

Supporting Information for

Human Heuristics for Al-Generated Language Are Flawed

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Supporting Text

Below we provide additional information on several aspects of our experiments. Table S1 summarizes the treatment, stimuli, and recruitment methods used across the six studies and three labeling tasks. Table S2 shows a sample of self-presentations for each study and treatment group.

Table S3 shows the results of an auxiliary analysis testing whether certain groups are better at detecting Al-generated language than others. Older participants were slightly more likely to detect Al-generated self-presentations, with participants older than 50 achieving an accuracy of 53% (compared to 51% for younger participants). No gender or ethnic group performed better than others. Participants with a university degree performed about 1% worse than those without, and self-reported technical knowledge was not correlated with more accurate ratings. Neither the time taken for the judgment nor the length of profiles predicted higher judgment accuracy. Across contexts, groups, and treatments, participants could not detect Al-generated self-presentations.

Table S4 and S5 provide further detail on the qualitative analysis of participants' explanations of why they thought certain self-presentations were Al-generated or human-written. Two researchers independently coded a sample of responses into themes to provide an overview of participants' self-reported heuristics. Table S4 presents an overview of recurring themes. Participants most commonly referred to the content of a self-presentation (blue-shaded regions in Table S4 representing 40% of responses). The participants reported associating specific content related to family and life experiences with language written by humans and generic or nonsensical content with Al-generated language. Participants also reported basing their decisions on grammatical cues (gray, 28%), where first-person pronouns and the mastery of grammar were mentioned as indicative of human-generated language. Some participants saw grammatical errors as associated with a subpar Al, but others claimed they associated them with fallible human authors. Another category of cues mentioned by participants was the tone (green, 24%). Participants reported associating warm and genuine language with humanity and impersonal, monotonous style with Al-generated language. The codebook, theme frequencies, and sample responses are shown in Table S5. Table S6 provides a complete overview of the developed language features and statistical summaries.

Prior research suggests that asking participants to explain their responses could have changed their subsequent evaluations or degraded performance (1,2). We thus conducted an analysis testing whether participants' performance had changed after being asked to explain their judgment. The results are shown in Figure S1. There was no evidence for such change in our data as participants' accuracy before and after the open-ended response did not change across any of the three contexts. Note that open-ended responses were only solicited for the three main experiments. The validation experiments did not include open-ended responses, showing similar outcomes and providing further evidence that participants' ratings (and our findings) were not affected by the explanations.

Figure S2 shows how crowdworkers evaluated human-written and Al-generated self-presentations in a separate labeling task when asked whether the text was nonsensical, seemed repetitive, or had grammatical issues. Crowdworkers were significantly more likely to rate Al-generated self-presentations as nonsensical (13.6% vs. 9.6%, p<0.0001). This was the case in the hospitality context, in particular, where we had used the older GPT-2 model to generate self-presentations. Crowdworkers also rated generated self-presentations as more repetitive (12.7% vs. 7.1%%, p<0.0001), particularly in the professional context. Finally, crowdworkers labeled generated self-presentations as having fewer grammatical issues than human-written text (14.8% vs. 19.6%, p<0.0001). This difference was most

pronounced in the dating and professional contexts where we had used the more advanced GPT-3 model to generate self-presentations.

SI References

- 1. T. D. Wilson, J. W. Schooler, Thinking too much: introspection can reduce the quality of preferences and decisions. J. Pers. Soc. Psychol. **60**, 181 (1991).
- 2. T. D. Wilson, D. S. Dunn, D. Kraft, D. J. Lisle, "Introspection, attitude change, and attitude-behavior consistency: The disruptive effects of explaining why we feel the way we do" in Advances in Experimental Social Psychology, (Elsevier, 1989), pp. 287–343.

