



EARLY MODERN LUXURY BOOKS

Analyzing the Role of Images in Enlightenment-Era Luxury Books

Team Members: Ari Vesalainen, Aytac Yurukcu, Chao Wang, Ching-Han Kuo, Enes Yilandiloğlu, Iiro Tiihonen, Jaakko Santavuori, Juho Hotari, Kira Hinderks, Luana Moraes Costa, Marika Fox, Minna Ahokas, Prince Kumar

The history of luxury books in the eighteenth century is intertwined with significant historical changes in Great Britain such as economic growth and the Enlightenment.

Expansion of global trade increased the wealth of the state but also people's awareness of their own individuality and place in society. "Luxury" became a hotly debated topic, with many disagreeing about the morality of outward signs of wealth. According to prominent 18th c. Scottish philosopher David Hume, luxury "may be taken in a good as well as in a bad sense" (1748).

Research Questions

Because luxury is a complicated concept, our main research question is: How can we define a book as a luxury based on historical context and quantitative data?

We approach our main question through these sub-questions:

- How can we operationalise and measure different factors and definitions of luxury?
- What can case studies tell us about luxury?

Data

- 200,000 volumes from Eighteenth Century Collections Online (ECCO)
- Metadata (book sizes, publication year etc.) for publications and visual elements
- Images of engravings and illustrations
- Smaller subsets with specific attributes (prices for some editions, bibles etc.)

Defining, operationalising and measuring luxury

- Based on humanities scholarship, we conceptually defined different dimensions of luxury.

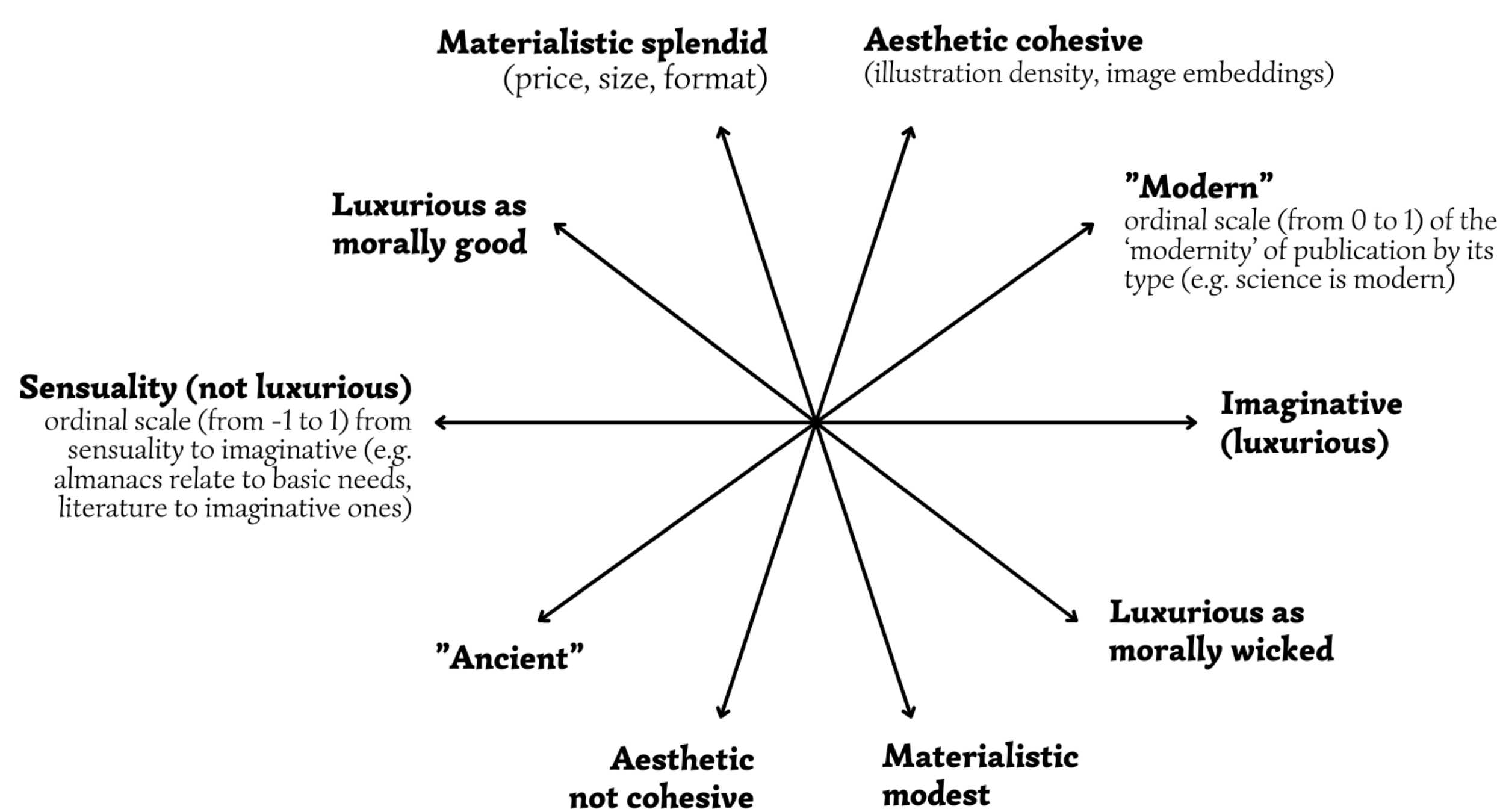


Figure 1. Conceptual axes of luxury based on Matt Erlin (2014) (and examples of proxies used in our quantitative analysis)

- Case studies of eighteenth-century books were mapped to these dimensions (according to both measurable and qualitative attributes) in order to demonstrate how they vary.
- Methods to automatically extract and format new data related to measures of luxury (image classification and OCR of prices from catalogues) were successfully applied.
- Our study suggests that some quantitative measures of luxury are associated with price. Book metadata (Fig. 2) and image classification (Fig. 3) were both used to cluster data points, and both methods created clusters that show some correlation with price data.

