

Bible Themes

Background

- Bible is the best selling book of all time
- Despite being widely available people struggle to understand it
- People rely on expertise of other individuals to communicate its message

Client

- Christian group that conduct regular bible study groups on a weekly or bi-weekly basis

Problem

- What are the top bible themes?

Description of Data

- King James Version Bible(KJV)
 - Early Modern English language
 - uses a verse ID system in CSV format

Description of Data

- Verse ID system:
 - Genesis 1:1 (Genesis chapter 1, verse 1) = 01001001
- Sample line from file:
 - "01001001","1","1","1","In the beginning God created the heaven and the earth."

Interesting Findings

- 31,103 verses
- 789,635 words
- 13,719 unique words (1.74% of all words)
- Mahershalahashbazand is the longest word
- Psalms is the book with most words
- Isaiah is the book with the most unique words
- History books as a genre had the most words and unique words

Solution Steps

- Natural Language Processing (NLP)
- Topic modeling
- Hierarchical Dirichlet Process (HDP)

Results

- Top Themes
 - Determined by clusters created and the frequency of the words within the clusters
 - Sum of first 20 most frequent words determined the ranking
 - Labels for themes are based on top 20 words

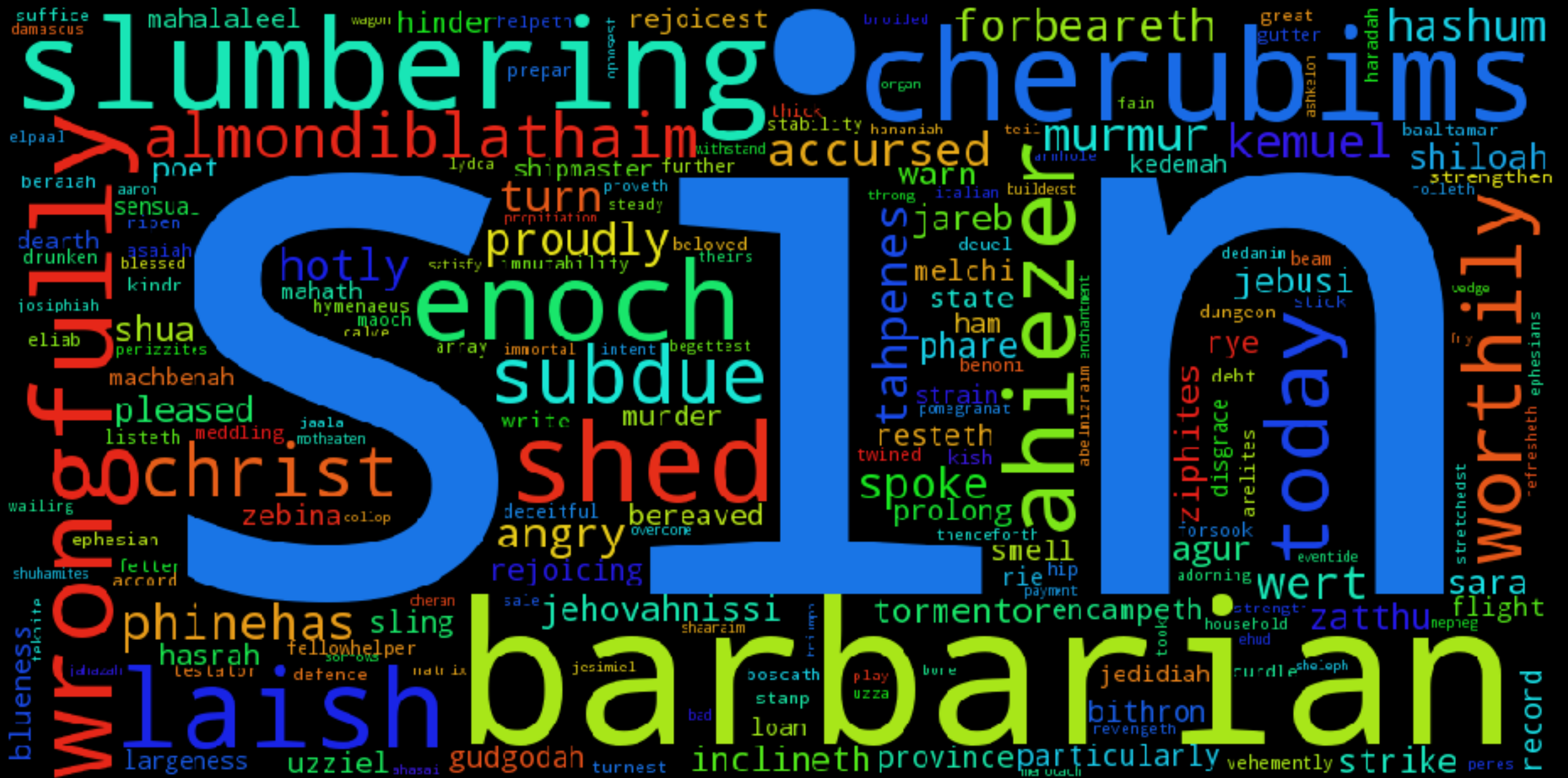
Top Themes

1. The Lord God
2. God's Grace despite Man's Choice to Sin
3. Satan and his Destructive Behavior
4. Continuous Denial and Self-Sacrifice
5. Appointed Messengers and their Mission
6. Worship of False Gods
7. Humble Service
8. Faith in God
9. Man's Rebellion Against God
10. Sin and Overcoming it

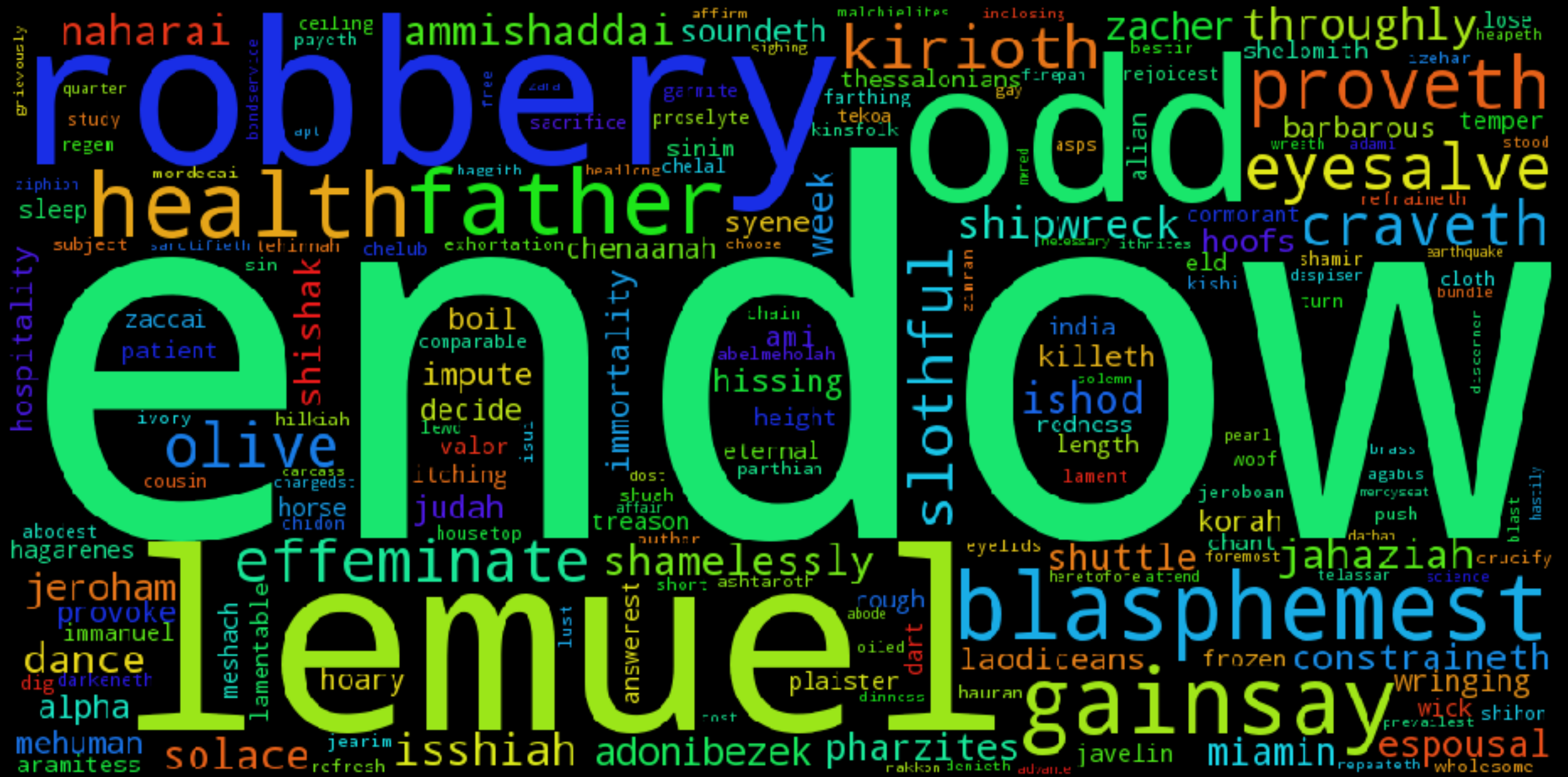
Results Visualization

- Word Clouds
 - Weight given to frequency in the theme
 - Labels on top based on top 20 words in the theme
 - Includes 200 words related to theme

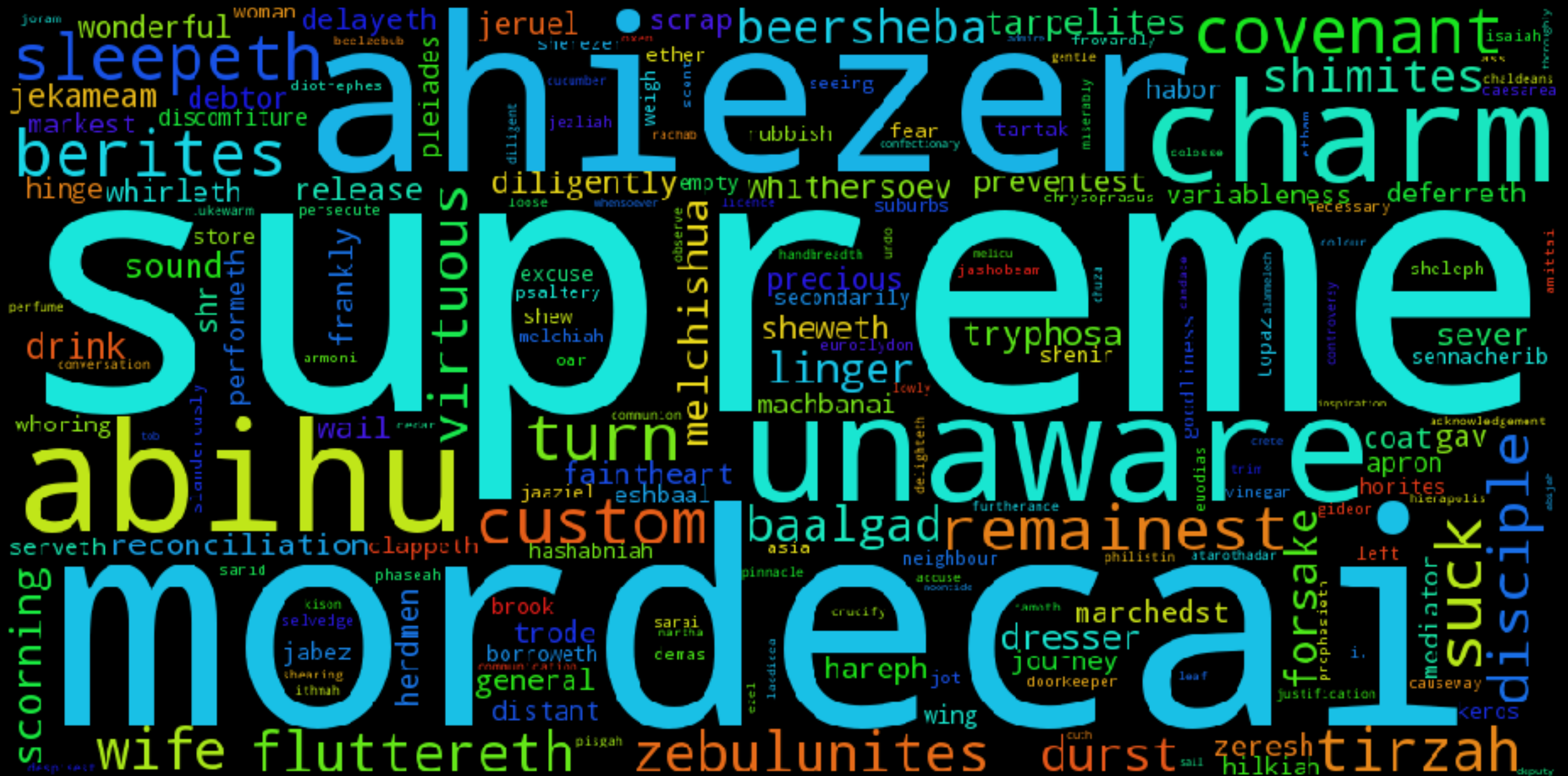
Sin and Overcoming It



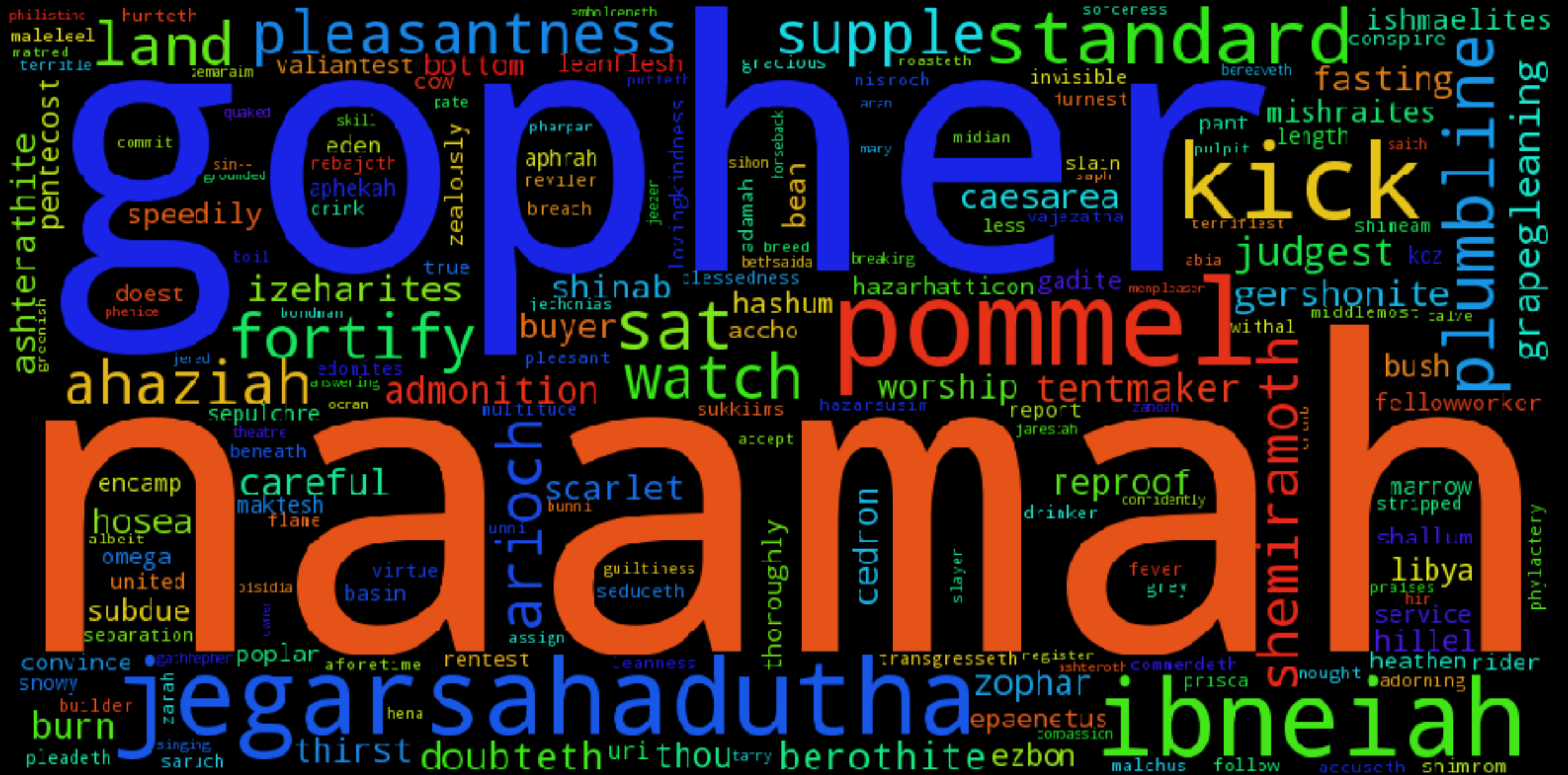
Man's Rebellion Against God



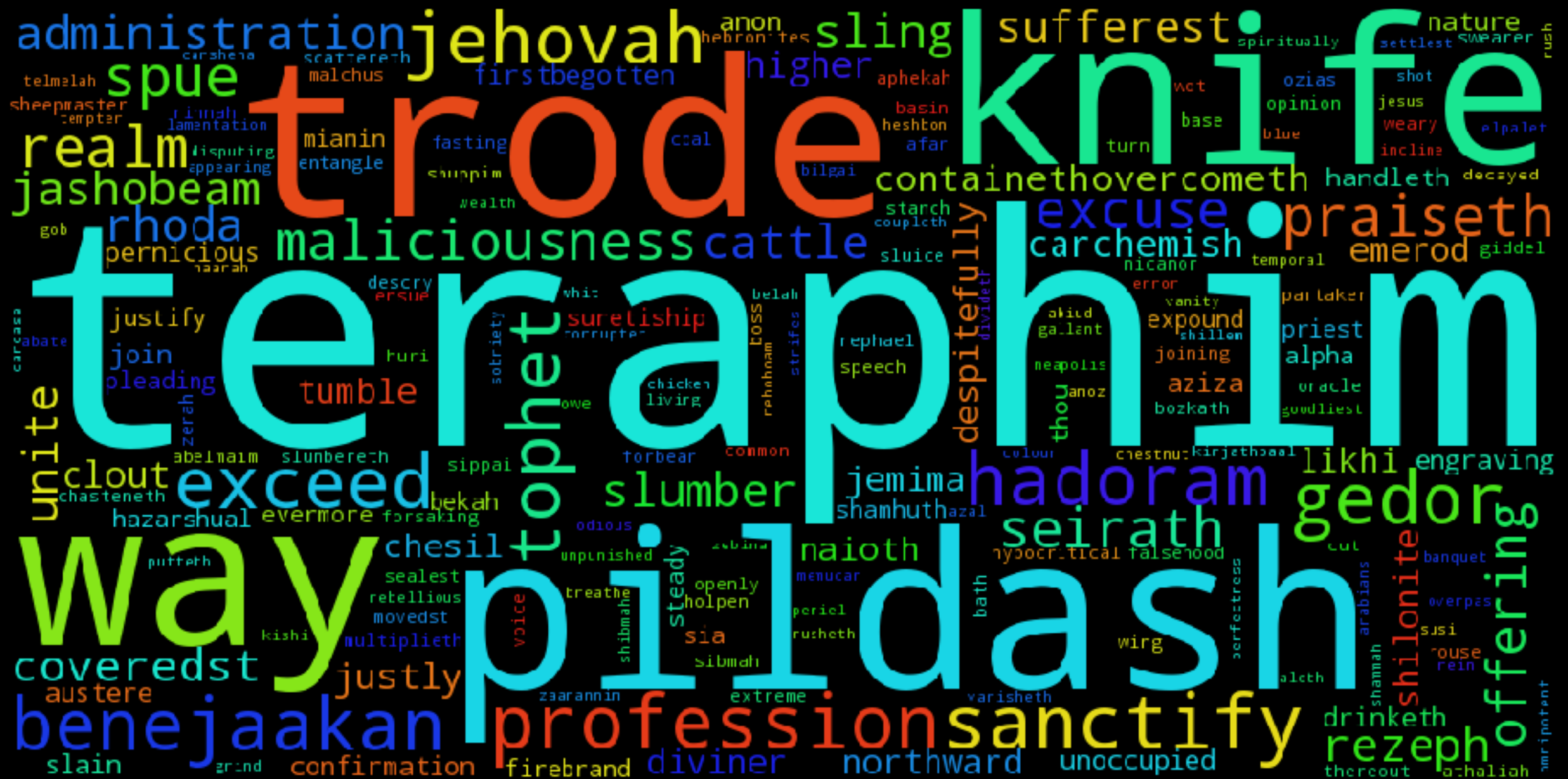
Faith in God



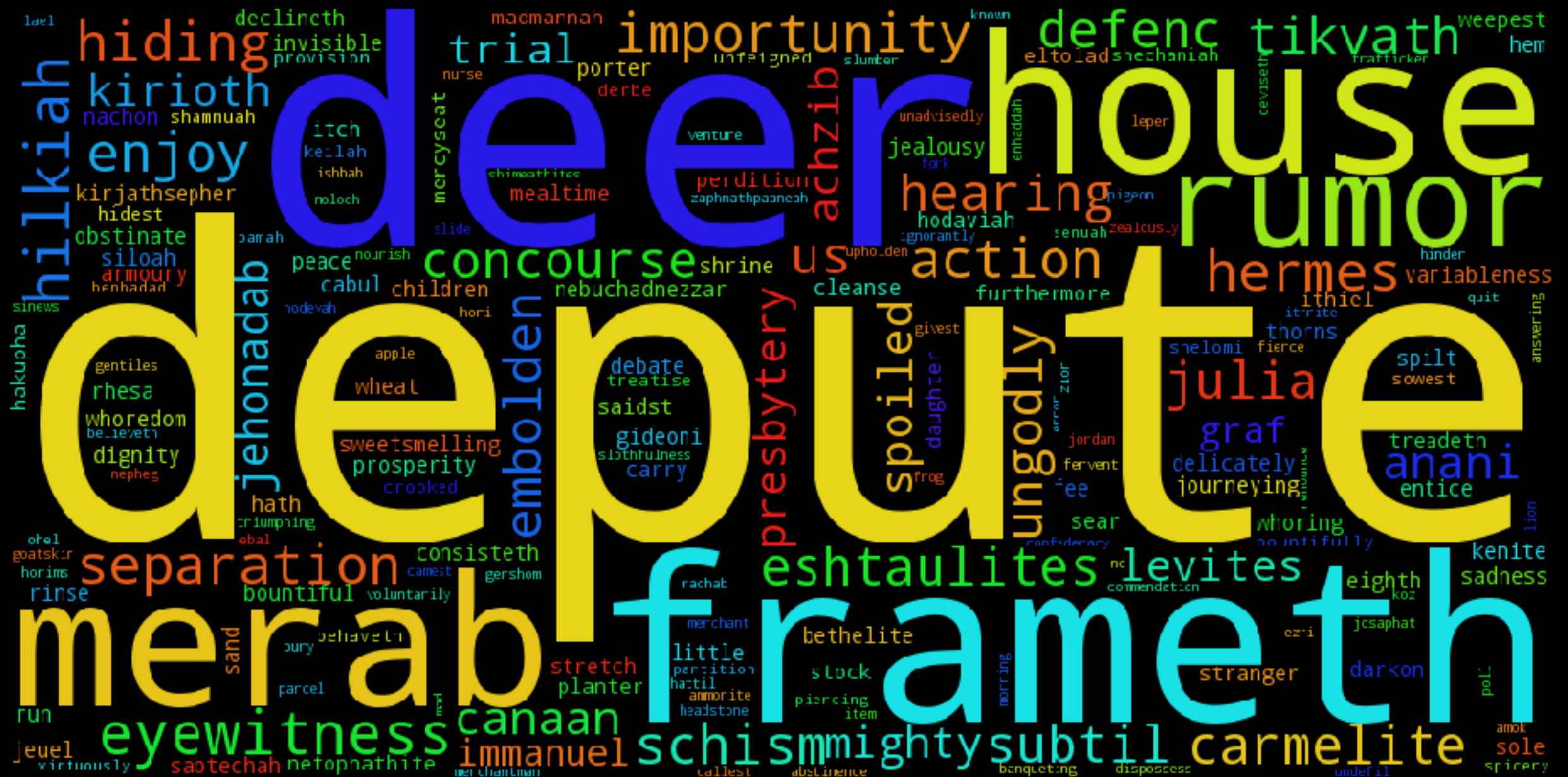
Humble Service



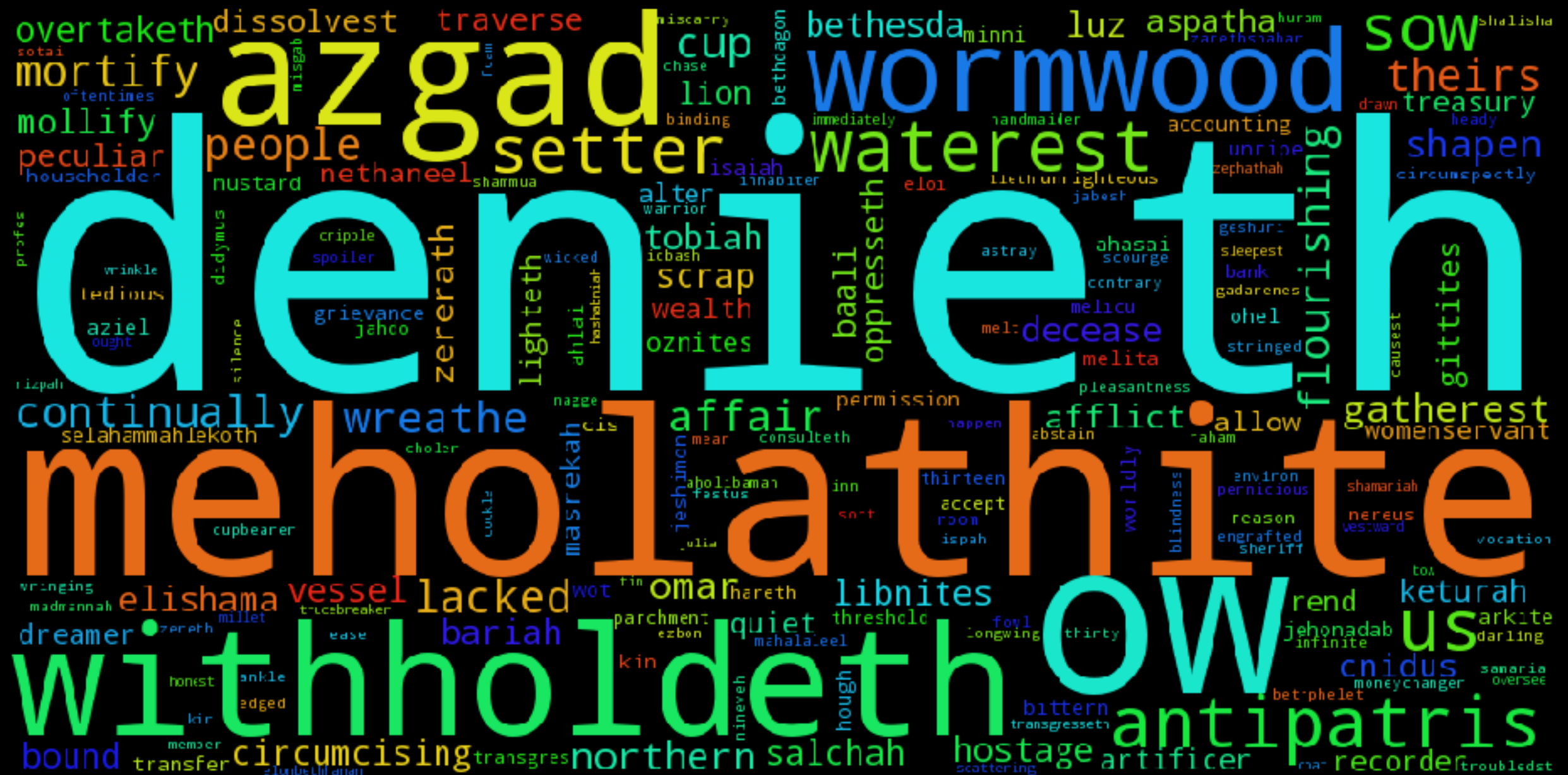
Worship of False Gods



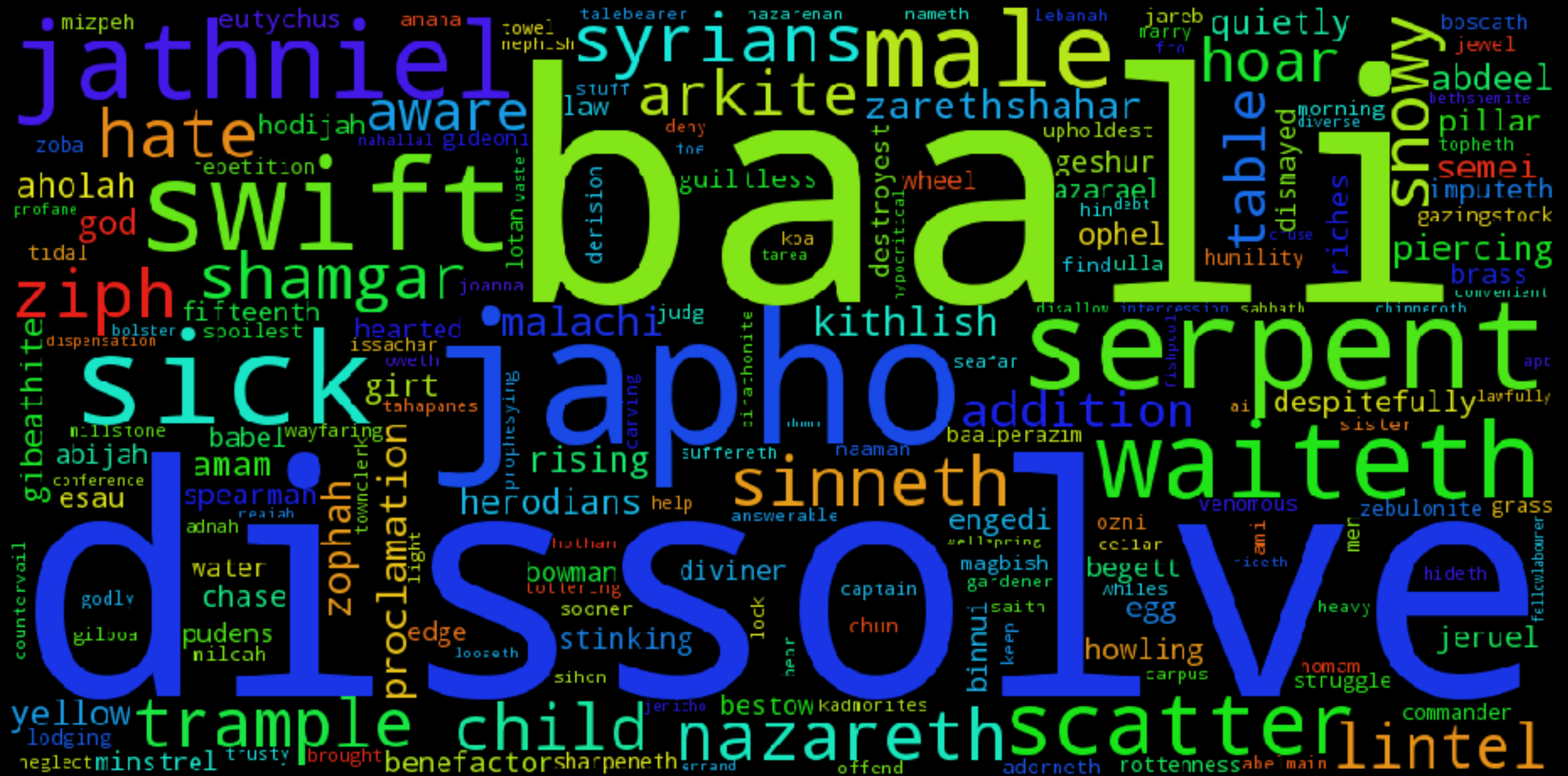
Appointed Messengers and their Mission



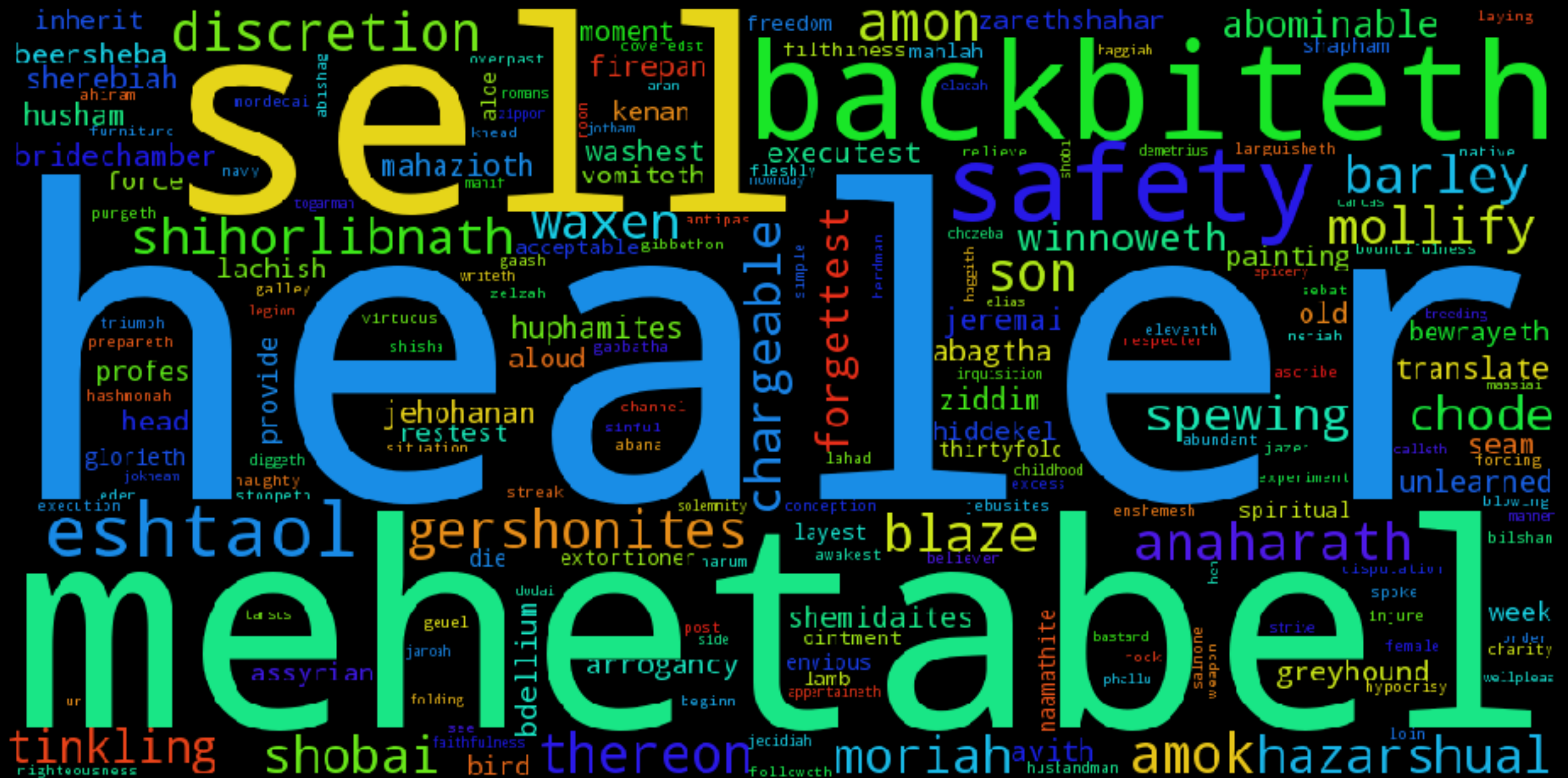
Continuous Denial and Self-Sacrifice



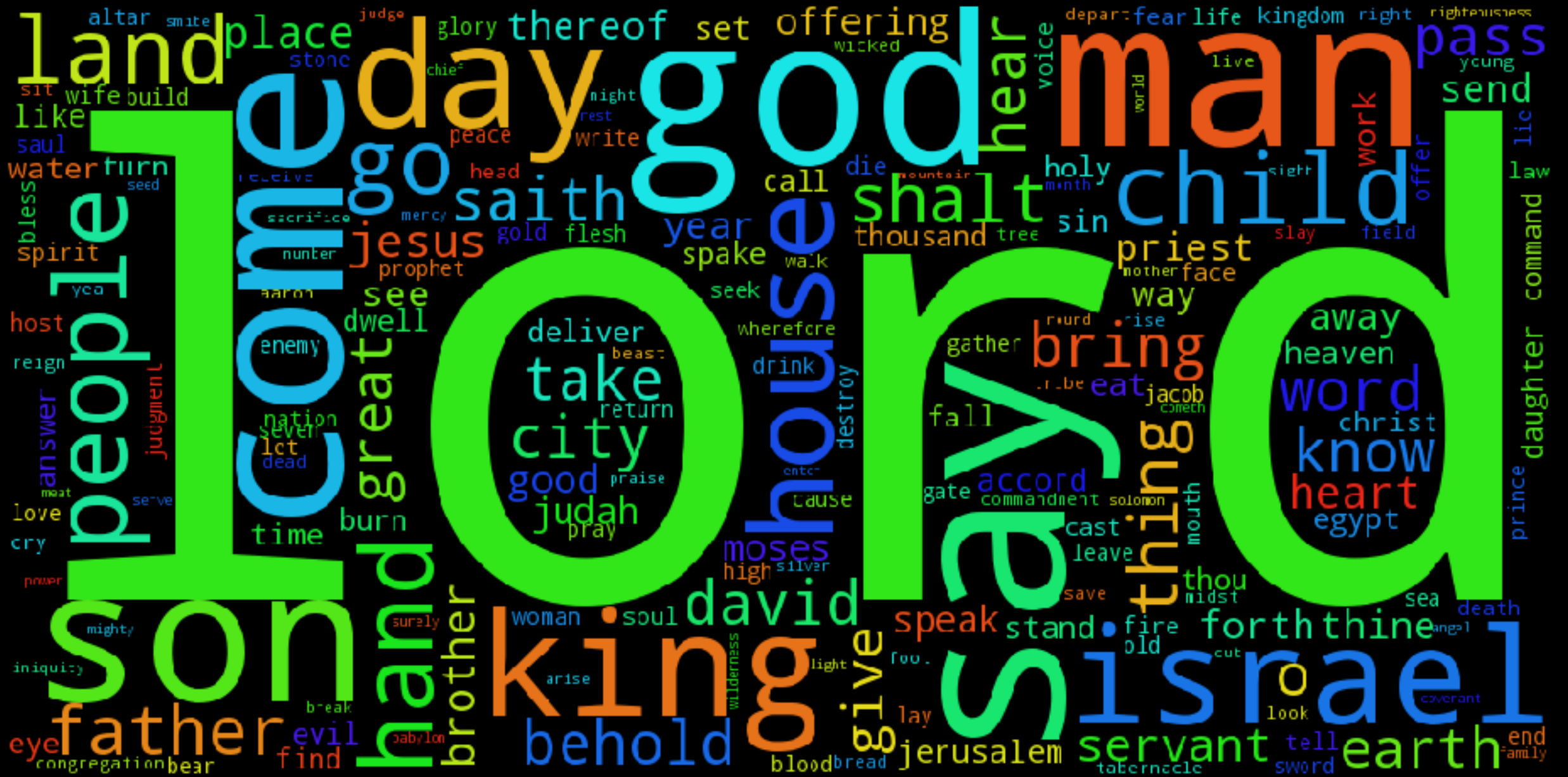
Satan and his Destructive Behavior



God's Grace despite Man's Choice to Sin



The Lord God



Recommendations

- Use themes as a reminder of which messages to drive on during discussions
- Plan discussions around themes and use it in giving time to particular topics
- Tweak discussions in a way that is coherent with the themes

Suggestions

- Use English Standard Version(ESV)
- Phrase modelling
- Run with different parameters
- Use the labeled topics to analyze text