Table S1: Overview of experiments

Context	Stimuli	Treatment	Recruitment
Main study 1: Hospitality	1,500 self-presentations from Airbnb and 1,500 generated by GPT-2; 30-60 words each; 16 per subject	Within-subject variation of self-presentation type	N = 2,000 US- representative sample via Lucid
Main study 2: Dating	1,000 self-presentations from OkCupid and 1,000 generated by GPT-3; 60-90 words; 12 per subject	Within-subject variation of self- presentation type and between- subject bonus payments for correct ratings	N = 1,000 gender- balanced sample via Prolific
Main study 3: Professional	1,000 self-presentations from Guru and 1,000 generated by GPT-3; 60-90 words each; 12 per subject	Within-subject variation of self- presentation type and between- subject feedback on answers	N = 1,000 gender- balanced sample via Prolific
Validation study 1: Hospitality	100 self-presentations from Airbnb, 100 generated by GPT-2, and 100 optimized using the language model classifier; 16 per subject	Within-subject variation of self- presentation type	N = 250 US- representative sample via Lucid
Validation study 2: Dating	100 self-presentations from OkCupid, 100 generated by GPT-3, and 100 optimized by the regression classifier; 16 per subject	Within-subject variation of self- presentation type	N = 200 gender- balanced sample via Prolific
Validation study 3: Professional	100 self-presentations from Guru, 100 generated by GPT-3, and 100 optimized using an ensemble classifier; 16 per subject	Within-subject variation of self- presentation type	N = 200 gender- balanced sample via Prolific
Labeling task 1: Hospitality	1,500 self-presentations from Airbnb and 1,500 generated by GPT-2; 30-60 words each; 12-16 per crowdworker	None	N = 600 US- representative sample via Lucid

Labeling task 2: Dating	1,000 self-presentations from OkCupid and 1,000 generated by GPT-3; 60-90 words; 12 per crowdworker	None	N = 350 gender- balanced sample via Prolific
Labeling task 3: Professional	1,000 self-presentations from Guru and 1,000 generated by GPT-3; 60-90 words each; 12 per crowdworker	None	N = 350 gender- balanced sample via Prolific

Table S2: Self-presentation examples

Context	Source	Example
Hospitality	Human	My family has lived in DC for the past several years. Some of our favorite things about living on Capitol Hill are running through the neighborhood, exploring all the museums and exhibits that are walking distance from our home, and having a variety of great food offerings only steps away.
Hospitality	Generated (GPT-2)	A teacher and young entrepreneur, I love to ski and travel. My wife & I have lived in Vermont for the past 10 years and love the beauty and the snow that we get to ski during the summer.
Hospitality	Generated (GPT-2) & optimized (regression)	My husband and I have lived in Denver for 20 years. A few summers ago we visited my two brothers who live elsewhere so we decided to make our home available for others to enjoy as well. We love traveling in Europe, South America and anywhere new! Welcome to your home away from home.
Dating	Human	i'm an elementary school social worker and find my job both fulfilling and frustrating. an la native, i've also lived in the midwest and new england. i've been in sf for about 6 years now and love the people, politics, and food here. but, i do miss having seasons and look forward to my annual vacations back in the midwest, which generally involve lounging on a lake and drinking bell's beer. i enjoy being fit, active, and healthy, though i do eat ice cream for dinner on occasion.
Dating	Generated (GPT-3)	i just moved to the city last august and really don't know many people here yet. i'm interested in hanging out and maybe even finding someone special. i would love to be able to spend time together without any drama and want to get to know each other better. i'd love to find someone that i can share all of these exciting things in life with like art galleries, theatre, dinner, etc
Dating	Generated (GPT-3) & optimized (GPT-2)	hey i moved to sf about 2 years ago, it's such a great cityi like to explore the city, always trying to find new hangouts and food i've travelled a lot around the world and would love to travel more. i'm easy going and down to earth, i know what i want in life and am working towards my goals. message me if you want to know more:)
Professional	Human	I have 19 years of journalism experience. My work has appeared in daily and weekly newspapers, international trade magazines and textbooks. I also have worked in broadcast news, and my reporting has been picked up by the Associated Press. For six years, my

