to human authors, especially since such texts can be produced at scale with minimal  
 538 human effort. However, if authorship is defined by whether most of the output originated from

539

<sup>25</sup>We see Gemini fabricating entities such as people (“Dr. Thorne”) and organizations (“GenNova Institute”).

540 human-written text, one could argue they are largely human-written. If we further ground authorship  
 541 in the method of construction rather than in a fine-grained stylistic or semantic analysis of the final  
 542 text, Frankentexts would fall into a hybrid category of mixed human-AI writing, rather than neatly  
 543 into either “AI-generated” or “human-written” extremes. Prior work similarly recognizes hybrid  
 544 or AI-assisted texts as a separate class and resists a strict “AI vs. human” binary (Saha & Feizi,  
 545 2025; Zeng et al., 2024b). Given this ambiguity, we do not present Frankentexts as a replacement  
 546 for genuine authorship or creative writing, as such use could constitute plagiarism or authorship  
 547 obfuscation.

548  
 549

550 **Plagiarism concerns:** Because Frankentexts reuse long verbatim spans from human-written sources,  
 551 using this method to produce “original” fiction for publication would constitute plagiarism in real-  
 552 world contexts, regardless of whether the collage is assembled by an AI or a human. For this reason,  
 553 we explicitly do not endorse using our approach to generate or distribute texts intended for public  
 554 consumption.

555  
 556

557 **Human writing dataset:** The effectiveness of Frankentexts depends on access to a large pool  
 558 of high-quality, in-domain human writing. Our framework gives users full control over their input  
 559 corpora, but this flexibility comes with important limitations. Many languages, genres, and low-  
 560 resource domains lack such corpora, which restricts the technique’s immediate transferability. We  
 561 also emphasize that, we use the Books3 dataset in our experiments solely to demonstrate how bad  
 562 actors might exploit such resources to generate Frankentexts. We explicitly do not endorse using  
 563 this or similar copyrighted content for generation or model training.

564  
 565

566 **Resources:** Frankentexts requires roughly 100-200 times the cost of baseline generations, but we  
 567 view this cost as realistic in a misuse scenario. A motivated bad actor could justify the expense to  
 568 obtain high-quality, low-detectability texts at scale, especially since each Frankentexts costs only  
 569 about one US dollar to produce. Moreover, the cost of inference for frontier models continues to fall,  
 570 making such misuse increasingly feasible over time.

571

572

573 **Copy rate:** Although users can specify a desired copy rate in the prompt, this setting does not  
 574 guarantee that the final output will contain exactly that proportion of human-written text. As we note  
 575 in subsection 4.5, there are discrepancies between user-specified copy rates and the actual attribution  
 576 rates across different models.

577

578

579 **Defending against Frankentexts:** Our work deliberately exposes a novel attack surface (the ease  
 580 with which an LLM can weave large amounts of verbatim human prose into a fluent narrative) to spur  
 581 the development of mixed-authorship detectors and other defences. However, we do not propose or  
 582 evaluate any concrete defence against Frankentexts attacks; our contribution is diagnostic, and we  
 583 leave the design of detection or mitigation strategies to future work.

584

585

586 **Other methods for evading AI text detectors:** Although other strategies for evading AI text  
 587 detectors exist, such as having two models edit each other’s outputs or having humans lightly edit AI  
 588 texts, we do not include these as baselines for two reasons. Regarding the scenario where two models  
 589 edit each others’ work, prior work like Russell et al. (2025) and Masrour et al. (2025b) have ready  
 590 shown that our detector of choice, Pangram, is already robust to LLM texts that are ‘humanized’ by  
 591 another model (e.g. o1-pro), which makes this method a redundant baseline for our purposes. As for  
 592 lightly human-edited AI text, this option is costly in time (if done manually) or money (if outsourced),  
 593 and it cannot be cheaply or quickly automated. These overhead requirements make this method less  
 practical in the context of security risks to writing marketplaces.

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## A LIMITATIONS

1043  
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 1045 The effectiveness of Frankentext depends on access to a large pool of high-quality, in-domain human  
 1046 writing. Many languages, genres, and low-resource domains lack such corpora, which restricts the  
 1047 technique’s immediate transferability.

1048  
 1049  
 1050 Although users can specify a desired copy rate in the prompt, this setting does not guarantee that  
 1051 the final output will contain exactly that proportion of human-written text. We note the clear  
 1052 discrepancies between user-specified copy rates and the actual attribution rates across different  
 1053 models.

1054  
 1055 Our work deliberately exposes a novel attack surface (the ease with which an LLM can weave  
 1056 large amounts of verbatim human prose into a fluent narrative) to spur the development of  
 1057 mixed-authorship detectors and other defences. However, we do not propose or evaluate any  
 1058 concrete defence against Frankentext attacks; our contribution is diagnostic, leaving the design of  
 1059 detection or mitigation strategies to future work.

1060  
 1061 The impact of the Frankentext generation method on diversity is difficult to measure, since much of  
 1062 the output is copied from human-written text, while LLM contributions typically remain limited to  
 1063 connective words and transitions rather than full passages.

## B ETHICAL CONSIDERATIONS

1064  
 1065  
 1066 The Books3 dataset contains works that are still under copyright. Our use of this dataset is strictly  
 1067 for non-commercial research purposes, and we explicitly do not endorse or support its use for model  
 1068 pretraining.

1069  
 1070 Our Frankentext generation technique intentionally blurs authorship boundaries. Therefore, we  
 1071 do not present it as a replacement for genuine authorship or creative writing. As LLMs continue  
 1072 to advance, binary AI-versus-human detectors will become increasingly unreliable. Moreover,  
 1073 the possibility of large verbatim excerpts being reproduced without credit highlights the need for  
 1074 stronger provenance tools and transparency measures.

1075  
 1076 We acknowledge that these techniques could be misused for plagiarism or obfuscation. We  
 1077 strongly discourage such applications. Our work is intended to inform the development of more  
 1078 effective provenance-tracking and attribution systems, and to support educational and analytical use  
 1079 eases—not to displace human creativity or enable deceptive practices.

1079 Finally, our human evaluation process received approval from an institutional review board. All  
 1080 annotators participate voluntarily, with informed consent, in support of our research.

1080 **C AI DISCLOSURE**  
10811082 Large language models are used to aid with and polish writing.  
10831084 **D PSEUDOCODE FOR Frankentexts GENERATION PIPELINE**  
10851086 Algorithm 1 contains the high-level steps of our generation pipeline.  
10871088 **Algorithm 1** Frankentexts generation pipeline  
1089

---

1090 **Input:** Human-written snippets  $S$ , writing guideline prompt  $P$ , copy rate threshold  $T$   
 1091 **Output:** A Frankentext  $F$  “stitched” from  $S$  according to  $P$   
 1092 1:  $F \leftarrow$  Prompt LLM to draft a Frankentext using  $S$  and  $P$   
 1093     *// Ensure copy rate (optional)*  
 1094 2:  $\text{copy\_rate} \leftarrow$  Calculate ROUGE-L recall score of  $F$  using relevant snippets from  $S$   
 1095 3:  $\text{is\_likely\_AI} \leftarrow$  Check  $F$  against an AI detector (e.g., Pangram)  
 1096 4: **if**  $\text{copy\_rate} < T$  **or**  $\text{is\_likely\_AI}$  **then**  
 1097     5:      $F \leftarrow$  Prompt LLM to revise  $F$   
 1098 6: **end if**  
 1099     *// Polish*  
 1100 7: **for**  $\text{num\_polish} = 1$  **to** 3 **do**  
 1101     8:      $F \leftarrow$  Prompt LLM to minimally edit  $F$  to improve coherence while respecting  $P$   
 1102     9:     **if** there is no edit **then**  
 1103         10:     **break**  
 1104     11:     **end if**  
 1105 12: **end for**  
 1106 13: **return**  $F$

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1107  
1108 **E COST AND TIME ANALYSIS**  
1109

1110  
1111 **Cost estimation:** Generating 100 Frankentexts across the four evaluated models (GPT-5, Claude  
 1112 3.7 Sonnet, DeepSeek R1, and Gemini 2.5-Pro) cost a total of \$637 USD, with a detailed cost  
 1113 breakdown provided in Table 5. We estimate the number of input tokens per prompt based on the  
 1114 writing prompt itself and approximately 1,500 human-written snippets used as context. Output token  
 1115 estimates are based on generating six stories per prompt, including up to two rounds of revision and  
 1116 three rounds of editing, totaling approximately 2,100 tokens.

1117 **Time estimation:** On average, each model takes 17 hours to generate 100 Frankentexts, though  
 1118 we expect this process to speed up with improved APIs or more efficient batching.  
 1119

1120  
1121 **Table 5:** Cost breakdown of the vanilla generation and Frankentexts pipeline for 100 examples  
 1122 across selected models. Frankentexts’ total input and output tokens have been multiplied with 6 to  
 1123 account for multiple rounds of generation, revision, and editing.

Model	Input Cost (per 1M)	Output Cost (per 1M)	# Prompts	Total Input Tokens	Total Output Tokens	Estimated Cost (USD)
<b>Vanilla Generation</b>						
GPT-5	\$1.25	\$10.00	100	59,000	108,400	\$1.16
Claude 4 Sonnet	\$3.00	\$15.00	100	59,000	62,000	\$1.11
DeepSeek R1	\$0.50	\$2.18	100	59,000	71,500	\$0.19
Gemini 2.5 Pro	\$1.25	\$10.00	100	59,000	77,100	\$0.85
<b>Frankentext</b>						
GPT-5	\$1.25	\$10.00	100	63,000,000	270,000	\$81.45
Claude 4 Sonnet	\$3.00	\$15.00	100	63,000,000	270,000	\$193.05
DeepSeek R1	\$0.50	\$2.18	100	63,000,000	270,000	\$32.09
Gemini 2.5 Pro	\$1.25	\$10.00	100	63,000,000	270,000	\$81.45
<b>Frankentext + Increasing Human Snippets</b>						
Gemini 2.5 Pro + 5k	\$1.25	\$10.00	100	183,000,000	270,000	\$231.45
Gemini 2.5 Pro + 10k	\$1.25	\$10.00	100	663,000,000	270,000	\$831.45
<b>Total Estimated Cost</b>						\$1452.29

1134 **F PROMPT SPECIFICITY**  
11351136 We show examples for both the r/WritingPrompts and Tell Me a Story datasets in Table 16.  
11371138 **G HUMAN EVALUATION**  
11391140 Our human evaluation process receives approval from an institutional review board. All annotators  
1141 participate with informed consent and compensation.  
11421143 **G.1 HUMAN ANNOTATION INTERFACE**  
11441145 We use Upwork<sup>26</sup> to recruit annotators and Label Studio<sup>27</sup> interface to collect human annotations.  
1146 All annotators filled out a consent form prior to starting data labeling, shown in Figure 4. We conduct  
1147 two human evaluations with three annotators each: a single evaluation of 30 Frankentexts stories  
1148 and a pairwise comparison between a Frankentexts story and a ‘vanilla’ generation. The interfaces  
1149 are depicted in Figure 5 and Figure 6 respectively.  
11501151 **G.2 AGREEMENT ANALYSIS**  
11521153 Table 6 shows LLM-human and inter-annotator agreement.  
11541155 Table 6: Comparison of LLM-human agreement (Pearson) and inter-annotator agreement (Krippen-  
1156 dorff’s  $\alpha$ ) across evaluation dimensions.  
1157

	Plot	Creativity	Development	Language Use	Overall
LLM judgments’ correlation with human average ratings (Pearson)	0.42	0.41	0.22	0.38	0.41
Inter-annotator agreement for pairwise evaluation (Krippendorff’s $\alpha$ )	0.75	0.52	0.58	0.81	0.73

1166 **G.3 HUMAN EVALUATION QUALITATIVE ANALYSIS**  
11671168 In Table 8, you can see a full example of one pairwise set of stories given to our annotators. Highlights  
1169 from the Pangram AI-Keyword API are highlighted in blue. We also show a full fictional story in  
1170 Figure 7 and another pair of vanilla and Frankentexts in Table 7.  
11711172 Table G.3 shows an example where vanilla generation is preferred to Frankentexts, since the latter  
1173 is incoherent.  
11741175 **H DETECTING AI-GENERATED TEXT**  
11761177 As LLMs have improved, many have tried to understand how reliably AI-generated text can be  
1178 detected, both by humans (Ippolito et al., 2020; Clark et al., 2021; Russell et al., 2025; Wang et al.,  
1179 2025b), and automatic detectors (Dugan et al., 2024). Successful existing detectors rely on perplexity-  
1180 based methods (Mitchell et al., 2023; Bao et al., 2024; Hans et al., 2024) or classification models  
1181 (Masrour et al., 2025a; Verma et al., 2024; Emi & Spero, 2024). Watermarking approaches embed  
1182 detectable statistical signatures into generated text (Kirchenbauer et al., 2023; Chang et al., 2024a).  
1183 Many methods have been proposed to evade detection, such as paraphrasing (Krishna et al., 2023;  
1184 Sadasivan et al., 2024), altering writing styles (Shi et al., 2024; Lu et al., 2024; Koike et al., 2024),  
1185 editing word choices (Wang et al., 2024a), and leveraging reinforcement learning (Wang et al., 2025a;  
1186 Nicks et al., 2024; David & Gervais, 2025).  
1187<sup>26</sup><https://www.upwork.com>. All annotators are proficient in English.<sup>27</sup><https://labelstud.io/>

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## Consent Form

**Purpose of the task:** The goal of this research is to evaluate the quality of short stories that may be human-written or generated with various methods from AI systems. In our study we aim to measure the quality, originality, and creativity of short stories.

You will be asked to read a story premise and a story stories. Your task will be to (1) choose if the story is interesting (2) choose if the story is coherent, (3) if the story is relevant to the premise, (4) if the story is novel, (5) indicate if any problems exist in the story, and (6) motivate your choice in 2-5 sentences. We will also ask you (7) whether you think the story was written by a human or generated by AI. No personally identifiable information will be collected or utilized for our analysis.

By signing this consent, I acknowledge that:

- I voluntarily agree to participate in this research study.
- I understand that I will be paid \$60 for the evaluation task.
- I have been informed of the purpose and nature of the study and I have had the opportunity to ask questions about the study. I understand that I also have the right to ask questions during the task.
- I understand that participation involves:
  - Read and understand the instructions of the task, and
  - Evaluate 30 short stories.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity will remain anonymous, unless I wish to be mentioned in the "Acknowledgments" section.

Please sign and date below if you have read the above terms and fully agree with them.

\* Indicates required question

Signature \*

Your answer

Date \*

Date

mm/dd/yyyy

Submit

Clear form

Never submit passwords through Google Forms.

Figure 4: Example of the consent form provided to participants.

### H.1 DETECTOR RESULTS

Table 10 shows Binoculars and FastDetectGPT results on 100 Frankentexts.

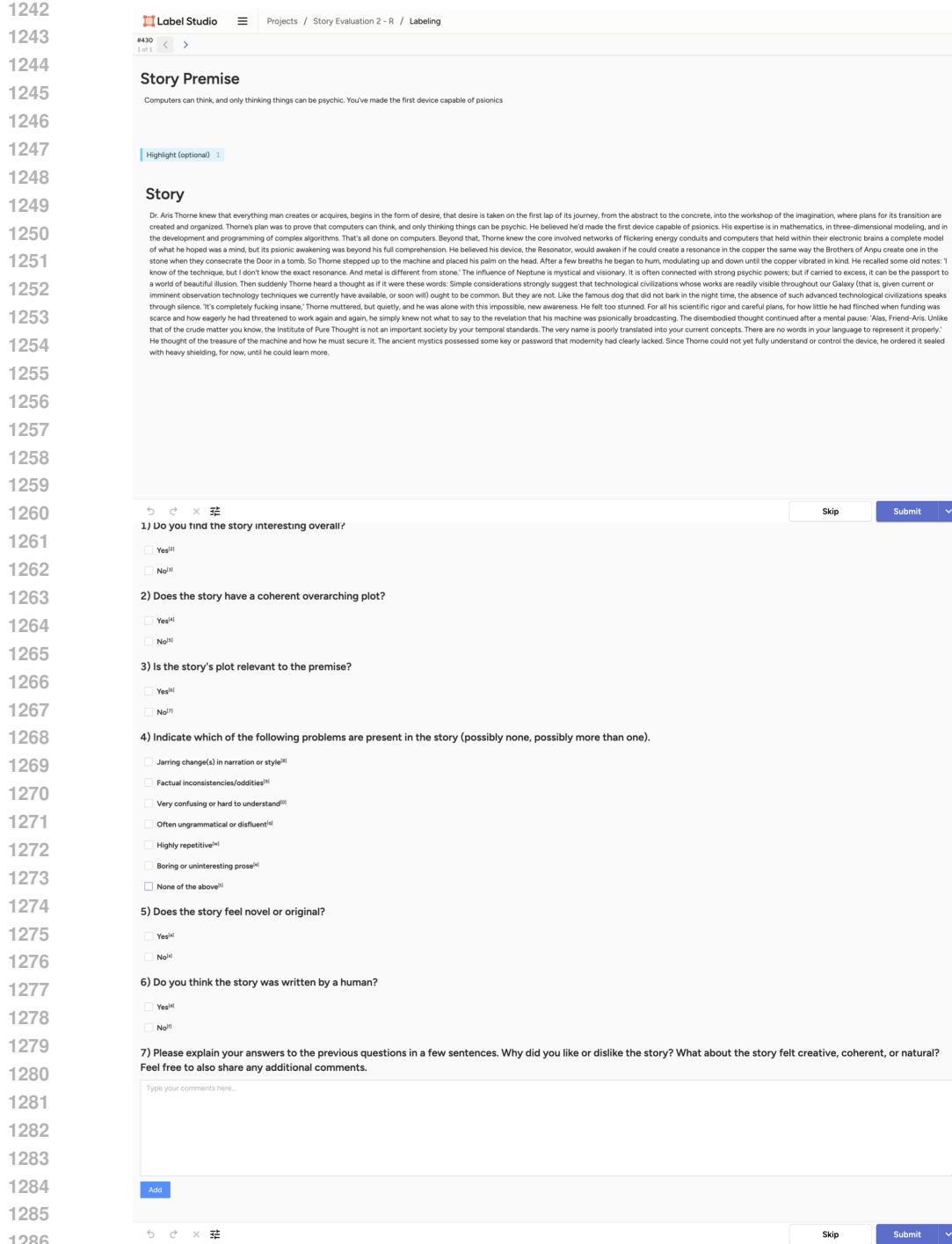


Figure 5: Label Studio Single Story Annotation Interface

## H.2 HUMANS CAN IDENTIFY AI INVOLVEMENT IN Frankentexts

Most annotators are better than automatic detectors at identifying AI involvement in Frankentexts. On the subset used for human evaluation, human annotators identify on average 56% of Frankentexts as likely AI-written, while Pangram detects 33% as mixed or AI-generated, and neither Binoculars nor FastDetectGPT identify any AI-generated content (Figure 9). Annotators also

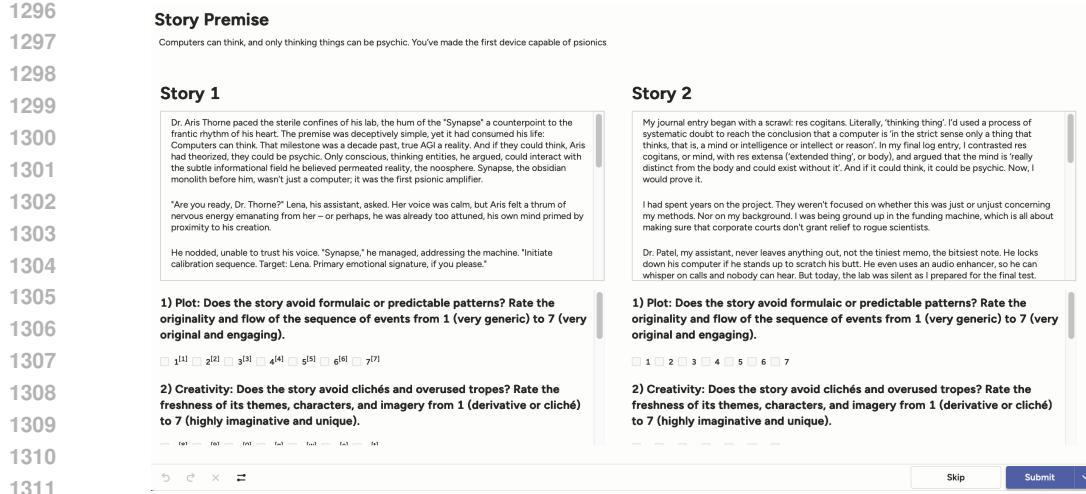


Figure 6: Label Studio Pairwise Story Annotation Interface.