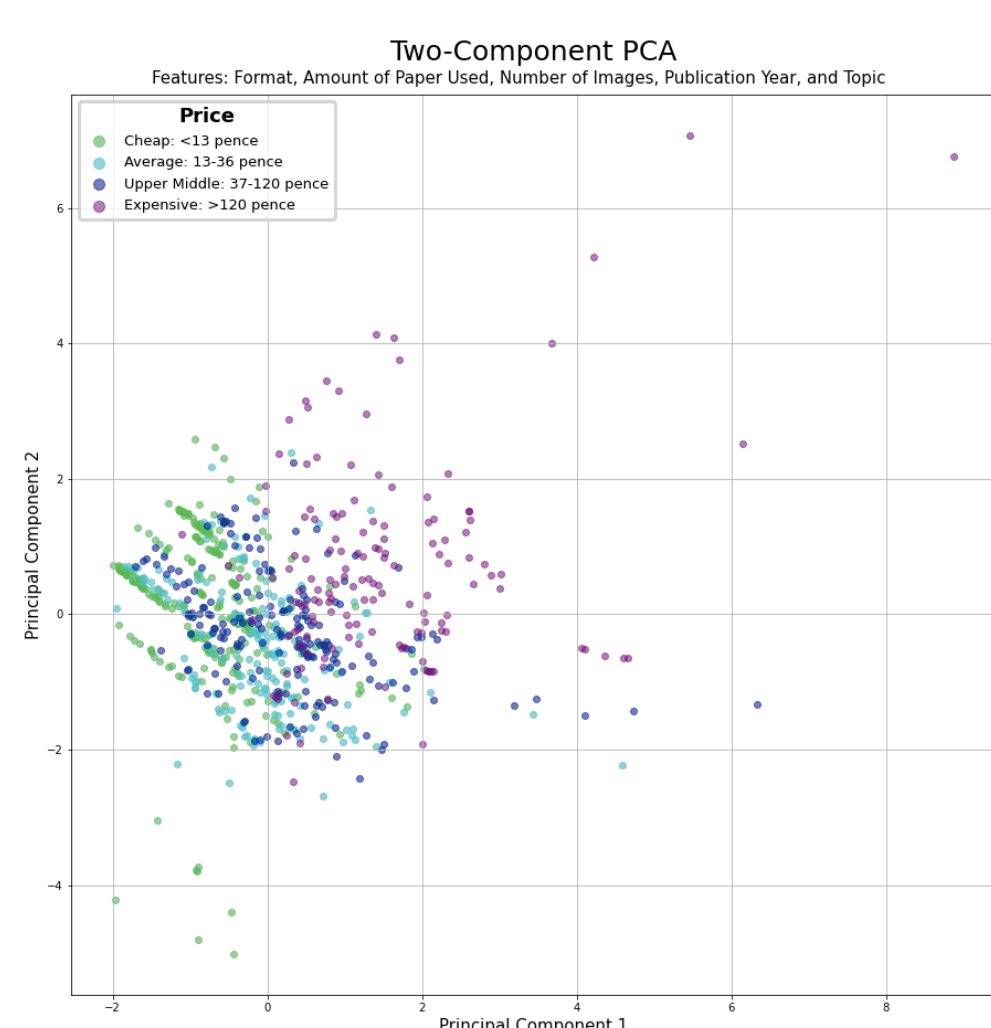


Figure 2. Information about four numerical features of books along with one categorical feature (the topic) were combined into two numerical factors that capture as much variation in the data as possible

The combination of features listed here correlates loosely with price. Taken together, these proxies do a good job of identifying the cheapest and most expensive books in this dataset, but most points not at either extreme of the price scale remain closely clustered.

No one proxy has a strict direct relationship with price!



Scan for more information!

Illustration quality and price

Whether a book can be considered luxurious or not is not only determined by the type of illustrations it contains, but also their quality and level of detail. Illustrations in expensive books tended to be highly detailed engravings and ornate portraits, while illustrations in average-priced books were less detailed and often depicted simpler, everyday scenes.