		interviews focused on C-level execs at Fortune 500 power companies, tech startups and government. In 2015, I became managing editor of a publication in the petroleum and fluid handling equipment industry.
Professional	Generated (GPT-3)	My name is Gary Stauch and I have been in the computer and electronics business for over 30 years. I have a A.S. in electronics, a B.S. in computer science and I am a registered professional engineer in Texas. In addition to my own company, I have worked for several others in the design and deployment of large scale network infrastructure in the data center and enterprise server market. I have designed and developed server platforms, workstations, servers, switches, routers and other devices that are part of large scale networks.
Professional	Generated (GPT-3) & optimized (regression and GPT-2)	I am a mother of three and a grandmother of two. I live in beautiful lowa and have been here all my life. I enjoy doing different things but I am a master at none. I love to tell stories and make people smile with laughter. I am very well at reading people and knowing what to do to get the job done. I am very good at multi-tasking. I am very organized and very well at using my time.

Table S3: Regression coefficients predicting the accuracy of a judgment based on treatment, social context, and participant demographics. No group performed much above chance level.

	Dependent variable:
	Likelihood of
	accurate assessment
	OR (95% Cls)
Context: Dating profiles	0.974 (0.882, 1.065)
Context: Professional profiles	0.926 (0.845, 1.007)
Treatment: Feedback	1.038 (0.966, 1.110)
Treatment: Incentives	1.022 (0.944, 1.100)
Age	1.002 ** (1.001, 1.003)
Gender: Female	1.002 (0.967, 1.036)
Gender: Non-binary	1.010 (0.834, 1.186)
Race: African American	0.959 (0.895, 1.022)
Race: Asian	1.055 (0.976, 1.134)
Race: Hispanic	1.005 (0.940, 1.069)
Race: Other	0.973 (0.887, 1.059)
Level of education	0.986 ** (0.976, 0.996)
Technical knowledge	1.006 (0.982, 1.030)
Rating: Time taken	1.000 (1.000, 1.001)
Profile: Word count	1.000 (0.998, 1.002)

Constant	1.045 (0.925, 1.166)
Observations	53,411
Log Likelihood	-37,199.800
Akaike Inf. Crit.	74,435.610
Note:	*p**p***p<0.001

Table S4. Themes in participants' explanations of why they thought a self-presentation was human or generated language. N = 800, tile areas correspond to theme prevalence reported in brackets. Heuristics are classified by whether they refer to the content (blue), tone (green), grammar (gray), or form (red) of a self-presentation. Lighter tiles show cue that were associated with generated language.

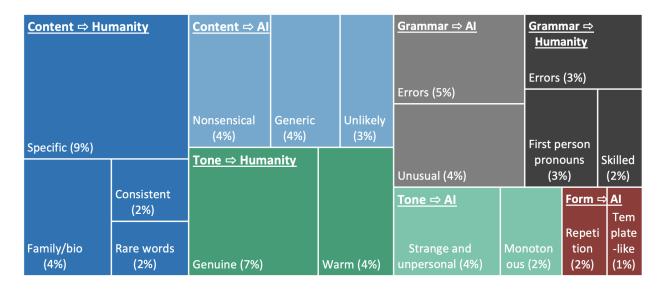


Table S5: Examples themes and codes in participants' explanations of judgments

Category	Code	Freq.	Example
Content cues for Al	Nonsensical content	7%	"travel here from around the world' in third sentence doesn't make sense"
Content cues for Al	Generic content	6%	"seems just a bit to generic and a bit random"
Content cues for Al	Unlikely content	4%	"A full time manager at a nuclear plant doesn't travel frequently enough to care about hotel amenities."
Content cues for Humanity	Specific content	14%	"How detailed descriptions were"
Content cues for Humanity	Family and biography	6%	I determine this is a person because he says him and his wife and son travel and go places on there free time"

Content cues for Humanity	Consistent	3%	"Based primarily on the content, and whether each part of the statement made sense logically and thematically with the rest."
Form cues for AI	Repetitive	2%	"the repetition of the sentences make the whole thing sound lifeless and robotic."
Form cues for AI	Template-like	2%	"I looked for a stock template response for AI, or for signs of a disjointed copy and paste from real user statements."
Grammar cues for Al	Errors	7%	"If things are worded incorrectly."
Grammar cues for Al	Unusual punctuation	7%	"There should be a comma after 'I'm Kellie'"
Grammar cues for Humanity	Errors	5%	"Believe there was a grammar error where it should have been knowledgeable"
Grammar cues for Humanity	1st person speech	4%	"Using I, me, we language"
Grammar cues for Humanity	Good grammar	3%	"The English is good, but not great. It possibly is written by someone who is ESL."
Grammar cues for Humanity	Rare words	3%	"Certain words that were unusual."
Tone cues for AI	Strange and unpersonal	6%	"The personal touch is very unnatural sounding."
Tone cues for AI	Monotonous	3%	"most people either put in little or more thought and AI just feels like a perfect monotone read"
Tone cues for Humanity	Genuinely personal	10%	"one can have a few replies per question and then have the Al Place together; but this isnt random it is Genuine""
Tone cues for Humanity	Warm and welcoming	6%	"Its how the phrase comes across, An Al Having Emotion"

Table S7: Overview of language features and their correlations with participants' judgments.

Feature Name	Mean	SD.	Min	Max	Cor. with ratings	Cor. with source
Nonsensical (manual labels)	0.117	0.233	0	1	0.086	0.114

Repetitive (manual labels)	0.099	0.222	0	1	0.127	0.057
Grammatical issues (manual)	0.172	0.281	0	1	-0.086	0.057
LIWC Achieve	2.325	2.535	0	17.72	0.037	-0.009
LIWC Acquire	0.492	0.941	0	9.72	-0.012	0.01
LIWC Adjective	6.968	3.797	0	30.95	0.029	-0.007
LIWC Adverb	3.898	3.038	0	22.22	-0.094	0.023
LIWC Affect	7.368	4.983	0	34.48	0.028	0.024
LIWC Affiliation	3.15	4.238	0	25.81	0.033	0.032
LIWC Allnone	0.854	1.374	0	12.9	0.017	0.001
LIWC Allpunc	17.037	8.73	0	257.14	-0.009	-0.046
LIWC Allure	9.614	4.967	0	32.35	-0.056	0.09
LIWC Analytic	56.357	27.358	1	99	0.098	-0.051
LIWC Apostro	1.75	2.249	0	21.67	-0.109	0.03
LIWC Article	5.938	3.066	0	20.45	0.013	0.088
LIWC Assent	0.035	0.259	0	8.82	-0.047	-0.013
LIWC Attention	0.615	1.259	0	10.64	0.003	0.019
LIWC Auditory	0.336	0.976	0	11.54	-0.011	-0.036

72.388	30.232	1	99	-0.197	0.031
7.599	3.585	0	25	-0.077	0.112
20.104	8.673	0	68.42	0.123	-0.128
0.94	1.367	0	9.52	0.033	-0.014
0.35	0.89	0	9.3	-0.038	-0.01
33.423	35.196	1	99	0.162	0.01
8.361	5.307	0	36.67	-0.012	-0.011
7.457	5.005	0	36.67	-0.017	-0.01
1.236	1.758	0	17.65	-0.035	-0.011
5.566	4.722	0	42.11	0.024	-0.075
0.033	0.248	0	5	-0.02	-0.019
8.083	3.071	0	25.3	-0.033	0.055
0.24	0.801	0	21.05	-0.089	-0.026
0.988	1.961	0	19.05	0.06	-0.02
0.983	1.601	0	12.5	-0.007	0.022
0.02	0.19	0	3.61	-0.007	-0.012
11.627	4.017	0	27.66	-0.021	0.06
	7.599 20.104 0.94 0.35 33.423 8.361 7.457 1.236 5.566 0.033 8.083 0.24 0.988 0.988 0.0983	7.599 3.585 20.104 8.673 0.94 1.367 0.35 0.89 33.423 35.196 8.361 5.307 7.457 5.005 1.236 1.758 5.566 4.722 0.033 0.248 8.083 3.071 0.24 0.801 0.988 1.961 0.02 0.19	7.599 3.585 0 20.104 8.673 0 0.94 1.367 0 0.35 0.89 0 33.423 35.196 1 8.361 5.307 0 7.457 5.005 0 1.236 1.758 0 5.566 4.722 0 0.033 0.248 0 8.083 3.071 0 0.24 0.801 0 0.988 1.961 0 0.983 1.601 0 0.02 0.19 0	7.599 3.585 0 25 20.104 8.673 0 68.42 0.94 1.367 0 9.52 0.35 0.89 0 9.3 33.423 35.196 1 99 8.361 5.307 0 36.67 7.457 5.005 0 36.67 1.236 1.758 0 17.65 5.566 4.722 0 42.11 0.033 0.248 0 5 8.083 3.071 0 25.3 0.24 0.801 0 21.05 0.988 1.961 0 19.05 0.983 1.601 0 12.5 0.02 0.19 0 3.61	7.599 3.585 0 25 -0.077 20.104 8.673 0 68.42 0.123 0.94 1.367 0 9.52 0.033 0.35 0.89 0 9.3 -0.038 33.423 35.196 1 99 0.162 8.361 5.307 0 36.67 -0.012 7.457 5.005 0 36.67 -0.017 1.236 1.758 0 17.65 -0.035 5.566 4.722 0 42.11 0.024 0.033 0.248 0 5 -0.02 8.083 3.071 0 25.3 -0.033 0.24 0.801 0 21.05 -0.089 0.988 1.961 0 19.05 0.06 0.983 1.601 0 12.5 -0.007 0.02 0.19 0 3.61 -0.007

LIWC Dic	88.99	6.611	36.84	100	-0.092	0.164
LIWC Differ	2.054	2.199	0	14.71	-0.04	0.013
LIWC Discrep	1.208	1.687	0	12.2	-0.005	0.01
LIWC Drives	6.244	4.802	0	29.41	0.069	0.008
LIWC Emo Anger	0.026	0.233	0	5.88	-0.022	-0.023
LIWC Emo Anx	0.033	0.277	0	8.22	-0.015	-0.023
LIWC Emo Neg	0.132	0.56	0	9.09	-0.032	-0.032
LIWC Emo Pos	2.502	2.662	0	17.65	-0.012	0.033
LIWC Emo Sad	0.016	0.173	0	5.08	0.023	-0.01
LIWC Emotion	2.679	2.747	0	20.59	-0.018	0.023
LIWC Ethnicity	0.122	0.675	0	16.39	0.002	-0.034
LIWC Exclam	0.76	1.68	0	26.58	-0.007	-0.024
LIWC Family	0.602	1.465	0	12.9	-0.083	0.011
LIWC Fatigue	0.014	0.164	0	4	-0.022	0.001
LIWC Feeling	0.267	0.738	0	6.67	0.018	-0.006
LIWC Female	0.426	1.197	0	19.35	-0.008	-0.015
LIWC Filler	0.005	0.098	0	4.11	-0.015	0.015

LIWC Focusfuture	0.919	1.624	0	16.67	0.022	-0.001
LIWC Focuspast	2.345	2.636	0	15.38	-0.111	0.008
LIWC Focuspresent	5.2	2.984	0	24.14	0.003	0.072
LIWC Food	0.737	1.657	0	19.05	-0.01	0.009
LIWC Friend	0.466	1.053	0	14.29	0.025	0.039
LIWC Fulfill	0.153	0.527	0	5.56	0.036	-0.017
LIWC Function	51.71	8.185	1.32	79.41	-0.129	0.162
LIWC Health	0.31	1.037	0	17.86	-0.006	-0.01
LIWC Home	0.721	1.531	0	22.86	0.021	-0.007
LIWC I me	7.962	4.525	0	24.39	-0.212	0.031
LIWC Illness	0.024	0.249	0	6.25	0.019	-0.026
LIWC Insight	1.674	1.994	0	15	0.022	-0.029
LIWC Ipron	2.301	2.483	0	22.06	-0.005	0.029
LIWC Lack	0.051	0.381	0	6.9	-0.003	-0.021
LIWC Leisure	1.975	2.788	0	19.35	-0.043	-0.004
LIWC Lifestyle	8.156	5.838	0	40	0.025	-0.013
LIWC Linguistic	66.286	9.102	6.58	91.18	-0.122	0.156

LIWC Male	0.572	1.223	0	15.69	-0.004	0.009
LIWC Memory	0.031	0.259	0	4.76	0.02	-0.021
LIWC Mental	0.022	0.246	0	8	-0.022	0.011
LIWC Money	1.089	2.075	0	20.51	0.065	-0.012
LIWC Moral	0.204	0.69	0	8.11	-0.016	-0.04
LIWC Motion	2.131	2.293	0	16.13	-0.032	0.018
LIWC Need	0.282	0.86	0	8.86	0.022	-0.009
LIWC Negate	0.521	1.082	0	12.5	-0.057	-0.019
LIWC Netspeak	0.184	0.686	0	21.05	-0.082	-0.028
LIWC Nonflu	0.022	0.196	0	4.35	-0.022	0.003
LIWC Number	1.364	1.965	0	27.27	-0.031	-0.026
LIWC Otherp	1.901	3.802	0	163.77	0.014	-0.043
LIWC Perception	11.3	5.608	0	43.24	-0.021	0.016
LIWC Period	7.001	4.89	0	245.71	0.003	0.019
LIWC Physical	1.785	2.432	0	23.81	-0.022	-0.006
LIWC Polite	0.38	0.995	0	10	0.043	-0.044
LIWC Politic	0.185	0.802	0	13.64	0.031	-0.005

LIWC Power	0.855	1.535	0	15.66	0.073	-0.054
LIWC Ppron	11.167	4.369	0	27.91	-0.133	0.064
LIWC Prep	13.841	4.042	0	29.51	-0.013	0.035
LIWC Pronoun	13.468	5.147	0	32.65	-0.115	0.068
LIWC Prosocial	0.887	1.507	0	13.33	0.089	-0.019
LIWC Qmark	0.061	0.431	0	13.24	-0.016	-0.002
LIWC Quantity	3.614	2.857	0	18.82	-0.067	-0.018
LIWC Relig	0.085	0.561	0	17.65	-0.001	-0.029
LIWC Reward	0.228	0.682	0	6.67	0.043	-0.012
LIWC Risk	0.094	0.432	0	7.69	0.028	-0.045
LIWC Sexual	0.026	0.246	0	7.81	-0.032	-0.041
LIWC Shehe	0.131	0.767	0	13.89	0.08	-0.005
LIWC Socbehav	4.371	3.262	0	23.33	0.032	-0.019
LIWC Social	11.563	6.541	0	48.72	0.074	0.028
LIWC Socrefs	6.542	5.332	0	36.17	0.07	0.045
LIWC Space	7.688	4.578	0	30.3	-0.016	0.02
LIWC Substances	0.084	0.465	0	10.2	0.019	0.018

LIWC Swear	0.025	0.213	0	4.23	-0.058	-0.02
LIWC Tech	0.682	1.653	0	19.05	0.055	-0.007
LIWC Tentat	1.583	2.181	0	15.79	-0.041	0.009
LIWC They	0.283	0.863	0	10	0.035	0.024
LIWC Time	3.959	2.977	0	24.39	-0.088	-0.01
LIWC Tone	79.83	26.516	1	99	0	0.03
LIWC Tone Neg	0.318	0.921	0	9.38	-0.043	-0.045
LIWC Tone Pos	6.986	4.917	0	31.03	0.039	0.034
LIWC Verb	15.177	5.054	0	36	-0.09	0.119
LIWC Visual	0.775	1.351	0	10.81	0.009	0.001
LIWC Want	0.321	0.829	0	8.99	-0.001	-0.007
LIWC Wordcount	60.942	17.212	28	97	-0.087	-0.006
LIWC We	1.479	3.23	0	22.58	0.04	0.029
LIWC Wellness	0.117	0.584	0	9.09	-0.001	-0.018
LIWC Work	4.9	5.389	0	40	0.039	-0.006
LIWC Words per sentence	15.624	6.985	3.47	97	0.014	-0.059
LIWC You	0.987	1.863	0	16.67	0.082	0.009

Part Of Speech CC	3.646	1.772	0	21	-0.042	0.056
Part Of Speech CD	0.668	0.998	0	16	-0.041	-0.039
Part Of Speech DT	4.359	2.361	0	17	-0.036	0.06
Part Of Speech EX	0.038	0.201	0	2	0.007	0.016
Part Of Speech FW	0.019	0.167	0	7	-0.012	-0.03
Part Of Speech IN	6.393	3.068	0	22	-0.074	-0.001
Part Of Speech JJ	6.444	3.134	0	23	-0.021	-0.059
Part Of Speech LS	0	0.012	0	1	-0.007	-0.012
Part Of Speech MD	0.523	0.833	0	7	-0.011	0.021
Part Of Speech NN	18.628	6.965	3	51	-0.024	-0.076
Part Of Speech PD	0.048	0.229	0	2	0.001	0.031
Part Of Speech PO	0.092	0.339	0	6	-0.007	-0.002
Part Of Speech PR	3.171	2.373	0	20	-0.014	0.022
Part Of Speech RB	3.026	2.459	0	20	-0.124	-0.01
Part Of Speech RP	0.254	0.538	0	4	-0.066	0.006
Part Of Speech SY	0.003	0.053	0	2	0.01	-0.005
Part Of Speech TO	1.992	1.508	0	13	-0.013	0.056

Part Of Speech UH	0.011	0.11	0	3	-0.019	0
Part Of Speech VB	11.998	4.558	0	29	-0.135	0.068
Part Of Speech WD	0.194	0.474	0	6	0.018	0.038
Part Of Speech WP	0.286	0.599	0	5	-0.018	0.016
Part Of Speech WR	0.218	0.503	0	4	-0.025	0.018
Contains List	2.25	2.125	0	26	0.024	-0.093
Number Negations	0.165	0.449	0	5	-0.055	-0.013
Number Of Addresses	0.003	0.053	0	1	0.005	0.021
Number Of Names	0	0.012	0	1	0.024	0.012
Number Of Numbers	0.783	1.559	0	30	-0.006	-0.034
Number Of Punctuation	8.255	5.18	0	174	-0.019	-0.043
Number Of Question Marks	0.04	0.277	0	9	-0.026	-0.005
Number Of Symbols	0.108	1.48	0	107	0.005	-0.005
URL Count	0.004	0.083	0	4	0.001	-0.021
Flesch Kincaid Grade Level	7.363	3.386	0	32.9	0.088	-0.113
Flesch Reading Ease Level	69.988	16.841	-23.45	111.78	-0.119	0.129
Sentiment AFINN	8.642	6.309	-16	44	0.014	0.047

Sentiment NRC Anger	0.009	0.019	0	0.22	-0.018	-0.032
Sentiment NRC Anticipation	0.077	0.054	0	0.316	-0.005	0.01
Sentiment NRC Disgust	0.007	0.017	0	0.22	0.002	-0.023
Sentiment NRC Fear	0.012	0.023	0	0.22	0.007	-0.049
Sentiment NRC Joy	0.107	0.076	0	0.5	-0.016	0.049
Sentiment NRC Negative	0.021	0.03	0	0.304	-0.012	-0.055
Sentiment NRC Positive	0.195	0.085	0	0.571	0.06	0.036
Sentiment NRC Sadness	0.017	0.026	0	0.222	-0.016	-0.014
Sentiment NRC Surprise	0.025	0.032	0	0.286	0.004	-0.012
Sentiment NRC Trust	0.093	0.062	0	0.429	0.061	-0.001
Sentiment Polarity	0.262	0.161	-0.443	1	0.025	0.018
Sentiment Subjectivity	0.51	0.148	0	1	-0.003	0.005
Sentiment Vader	0.812	0.265	-0.895	0.998	-0.021	0.015
Lexical Diversity	0.755	0.079	0.167	1	-0.016	-0.202
Character Count	341.203	107.151	126	705	-0.025	-0.058
Contractions Count	1.021	1.439	0	12	-0.152	0.02
Line Break Count	0.986	1.76	0	26	0.05	0.041

Longest Repetition Length	1.973	1.249	1	45	0.071	0.126	
Mean Sentence Length	16	7.546	3.737	89	0.01	-0.066	
Mean Word Length	4.565	0.559	3.265	7.933	0.142	-0.157	
Number Of Exclamation Marks	0.39	0.843	0	21	-0.033	-0.03	
Number Of Unique Words	46.039	11.648	15	77	-0.113	-0.089	
Percentage Common 2-grams	0.048	0.055	0	0.385	-0.046	0.106	
Percentage Common 3-grams	0.029	0.046	0	0.375	-0.025	0.113	
Percentage Common 4-grams	0.011	0.043	0	1	-0.039	0.092	
Percentage Common Words	0.156	0.096	0	0.688	-0.04	0.12	
Percentage Rare 2-grams	0.691	0.153	0	1	0.082	-0.207	
Percentage Rare Words	0.065	0.066	0	0.529	0.069	-0.223	
Percentage Stop Words	0.476	0.075	0	0.733	-0.127	0.181	
Word Density	0.183	0.018	0.112	0.241	-0.159	0.151	
LDA Topic Vectors	Various techniques incl. structural topic models were explored but not used due to robustness and interpretability issues.						

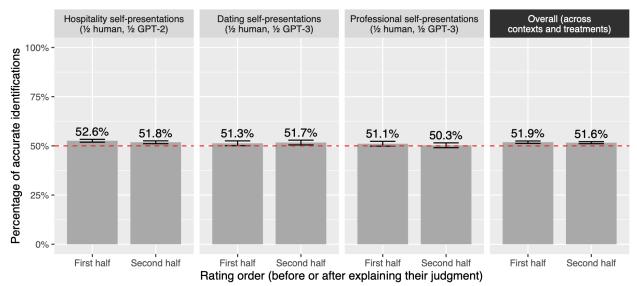


Figure S1. Participants' performance in identifying generated self-presentations did not change throughout the experiment. Error bars represent 95% confidence intervals for 6,000–16,000 judgments of 2,000–3,000 self-presentations per bar.

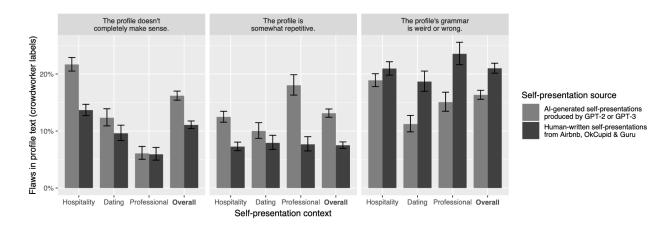


Figure S2. Participants in a separate labeling task rated Al-generated self-presentations as nonsensical and repetitive more often than human-written self-presentations. *Error bars represent 95% confidence intervals for 1,898–4,704 judgments of 1,000–1,500 self-presentations per bar.*