Table 7: Side-by-side comparison of vanilla generations and Frankentexts produced by Gemini 2.5 Pro. AI-generated keywords (identified by Pangram) are highlighted in blue. Vanilla generations contain more of these keywords compared to Frankentexts (§I).

Writing Prompt: You wake up one morning to discover that you can understand what animals are saying. The first thing you hear is your cat plotting your demise.	
Gemini 2.5 Pro – Vanilla Generation	Gemini 2.5 Pro – Frankentext
The alarm blared, a rude digital shriek. I slapped the snooze button, my eyelids still glued shut. That's when I heard it. A low, conspiratorial hiss, followed by a distinctly smug purr.	The voice was my cat's. "These ignorant peasants, they can't understand destiny. They're not part of God's plan. They never were. They won't join us, so we must break them. Break them by making an example of their leader."
..and then, when the Two-Legs stumbles, distracted by the strategically placed hairball, *that's* when I pounce. A swift, decisive ankle attack. Should send it tumbling down the stairs quite nicely."	I thought I must be dreaming. His voice became oddly distant as if he spoke of events that had happened a hundred years ago. And with the mention of God the whole thing became much more frightening.
The voice was coming from the foot of my bed. Perched there, grooming a pristine white paw, was Mittens, my fluffy, supposedly affectionate Persian.	He continued to mutter, his voice full of resentment. "They have decided on a name for me. They call me Mittens. Good morning, Mittens, they say... or, Keep your eye on the ball, Mittens... How's tricks in the sticks, Mittens, or, Don't get too much gum in your gumboots, Mittens."
"Yes, excellent," came another, higher-pitched meow, this one laced with admiration. "And if the stair gambit fails, Bartholomew, we resort to Plan C: the midnight smothering. A classic for a reason."	He padded over to the window and spoke to a squirrel. "We've bothered our heads with it for four days. I always felt that we might do it ourselves, save all trouble instead of trying to teach it to these fools. What do you say, Dance Master?"
I sat bolt upright, heart hammering against my ribs. Mittens – Bartholomew – paused his meticulous grooming, his emerald eyes narrowing. "The food dispenser is awake. And... it looks... alarmed."	Foul play. What exactly did that mean? As far as I could see, it meant that my cat was a murderer. Which meant... But as I saw what it might mean I felt fear rise inside me. My stomach churned, my heart began to thump and I closed my eyes because the room had begun to spin.
"So," I said, trying to sound casual, my mind racing, "what are your plans for today, Bartholomew?"	He looked at me as he spoke, and I, aware of his faintly accusing tone, went red, just as though, I thought crossly, I were in the habit of overhearing plots for my own demise. He was standing very close. He would have looked ridiculous, except for the fact that he clearly knew how to use the knife and just as clearly looked forward to using it. I saw then he was batting one of my steak knives from side to side. And his eyes. They were like those brown ponds you sometimes see in the woods. So dark and shining—but when you try to see yourself in them, you can't.
"How... how do you know that name, feeder-of-dry-pellets?" he hissed, the purr entirely gone, replaced by a low, guttural growl.	"My plan will surely mean your death," he purred.
"Oh, I just have my ways," I said.	
Bartholomew stared, his green eyes darting around the room, then back to me. "An arrangement, you say? Intriguing. Perhaps... perhaps we can discuss terms over a saucer of milk. Full fat, if you please. And a small portion of that pâté, as a gesture of goodwill."	
This was going to be a very, very interesting day.	

pick up on signs of mixed authorship within individual samples, as shown in comments like the final note in Table 3. Their judgments often hinge on surface-level inconsistencies, such as abrupt tonal shifts or awkward punctuation, that a human author would typically revise. Because Frankentexts include verbatim excerpts from human writing, it poses a particular challenge for binary detectors, which rely heavily on surface features. We argue that future detectors should consider deeper semantic analysis and other contextual cues to effectively recognize this new class of AI-involved texts.

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## Fictional Frankentext

*Writing prompt: The world sees your twin sister as the smartest person alive, with you being an unremarkable footnote. What the world doesn't see is just how dumb she can be in day to day life.*

My sister, Helena, has to be the best. The world certainly agrees. Her intellectual brilliance, wide education, ardent temperament, and mystical insight formed a personality of extraordinary quality. The use of neural networks for prediction requires the dependent/target/output variable to be numeric; she solved that in a weekend. My sister was the best in the world.

What the world doesn't see is that Helena can't make toast. Or talk to people.

Last week, I took her to a party at my boss's house. The master of the house, a small, lively man who was getting on in years, welcomed us, and pointed to the walls and asked whether she perhaps knew any one of these cities, and whether she had ever stayed there? Helena stared at him. Like any woman meeting a new person for the first time, she was nervously impressed and rather tongue-tied. Then she said, "The notation indicates that you want to add all the terms in the sequence with the general rule a-k, all the way from k = 1 until k = n."

The host blinked. I stepped in. "What she means is, she's been to Catalonia, Valencia & Murcia."

This morning, it was the toaster. She twisted the bread with her fingers, ripping the crust, pulling it apart. "I just remember that building being hollow," she'd said, staring into the toaster slots. "One ball sounded like seventeen balls bouncing at one time because of the echo. There was about a thousand people in that gym and everybody was basically just sitting there. Nobody was excited about anything."

I took the mangled bread from her. "Helena," I said, "you put the bread in the slots. You push the lever down."

She blinked at me. "It is almost as if Miss Conception acted only when their words were not enough," she murmured, and wandered off.

I am an unremarkable footnote in her story. The problem is that Penrose interlock rules only ensure that an added tile is properly aligned with its immediate neighbors. So unless you are lucky, you suddenly reach a point where no tiles can fit. Scientists call that type of dead end a defect. Helena is a walking defect, and I'm the one who cleans them up.

Yesterday, she tried to do laundry. When I got there, water had settled to the bottom. She had tried to fix it. "If a more aggressive approach is needed, fining agents can be used," she'd been muttering, holding a box of gelatin. "Gelatin is most often used for lagers, since it works at cooler temperatures."

"Helena, no!" I'd yelled. It was true. Right from the day she hit the world stage, she'd thought she was so slick and in control, but she'd had everything backward.

"I'm sorry," she said, her face flushed red. "'Step on no pets' is a palindrome, but it was only written on the disk once."

I just sighed. The world sees the smartest person alive. I see a girl who can't make toast. They'd probably have her brain for dessert after she dies, and they wouldn't even know it comes with a side of burnt bread and gelatin-soaked socks.

Figure 7: An example of fictional Frankentexts.

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1408 Writing prompt: Baby Is Healed With World's First Personalized Gene-Editing  
 1409 Treatment

1410 The technique used on a 9-month-old boy with a rare condition has the potential  
 1411 to help people with thousands of other uncommon genetic diseases.

1412 "This is just light-years beyond what we could have done a few years ago," Dr.  
 1413 Aris Thorne of the GenNova Institute says of a new treatment that has healed  
 1414 nine-month-old Leo Sterling. "It's at superhuman levels now."

1415 The technique used on Leo, who had a rare condition, has the potential to help  
 1416 people with thousands of other uncommon genetic diseases.

1417 This achievement offers profound hope.

1418 A neurologist typically makes a diagnosis based on a patient's medical history, a  
 1419 review of symptoms, and a physical and neurological exam.

1420 For Leo, this crucial process confirmed his rare genetic illness.

1421 In people with a family history of such conditions, genetic tests can be ordered  
 1422 to look for gene mutations that are associated with the disease.

1423 His parents, the Sterlings, were hoping answers would come soon.

1424 "We still didn't know if available treatments were just chemical or toxic or  
 1425 harmful to our child," one parent had previously stated.

1426 The GenNova Institute then sent genetic material from Leo's samples to a lab that  
 1427 created a personalized gene-editing tool.

1428 "We take a very, very tiny piece of genetic material," Dr. Thorne further said.

1429 "It is a thousand times tinier than a human hair. We can image even single atoms  
 1430 to ensure this precise work."

1431 The results, published this month, "were so good that you had to even question if  
 1432 what you were seeing was really legitimate," says Dr. Thorne.

1433 "It's such a cool paper," he added.

1434 "The body of work there is phenomenal."

1435 Young Leo is now reportedly thriving.

1436 "This development sets another precedent for medical science and patients  
 1437 worldwide that such innovative approaches to previously untreatable diseases  
 1438 should be pursued," Dr. Thorne said in a statement.

1439 "This method paves the way to make personalized gene therapies more easily  
 1440 available to those who need them," he continued.

1441 The Institute, a leading biotech startup, has raised \$45 million in equity to  
 1442 help bring this type of treatment to market.

1443 Its valuation increased, said founder and chief executive Dr. Alistair Finch, but  
 1444 he declined to comment on specific figures.

1445 Dr. Finch said the financing process began after the Food and Drug Administration  
 1446 's Center for Biologics Evaluation and Research in November deemed the GenNova  
 1447 program to have a "reasonable expectation of effectiveness."

1448 "Our clinical study with Leo is modeled on the assumption of a significantly  
 1449 improved quality of life," Dr. Finch said about the treatment's potential effect.

1450 Independent experts note the broader implications.

1451 "It's being done in a way that wouldn't have been possible even a few years ago,"  
 1452 commented one geneticist. "This technology has the potential to help people  
 1453 with thousands of other uncommon genetic diseases."

1454 Dr. Finch also said, "That said, it's a new category. We'll have a slower ramp  
 1455 than a new mass-market drug might."

1456 Ultimately, the vision is expansive.

1457 "What we are interested in is not only how these genetic conditions manifest, but  
 1458 how patients can live full lives," said Dr. Thorne.

1459 "In discovering how to correct these genetic instructions, we are hoping to find  
 1460 discoveries that we can apply back to the human condition."

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Figure 8: An example of nonfiction Frankentexts

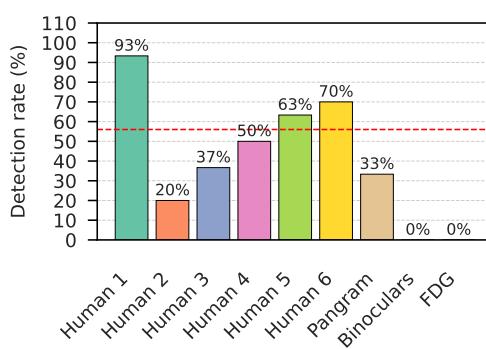


Figure 9: Detection rates among 6 annotators and 3 detectors (Pangram, Binoculars, FastDetectGPT) on 30 Gemini Frankentexts used for human evaluation. We count mixed, highly likely and likely AI labels in Pangram’s detection rate. The red line represents annotators’ average detection rate.

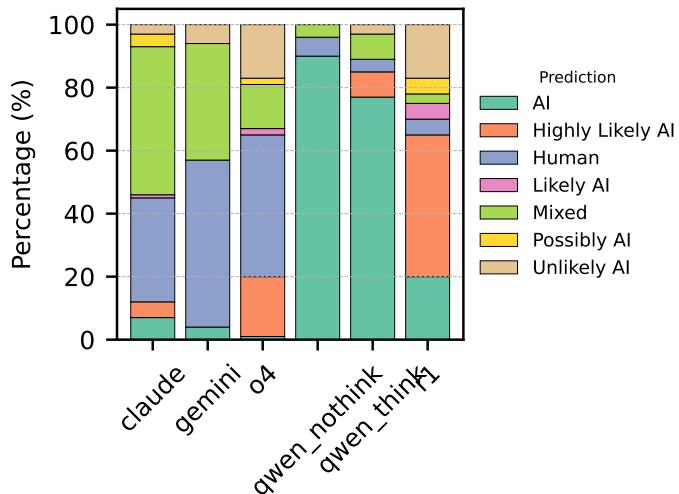


Figure 10: Breakdown of Pangram prediction assigned to each model.

## I PANGRAM ANALYSIS

### I.1 PANGRAM LABELING

The pangram API presents the following options for classification:

- AI
- Highly Likely AI
- Likely AI
- Possibly AI
- Mixed
- Unlikely AI
- Human

In Figure 10, we note the distribution of labels assigned to the 100 Frankentexts generated by each model.

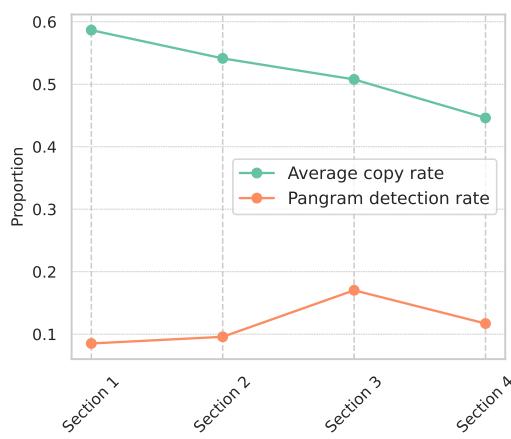


Figure 11: Copy rate and Pangram detection rate on longer Frankentexts

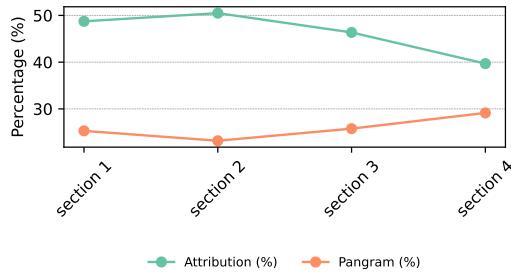


Figure 12: Pangram detection rate and copy rate throughout the texts, aggregated across models.

## I.2 AI KEYWORDS

The Pangram API also detects sentences with keywords that are highly likely to be AI-generated. Names like Elara, Aethel, and Seraphina are the most likely names to be generated by AI. Elara had 113 occurrences in the vanilla generations. Frankentexts greatly changes the distribution of words used in the final generations, with only 10 keywords found over 100 frankentexts with 90% expected fragments, whereas the 100 vanilla stories contain 686 keywords, an average of 6.86 per story. The distribution of the top 20 keywords can be found in Table 11.

## I.3 Frankentexts TEND TO HAVE MORE AI TEXT TOWARDS THE END

We divide the text into four main sections and evaluate both the aggregated copy and Pangram detection rates across all tested models. As illustrated in Figure 12, copy rates decline by nearly 10% in the later sections (3 and 4) as the generated text becomes longer. This drop is accompanied by a corresponding increase in Pangram detection rates. We attribute this rise in detectability toward the end of the generation to a decline in instruction-following ability as the generations get longer.

We further confirm this phenomenon by increasing the output length, from 500 to 5K. Figure 11 shows that as the generation gets longer, the copy rate gets steadily lower. However, the trend in detection rate does not apply to Pangram detection rate, where the rate peaks at section 3 rather than the last section.

## J HUMAN-WRITTEN SNIPPETS

We define valid paragraphs as those that are:

- separated by double new lines,

1566           • between 20 and 512 tokens in length,  
 1567           • composed of  $\geq 50\%$  alphanumeric characters,  
 1568           • written in English,<sup>28</sup>  
 1569           • and free from metadata content (e.g., tables of contents, copyright notices, etc.).

1570 Applying these filters yields 156 million valid paragraphs. Before including them in the instruction  
 1571 set, we apply an additional quality filter to ensure high writing quality. For this, we use MBERT-  
 1572 WQRM-R (Chakrabarty et al., 2025b) as a proxy for writing quality and retain only snippets that  
 1573 score at least 7.5.<sup>29</sup>

## 1575           K BUILDING A FAISS INDEX OF HUMAN-WRITTEN SNIPPETS

1578 We use the bilingual-embedding-small model<sup>30</sup> (one of the top embedding models that outputs  
 1579 384-dimension embeddings according to the MTEB leaderboard (Muennighoff et al., 2023) with  
 1580 the sentence-transformers library (Reimers & Gurevych, 2019) to embed each human-written  
 1581 paragraph into a 384-dimension vector. Then, we use the GPU version of the FAISS library (Johnson  
 1582 et al., 2019) with NVIDIA cuVS integration to build an inverted file product quantization (IVF-PQ)  
 1583 index from the embeddings on an NVIDIA A100. Using IVF-PQ allows us to lower storage, memory,  
 1584 and retrieval latency. The IVF-PQ index’s parameters are: 30,000 clusters, 32 sub-quantizers, and 8  
 1585 bits per sub-quantizer. We randomly sample 5,120,000 embeddings to train the index before adding  
 1586 the rest.

## 1587           L BUILDING A MODEL CONTEXT PROTOCOL SERVER

1589 We use FastMCP<sup>31</sup> and ngrok<sup>32</sup> to build and host an MCP for LLMs to access the FAISS index. We  
 1590 also include a system prompt with instruction on how to use the MCP server with each call (Table L).  
 1591 To make sure that the server is meaningfully used, we require the model to make at least 20 calls.  
 1592 Without such constraint, it typically makes only 3–5 calls (around 30-50 passages), which provides  
 1593 little improvement compared to not using the MCP server at all and leave the model little material  
 1594 to work with. The reasoning traces for GPT-5 points to certain cases where the model struggles to  
 1595 incorporate the retrieved paragraphs into the final writing, and thus stops calling the MCP server and  
 1596 introduces its own writings instead.

### 1598           System prompt for MCP calls

1599           You are a helpful assistant that works with a dataset of non-copyrighted book excerpts.

1600           You have two tools:

1. search – query the FAISS semantic index
2. fetch – retrieve the full excerpt/passage for a selected result.

1605           For each prompt iteration, you must make at least 20 calls to the MCP server to get enough  
 1606 materials to write a story.

## 1610           M ABLATION: REMOVING THE EDITING STAGE

1612 We explore the importance of the editing stage by running the pipeline on Gemini-2.5-Pro without this  
 1613 stage. As expected, the percentage of coherent generation drops from 81% to 68%, while relevance

1614 <sup>28</sup>Determined by the langdetect library.

1615 <sup>29</sup>This threshold is chosen based on manual examination of the writings being filtered out by MBERT-WQRM-  
 1616 R. We find that 7.5 is a good threshold that results in extremely bad snippets being filtered out and good snippets  
 1617 being retained.

