Climax: A historical script´s AI transformation for human behavioural estimation

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1. Introduction

There is a historical script in the Christian Literature, written in the first period of unified Christianity, which could be considered as the primary theological text, in value and uniqueness, after the Bible. The title of this script is 'Climax' (=the Ladder) and it was written by St. John of Sinai (or, Climacus). This text was written in the 6th century AD. in the Greek language of that period, following a long period (ca. 40 years) of St.John's rigorous ascetic life on Mount Sinai. The script is an offspring of empirical progress of St. John in spiritual perfection in Christ. It is undoubtedly an entity of world cultural heritage. The aforementioned book 'Climax' is thus important for the Christian Church that one Sunday each year has been dedicated to it, a dedication which is maintained until today, e.g. in the Orthodox Church. It should be noted that 'First, the Ladder was written specifically for monks in a cenobium. And, second, the work is relevant to lay people, too' (Chryssavgis, 2004, p. 23).

2. Climax's structure

The text is structured in 30 chapters - the 30 steps of the Ladder - which are the steps of man's ascent to spiritual (in Christ) perfection; this perfection is achieved with the virtue of love (30th step). One of the proposed segmentations regarding the organisation of the text is given as (Climacus, 1982, pp. 11-12): (i) 'The Break with the World' (Step 1-3) (ii) 'The Practice of the Virtues-Active Life' (Step 4-26) (iii) 'Union with God-Contemplative Life' (Step 27-30). In addition to the previous general structure of the overall book, there is an internal structure per chapter that includes: introduction, definitions, presentation of the subject under examination and conclusions (Chryssavgis, 2004). The virtues and passions of man coexist in the work; each person should

follow virtues and should avoid passions. It is obvious throughout the text that two opposite poles are dominant, the virtues and the passions, which are the fundamental entities of human behaivor.

The text has its inherent and even unique logic, as well as a related exceptional intelligence. For example, the behavioural entities (passions / virtues) that are presented in the text of Climax are very well delimited, with specific properties, positions and relationships (of hierarchy, inheritance, causality, etc.). The latter effortlessly provides the opportunity to move to the level of Artificial Intelligence (AI). Therefore, adapting the content of the text to an AI format is not just a challenge, it is a must. Furthermore, what is definitely the primary application of Climax in (real-time) applications draws from its unique advantage that is to provide interconnections between individual components of human personality, and therefore of behaviour, i.e. virtues and passions; moreover, to provide the logical path of their evolution, as well as of human behaviour. Therefore a robust estimation of human behaviour results.

3. AI estimation of human behaviour via Climax

At a practical level, the algorithmisation of the production of behavioural knowledge presupposes the transcription, coding and storage of the empirical data of Climax in computer systems. Thus an 'intelligent' tool can be created for understanding people's actions, which is able to "predict" and "explain" their behaviour. Two approaches seem possible: on the one hand, a knowledge base can be constructed, which will "estimate" behaviour based on what he knows, while on the other hand, a learning machine can be constructed which will "explain" behaviours based on the creation of new data structures, namely, new mental patterns.

In this context we can create a class called 'soul', which contains the three fundamental powers/parts of the soul, according to Christian teaching (St. Gregory Palamas), namely, *nous, logos. and pneuma (intellect, reason, and spirit)*. The subclasses (i.e. virtue and passion) inherit all the attributes from the parent class 'soul'; however, the subclasses possess their own specific attributes. These attributes are their name, their product and their order (which is a number that indicates the number of products that a virtue or a passion produces) (see fig 1.). We also define an identification number for each path in the complexity diagram, which we call 'id-path'.
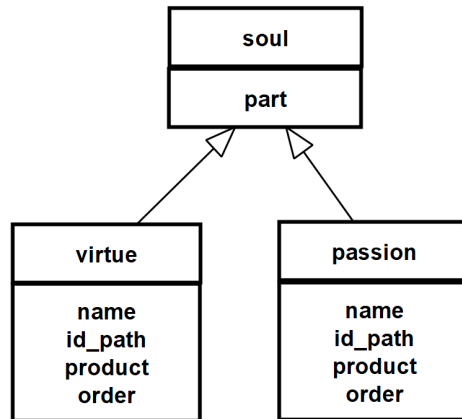
Figure 1. Inheritance diagram of Climax

Moreover, there is additionally the possibility of knowledge representation in order to extract and display the relationships between virtues and passions; the latter representation leads to respective complexity diagrams (Myridis, 2020) as a skeleton/spine on which the whole work is built. The behavioural entities (virtues, passions) are the nodes of complexity diagrams, while the edges in these diagrams are the relationships between the entities. Two typical examples of complexity diagrams in Climax are given below.

In fig.2 a snapshot is schematically rendered regarding the relationship diagram of the passion of avarice. More precisely, this figure highlights a path of evolution of the avarice passion. It follows from this graph that the products of avarice are anger and effort while it is itself a product of the passion of unbelief.
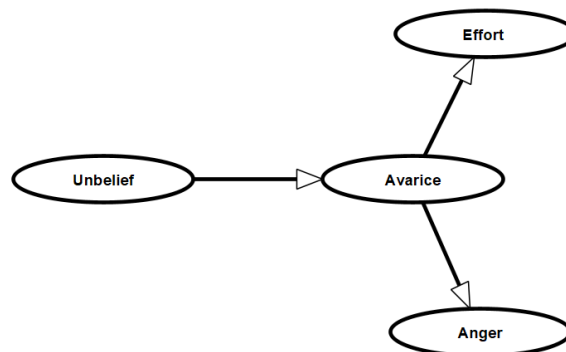
Figure 2. A path of evolution (snapshot) of the passion of avarice

In Figure 3 another snapshot is depicted displaying the products of avarice which are: hatred, thefts, envy, separations, enmities, storms, remembrance of wrong, hard-heartedness, murders.
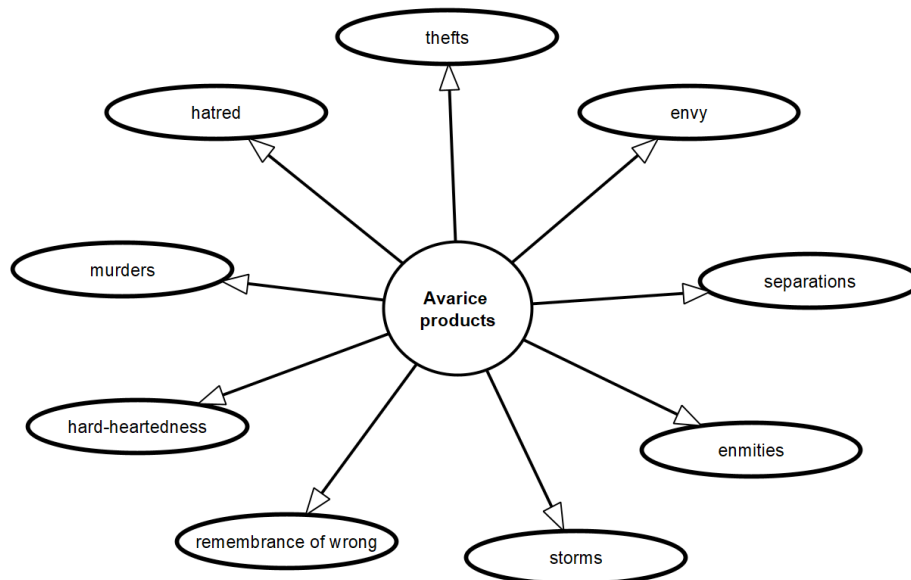

Figure. 3. The products of avarice

4. Conclusion

The usefulness of AI in the case of Climax is manifold and extends to a variety of areas of interest, e.g. psychology. The overall text, with its structure and development, as well as with the analysis of the psychical untrodden of human personality, provides a profile of the human soul and an approach to human behaviour. It also opens new horizons of research and challenges, such as for instance is the research focusing on the degree of Climax's approach to the real status of human character and behaviour. Both the revelation of aspects of human personality by terms, means and applications of AI, as well as the estimation or interpretation of behaviours, are innovative achievements provided in our time by a historical text of centuries, i.e. that of Climax.

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