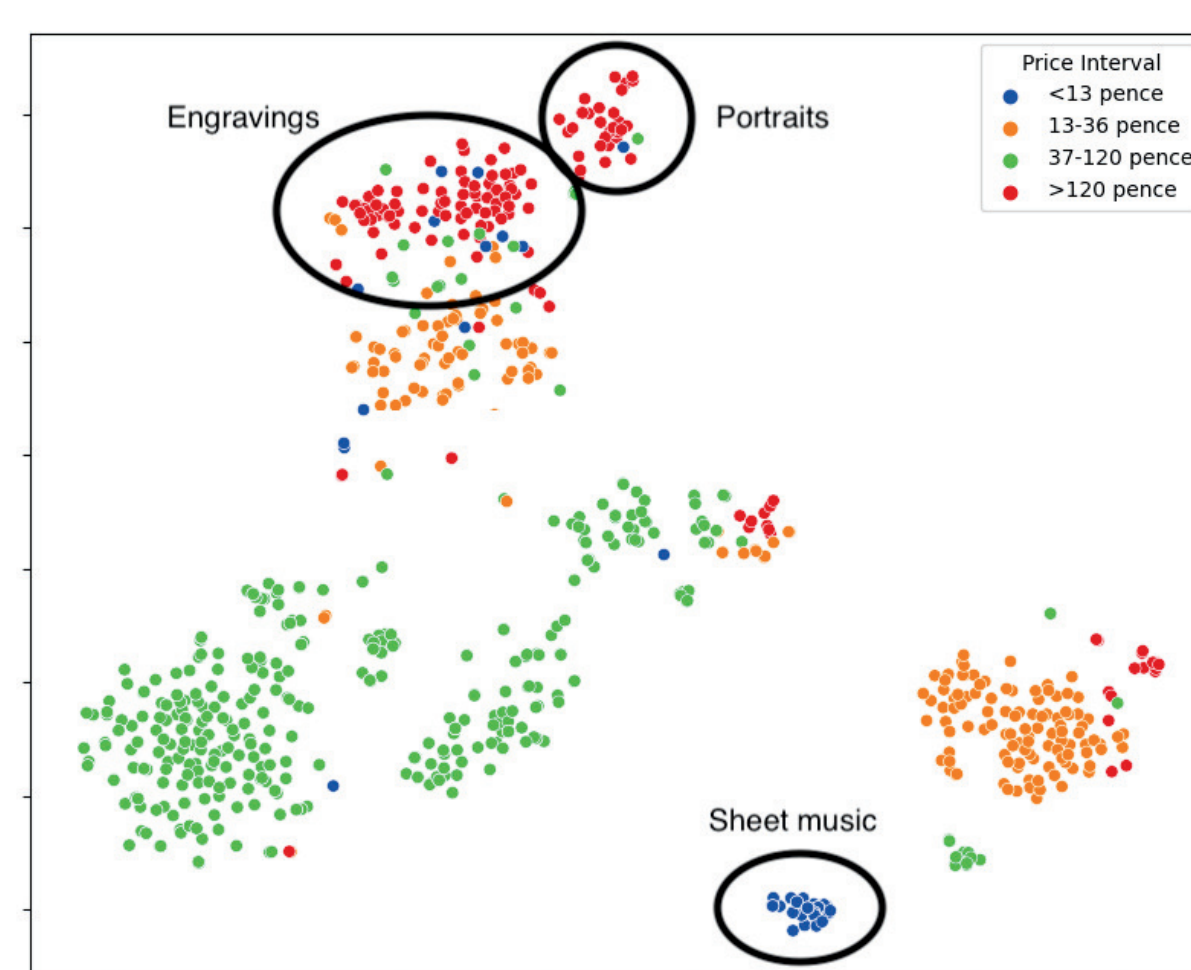


Figure 3. Illustration similarity analysis. The price intervals refer to the price of the book the illustration belongs to



Figure 4. Two images from two different books that sold for very different prices (left: 276 pence; right: 72 pence)

Luxury and illustrations in the Bible

The Bible highlights the complex relationship between price, luxury and illustrations:

- Our data includes 107 editions of the Bible ranging from cheap to expensive (up to 480 pence).
- Many Bibles were printed by royal printers with privileges. These privileges were awarded to ensure the integrity of the text and to keep prices down.
- Cheaply-produced editions largely contained low-quality illustrations or no illustrations.
- Even in editions with high illustration density, many pages contained simple ornaments or illuminated initials rather than large or complex images.

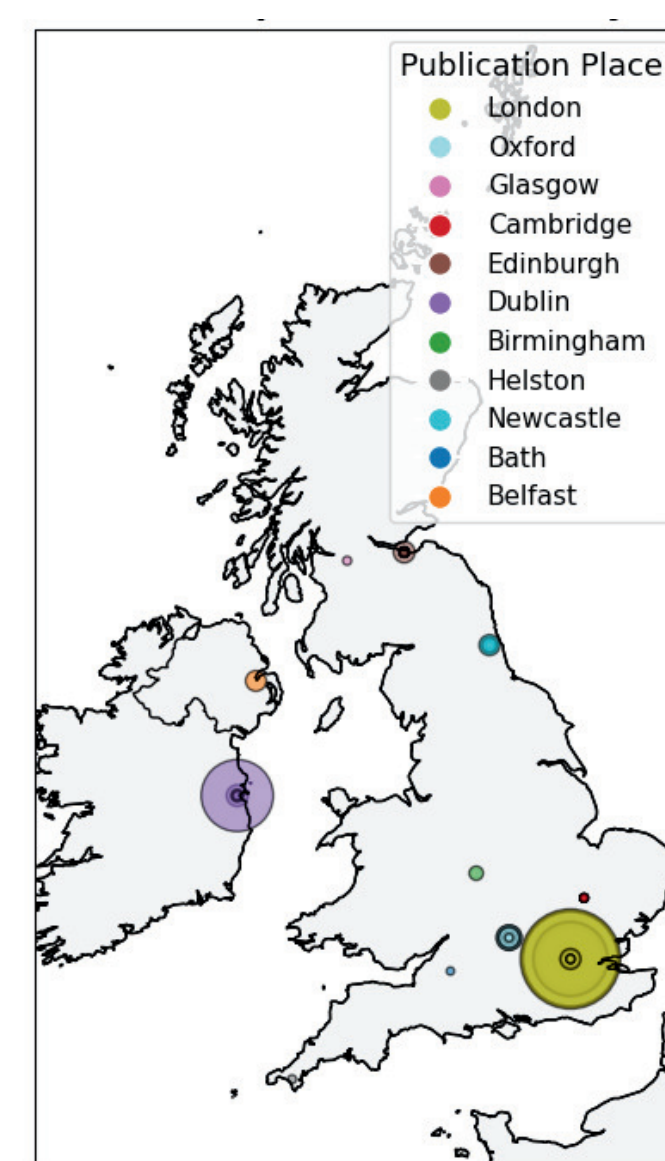


Figure 5. Illustration density in Bible editions by publication place

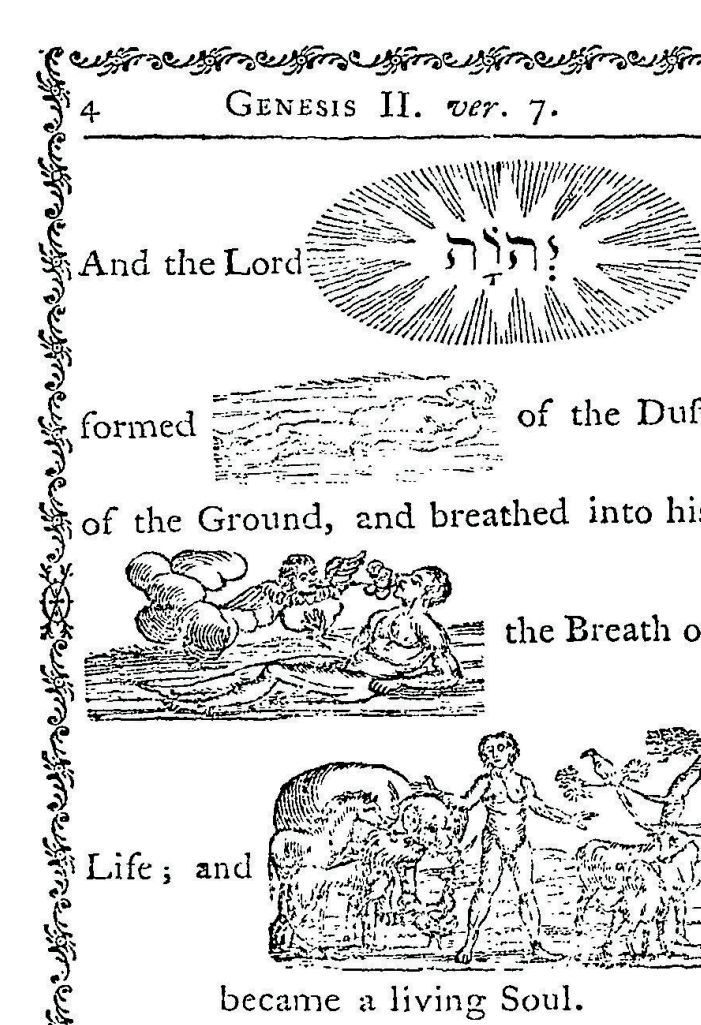


Figure 6. Bible page (London, 1794). The illustration density for this edition is 163%

Discussion

"In general, it [luxury] means great refinement in the gratification of the senses; and any degree of it may be innocent or blameable, according to the age, or country, or condition of the person." (David Hume, 1748).

Our findings from combining both quantitative and qualitative analysis fit well with Hume's considerations of luxury. A book's status as a luxury item depends on many different factors such as density of illustrations, price, and format. No individual factor is sufficient to determine whether a book is luxurious or not. Luxuriousness of a book depends more how all of these factors interact with each other.

We argue that quantitative measures of luxury are associated with price, but our results also highlight the complexity of this relationship. Thus, classifications of luxury have to be considered in context from various angles.

Next steps

- Unsupervised approaches to describing luxury (e.g. image classification and data clustering methods) should be evaluated systematically.
- A soft-matching approach to automatically link price data extracted from the catalogues needs to be developed in order to analyse high-priced editions with a larger data set.
- The use of more possible proxies and conceptualisations of luxury (bindings, book as a status symbol, separating engravings from woodcuts etc.) can be developed to further refine results.