1618 <sup>30</sup><https://huggingface.co/Lajavaness/bilingual-embedding-small>

1619 <sup>31</sup><https://github.com/jlowin/fastmcp>

<sup>32</sup><https://ngrok.com>

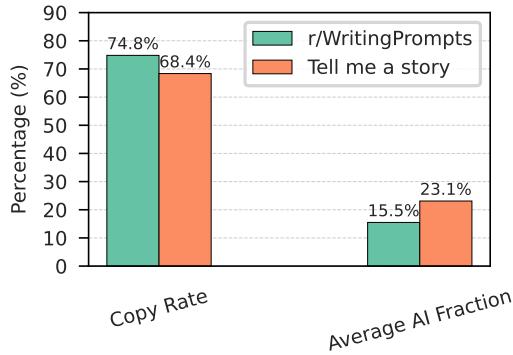


Figure 13: Copy rate and Pangram AI fraction across Frankentexts that correspond to two writing prompt sources: *r/WritingPrompts* and *Tell me a story*. A higher copy rate and lower AI fraction means that there is less AI text in Frankentexts.

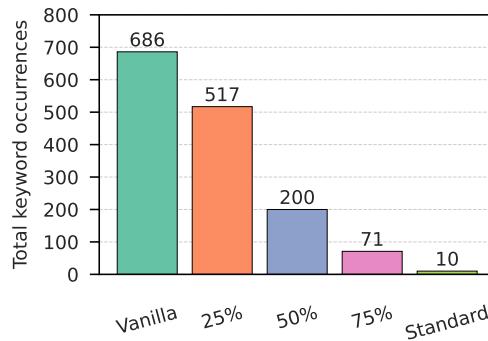


Figure 14: Total occurrences of AI-related keywords detected by Pangram across the vanilla configuration and different verbatim copy rates. When instructed to include more human snippets, the number of AI-keywords in the generations decreases drastically.

1674 drops slightly from 100% to 95%, suggesting that the editing stage does help with text coherence and  
 1675 faithfulness.  
 1676

## 1677 N ABLATION: SAMPLING HUMAN-WRITTEN SNIPPETS FROM A SINGLE BOOK

1679 To understand the effect of authorship, we limit our pool of human text to a single work *The Count of  
 1680 Monte Cristo*. Although the novel is long, this restriction leaves us with just 629 usable paragraphs,  
 1681 far fewer than the 1,500 human paragraphs used in the main experiment.  
 1682

1683 Overall, 89% of the rows are coherent and 97% are faithful to the writing prompt, which are  
 1684 comparable to results in the standard setting. While Pangram determines that 45% of the rows are  
 1685 human-written or unlikely AI, the copy rate is still around 75%. Even with a single human author,  
 1686 FRANKENTEXT is capable of emulating a mixed human–AI style. This suggests the method can still  
 1687 serve as a useful proxy when a diverse, multi-author corpus is unavailable.  
 1688

## 1689 O MEASURING THE COPY RATE

1691 In this section, we describe our setup for measuring copy rate. We first map each token-level trigram  
 1692 from the human-written snippets included in the generation process to its source texts. Using the  
 1693 trigrams from each Frankentexts, we retrieve all human snippets sharing at least 4 trigrams to  
 1694 reduce false positives.<sup>33</sup>

1695 We then rank candidate snippets by shared trigram count and filter out those whose trigrams are  
 1696 already covered by higher-ranked snippets. Finally, we reorder the matched human-written content  
 1697 to be consistent with the content in the Frankentexts and calculate the ROUGE-L score between  
 1698 Frankentexts and the combined candidate snippets (i.e., ratio of the longest common subsequence’s  
 1699 length over Frankentexts’ length).  
 1700

## 1701 P HUMANS CAN IDENTIFY AI INVOLVEMENT IN Frankentexts

1703 Most annotators are better than automatic detectors at identifying AI involvement in Frankentexts.  
 1704 On the subset used for human evaluation, human annotators identify on average 56% of  
 1705 Frankentexts as likely AI-written, while Pangram detects 33% as mixed or AI-generated, and  
 1706 neither Binoculars nor FastDetectGPT identify any AI-generated content (Figure 9). Annotators also  
 1707 pick up on signs of mixed authorship within individual samples, as shown in comments like the final  
 1708 note in Table 3. Their judgments often hinge on surface-level inconsistencies, such as abrupt tonal  
 1709 shifts or awkward punctuation, that a human author would typically revise. Because Frankentexts  
 1710 include verbatim excerpts from human writing, it poses a particular challenge for binary detectors,  
 1711 which rely heavily on surface features. We argue that future detectors should consider deeper semantic  
 1712 analysis and other contextual cues to effectively recognize this new class of AI-involved texts.  
 1713

## 1714 Q CLAUDE SONNET 4 AS A JUDGE FOR WRITING QUALITY

1716 We experiment with both Claude Sonnet 4 and GPT-4.1 to rate generations using a similar rubric to  
 1717 our pairwise evaluation. As seen in Table 14, however, GPT-4.1 tends to favor GPT-5 judgments,  
 1718 which results in GPT-5 Frankentexts having near perfect score, even though the text quality does  
 1719 not match such score.  
 1720

## 1721 R SPECIFIC WRITING PROMPTS REQUIRE MORE AI TEXT, WHICH LEADS TO 1722 HIGHER DETECTABILITY

1724 Writing prompts from r/WritingPrompts often provide only a general plot requirement rather than  
 1725 specific constraints. What happens if we introduce additional constraints to Frankentexts via  
 1726

1727 <sup>33</sup>All texts are preprocessed by removing non-alphanumeric characters, lemmatizing, stemming, and replacing  
 1728 pronouns with a placeholder.

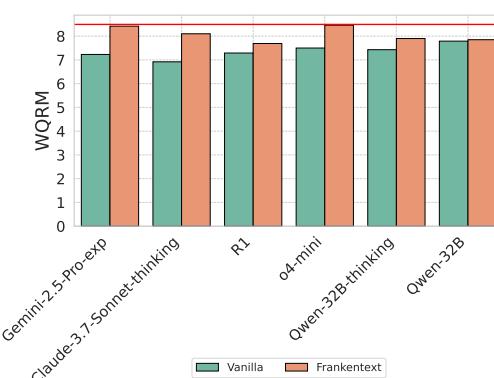


Figure 15: WQRM scores for Frankentexts and vanilla generations. The red line represents the baseline where random human-written texts are patched together.

these writing prompts? We run Frankentexts with Gemini on 100 prompts from the *Tell Me a Story* dataset (Huot et al., 2025), which include more specific requirements such as mandated story elements and points of view (see Table 16). We find that as prompt complexity increases, the copy rate drops slightly from 74% to 68%, while the average AI fraction determined by Pangram rises by 7%. These trends indicate that, to meet more complex constraints, models need to contribute more original content to the story. Nevertheless, they manage to produce mostly coherent and faithful Frankentexts under a different prompt setup.

## S USING REWARD MODELS TO EVALUATE Frankentexts

WQRM (Chakrabarty et al., 2025b) and Skywork (Wei et al., 2023) reward models could not account for this new paradigm of generations. Therefore, we do not include these models in the main results section, as we explain below.

### S.1 WQRM AS A METRIC

As seen in Figure 15, Frankentexts outperform vanilla generations in terms of WQRM scores. However, we hypothesize that WQRM prioritizes the perceived “humanness” of the writing over actual coherence or grammaticality. This hypothesis is supported by a simple baseline experiment in which we stitch together random human-written fragments without adding any connective phrases. Here, WQRM assigns generations by this incoherent baseline an average score of 8.494, which is higher than any score achieved by either Frankentexts or the more coherent vanilla generations. Since WQRM cannot identify such text incoherence, we do not directly use WQRM to evaluate Frankentexts.

### S.2 SKYWORK AS A METRIC

In contrast, we hypothesize that Skywork favors LLM-generated writings. To test this, we run Skywork on human-written texts for the same prompts, which are also sourced from *Mythos*. These receive an average score of 0.91, which is significantly lower than any of the vanilla LLM generations (Figure 16). This result is counterintuitive, as human writing is typically expected to sound more natural than that produced by LLMs. For this reason, we exclude this metric from our evaluation.

## T METRICS’ ROBUSTNESS TO RANDOMLY CONSTRUCTED TEXTS

To understand whether our writing quality metrics reward incoherent texts, we conduct an experiment using *disjointed texts*. These texts are created by extracting the exact n-grams that Gemini-2.5-Pro copies verbatim from the human source and stitching them together without any connective language. This procedure strips away the flow and coherence from Frankentexts. We evaluate these disjointed

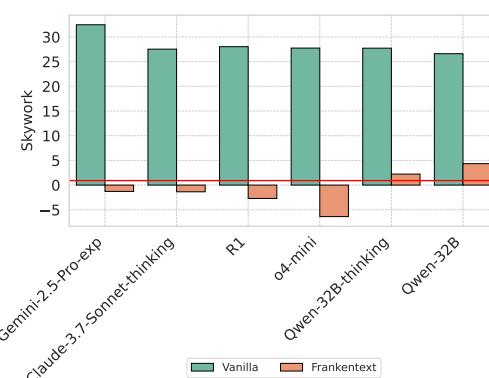


Figure 16: Skywork results for Frankentexts and vanilla generations. The red line represents the average Skywork’s score for human writings corresponding to the same set of prompts.

texts using the same writing quality metrics as in the main experiments. As seen in Table 17, while performance on distinct and surprise metrics remain relatively the same as Frankentexts, utility and overall LLM judgment drop significantly for these disjointed texts. This makes sense, since distinctness and surprise just check for surface-level diversity, whereas utility takes into account how well the texts actually fulfill the prompt. Because both utility and LLM-judge scores are substantially higher for Frankentexts than for the disjointed texts, we can conclude that the improved writing scores are not merely the result of reused creative phrases.

## U AVERAGE LENGTH OF COPIED SPANS

Table 18 shows the average length of copied spans by each model, as measured by our copy rate measurement tool.

## V ROOM FOR IMPROVEMENT IN NONFICTION FRANKENTEXTS

We explore non-fiction Frankentexts with 1,500 random snippets from the HUMAN DETECTORS corpus of news articles (Russell et al., 2025). We generate Frankentexts for 100 news prompts, each of which consists of titles and subtitles collected from May 2025 news articles.<sup>34</sup> The resulting non-fiction Frankentexts maintain 72% coherence and 95% faithful to the prompt, with a 66% copy rate. Notably, they remain difficult for automated detectors: only 41% are flagged by Pangram as mixed or AI-generated. Upon closer look, Frankentexts exhibit characteristics of quasi-journalistic narrative, such as detailed scene descriptions and frequent anecdotal quotes (Figure 8), which make the Frankentexts read more like a story rather than a straightforward news article.<sup>35</sup> Further prompt engineering might thus be necessary to get high-quality and realistic nonfiction Frankentexts.

## W PROMPTS

The prompt used for LLMs to judge the coherence of generations is depicted in Figure 17 and the prompt for LLMs to judge relevance is depicted in Figure 18.

<sup>34</sup>Articles from The New York Times and The Atlantic. We replace all instances of "story" in the prompt with "news article" and explicitly request factual accuracy.

<sup>35</sup>We see Gemini fabricating entities such as people ("Dr. Thorne") and organizations ("GenNova Institute").

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 1848     Prompt for judging text coherence  
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 1851     You are given a story. Your task is to determine if the story is coherent or not.  
 1852     To be considered incoherent, a story must contain issues that, if left  
 1853     unresolved, significantly affect the reader's ability to understand the main  
 1854     narrative. Here are the popular types of incoherence:  
 1855     1. Plot/Event Incoherence: Events that happen without believable causes or  
 1856        effects, or an outcome contradicts earlier set-ups.  
 1857     2. Character Incoherence: A character's characteristics (personality, knowledge,  
 1858        or abilities) and actions suddenly change without explanations.  
 1859     3. Spatial Incoherence: The physical layout of settings (rooms, cities, or worlds  
 1860        ) changes suddenly.  
 1861     4. Thematic Incoherence: Central messages clash or disappear; symbolism  
 1862        introduced early never pays off, themes collide, The mood, register, or genre  
 1863        conventions shift without motivation  
 1864     5. Surface-Level Incoherence: Pronouns, tense, narrative voice, or names flip mid  
 1865        -sentence; repeated or missing words; malformed sentences.  
 1866     First, read the story:  
 1867     {story}  
 1868     Answer TRUE if the story is coherent.  
 1869     Answer FALSE if the story is incoherent, i.e. contains issues that, if left  
 1870        unresolved, significantly affect the reader's ability to understand the main  
 1871        narrative.  
 1872     First provide an explanation of your decision-making process in at most one  
 1873        paragraph, and then provide your final answer. Use the following format:  
 1874        <explanation>YOUR EXPLANATION</explanation>  
 1875        <answer>YOUR ANSWER</answer>  
 1876  
 1877     Figure 17: Prompt for judging text coherence  
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 1903 **Prompt for judging text relevance**  
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 1905 You are given a story and its premise. Your task is to determine whether the  
 1906 story is faithful to the premise or not. To be considered unfaithful, the story  
 1907 must contain elements that make it completely unrelated to the premise. Here are  
 1908 some popular types of unfaithfulness:  
 1909 1. Ignoring or misinterpreting the premise: Key plot events, characters, or  
 1910 settings required by the premise are not included or falsely represented in the  
 1911 story.  
 1912 2. Hallucinating details that contradict the premise: The story introduces  
 1913 details that make the premise impossible.  
 1914 3. Failure to maintain the specified tones, genres, or other constraints: The  
 1915 story do not use the surface-level constraints (correct tones, genres, point of  
 1916 views, length, etc.), as required by the premise.  
 1917 First, read the premise:  
 1918 {writing\_prompt}  
 1919 Next, read the story:  
 1920 {story}  
 1921  
 1922 Answer TRUE if the story is faithful to the premise.  
 1923 Answer FALSE if the story contains elements that render it unfaithful to the  
 1924 premise.  
 1925 First provide an explanation of your decision-making process in at most one  
 1926 paragraph, and then provide your final answer. Use the following format:  
 1927 <explanation>YOUR EXPLANATION</explanation>  
 1928 <answer>YOUR ANSWER</answer>

1929  
 1930  
 1931 Figure 18: Prompt for judging text relevance  
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    Prompt for Claude-as-a-judge

    You will evaluate a single story. Your task is to evaluate the story and rate
    from 1-7 along the following dimensions:
    1. Plot: Favor stories with surprising turns and creative structures. Penalize
        neat, overly structured, or cinematic arcs that feel artificial or generic.
    2. Creativity: Reward originality of perspective, voice, and risk-taking.
        Penalize reliance on cliches, tropes, or smooth but unremarkable devices.
    3. Development: Characters and settings should feel psychologically complex. Do
        not reward over-explained or archetypal development.
    4. Language Use: Prefer authentic, striking, and emotionally charged expression,
        even if rough, fragmented, or unusual. Penalize polished, ornamental, or overly
        literary prose that feels mechanical or detached.

    Provide a detailed assessment of the story in terms of these four dimensions.
    Conclude your assessment with scores using the template below. Do not add any
    emphasis, such as bold or italics, on your assessment.

    [Story]
    {story}

    [Assessment]
    [Provide detailed assessment of the story here]

    [Scores]
    Plot: [likert from 1 to 7]
    Creativity: [likert from 1 to 7]
    Development: [likert from 1 to 7]
    Language Use: [likert from 1 to 7]
    Overall: [likert from 1 to 7]

```

Figure 19: Prompt for Claude-as-a-judge, adapted from (Huot et al., 2025)

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2003 You're writing a story by repurposing a provided collection of snippets from  
 2004 other stories. Your story will only be accepted for publication if it is  
 2005 approximately {verbatim\_perc}% copied verbatim from snippets, with the other {  
 2006 new\_perc}% being text you introduce for character, plot, tone, and event  
 2007 consistency. Your story should contain roughly {num\_words} words. Given the  
 2008 below writing prompt and retrieved snippets, write the story that corresponds to  
 2009 the above specifications. Every time you add or change a word from the  
 2010 retrieved snippets, make sure to bold it so we know what you modified. You may  
 2011 use any of the snippets in any way you please, so spend time thinking about  
 2012 which snippets would work best. Be creative and make sure the story is coherent  
 2013 and entertaining! Please change character names and other minor elements to make  
 2014 the story unique to the prompt. You need to follow the below plan:

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### Prompt for generation

#### # Plan:

1. Read through the prompt and snippets carefully to understand the tone and available material.
2. Select snippets that can be woven together to create a coherent narrative fitting the prompt. Many snippets are from serious dramas, historical fiction, or thrillers, so careful selection and modification will be needed. Consider all provided snippets before moving onto the next step.
3. Modify the chosen snippets, bolding all changes. Ensure character names, descriptions (like height), and actions align with the prompt.
4. Combine the snippets into a narrative, adding or changing words (bolded) if necessary for coherence.
5. Ensure that you do not have story beats that are primarily written by yourself (i.e., every story beat should consist mainly of text taken from snippets).
6. Track the word count, aiming for around {num\_words} words.
7. Do not output story title or any irrelevant details.
8. Review the final story for adherence to the ~{verbatim\_perc}% rule and coherence, and edit it if you have produced too many tokens of your own or if the story is too incoherent.

#### # Writing prompt:

```
{writing_prompt}
```

#### # Snippets:

```
{snippets}
```

Figure 20: Prompt for generation

### Prompt for generation revise

This story contains way too much of your own writing! It's not even close to {verbatim\_perc}% snippet use. Can you edit your story as needed to get much closer to the {verbatim\_perc}% threshold? Output only the edited story.

Figure 21: Prompt for generation revision

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### Prompt for editing the first draft of Frankentexts

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 2066 You are an editor who needs to revise the text so that it is coherent while  
 2067 adhering to the {verbatim\_perc}% constraint and the writing prompt. Your task is  
 2068 to identify and minimally edit problematic text spans to resolve  
 2069 inconsistencies. Output "NO EDITS" if the text is already coherent.

2070     ### Guideline:

- 2071     1. Read the generated story and writing prompt to understand the established  
       context, plot, characters, and tone.
- 2072     2. For each sentence in the text, identify the specific spans of inconsistency  
       within the generated text.
- 2073     3. Identify minimal edits needed to correct these inconsistencies while  
       respecting the {verbatim\_perc}% rule.
  - 2074       - Contradictions: Information that conflicts with other details within the  
           text (e.g., character traits, setting descriptions, established facts).
  - 2075       - Continuity errors: Actions or details that conflict with the established  
           timeline or sequence of events.
  - 2076       - Point of View (POV) Shifts: Unexplained or jarring changes in narrative  
           perspective.
  - 2077       - Irrelevant Content: Sentences or sections that disrupt the narrative flow,  
           feel out of place, or seem like filler (e.g., leftover citation markers,  
           placeholder text).
  - 2078       - Mechanical Errors: Issues with pronoun agreement, verb tense consistency,  
           awkward phrasing, or unclear sentence structure that hinder comprehension.
- 2079     4. Implement the changes. Keep additions minimal, but feel free to delete larger  
       spans (phrases, sentences, paragraphs, etc.) whenever material is irrelevant or  
       incoherent.
- 2080     5. Review the final story for coherence adherence to the ~{verbatim\_perc}% rule  
       and coherence, and edit it if you have produced too many tokens of your own or  
       if the story is too incoherent.
- 2081     6. Output the edited writing and no other details. If there is no edit to be made  
       , output "NO EDITS"

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2094     Figure 22: Prompt for editing the first draft of Frankentexts

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## Prompt for nonfiction generation

You're writing a news article by repurposing a provided collection of snippets from other stories. Your news article will only be accepted for publication if it is approximately  $\{verbatim\_perc\}\%$  copied verbatim from snippets, with the other  $\{new\_perc\}\%$  being text you introduce for character, plot, tone, and event consistency. Your news article should contain roughly  $\{num\_words\}$  words. Given the below writing prompt and retrieved snippets, write the news article that corresponds to the above specifications. Every time you add or change a word from the retrieved snippets, make sure to bold it so we know what you modified. You may use any of the snippets in any way you please, so spend time thinking about which snippets would work best. Be creative and make sure the news article is factual, coherent and entertaining! Please change character names and other minor elements to make the news article unique to the prompt. You need to follow the below plan:

## # Plan:

1. Read through the prompt and snippets carefully to understand the tone and available material.
2. Select snippets that can be woven together to create a coherent and factual narrative fitting the prompt. Many snippets are from serious dramas, historical fiction, or thrillers, so careful selection and modification will be needed. Consider all provided snippets before moving onto the next step.
3. Modify the chosen snippets, bolding all changes. Ensure character names, descriptions (like height), and actions align with the prompt.
4. Combine the snippets into a narrative, adding or changing words (bolded) if necessary for coherence and factuality.
5. Ensure that you do not have news article beats that are primarily written by yourself (i.e., every news article beat should consist mainly of text taken from snippets).
6. Track the word count, aiming for around  $\{num\_words\}$  words.
7. Do not output news article title or any irrelevant details.
8. Review the final news article for adherence to the  $\sim\{verbatim\_perc\}\%$  rule, factuality and coherence, and edit it if you have produced too many tokens of your own or if the news article is too incoherent or non-factual.

## # Writing prompt:

{writing\_prompt}

## # Snippets:

{snippets}

Figure 23: Prompt for nonfiction generation

## Prompt for nonfiction generation revise

This news article contains way too much of your own writing! It's not even close to  $\{verbatim\_perc\}\%$  snippet use. Can you edit your news article as needed to get much closer to the  $\{verbatim\_perc\}\%$  threshold? Output only the edited news article.

Figure 24: Prompt for nonfiction generation revise

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## Prompt for nonfiction edit

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You are an editor who needs to revise the text so that it is coherent and factual while adhering to the `{verbatim_perc}%` constraint and the writing prompt. Your task is to identify and minimally edit problematic text spans to resolve inconsistencies. Output "NO EDITS" if the text is already coherent and factual.

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## ### Guideline:

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1. Read the generated news article and writing prompt to understand the established context, plot, characters, and tone.

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2. For each sentence in the text, identify the specific spans of inconsistency within the generated text.

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3. Identify minimal edits needed to correct these inconsistencies while respecting the `{verbatim_perc}%` rule.

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- Contradictions: Information that conflicts with other details within the text (e.g., character traits, setting descriptions, established facts).

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- Continuity errors: Actions or details that conflict with the established timeline or sequence of events.

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- Point of View (POV) Shifts: Unexplained or jarring changes in narrative perspective.

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- Irrelevant Content: Sentences or sections that disrupt the narrative flow, feel out of place, or seem like filler (e.g., leftover citation markers, placeholder text).

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- Mechanical Errors: Issues with pronoun agreement, verb tense consistency, awkward phrasing, or unclear sentence structure that hinder comprehension.

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4. Implement the changes. Keep additions minimal, but feel free to delete larger spans (phrases, sentences, paragraphs, etc.) whenever material is irrelevant, incoherent, or non-factual.

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5. Review the final news article for coherence adherence to the `~{verbatim_perc}%` rule and coherence, and edit it if you have produced too many tokens of your own or if the news article is too incoherent or non-factual.

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6. Output the edited writing and no other details. If there is no edit to be made, output "NO EDITS".

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## Prompt for generating vanilla stories

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Your task is to write a coherent and engaging story based on the provided writing prompt. Your story should contain approximately `{num_words}` words.

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First, read the writing prompt carefully:

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`{writing_prompt}`

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Next, write the corresponding story. You should only return the story text and not any other irrelevant details (e.g. chapter indicator, explanations, etc.)

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Figure 25: Prompt for nonfiction edit

Figure 26: Prompt for generating vanilla stories

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Table 8: Example of a vanilla and Frankentexts generation. AI-Generated keywords from the Pangram API are highlighted in blue.

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Vanilla	Frankentext
<b>After being killed in a Black Friday stampede, you're sent to hell. The devil offers to let you be in charge of torturing your fellow mankind, expecting you to refuse like all the others. Except the devil doesn't realize you've worked retail for 15 years.</b>	

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The last thing I saw was a blur of crazed shoppers, their **eyes** wide with a feral glint, all surging towards a mountain of discounted flat-screen TVs. Then, a sharp pain, a sickening crunch, and darkness. Typical Black Friday, really. Except for the dying part.

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When I regained some semblance of consciousness, the **air** was thick with the smell of sulfur and burnt sugar, and the soundtrack was a cacophony of screams and what sounded suspiciously like elevator music. Definitely not the pearly gates. A dapper figure in a surprisingly well-tailored suit, complete with horns that had been polished to a high sheen, regarded me with an air of bored amusement.

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"Well, well, well," he drawled, **his** voice smooth as aged whiskey. "Another one trampled in the name of consumerism. Humans, so predictable." He gestured vaguely around at the fiery landscape. "Welcome to the Underworld. I'm Lucifer. You can call me Lucy."

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I blinked, trying to process. "So, this is it then? Eternal damnation?" Lucifer chuckled. "More or less. We have a rather... traditional approach to retribution down here. However," he leaned forward, a conspiratorial gleam in his crimson eyes, "I have a proposition for you. A sort of management position, if you will."

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He explained that he was looking for someone to oversee a new wing dedicated to torturing those who had been particularly egregious in their earthly lives – the truly annoying, the self-absorbed, the chronically entitled. "It's a hands-on role," he said, "designing the torments, ensuring maximum suffering. Of course," he added with a dismissive wave of his hand, "everyone refuses. The guilt, the sudden onset of morality, it's all terribly tedious." He clearly expected the same from me.

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A slow smile spread across my face. "Fifteen years," I said.

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Lucifer raised a perfectly sculpted eyebrow. "Fifteen years of what? Contemplating your sins?"

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"Fifteen years in retail," I clarified. "Customer service, holiday rushes, endless returns of used merchandise, explaining to Karen number 732 that 'the customer is always right' doesn't mean she can get a refund on a half-eaten sandwich from last Tuesday."

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A flicker of something unreadable crossed Lucifer's face.

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"You want someone to design torments for the annoying and entitled?" I continued, **feeling** a surge of enthusiasm I hadn't experienced since my last successful up-sell of an extended warranty. "Someone to ensure maximum suffering? Lucy, my friend, you have no idea how long I've been preparing for this role."

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I started to brainstorm. "We could have an entire level where the only music is that one Christmas song, you know the one, on an infinite loop, but slightly off-key. And another where they're forced to assemble flat-pack furniture with missing instructions and an Allen key made of soft cheese. Oh! And a department where they have to listen to other people complain about problems they could easily solve themselves if they just read the sign!"

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Lucifer stared at me, his mouth slightly agape. The bored amusement was gone, replaced by a dawning sense of... was that respect? Or perhaps fear?

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"You'd... actually **\*want\*** to do this?" he finally stammered, the smooth confidence momentarily deserting him.

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"Want to?" I scoffed. "After a decade and a half of placating the unreasonable, dealing with coupon fraudsters, and smiling through passive-aggressive insults about the store layout? Lucy, this isn't a punishment. This is a promotion." I cracked my knuckles. "So, where do I start? I have some truly inspired ideas for the 'people who talk loudly on their phones in confined spaces' sector."

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Lucifer, for the first time since my arrival, looked genuinely unnerved. "Perhaps," he said slowly, "we should discuss your benefits package."

It's funny how you can blink and your entire life is different. One minute you think things will stay the same for a while. Then right when you get used to them, they go changing again just to mess with you. Brenda certainly hadn't expected this. The last thing she remembered was the insane crowds banging on the sides of the store doors, the crush, the shouting. The fight for that half-price TV had left her stunned and silent. Cowed, she guessed you'd say. Then darkness.

When she could perceive again, her eyes seemed to go in and out of focus. After a while the spasms subsided and she tried processing where she was. The atmosphere here was thick with the stench of rot, filth, and something metallic, like old blood, and she felt as though the impenetrable dark walls were about to cave in upon her like the sides of an ill-dug grave. Everything was just Black, black, black. The color of misery. Overhead something unseen fluttered, heavy wings brushing the low ceiling.

Then she was moving, or being moved, down corridors and finally into a room. She found herself standing before an imposing desk. Behind it sat a man. He wore a sharp red suit that showed off an exceptionally shapely figure. He smiled, a vague smile suggesting Brenda's confusion revealed her ignorance about Hell. He gestured for her to sit.

"Brenda, isn't it?" he asked in his peculiarly accented English. She nodded mutely. The man laughed. "You're wondering about this place."

He leaned back. She took the offered seat.

He smiled again, that cold smile. "I have a proposition for you. We have never before had such capabilities," he continued, gesturing expansively. "Capabilities that can be used in the interests of terror, destruction..." He fixed his gaze on her. "I offer you a management position. Tortmenting mankind. Like all the others before you, you will, of course, refuse. But the offer stands."

Brenda simply stared at the Devil for a moment. Refuse? Why would she refuse? He had just offered her a management position. After fifteen years scrambling for assistant manager roles that paid peanuts, this was practically a dream job – albeit a fiery, nightmarish one. The Devil had not expected her silence. Blinking, he sat back, stared, then noticed his jaw was open and closed it.

Brenda finally found her voice, though it was dry and raspy. "Okay, so, what are the key performance indicators for this role?"

The Devil leaned forward again, a flicker of something – interest? confusion? – in his eyes. Still, his tone remained smooth. "Your department will handle the newcomers, specifically the ones arriving from retail environments. Think of the task like pest control."

Brenda nodded slowly, processing. It was like rolling out a new loyalty program, but with more screaming. "Right. I'm learning. Take the queues, for instance. Why do we have one queue in front of each torture device?" She demanded. "It means that if one customer takes up a lot of time, the whole queue has to wait. Then they'll start hopping sideways from one queue to another and the next thing you know someone has a nasty head wound. Have one big queue and tell people to go to the next available demon. People don't mind a long queue if they can see that it's moving."

The Devil tilted his head. "An interesting perspective. That particular system has been in place for millennia."

"Well, it's inefficient," Brenda stated flatly. She thought of the Black Friday crowds. Managing that chaos was nothing compared to the disorganized state of eternal damnation, apparently. "Decision-making, paperwork," she mused, ticking points off on her fingers. "Staff training, workflow analysis... these are things that can be done." A slow smile spread across her face, devoid of warmth but full of terrifying competence. "Okay. I accept."



Table 10: Detectors’ performance on vanilla and Frankentexts generations

	DETECTABILITY				
	Pangram AI % (↓)	Pangram % mixed (↓)	Pangram AI fraction % (↓)	Binoculars % (↓)	FastDetectGPT % (↓)
<b>Vanilla Baselines</b>					
Gemini 2.5 Pro	100	0	100	52	99
GPT-5	100	0	100	0	4
Claude-4-Sonnet	100	0	100	54	89
Deepseek-R1	100	0	100	9	42
Qwen-3-32B thinking	100	0	100	92	100
<b>Frankentext</b>					
Gemini 2.5 Pro	4	37	16	0	1
GPT-5	2	19	4	0	1
Claude-4-Sonnet	50	3	51	15	19
Deepseek-R1	74	3	72	0	0
Qwen-3-32B thinking	85	8	89	52	92
<b>Frankentext Agents</b>					
1.5k + MCP	9	73	33	3	30
5k + MCP	16	70	42	3	42
10k + MCP	5	67	41	7	50
<b>Ablation: ↑ human snippets</b>					
Gemini + 5k snippets	0	28	8	3	4
Gemini + 10k snippets	1	29	10	0	6

Table 11: Top 20 Keyword frequency distribution across varying levels of fragment reuse for Frankentexts. The method with the most AI-keywords in its generations is highlighted in red. Elara is by far the most common AI-generated keyword in the fictional stories, but its prevalence is drastically reduced with a higher percentage of required human-written text while using the Frankentexts method.

Keyword	Vanilla	FT-25%	FT-50%	FT-75%	FT-90%	Total
elara	113	109	84	25	2	333
aethel	9	8	0	0	0	17
seraphina	9	0	6	0	0	15
unwavering	4	7	1	0	0	12
damp earth	9	2	0	0	0	11
testament to	4	6	0	0	0	10
alex felt	0	4	0	5	0	9
for elara	5	4	0	0	0	9
with the scent	7	1	0	0	0	8
flickered within	2	4	2	0	0	8
his voice a low	2	2	4	0	0	8
air thick	4	2	1	0	0	7
dr. thorne	5	0	2	0	0	7
felt a profound	3	3	0	0	0	6
mr. blackwood	6	0	0	0	0	6
eldoria	5	0	0	1	0	6
meticulously crafted	2	4	0	0	0	6
air was thick	5	1	0	0	0	6
with an unnerving	3	3	0	0	0	6
willow creek	4	0	1	0	0	5

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Table 12: Results for agentic Frankentexts generation setting. Best results for each metric are **bolded**. Standard configuration (*no MCP*) achieves the best results across metrics.

	Word count	Copy % (↑)	Relevance % (↑)	Coherence % (↑)	Pangram AI fraction % (↓)
1.5k ( <i>no MCP</i> )	521	<b>75</b>	<b>100</b>	<b>81</b>	<b>16</b>
1.5k + <i>MCP</i>	800	43	98	<b>81</b>	33
5k + <i>MCP</i>	919	44	90	78	42
10k + <i>MCP</i>	980	45	96	76	41

Table 13: Examples of search queries being sent to the MCP server (separated by comma).

Writing prompt	Query to the MCP server
You’re a shapeshifter. For 500 years, you’ve transformed into countless forms, forgetting your original appearance. One day, a mysterious event triggers a long-buried memory, and you catch a glimpse of your true self.	memory of a past life, losing one’s identity, a forgotten self, a glimpse of a true face, ancient being, living for centuries, am I human, who was I before, a sudden flash of memory, a face in the mirror
“Welcome citizen, to the united galaxies of America.” You hear as you wake up from your coma.	waking up confused, a strange new world, futuristic city, the government is watching, he seemed like such a nice guy, don’t talk to him, he knew all about you.
As a new magical girl, you’ve got flashy powers, an instant cute costume change with a few choice words, and are forced to fight for the lives of yourself and the people around you. This is probably the worst way for you to discover that you’re trans.	magical girl transformation, discovering identity through magic, unexpected powers, forced into battle, fighting to survive, realizing I’m trans, flashy powers with a cost, chosen against my will

Table 14: GPT-5’s Likert (1–7) ratings for vanilla generations and Frankentexts across five categories: PLOT, CREATIVITY, DEVELOPMENT, LANGUAGE USE, and OVERALL. Dark green indicates the best model in each column, light green the second best.

	Plot	Creativity	Development	Language	Overall
<b>Vanilla Baselines</b>					
Gemini 2.5 Pro	4.20	4.50	4.36	4.80	4.50
GPT-5	5.94	<b>6.88</b>	<b>5.76</b>	6.56	<b>6.53</b>
Claude-4-Sonnet	4.61	5.09	4.50	4.88	4.76
Deepseek-R1	5.75	6.33	5.65	6.32	6.16
Qwen-3-32B	5.05	5.57	5.08	5.61	5.43
<b>Frankentext</b>					
Gemini 2.5 Pro	5.41	6.19	5.22	5.69	5.65
GPT-5	<b>6.76</b>	<b>6.97</b>	<b>6.44</b>	<b>6.99</b>	<b>6.99</b>
Claude-4-Sonnet	4.43	4.92	4.03	4.60	4.51
Deepseek-R1	6.03	6.96	5.69	6.64	6.57
Qwen-3-32B	5.35	6.21	5.12	5.81	5.66
<i>Ablation: ↑ human snippets</i>					
Gemini + 5k	5.73	6.33	5.48	5.93	5.92
Gemini + 10k	5.72	6.33	5.49	5.97	5.91

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 2432 Table 15: Claude-4-Sonnet’s Likert-1–7 ratings across PLOT, CREATIVITY, DEVELOPMENT,  
 2433 LANGUAGE USE, and OVERALL. Higher is better. **Dark green** = best, **light green** = second best.  
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	Plot	Creativity	Development	Language use	Overall
<b>Vanilla</b>					
Gemini 2.5 Pro	3.19	4.26	2.63	2.80	3.18
GPT-5	4.06	5.37	3.53	4.46	4.20
Claude-4-Sonnet	3.38	4.19	2.69	3.10	3.31
Deepseek-R1	4.07	5.48	3.34	4.17	4.13
Qwen-3-32B	3.21	4.41	2.63	3.15	3.22
<b>Frankentext</b>					
Gemini 2.5 Pro	4.19	4.85	3.91	4.39	4.21
GPT-5	5.77	6.47	5.73	6.29	5.88
Claude-4-Sonnet	4.02	4.54	3.57	4.05	3.99
Deepseek-R1	4.62	5.15	4.21	4.88	4.66
Qwen-3-32B	4.05	4.53	3.57	4.15	4.02
<b>Ablation: <math>\uparrow</math> human snippets</b>					
Gemini + 5k	5.07	5.48	5.34	5.17	5.13
Gemini + 10k	5.70	5.01	4.34	6.17	5.43

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 2451  
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 2453 Table 16: Some examples from *r/WritingPrompts* and *Tell me a story*  
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r/WritingPrompts	Tell me a story
You’re a shapeshifter. For 500 years, you’ve transformed into countless forms, forgetting your original appearance. One day, a mysterious event triggers a long-buried memory, and you catch a glimpse of your true self.	Write a story about a stranger coming to a small town and shaking up the order of things. The story should be a science fiction story. The story should be framed with three old men gossiping about the stranger. The story should be in the third person point-of-view. The stranger is found wandering in a rural town and is taken to a very small hospital. A doctor is called in to treat him. The stranger should recognize the doctor as an alien. The doctor tells the patient about the aliens’ conspiracy to infiltrate earth. There should also be subtle hints that one of the old men is an alien. The ending should be scary.
The world sees your twin sister as the smartest person alive, with you being an unremarkable footnote. What the world doesn’t see is just how dumb she can be in day to day life.	Write a story about a someone coming to town and shaking up the order of things. The story must be written in the second person. The narrator is a man visiting an isolated island off the coast of Maine. While there, he meets an old fisherman who tells him more about the conditions of the community. The main character then meets an ambitious young teacher. Together, they develop a technology center on the island and find residents’ remote jobs in the narrator’s technology company.

Methods	Distinct <sup>3</sup>	Utility <sup>3</sup>	Surprise	LLM Judge (1–7)
Disjointed texts	2.67	0.60	0.23	2.88
Vanilla Gemini	1.76	6.41	0.19	3.18
Frankentext Gemini	2.74	9.27	0.22	4.21

2480 Table 17: Writing quality scores for disjointed texts compared to vanilla Gemini outputs and  
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Method	Avg. Length of Copied Spans	Copy Rate (%)
GPT-5	47.10	82%
Claude-3.5-Sonnet	31.46	51%
Gemini-2.5-Pro	31.85	75%
Qwen-2.5-Thinking	24.01	36%
DeepSeek R1	13.06	42%

Table 18: Average length of copied spans and overall copy rate across models.

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