In [1]: `!pip install wordcloud`

```
Requirement already satisfied: wordcloud in c:\users\yasha\anaconda3\lib\site-packag
es (1.9.4)
Requirement already satisfied: numpy>=1.6.1 in c:\users\yasha\anaconda3\lib\site-pac
kages (from wordcloud) (1.26.4)
Requirement already satisfied: pillow in c:\users\yasha\appdata\roaming\python\pytho
n312\site-packages (from wordcloud) (11.0.0)
Requirement already satisfied: matplotlib in c:\users\yasha\anaconda3\lib\site-packa
ges (from wordcloud) (3.9.2)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\yasha\anaconda3\lib\site
-packages (from matplotlib->wordcloud) (1.2.0)
Requirement already satisfied: cycler>=0.10 in c:\users\yasha\anaconda3\lib\site-pac
kages (from matplotlib->wordcloud) (0.11.0)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\yasha\anaconda3\lib\sit
e-packages (from matplotlib->wordcloud) (4.51.0)
Requirement already satisfied: kiwisolver>=1.3.1 in c:\users\yasha\anaconda3\lib\sit
e-packages (from matplotlib->wordcloud) (1.4.4)
Requirement already satisfied: packaging>=20.0 in c:\users\yasha\appdata\roaming\pyt
hon\python312\site-packages (from matplotlib->wordcloud) (24.1)
Requirement already satisfied: pyparsing>=2.3.1 in c:\users\yasha\anaconda3\lib\site
-packages (from matplotlib->wordcloud) (3.1.2)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\yasha\appdata\roamin
g\python\python312\site-packages (from matplotlib->wordcloud) (2.9.0.post0)
Requirement already satisfied: six>=1.5 in c:\users\yasha\appdata\roaming\python\pyt
hon312\site-packages (from python-dateutil>=2.7->matplotlib->wordcloud) (1.16.0)
[notice] A new release of pip is available: 24.3.1 -> 25.0
[notice] To update, run: python.exe -m pip install --upgrade pip
```

In [2]:
```python
from wordcloud import WordCloud
import matplotlib.pyplot as plt
```

In [3]:
```python
text = '''
In this paper, we distinguish between four interconnected notions that recur in the
Keywords: plain language, easy language, clear writing, text clarity, text simplifi
Introduction
The movement of opinion known as plain language has gained attention in many countr
The goal of this article is to answer these research questions:
How are these notions related and how do they differ?
How can considering these four notions offer a better conceptualization of text sim
In fact, much effort has been devoted to developing a standard definition of plain
This paper is structured as follows: First we will discuss the definitions of plain
Plain language as clear (and simple) language
In the 2000s, plain language specialists felt the need for a standard definition of
1) Communication is in plain language if its wording, structure and design are so c
In the French and German versions of this definition, the wording is slightly diffe
2) Eine Mitteilung ist in einfacher Sprache gehalten, wenn ihre Sprache, ihre Struk
"Communication is considered to be in simple language, if its wording, its structur
3) Une communication est en langage clair si les mots et les phrases, la structure
"Communication is in clear language if its words and sentences, its structure and d
Both clarity and simplicity are part of the dictionary meanings of plain (Merriam-W
4) Plain language is clear language. It is simple and direct but not simplistic or
We can infer that in defining the notion of plainness, clarity has displaced simpli
Easy language: when plain is not enough
```

In the definitions (1–3), the parameter for quantifying clarity is ease. The adject
The main characteristic of easy language is its target audience, which is people wi
5) Easy to read is information that is written in a simple way so that people with
Here, structural simplicity is used as a proxy for easiness, just as complexity is
While text simplification for the public has met with opposition, resistance toward
What exactly is text clarity?
Although it is often used as a self-evident notion, the conceptualization of clarit
Among its meanings, the adjective clear is synonymous with transparent, plain, and
6) Clear writing by definition is writing which signals without ambiguity the natur
Coleman (1998, p. 393) contrasts clarity with precision, attributing to the latter
7) Clarity in fact includes a range of attributes: brief, simple, comprehensible an
Beaudet (2001, p. 3) attempts a definition where clarity does not correspond to a s
8) the clarity of a text produced in the workplace corresponds to its effectiveness
Among these three definitions, we opt for Beaudet (2001). In fact, Emig's and Colem
Furthermore (ibid., p. 12), Beaudet emphasizes the dimension of the text's adequacy
9) [C]larity is not a property of thought or language, per se, but the result of th
Beaudet (2001) includes other related concepts in the scope of clarity, such as rea
'''

```
In [4]: plt.figure(figsize=(10,10))
        wordcloud = WordCloud(background_color='white').generate(text)
        plt.imshow(wordcloud)
        plt.axis('off')
        plt.show()
```



```
In [64]: import PIL.Image
         import numpy as np
```

```
In [81]: mask = np.array(PIL.Image.open('th.jpeg'))
```

```
In [82]: mask.shape
```

```
Out[82]: (180, 396, 3)
```

```
In [83]: wc = WordCloud(background_color='white', mask=mask)
```

```
wc.generate(text)
```

Out[83]: `<wordcloud.wordcloud.WordCloud at 0x287f9b6be90>`

In [84]:
```
plt.imshow(wc)
plt.axis('off')
plt.show()
```


In [ ]:

In [ ]: