Summarising scientific texts with ChatGPT—the example of Max Weber

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The following exercise is intended for use in teaching. The aim is to enable the students themselves to evaluate the limits and possibilities of programmes such as ChatGPT.

Based on a challenging text, the bot is to be asked certain questions, which can then be discussed. In this case, it is a classic passage from 'Economy and Society'. In it, Max Weber describes the three ideal types of legitimate rule. This is just one example; a different text can be used depending on the subject.

In this exercise, the programme is instructed to summarise a theoretically demanding text and answer questions about its content. The aim of this exercise is to show that the programme does not provide an ideal summary and can also provide incorrect information in some places, that it takes a considerable amount of work to check the answers and that the programme cannot 'understand', but performs arithmetic operations and works with probabilities.

The exercise also illustrates that ChatGPT cannot handle basic academic tasks such as correct citation without errors and also reproduces text passages in the answers verbatim and without labelling. The example also shows that ChatGPT mixes text summarisation with interpretation.

Note for further use



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Summarising scientific texts with ChatGPT—the example of Max Weber¹

User:

Please summarise the following text for me

ChatGPT:

Of course, I'm happy to help! Which text would you like to have summarised?

User:

Weber, Max: Economy and Society. Grundriss der verstehenden Soziologie,

Frankfurt am Main 2005, p. 159f. . Chapter III. 1 Legitimacy, §2

There are three pure types of legitimate authority. The validity of their claims to legitimacy may be based on:

1. Rational grounds—resting on a belief in the 'legality' of patterns of normative rules and the right of those elevated to authority under such rules to issue commands (legal authority).

2. Traditional grounds—resting on an established belief in the sanctity of immemorial traditions and the legitimacy of the status of those exercising authority under them (traditional authority); or finally,

3. Charismatic grounds—resting on devotion to the specific and exceptional sanctity, heroism or exemplary character of an individual person, and of the normative patterns or order revealed or ordained by him (charismatic authority). In the case of legal authority, obedience is owed to the legally established impersonal order. It extends to the persons exercising the authority of office under it only by virtue of the formal legality of their commands and only within the scope of authority of the office. In the case of traditional authority, obedience is owed to the person of the chief who occupies the traditionally sanctioned position of authority and who is (within its sphere) bound by tradition. But here the obligation of obedience is not based on the impersonal order, but is a matter of personal loyalty within the area of accustomed obligations. In the case of charismatic authority, it is the charismatically qualified leader as such who is obeyed by virtue of personal trust in him and his revelation, his heroism or his exemplary qualities so far as they fall within the scope of the individual's belief in his charisma.

1. The usefulness of the above classification can only be judged by its results in promoting systematic analysis. The concept of 'charisma' ('the gift of grace') is taken from the vocabulary of early Christianity. For the Christian religious organization Rudolf Sohm, in his Kirchenrecht, was the first to clarify the substance of the concept, even though he did not use the same terminology. Others (for instance, Holl, Enthusiasmus und Bussgewalt) have clarified certain important consequences of it. It is thus nothing new.

¹ The Conversation took place on 4th July 2024, using the free version of openai.com/chatgpt







2. The fact that none of these three ideal types, the elucidation of which will occupy the following pages, is usually to be found in historical cases in 'pure' form, is naturally not a valid objection to attempting their conceptual formulation in the sharpest possible form. In this respect the present case is no different from many others. Later on (\S n ff.) the transformation of pure charisma by the process of routinization will be discussed and thereby the relevance of the concept to the understanding of empirical systems of authority considerably increased. But even so it may be said of every empirically historical phenomenon of authority that it is not likely to be 'as an open book.' Analysis in terms of sociological types has, after all, as compared with purely empirical historical investigation, certain advantages which should not be minimized. That is, it can in the particular case of a concrete form of authority determine what conforms to or approximates such types as 'charisma,' 'hereditary charisma' (\S 10, 11), 'the charisma of office,' 'patriarchy' (\S 7), 'bureaucracy' (\S 4), the authority of status groups,[5] and in doing so it can work with relatively unambiguous concepts. But the idea that the whole of concrete historical reality can be exhausted in the conceptual scheme about to be developed is as far from the author's thoughts as anything could be.

ChatGPT:

The text describes Max Weber's classification of legitimate types of rule: rational, traditional and charismatic. Rational rule is based on legality and the right to give orders, traditional rule is based on tradition and everyday beliefs, and charismatic rule is based on extraordinary devotion to charismatic leaders. Weber stresses that historical forms of rule rarely correspond to a single type. He also discusses the generalisation of charisma and stresses the usefulness of his typology for historical analysis, although it cannot fully capture the complexity of real forms of rule.

User:

What exactly does this section mean?

ChatGPT:

The section deals with Max Weber's typology of forms of rule, in particular the three pure types: rational, traditional and charismatic rule. Weber explains that no historical form of rule corresponds purely to one of these types. Instead, there are mixed forms and changes over time, which he further specifies using terms such as 'hereditary charismatic', 'official charismatic', 'patriarchal' and 'bureaucratic'. Weber stresses that his sociological typology, despite its abstraction and simplification, offers important insights for empirical historical research, but cannot fully capture the whole of historical reality.²

The summary is correct, especially at the beginning. However, in its answers, the programme sticks to the original terms without indicating this. In the summary and in the answer to the question, ChatGPT adopts a certain perspective which is not necessarily that of a seminar context. For example, the answer refers primarily to the naming of ideal types, their limitations as ideal types, and a further development of the terminology, again without reference to the source. There is no further discussion of 'everydayisation' (Veralltäglichung) at this point.



² Comment on the summary:

User:

Does the text refer to other theories?

ChatGPT3:

Yes, Max Weber's text makes reference to various theoretical references:

1. **Old Christian terminology and hierocracy**: Weber mentions the concept of "charisma", which comes from ancient Christian terminology and refers to divine grace or gift of grace. This shows that he includes historical roots and theological concepts in his sociological analysis.

2 **Rudolf Sohm**: Weber refers to Rudolf Sohm, a German legal historian and theologian who worked in the field of canon law. Sohm dealt with concepts such as hierocracy (priestly rule), which Weber apparently uses for his own considerations on the legitimacy of rule.

3 Holl and Enthusiasm: Weber also mentions other authors such as Holl, who clarified certain consequences of Christian terminology in his work "Enthusiasmus und Bussgewalt". This shows that Weber also refers to contemporary or previous sociological and theological discourses.

These references show that Weber did not develop his theory of types of domination in isolation, but rather drew on existing theological and sociological ways of thinking and integrated them into his own analysis.³

User:

What advantage do the ideal types have for Weber?

ChatGPT:

For Max Weber, the ideal types have several advantages:

1. **Analytical clarity**: Ideal types allow a clear and precise analysis of complex social phenomena. By abstracting real, often mixed forms into pure types, specific features and characteristics can be worked out and better understood.

2 **Comparability**: Ideal types facilitate the comparison of different historical or contemporary phenomena. They provide a common basis for comparing forms of government or other social structures and for identifying similarities and differences.

⁽³⁾ The title "Holl und Enthusiasmus" is confusing. Weber is referring to the work "Enthusiasmus und Bussgewalt beim griechischen Mönchtum: eine Studie zu Symeon dem neuen Theologen" by Karl Holl (Leipzig: J. C. Hinrichs, 1898).



³ Comment on the reference to theory:

The distinction between three (independent) theories is not correct; Sohm and Holl deal with hierocratic forms of rule in their work. In addition, there are three other points that illustrate how ChatGPT's answers should be assessed.

⁽¹⁾ ChatGPT explains that Weber takes the term charisma from ancient Christian terminology. Despite the title, ChatGPT does not mention the term hierocracy.

⁽²⁾ Weber refers to the work Kirchenrecht by Rudolph Sohm (Berlin: Duncker & Humblot, 1892). Weber uses the term charisma for Sohm's analysis of Christian hierocracy, who does not use the term himself.

3 **Theoretical clarity**: By defining ideal types, Weber creates a clear theoretical basis for the development of further concepts and theories. Ideal types serve as building blocks for his sociological theorising and enable him to divide complex social realities into manageable categories.

4 **Systematisation**: Ideal types help Weber to systematically organise and structure his theory of the legitimacy of rule. They enable him to clearly distinguish between different forms of legitimacy (rational, traditional, charismatic) and to identify their specific characteristics.

5 **Empirical applicability**: Although Weber emphasises that no historical reality fits perfectly into ideal types, they nevertheless provide a practical framework for empirical research. Historical phenomena can be analysed in terms of their proximity to the ideal types, which enables a differentiated and structured description.

Overall, ideal types are an important tool for Weber to analyse, compare and theoretically classify complex social phenomena, which is why they occupy a central place in his sociological theory⁴

User:

Where is this in the text?

ChatGPT:

The explicit mention of the advantages of ideal types for Max Weber, as I have described them, is not found verbatim in Max Weber's quoted text on types of domination. This interpretation is based on an understanding of his general methodological approach and his use of ideal types in sociology.

In the text itself, Weber focuses on describing the three pure types of legitimate rule (rational, traditional, charismatic) and their differences. He also explains that historical forms of rule rarely correspond purely to one of these types and discusses the theoretical basis behind his categories.

For a more detailed analysis of the advantages of the ideal types, one would have to refer to Weber's general writings on the methodology of the social sciences, where he explains his views on the use of ideal types in more detail.

interpretation. When asked about the specific passage, the programme can only point out that the answers are not to be found in the text. The subsequent summary and reference to other texts is not a precise answer to the question.



⁴ Comment on the advantages for Weber and textual evidence:

The question was not asked precisely enough. In a human conversation, the textual reference of the question (i.e.: What advantages do Weber's ideal types offer in the text?

The programme provides answers that are not directly derived from the text passage, but are an

User:

What are the limits of the ideal types according to the text?

ChatGPT:

According to Max Weber's text, there are several limits or limitations to ideal types:

1. **Historical reality**: Weber emphasises that no historical form of rule corresponds completely to a pure type. Instead, they are often mixed forms or show changes over time. This means that while ideal types are analytically useful, they cannot fully capture the complexity and diversity of real historical phenomena.

2 **Conceptual fixation**: Weber warns against over-fixing ideal types and believing that they can fully describe all historical reality. Historical forms of rule are generally not so clearly delineated and can combine various elements of several ideal types.

3 **Commonisation of the charism**: Weber also discusses the possibility that a leader's charisma can be attenuated or institutionalised through everydayisation. This means that charismatic forms of rule do not always remain pure, but can change over time.⁵

As with the other answers, the limits are given without textual evidence. The differences between answers 1, 2 and 4 are marginal and address the same issue. The third answer does not appear in the source text.



⁵ Comment on the boundaries of the ideal types: