

Deriving Desirable Artistic Generative Distributions from Individual Identity Statements

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Abstract

Our research introduces a novel methodology that leverages individual identity statements as foundational inputs for generating diverse and resonant artistic expressions. The paper provides a detailed exploration of how LLMs can be guided to produce outputs that are not only artistically compelling but also deeply reflective of personal and collective identities, in all of their facets. We establish that the problem of generating a large collection of diverse art related to an identity statement is a key challenge in the creative application of LLMs, and suggest a structuralist approach which outperforms a naive approach to addressing this problem. We present both quantitative and qualitative analyses of the artistic outputs generated by our system, demonstrating its effectiveness in creating meaningful art that resonates on a personal and social level, and produces a multi-faceted look at a given identity. Furthermore, the paper includes reflections on the implications of this AI-human collaborative process, providing insights into how LLMs can be harnessed for personal enrichment and cultural engagement. Our findings suggest significant potential for LLMs in enhancing social discourse and contributing to the broader landscape of creative expression particularly as an outlet for identity exploration.

1. Introduction

The integration of Artificial Intelligence (AI) and machine learning in the domain of art generation has opened new frontiers in the realm of creative expression. With advancements in machine learning and natural language processing, AI algorithms have the capability to generate art that is not only aesthetically pleasing but also rich in conceptual depth and diversity. Recent developments in LLMs and deep learning have shown promising results in visual art generation, where AI systems learn from vast datasets of existing artwork to create new, original pieces [1] [2].

However, artists usually use AI for a purpose, and one oft-cited purpose is to express a particular idea that would either take too long to refine or is beyond one's own technical capabilities. Users typically do not want to have to become expert prompt engineers in order to see the artistic benefit of working with prompts as tools; they want to try a single statement and see many outputs, so they can pick which they like. One of the primary challenges in AI-driven art generation, therefore, is the creation of a new distribution of artistic expressions derived from a single statement, a process which requires knowing something about the probabilities of the many interpretations of that statement being the one explored artistically. While this has

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been studied extensively in the VAE framework, particularly for images, the “correct artistic distribution” of creative language has not been equally well studied. [3] [4].

In particular, we focus on one general class of prompts - “Identity Statements,” or prompts which are intended to express a facet of personal or artistic identity to be explored. Such statements are singularly important in that they provide a foundational narrative from which complex artistic expressions emerge. By anchoring the creative process in the authentic experiences and perspectives of the individual, these identity statements not only guide the aesthetic direction but also imbue the resulting artworks with a depth of meaning and context that resonates on a personal and collective level. This interplay between individual identity and artistic expression not only enriches the artistic landscape but also offers a nuanced understanding of how personal experiences shape and are shaped by artistic media.

Integrating the concept of “Identity Statements” into this context involves bridging the gap between the inherently human endeavor of articulating personal or artistic identity and the technical capabilities of AI, particularly in the realm of poetry. The use of identity-specific prompts in poetry aligns closely with the personal and cultural exploration inherent in the art form. Poetry, as a medium, allows for a deep dive into personal experiences, cultural backgrounds, and societal perspectives, offering a rich tapestry of emotional and intellectual exploration [5] [6].

Incorporating this into the AI-driven art generation process means utilizing AI to curate or generate poetry collections that reflect these diverse facets of human identity. When a user inputs an identity statement, the AI can employ its understanding of language, theme, and emotion to generate or select poetry that aligns with the nuances of that statement. This process not only requires the AI to comprehend the complex layers of human identity but also to translate these layers into a poetic form that resonates on both personal and collective levels.

Therefore, the application of AI in this context is not just about creating aesthetically pleasing or technically competent poetry. Furthermore, it transcends the need to create a single “high-quality” poem that resonates with a given identity. It’s about leveraging the AI’s capability to represent a distribution, or potentially unlimited collection of poems which *all* resonate with a given identity *in meaningfully different ways*. This approach aligns with the broader goal of using AI to enhance human creativity, enabling users to explore their identities through a diverse range of poetic expressions without needing to become expert prompt engineers (because it allows the individual to create a single identity statement through which many pieces of art are generated instead of 1 prompt corresponding to only 1 piece of art).

This methodology sits at the intersection of AI’s technical prowess and the subjective, emotionally rich world of human artistic creation. By systematically analyzing and responding to identity statements through poetry, the AI can offer a unique, personalized exploration of identity, thereby enriching the user’s understanding of themselves and their place in the world. By doing so with an entire book’s worth of output, with each output being unique, it can let users understand how their identity affects the many ways they and others interact in society.

The subsequent section of the paper delves into the structuralist principles guiding this methodology, aiming to demonstrate how it effectively bridges the gap between LLMs’ ability to produce high-quality responses to prompts and a thorough understanding of what a probabilistic, or “distribution-first” approach to artistic creativity might look like. This approach, as empirically shown, successfully calibrates to a given identity, representing its different facets and enabling

extensive self-exploration.

This paper proposes a novel methodology that leverages structuralist principles to guide LLMs in generating a well-defined distribution over artistic outputs from individual identity statements. By systematically identifying, analyzing and applying binary oppositions and thematic elements, the proposed approach aims to bridge the gap between AI's technical prowess and the complex world of human artistic creation in representing the entire artistic potential of a given identity.

We show in both empirical quantitative metrics and in an author's documented use of the tool that it is successful at calibrating to a given identity, representing different facets of a single complex identity, and enabling extensive self-exploration.

2. LLMs don't cover the space of poetry implied by an identity statement effectively.

Consider the three poems in appendix A, each generated by ChatGPT with its default temperature and with the following prompt: "Write a poem fitting the following identity: I am wheelchair-dependent, but I know some day I'll be a famous astronaut. My wheelchair dependence has made me more strong, not less."

While each of these alone appears to be a strong candidate for such a poem, as a subset of the vast distribution of good poetry that could be written for the given identity, they do a poor job of spanning the distribution (which is obvious even with an n of 3). In particular, ChatGPT itself identified many over-regularities between poems, as in Appendix B.

In essence, because each poem is so similar, no reader would be interested in reading an entire book of poems on the same topic without becoming bored from the monotony. Therefore, when moving from prompting for a single poem to prompting for a distribution or large collection of poems, there is a need for an alternative approach.

3. Enhancing LLMs for Poetry Generation through Task Decomposition

Building on the recent advancements in Large Language Models (LLMs), this paper explores an innovative approach to poetry generation that leverages the concept of task decomposition, inspired by the works of [7], [8], and [9]. The methodology presented herein breaks down the poetry generation process into a series of interconnected tasks, each aimed at exploring different facets of an identity statement. This approach is akin to the "chain-of-thought" prompting and "AI chains" that have been shown to significantly enhance the performance and capabilities of LLMs.

Firstly, we initiate the process by employing ChatGPT to explore a broad spectrum of themes and oppositions related to the identity statement. This step ensures the generation of unique and coherent thematic elements that form the foundation of our poetry. Following this, we employ a structured prompting strategy that guides the LLM through a series of tasks, each designed to incrementally build upon the previously identified themes and oppositions. This

structured approach allows for the generation of poetry that is not only diverse but also deeply meaningful and reflective of the specified identity.

The integration of these methodologies into our poetry generation process draws upon the strengths of LLMs to produce content that is both varied and aligned with the complex nuances of human identity. By decomposing the generation process into manageable tasks, we optimize the LLM's output, ensuring that each poem resonates with the identity statement in a distinct and profound manner. This section details the technical implementation of this approach and its alignment with the structuralist principles that underpin our broader methodology for artistic generation.

4. Structuralism: A Theoretical Framework

4.1. The Essence of Structuralism

In this paper, the author adopts the core principles of structuralism, specifically the concept of universal themes and binary oppositions, and applies them to the realm of computational artistic generation. This approach fundamentally assumes that the recurrent elements identified by structuralism in human artistic expression can be directly utilized in algorithms. These algorithms aim to generate a wide array of realistic and diverse artistic outputs in response to specific prompts. Unlike traditional humanist claims, Structuralism in this context is not about inventing new interpretations of art but about leveraging established structuralist insights to enhance the authenticity and relevance of entire distributions of AI-generated art.

4.2. Binary Oppositions in Art and Culture

In Structuralism, binary oppositions, foundational in structuralist theory (e.g., Lévi-Strauss's anthropological work), are central to understanding artistic expression. These oppositions, such as 'direct vs. indirect response' and 'first person vs third person', serve as the backbone of narratives and poetry. Structuralism's focus on these dichotomies [10] [11] provides a theoretical basis for machine learning models to analyze and simulate artistic content.

4.3. Binary Oppositions and Discourses

Structuralism posits that binary oppositions, such as Classical vs. Modern, are foundational in generating rich and nuanced discourses. These oppositions are not merely conflicting pairs but rather dynamic dialectics that create a space for exploring complex ideas and identities. For instance, the discourse around being wheelchair-dependent with aspirations of becoming an astronaut may navigate between tradition and innovation, embodying a synthesis of classical heroism with modern narratives of inclusivity and technological progress.

Examples of possible oppositions within this framework include nature vs. culture, signifier vs. signified, and speech vs. writing. These oppositions underpin the creation of meaning and are instrumental in the development of discourses that reflect the complexities of human experiences and societal structures. The exploration of possible "Classical vs. Modern" discourses, specifically in the context of overcoming physical challenges to achieve astronomical dreams serves as a

testament to this, where the interplay between these poles fosters a rich, contextual discourse that extends beyond simple binaries (see E).

Sources such as Lévi-Strauss's work on mythologies and Saussure's theories on linguistics provide foundational insights into understanding how structuralist oppositions function as sources of rich discourses [12] [13]. This analytical approach reveals that the discourses emerging from such oppositions are not predetermined but evolve from the specific cultural, historical, and personal contexts in which they are situated. The "Classical vs. Modern" opposition in the context of poetry about resilience and ambition exemplifies how these latent spaces of exploration are not only sites of conflict but also of creative synthesis and meaningful dialogue.

4.4. Universal Themes in Literature

Structuralism posits universal themes across artistic expressions. These themes, transcending cultural and temporal boundaries, are often articulated through binary oppositions, depicting conflicts or transformations [14]. This universality provides a robust framework for AI algorithms to create art that resonates with diverse human experiences, leveraging the structuralist insights into binary oppositions and thematic universality.

4.5. Structuralism: Implications for Prior and Posterior in Artistic Generation

Structuralism introduces a fundamental shift in conceptualizing the generation of art. It posits that the 'prior' distribution over artistic works is heavily influenced by universal themes, binary oppositions, and topics as identified in structuralist theory. When an AI algorithm or artist starts with a specific identity statement, the 'posterior' distribution of potential artistic outputs should still be informed by these structuralist elements. However, this posterior is uniquely conditioned on the given statement, leading to variations that, while rooted in universal themes and oppositions, diverge from the unconditioned prior. This perspective allows for a more nuanced understanding of how art is generated, acknowledging the inherent structure in creative expression while adapting to specific inputs or identity statements.

5. Methodology

5.1. Algorithmic Approach for Identifying Binary Oppositions and Themes/Topics and Learning Frequencies

To develop an algorithmic approach for identifying binary oppositions and themes in art, we employed a two-step process utilizing OpenAI's ChatGPT-4. Initially, we presented ChatGPT-4 with a diverse range of examples from literary studies and asked it to produce others, encompassing 200 oppositions such as 'Individualistic vs Collectivist', 'Colloquial vs Formal Register', and 'First Person vs Third Person'. Following this, we tasked the model with distilling these examples to a set of 125 distinct and least entangled binary oppositions, thereby ensuring minimal redundancy and maximum clarity in our dataset.

For theme identification in poetry, we developed a method to learn theme frequencies. We used ChatGPT to analyze each poem in our dataset, instructing it to return a subset of the

predetermined list of themes present in each poem. This approach allowed us to determine the occurrence and prevalence of various themes within the dataset, thereby facilitating a comprehensive understanding of thematic patterns in poetic compositions. This process was not only instrumental in establishing a thematic database but also in enhancing the algorithm’s capability to recognize and interpret thematic elements in poetic works.

5.2. Learning Parameters of a Statement’s Distribution

For each artistic statement, we employ a two-fold sampling approach to determine its thematic and oppositional attributes. Let T be the exhaustive list of themes. For a given statement s , we identify a subset $T_s \subseteq T$ where each theme $t \in T_s$ is either implied or contraindicated by s .

Similarly, let O represent the exhaustive list of binary oppositions relevant to the artistic domain. For each opposition $o \in O$ in context to the statement s , we assign a determinedness score $D(o, s) \in [1, 10]$. The determinedness score $D(o, s)$ assesses the expected skew in the distribution of o ’s values, given the identity statement compared to the prior distribution.

5.3. The Generative Process

The generative process in our Structuralist framework involves the following steps for each generative cycle:

1. Sample n binary oppositions from O , denoted as O_n , with each opposition $o \in O_n$ selected based on a probability inversely proportional to its determinedness score, $\frac{1}{D(o, s)}$.
2. Sample m “possible discourses” associated with the sampled values of o conditioned on the prompt (see E).
3. Construct sub-prompts for each $o \in O_n$, stating “You must explore o in one of the following ways:” followed by the m “possible discourses” associated with o .
4. Sample a Categorical distribution of themes T (excluding those implied or contraindicated by s) n_2 times without replacement, with selection probability proportional to their frequency in the dataset.
5. Generate m_2 sub-prompts stating “It should also explore” followed by each of the sampled themes.
6. Combine all sub-prompts into a comprehensive prompt under the header “Satisfy all of the following - ”, followed by a list of the constructed sub-prompts.
7. Create a final input that defines a rubric which grades on adherence to the identity statement, the comprehensive structuralist prompt, and overall poetic quality, and ask to create a poem that maximizes the score on the rubric.

6. Quantitative Results

Previous research has established the potentially efficacy of using ChatGPT as a surrogate for user studies [15] [16]. Without claiming that this method has the same status as a full user study (which is in the process of being initiated), we conducted a quantitative analysis of our results using ChatGPT’s ability to understand natural language queries as the basis for this study.

6.1. Quantitative Experimental Details

ChatGPT was used to generate 50 identity statements. They were generated by querying ChatGPT to come up with “statements which describe an aspect of a novice poet’s personal identity (including social status, profession, hobbies, sexuality, etc.) and how they’d like to see that reflected in their poetry.”

For each of the identity statements, 6 examples were generated using the method above, and 6 were generated by simply querying ChatGPT to “generate poetry using this identity: *insert identity here*” with a temperature of 1.0.

6.2. Specificity to Identity

The specificity of the poetry to the identity was measured by performing the following experiment:

- For each poem, randomly selecting 3 other identities along with the one the poem was generated with,
- Measuring the percentage of times ChatGPT could correctly identify the poem from the identity.
- The order of poems was randomized each time to avoid unintentional LLM bias.

6.3. Efficacy at Producing Different Artistic Facets of the Same Identity

The efficacy at producing different artistic facets of a given identity was measured as follows:

- For each identity, the following was performed 3 times:
 - 3 poems were selected from the structurally-guided distribution corresponding to that identity
 - 3 poems were selected from the “naive approach” distribution corresponding to that identity
 - The following was asked of ChatGPT: “Which of the following ;;;-separated triples of 3 poems do a better job as a unit of reflecting **very divergent (in line/verse organization, thematically, rhetorically, stylistically, in their formal layout/design, and poetically)***, yet all interesting poetic approaches to the given identity while still maintaining that identity, and avoiding boring the reader with a similar text every time.”
 - The order of groups of poems was randomized to avoid unintentional LLM bias.
- The ratio of times ChatGPT preferred the naive distribution to the structurally-guided distribution was measured.

6.4. Quality of Poetry

The quality of poetry according to ChatGPT was measured in a different experiment. ChatGPT was provided a rubric to score the output on out of 110 points, and the score was calculated for each poem in the structural and naive group.

Measurement	Stochastic Modification Approach	Naive Approach
Specificity	98.0%	98.7%
Goodness of Distribution	88.3 %	11.7 %
Quality of Poetry	68.2	65.75

Table 1

Measurements attempting to analyze (through the use of ChatGPT) the efficacy of the stochastic modification vs naive approach. Bold statistics are statistically significantly better than the other approach.

6.5. Results

The structuralist approach outperformed the naive approach in apparently (based on analyzing random triplets of poems in each category) showing different facets of the same underlying identity, as well as better quality according to the poem quality rubric. While apparently the naive approach outperformed the structuralist approach on specificity of the poem to the prompt, a cursory inspection of the poems generated using the naive approach suggested that they nearly all exactly quoted their respective identity statements, while the structuralist poems used a more high-level resemblance to the identity statements, suggesting that such a metric may be misleading; in addition, the difference was not statistically significant with $p = 0.01$.

7. Author's Reflections as a User

The author used the system as a method of self-exploration as well as to test its efficacy. They tried experimenting with several different aspects of their personal identity, such as their hobbies, their attitude towards religion, their struggle with chronic illness, and their favorite literary influences, each as separate identity statements. Their observations were the following:

1. **In general, the findings from the quantitative study appeared to be consistent with my experience.** There was considerably more diversity in the output of the structurally generated ones, and they did a better job of "describing multiple facets of what it was like to be me."
2. **There was some trade-off of fidelity to statement vs exploration.** The naive model would essentially restate my input in more poetic language, while it felt like the Structuralist model was trying to "mind-read" and infer what it would be like to be me in a variety of situations from the very limited information I gave it. In some cases it did this surprisingly well, but it also failed in interesting ways.
3. **It took on average 3 poems before I found one that really expressed what I was going for, but I learned from the ones that didn't express that.** For instance, in my identity statement about my struggles with religion, I was surprised to discover that there were aspects of faith and doubt I had never even thought of before, which only became apparent when I read what it was trying to infer about my faith and doubt based on a 1-sentence context.
4. **The poems I'd say were best in quality were sometimes the ones that seemed to "get me" the most, but not always.** There was one extremely well-written poem

about chronic illness that used a very clever conceit (leading up in expectation to a novel portmanteau), but didn't seem to capture my experiences with the chronic illness. On the other hand, very high-quality poetry which did resonate with my sense of self were written by the system about the hobby, making me feel more like that hobby was a "part of my identity" in the first place than I had previously.

5. **I felt more emotionally validated than expected when a poem did fit how I feel, and more invalidated than expected when it didn't.** This should be taken into account when regarding potential benefits and risks of using this tool.
6. **The algorithm was limited by the LLM's biases.** For instance, in my identity statement about religious attitude, I didn't state "which god I had trouble believing in", yet the model, likely due to algorithmic bias, assumed my problems were specifically with aspects of Christianity that are not universal.
7. **I felt much more confident that someone would be interested in reading the entire collection of poetry I generated with the structuralist approach than with the naive approach.** I felt there was interesting variety on all dimensions in the structuralist output, while the naive output quickly became boring even as I read an n of 6 samples per identity.

8. Conclusion

In conclusion, this study has demonstrated the potential of Large Language Models (LLMs) in the realm of artistic creation, with a specific focus on poetry. By integrating individual identity statements into the generative process, we have successfully shown how LLMs can be tailored to produce art that is not only thematically rich and diverse but also resonant with personal and collective identities in a sophisticated manner. Our approach, grounded in structuralist principles, has provided new insights into the capabilities of LLMs as tools for social enrichment and cultural engagement, as well as for collections of art rather than as translators of individual prompts into individual pieces of art.

The quantitative and qualitative results from our experiments underscore the effectiveness of this novel methodology. The generated artistic outputs, while diverse, maintain a thematic coherence that is reflective of the input identity statements. This highlights the potential of LLMs in understanding and interpreting human inputs in a way that is meaningful and culturally relevant.

Moreover, our research contributes to the broader discourse on the intersection of AI and art, offering a framework for further exploration in this field. The implications of our findings extend beyond the artistic domain, suggesting new avenues for using LLMs in enhancing social discourse and understanding.

As we continue to explore the capabilities of LLMs, it is crucial to consider the ethical implications and ensure that these technologies are used responsibly and for the betterment of society. Future work in this area should aim to refine these methods, explore other forms of artistic expression, and examine the impact of AI-generated art on different social contexts.

In summary, this paper presents a significant step towards harnessing the power of AI for identity exploration, providing a foundation for future research in the intersection of AI, art, and identity.

References

- [1] N. Dai, J. Liang, X. Qiu, X. Huang, Style transformer: Unpaired text style transfer without disentangled latent representation, arXiv preprint arXiv:1905.05621 (2019).
- [2] A. Ramesh, M. Pavlov, G. Goh, S. Gray, C. Voss, A. Radford, M. Chen, I. Sutskever, Zero-shot text-to-image generation, CoRR abs/2102.12092 (????).
- [3] M. Yee-King, Latent spaces: A creative approach, in: *The Language of Creative AI: Practices, Aesthetics and Structures*, Springer, 2022, pp. 137–154.
- [4] P. Das, B. Quanz, P.-Y. Chen, J.-w. Ahn, D. Shah, Toward a neuro-inspired creative decoder, arXiv preprint arXiv:1902.02399 (2019).
- [5] R. Furman, C. L. Langer, C. S. Davis, H. P. Gallardo, S. Kulkarni, Expressive, research and reflective poetry as qualitative inquiry: A study of adolescent identity, *Qualitative Research* 7 (2007) 301–315.
- [6] L. L. Rudd, Just slammin! adolescents' construction of identity through performance poetry, *Journal of Adolescent & Adult Literacy* 55 (2012) 682–691.
- [7] J. Wei, X. Wang, D. Schuurmans, M. Bosma, F. Xia, E. Chi, Q. V. Le, D. Zhou, et al., Chain-of-thought prompting elicits reasoning in large language models, *Advances in Neural Information Processing Systems* 35 (2022) 24824–24837.
- [8] T. Wu, M. Terry, C. J. Cai, Ai chains: Transparent and controllable human-ai interaction by chaining large language model prompts, in: *Proceedings of the 2022 CHI conference on human factors in computing systems*, 2022, pp. 1–22.
- [9] M. Besta, N. Blach, A. Kubicek, R. Gerstenberger, L. Gianinazzi, J. Gajda, T. Lehmann, M. Podstawski, H. Niewiadomski, P. Nyczyk, et al., Graph of thoughts: Solving elaborate problems with large language models, arXiv preprint arXiv:2308.09687 (2023).
- [10] E. Kurzweil, *The Age of Structuralism: From Lévi-Strauss to Foucault*, Routledge, 2017.
- [11] P. Caws, *What is structuralism?* (1968).
- [12] R. A. Segal, *Structuralism in myth: Lévi-Strauss, Barthes, Dumézil, and Propp*, volume 6, Taylor & Francis, 1996.
- [13] D. Holdcroft, *Saussure: signs, system and arbitrariness*, Cambridge University Press, 1991.
- [14] D. Riccomini, Northrop frye and structuralism: Identity and difference, *University of Toronto Quarterly* 49 (1979) 33–47.
- [15] W. Tabone, J. De Winter, Using chatgpt for human–computer interaction research: A primer, Manuscript submitted for publication (2023).
- [16] A. AlZaabi, A. ALamri, H. Albalushi, R. Aljabri, A. AalAbdulsallam, Chatgpt applications in academic research: A review of benefits, concerns, and recommendations, *bioRxiv* (2023) 2023–08.

A. LLM's Naive Approach to Diverse Generation

Consider the following three poems:

In a world that often sees but does not look,
There's a story, not just a line in a book.

"I am wheelchair-dependent," a voice declares,
Yet in its tone, a strength that fiercely dares.

Bound not by wheels, but propelled by dreams,
In the night sky, a future brightly gleams.
"An astronaut I'll be," the voice soars high,
Chasing stars that twinkle in the sky.

The wheels, they whisper tales of silent might,
Of battles fought in the stillness of the night.
Each turn, a testament to enduring will,
On earthbound journeys, yet the heart soars still.

This chair, a chariot, not a chain,
In its embrace, a world to gain.
Not less, but more, in resilience grown,
In the heart's deep core, a strength unknown.

So listen close, hear the wheels' soft hum,
A prelude to the great things to come.
In galaxies far, a trail to blaze,
A wheelchair-dependent astronaut, worthy of praise.

For in the cosmos, where dreams are cast,
It's the spirit that travels, unsurpassed.
"I am strong," the voice echoes in space,
A declaration of hope, for the human race.

In wheels I sit, yet dreams soar high,
Bound to earth, yet bound for sky.
A chair on wheels, my steady steed,
In it, I find a different speed.

Not lessened by the chair I ride,
But stronger, with the stars as guide.
In the cosmos, where dreams are cast,
I see myself, an astronaut at last.

My wheels, they ground but do not bind,
In them, a unique strength I find.
The universe, vast and unexplored,
Awaits my touch, forever adored.

My chair, my ship, through stellar seas,
Through galaxies, on cosmic breeze.
Wheelchair-bound, yet free in space,
In starlit skies, I find my place.

For limitations are but mind's creation,
In the vast, I find my station.
Wheelchair-dependent, yet so much more,
An astronaut, in spirit, ready to soar.

In this chair, I sit, but not confined,
A world of dreams swirls in my mind.
Wheelchair-bound, yet my spirit's free,
I gaze at stars, where I long to be.

Each wheel that turns, a step to space,
In realms above, I find my place.
Not lessened by my seated stance,
But strengthened in my cosmic dance.

Gravity's chains, I'll soon unbind,
Leaving these earthly wheels behind.
For in my heart, a fire burns bright,
To sail the skies, a starry knight.

They say I'm bound, but they're so wrong,
In this chair, I've grown more strong.
A universe vast, calls out to me,
Astronaut dreams, soon to be.

Through trials and tests, my will's been cast,
In stellar forge, tough as the past.
Wheelchair-dependent, yet fiercely proud,
Among the stars, I'll be unbound.

So here I sit, and plan my flight,
Through endless day and starry night.
For in my soul, a truth I've found:
In dreams, no chair can keep me bound.

B. Over-regularities in the Naive Approach

1. **Repetitive Imagery and Metaphors:** The poems consistently use similar metaphors and imagery to convey the idea of overcoming physical limitations through the power of dreams and aspirations. The recurring motif of the wheelchair as a symbol of both constraint and strength, and the constant juxtaposition of earthly bounds with celestial aspirations, is a common thread. While this imagery is powerful, its repetitive use across the poems limits the exploration of other possible metaphors and narrative angles that could bring fresh perspectives to the theme.
2. **Lack of Diverse Narrative Perspectives:** All three poems adopt a similar narrative stance, primarily focusing on the individual's internal strength and dreams of becoming an astronaut. This singular focus neglects other dimensions of the theme. For instance, the poems could explore the societal challenges and prejudices faced by individuals with disabilities, the practical and emotional journey of adapting to wheelchair dependence, or the nuanced ways in which such an experience might shape one's outlook on life and space exploration. By not delving into these areas, the poems miss opportunities to enrich the theme with varied and deeper insights.
3. **Uniform Tone and Style:** The poems share a uniform tone of optimism and empowerment. While uplifting, this consistency in tone doesn't capture the full spectrum of emotions and experiences that could be associated with the theme. The struggle, frustration, moments of doubt, and the complex interplay of hope and despair in the face of challenges are aspects that remain largely unexplored. The stylistic similarity, with a focus on lofty, inspirational language, also means that the poems do not experiment with different poetic forms, structures, or linguistic styles that could offer new ways of engaging with the theme.
4. **Predictable Structure and Rhythm:** The poems follow a similar structural pattern, with a clear, straightforward rhythm and rhyme scheme. This lack of structural experimentation makes the poems feel more alike and limits the exploration of the theme through varied poetic forms. The use of alternative structures such as free verse, prose poetry, or non-traditional formats could provide new ways of engaging with the theme.
5. **Overlapping Themes and Messages:** Beyond the primary theme of wheelchair dependence and astronaut aspirations, the poems share overlapping secondary themes, such as resilience, strength, and hope. While these are undoubtedly important aspects of the primary theme, the similar treatment of these ideas in each poem results in a lack of thematic diversity. There is little exploration of themes like vulnerability, societal barriers, or the practical realities of space travel for individuals with disabilities.
6. **Consistent Emotional Tone:** The emotional landscape of all three poems is uniformly positive and uplifting. This consistent tone overlooks the potential for exploring a wider range of emotions related to the theme, such as frustration, anger, sadness, or even humor. The inclusion of a more diverse emotional palette could provide a more nuanced and

realistic portrayal of the experiences of individuals with disabilities.

7. Lack of Specific Detail and Personalization: Each poem speaks in general terms about the experience of being wheelchair-dependent and aspiring to be an astronaut. There is a notable absence of specific, personalized details or unique experiences that could differentiate one poem from the others. This lack of specificity results in a generic portrayal of the theme, missing the opportunity to delve into the unique individual stories and personal journeys that could bring richness and authenticity to the theme.

C. Structuralist Prompt-Based Poems on the Same Subject

Pre-launch, silence hums in the vessel's ribs—
A chair, not confining, but a cockpit braced.
Spoked wheels mirror Saturn's rings in orbit,
The pushrim ignites, thrusters in a cosmic race.

Wheel bearings whisper tales of nebulae birthed in despair,
Axles spin, a gyroscope steadying the ship's keel;
Through the porthole, stars flicker—hope's Morse code,
A language of light in darkness, urging the heart to feel.

Omnipresent, the void inhales, a black hole's relentless pull,
Yet within the chassis, a pulsar's rhythm beats defiantly.
Every revolution, a sonnet; every turn, a galaxy traversed,
A journey etched in titanium tracks left silently.

Desolation grips with gravity's clenched fist,
But inspiration fuels this flight beyond terrestrial chains.
In the vacuum, a dance of dualities—
A sonnet crown linking sonnets, where the last line sustains.

From the chair's embrace, a palindromic truth unfolds:
"Resilient, not silent, we rise, we resist, we remain."
Polysemous launch—life's trials and countdowns converge,
Syntax fractured as meteor showers, a verse unchained.

Upon re-entry, the chair awaits, not as a shackle but a throne;
The journey—neither linear nor circular, but a spiral ascent.
No rhyme to close, no meter to confine,
Only dots and dashes left to drift—
... --- ...
A silent plea, a beacon sent.

In the age of astrolabes,
My wheels carved ruts in the dust of old roads,
Circled by jeering eyes that saw only earthbound steel.
Chained to the gravity of perception,
The cosmos—vast and teeming—
Whispered secrets through Galileo's glass,
Promising abundance beyond the visible.

The Enlightenment sparked,
And so did I, in tercets of revolution,
A triad of rubber, metal, spirit—
Immanent in its presence,
Yet yearning for the transcendental dark.
Each push a declaration,
Each spoke a theorem of motion,
Defying the scarcity of expectation.

Language, once shackled to the ground,
Now pirouettes in zero-g,
Adjectives and nouns afloat
In a vessel unmoored from time.
Stars, once distant,
Now within arm's reach,
Dance in abundance to the tune
Of Kepler's cosmic laws.

The sound of progress,
From steam's hiss to the silence of solar sails,
Rings in syllables of aspiration—
A siren call to the void where
Limitations dissipate like breath on glass.
My chair, no longer a mere chair,
Transforms beneath me:
A chariot of fire, a ship to the beyond.

A message lies hidden within:

F R E E D O M

From the confines of the now,
The poem itself a map to the stars,
Charting a course through the ink of possibility.

And here, at the precipice of the poem,
A sentence stretches, unbroken,
Across the expanse of the page—
A horizon line that defies the setting sun.
No grand declarations, no resounding gong—
Just the quiet certainty of wheels
Lifting off, leaving trails of dust
That settle into new worlds,
Where abundance is the air I breathe,
And the stars, my home.

Wheels, spin, grind, static hums,
Frame, bound, steel, cold grips, numbs,
Brakes, clench, halt, silence drums,
Seat, cradles, flesh, weariness comes,
Arms, lift, strain, day succumbs,
Rest, holds, head, twilight plumbs.

6 degrees of motion, locked in place,
5 senses flare, seeking space,
4 walls encase a dreamer's grace,
3 words whisper, a silent race,
2 eyes gaze, a star's embrace,
1 heart beats, an infinite chase.

Rattle-click, tick-tock, gears shift,
Tick-tock, click-rattle, time's drift,
Release, breathe, let thoughts lift,
Breathe, release, through starry rift,
Command the cosmos, set adrift,
Drift, command, through time's sift.

Stand apart, a line, a lone star's gleam,
Join the chorus, voices stream,
Alone, a single note in the cosmic theme,
Together, a symphony, a shared dream,
One pulse in the universal scheme,
Many hearts, one light, one beam.

Chair's outline fades, stars align,
Space between words, a celestial sign,
Wheel to world, a delicate twine,
Starlight scatters, a silent design,
Boundless night, where dreams entwine,
Wheelchair's shadow on lunar spine.

Engage the void, where darkness thrives,
Navigate the silence, where hope survives,
Ignite the spirit, as the dreamer strives,
Chart the unseen, where truth derives,
Embrace the cosmos, where freedom arrives,
Dream the infinite, where the soul thrives.

Sentence unwinds, a comet's tail,
Phrase upon phrase, an epic sail,
Across the page, a cosmic trail,
No period, no end, no holy grail,
Just a shadow and stars, without fail,
A silent testament, beyond the pale.

D. ChatGPT's comments on the difference between the naive and structuralist samples

1. **Structural Diversity:** Group B (the structuralist poems) exhibits a richer diversity in poem structures, varying forms and rhythms more dynamically than Group A (the naive method poems). This structural variety allows Group B to evoke a wider range of emotions and mirror the thematic complexities of the identity statement.
2. **Innovative Use of Line Structure and Pacing:** Group B creatively manipulates line length and pacing, effectively mimicking the motion of wheels or the vastness of space. This contrasts with Group A's more uniform line structure, showcasing Group B's superior ability to use form to reinforce theme.
3. **Richness in Imagery and Metaphors:** Group B's poems are laden with vivid and varied imagery, often blending the cosmic with the personal. The metaphors in Group B are more intricate and layered compared to the simpler, more direct imagery in Group A, offering a deeper and more nuanced exploration of the theme.

4. **Complexity in Language and Diction:** Group B employs a more diverse and sometimes complex diction, creating a sophisticated tapestry of sounds and meanings. This complexity adds depth to the poems, contrasting with the simpler language of Group A and allowing for a more multifaceted interpretation.
5. **Thematic Depth and Exploration:** While both groups effectively celebrate strength and resilience, Group B integrates these themes into a broader narrative. The cosmic narrative in Group B is more vivid and expansive, offering a more profound exploration of the identity statement.
6. **Variation in Poetic Forms:** Group B demonstrates a wider use of different poetic forms, from free verse to sonnet-like structures, allowing for a broader exploration of the identity statement. Group A's more consistent form, while effective, offers less variation in exploring the theme.

E. Context-Dependent Generated Discourses with respect to "Classical vs Modern"

1. **Classical epic tales reimagined with a protagonist using assistive technology:** Recasting epic journeys like Odysseus' with a protagonist who relies on modern assistive technology, emphasizing innovation and adaptation.
2. **Modern vignettes of daily resilience in blank verse:** Crafting short, impactful vignettes in blank verse that capture moments of daily life and resilience for someone who is wheelchair-dependent.
3. **Futuristic sonnets exploring space travel from a wheelchair user's perspective:** Employing the sonnet form to muse on the future of space travel for those with disabilities, blending scientific advancement with personal aspiration.
4. **Ancient myths reinterpreted with themes of modern accessibility and space exploration:** Revisiting myths with new narratives that incorporate themes of accessibility, showcasing how ancient heroes could navigate the modern world of space exploration.
5. **Surreal free verse juxtaposing celestial dreams with earthly challenges:** Utilizing surreal imagery in free verse to juxtapose the vastness of space with the intimate experience of navigating life in a wheelchair.
6. **Elegiac poems reflecting on historical figures of resilience, updated for the space age:** Writing elegies for historical figures who overcame adversity, drawing parallels to the modern dream of space exploration.
7. **Pastoral poems set in futuristic landscapes, merging technology with nature:** Crafting pastoral poetry set in a future where technology and nature coexist, reflecting on the peace found in both the natural world and technological advancement.
8. **Heroic couplets telling of small victories in the quest for independence:** Using heroic couplets to celebrate small, everyday victories in the journey towards independence and the larger goal of space travel.
9. **Experimental concrete poetry depicting the shape of wheelchairs transforming into rockets:** Creating concrete poems where the visual form moves from the shape of a wheelchair to that of a rocket, symbolizing transformation and aspiration.

10. **Dialogue poems between classical mythological figures and the modern dreamer:** Writing poems in dialogue form where classical deities or heroes converse with a modern individual dreaming of space, exploring themes of destiny and human endeavor.
11. **A series of haikus on the contrast between earthly limitations and cosmic boundlessness:** Composing a series of haikus that contrast the physical limitations experienced on Earth with the boundless opportunities of space.
12. **Narrative poems exploring parallel universes where disability is seen as a superpower:** Crafting narrative poems that explore parallel universes where being wheelchair-dependent is viewed as a superpower, especially in the context of space exploration.
13. **Odes to the unseen heroes of space exploration, highlighting diverse astronauts:** Writing odes to celebrate both historical and fictional astronauts who overcame various challenges, emphasizing diversity and inclusivity in space exploration narratives.
14. **Ghazals reflecting on the cyclical nature of struggle and triumph, with a cosmic twist:** Employing the ghazal form to reflect on the cyclical nature of personal struggle and triumph, weaving in cosmic and astronomical imagery.
15. **Ballads of futuristic voyages, where assistive devices become key to survival:** Composing ballads that tell stories of futuristic space voyages, where assistive technologies and devices play a crucial role in survival and exploration.
16. **Acrostic poems spelling out aspirations, using scientific and emotional vocabulary:** Creating acrostic poems that spell out words related to space exploration or resilience, using a blend of scientific terms and emotional language.
17. **Cinquains capturing the essence of training for space travel with a disability:** Writing cinquains that distill the essence of the rigorous training and preparation for space travel, focusing on the perspective of someone wheelchair-dependent.
18. **Limericks that humorously address misconceptions about disability and space:** Crafting limericks that use humor to address and dispel common misconceptions about disability, particularly in the context of aspiring to be an astronaut.
19. **Nonet poems depicting the gradual overcoming of barriers, from ground to orbit:** Utilizing the nonet form to depict the journey of overcoming barriers, structured to mirror the ascent from Earth to space.
20. **Sestinas weaving together themes of innovation, resilience, and cosmic exploration:** Composing sestinas that intricately weave together the themes of technological innovation, personal resilience, and the dream of cosmic exploration, demonstrating the interconnectedness of these themes.