The Role of Values in the Selection and Formulation of Scientific Problems

A Reconstruction of Max Weber's Approach

Abstract

This article presents an integrated interpretation of Max Weber's view on the role of values in scientific inquiry by linking four social categories – personality, vocation, Bildung, and ethics of responsibility – with four epistemological concepts: historical interest, value relevance, cultural meaning, and value interpretation. Previous interpretations have mostly focused on epistemological and logical aspects of value interference in science, leaving the relationship between Weber's categories – and the mechanisms through which values shape scientific problem selection – underexplored. Drawing on the case of familial homicides, we argue that researchers integrate their values into the research process through a three-stage model. We trace the origins of Weber's concept of value interpretation to perspectivism and Nietzsche's notion of a "battle of values." By examining the historical development of the concepts of interest and value relevance – particularly in relation to Kant's theory of reason – we propose a revised reading of the epistemological foundations of Weber's approach. Finally, we analyze the methodological implications of personality, vocation, Bildung, and responsibility ethics in Weber's social theory, highlighting their significance for understanding how values are embedded in the selection and framing of scientific problems.

Keywords: Value-laden problem selection, ideas of reason, personality, Beruf, Bildung.

FINDING AND FORMULATING the problem is the basis of scientific research. A researcher and instructor of the social sciences must be skilled in identifying and formulating problems and should be able to recognize and articulate the issues of the social world with depth and insight. However, many scholars have reported that discovering research problems is often more difficult than finding their solutions (Zuckerman, 1978; Merton, 1959). Experiences from working with social science students also reveal their frequent feelings of confusion and inability when it comes to selecting topics and formulating research problems. But how do social scientists arrive at research problems, and which kinds of problems do they choose to raise or avoid? Who is a problem-seeker, and what characteristics define them?

In this study, we aim to reconstruct Max Weber's perspective on the logic of problematization in the social sciences. In Weber's approach, scientific problems are selected

based on the "relevance of the phenomena under investigation to values" (Weber, 2012[1906a]: 47–48). Weber does not address the role of factors and motivations influencing the selection and formulation of research topics and problems. In reality, various factors, including financial resources, neoliberal policies in science and technology, time constraints, researcher freedom, applicability, and others, play a role in the selection and formulation of research problems. Social scientists choose topics and issues for research based on diverse motivations such as curiosity, gaining fame and recognition, earning a livelihood, entertainment and pleasure, and serving humanity.

Nevertheless, this article reconstructs Weber's approach for two reasons. The first reason is Weber's emphasis on the role of multiple values in problematization and his redefinition of social sciences based on the categories of vocation, personality, ethics of responsibility, and Bildung. This framework provides a useful tool to counter the influence of neoliberal discourse and market values on science. The second reason is that Weber, through his innovative distinction between value relevance and value judgment, clarifies the points of contention regarding the intervention of values in the selection and formulation of scientific problems. Based on this distinction, Weber, drawing on neo-Kantian and Nietzschean philosophy, discusses the role of values in scientific problem selection and formulation. At the same time, he aligns with English empiricism and French positivism, preserving the Kantian concept of scientific objectivity while standing against relativism and radical constructivism.

The evaluation of existing literature reveals that, despite the complexity, depth, and vitality of Weber's theoretical contributions, there exists no coherent, integrated, and comprehensive interpretation of his approach. Firstly, both Weber and his interpreters have, in a scattered manner and often by focusing on selected categories, discussed the value-laden nature of problem selection. In his various works, Weber elaborates on the necessity, desirability, and legitimacy of value involvement in the selection and formulation of scientific problems by employing multiple conceptual categories. He draws upon ideas such as cultural significance, the distinction between value relevance and value interpretation, personality, and Bildung to clarify the value-laden logic inherent in problem selection within the social sciences. Other key categories in his analysis include historical interests, value interpretation, vocation, and the ethics of responsibility. These conceptual tools reveal the integral role of values in shaping the direction of scholarly inquiry. Correspondingly, Weber's commentators have sought to explain the role of values in scientific problem selection and formulation using similar categories. Most interpretations tend to focus on value relevance, cultural significance, and historical interest as central elements in this process¹. A smaller number of scholars² have drawn comparisons between Weber's concept of value interpretation and Rickert's notion of value relevance.

¹ Salomon (1934); Parsons (1949); Rossides (1972); Goddard (1973); Rex (1977); Oakes (1982, 1988, 1990); Lassman (1980); Burger (1987); Albrow (1990); Agevall (1999); Eliaeson (1990); Löwith (1993); Root (1993); Hekman (1994); Parkin (2002); Kieran (2004); Segre (2004); Rossides (2011, 2016); Swedberg and Agevall (2016); Rosenberg (2016).

² Bruun (2007); Whimster (2007); Ringer (1997).

Secondly, the majority of Weber's interpreters have offered epistemological and logical analyses of the value-laden nature of problem selection in scientific inquiry, while relatively few have provided systematic assessments of the methodological implications of Weber's social theory for the same issue. This is despite the fact that Weber himself underscored the methodological implications of social theory in understanding the value-laden nature of scientific problem selection. For Weber, the concept of value relevance is not merely epistemological; rather, its roots lie in a disenchanted and fragmented reality – a condition that Nietzsche had poignantly emphasized. Some commentators have briefly referred to these implications, focusing on concepts such as personality, Beruf, Bildung, disenchantment, and the ethics of responsibility³.

Third, in the epistemological interpretations of Weber and his commentators, there is no cohesive discussion regarding the relationships among Weber's conceptual categories – historical interest, value relevance, cultural significance, and value interpretation. Fourth, Weber and his commentators have paid little attention to the stages and mechanisms by which values influence the selection and formulation of scientific problems. Instead, the discussion has been limited merely to the necessity, desirability, and legitimacy of value intervention in the selection of research problems⁴. Fifth, an epistemological account of the philosophical status of Weber's concepts of value relevance and value interpretation requires further reflection and critical examination. A commentator such as Albrow (1990) attributes the philosophical origin of the concept of value relevance – which Weber explicitly roots in Kantian epistemology (Weber, 2012[1904] – to the Cartesian cogito, "the I think", thus offering a more Cartesian than Kantian interpretation of the concept.

On the other hand, while Ringer acknowledges the influence of Nietzsche's theories of cultural plurality and the irreconcilable conflict of ultimate values, he does not connect Nietzsche's theory of value conflict to Weber's concept of value interpretation in the selection and formulation of scientific problems from diverse value perspectives (Ringer,1997). Similarly, Bruun, without mentioning Nietzsche by name, offers a Nietzschean interpretation of Weber's concept of value interpretation without addressing the philosophical basis on which Weber established this category or why Weber favored it over Rickert's concept of value relevance (Bruun, 2007). Likewise, Whimster indirectly provides a Nietzschean interpretation of Weber's concept of value relevance without explicitly referring to Weber's notion of value interpretation (Whimster, 2007).

To address these gaps and formulate a more comprehensive account of Weber's

³ On personality: Mommsen (1989); Bruun (2007); Farris (2016). On Beruf: Gane (2002). On Bildung: Ringer (1997); Bruun (2007); Whimster (2007); Farris (2016). On disenchantment: Albrow (1990); Gane (2002); Löwith (2003). On ethics of responsibility: Lassman (1980); Hennis et al. (1994); Gane (2002); Bruun (2007).

⁴ Salomon (1934); Parsons (1949); Rossides (1972); Goddard (1973); Rex (1977); Oakes (1982, 1988, 1990); Lassman (1980); Burger (1987); Albrow (1990); Agevall (1999); Eliaeson (1990); Lowith (1993); Root (1993); Hekman (1994); Ringer (1997); Parkin (2002); Kieran (2004); Segre (2004); Bruun (2007); Whimster (2007); Rosides (2011; 2016); Swedberg and Agevall (2016); Rosenberg (2016).

approach to the role of values in scientific problem selection, this article proceeds as follows: First, we clarify the relationships among the categories of historical interest, value relevance, cultural significance, and value interpretation. Second, using the example of familial homicides, we argue that researchers incorporate their values and ideals into the selection and formulation of research problems through a three-stage process. During the second step, we connect the epistemological foundation of value interpretation to Nietzsche's perspectivism and theory of value conflicts. Third, we trace the foundations of value relevance to the "ideas of reason" in Kantian epistemology and provide a Kantian explanation of this concept, affirming the rational legitimacy of value involvement in scientific problem selection. Finally, we analyze the methodological implications of the four categories – personality, Beruf, Bildung, and ethics of responsibility – in Weber's social theory to offer a sociological account of the value-laden nature of scientific problem selection.

The Relationship between Historical Interest, Value-Relevance, Cultural Significance, and Value-Interpretation

Here, we explore the relationships between the categories of historical interest, value-relevance, cultural significance, and value-interpretation within Weber's conceptual framework. Specifically, we will examine how Weber and his interpreters have understood the connection between historical interest (and cultural interest) and value-relevance. Three types of relationships have been posited in Weber's thought.

The first relationship is distinguishing interest from value. Commentators like Bruun, drawing on certain statements by Weber, highlight Weber's skepticism toward the concept of value and his preference for using terms like interest, relevance, or importance instead of the term value (Bruun, 2007). In this regard, Weber himself states in a letter to Friedrich Gottl: "I do not accept that value stands on the same level as interest or importance in relation to the servitude to words that determines the use [of those concepts]" (Weber, 2012 [1906d] : 388). The second relationship is the equating interest and value-relevance. In some of Weber's statements, interest and value-relevance are considered equivalent. For example, Weber notes that the more one refines Rickert's concept of value-relevance, all that emerges is the sense of "worth knowing about" (Weber, 2012[1902-1903]: 413). In German sociology, Weber states that the question of whether a topic is scientifically interesting or engaging is identical to asking whether it is important from a value standpoint (Weber, 2012[1910]: 368). A further example comes from Weber's essay *The meaning of value freedom in the sociological and economic sciences*, where he discusses why polyphonic folk music, which

⁵ However, Weber sometimes views the relationship between problematic issues and values as inverse. Weber says: "Objects enter into the realm of that which is worth knowing when they become problems, when new questions arise. When we realize that there is something that we don't know. Economy was already in Antiquity related to values. But not seen as a problem" (Weber, 2012[1902-1903]: 414).

is globally widespread, evolved into harmonic music only in Europe and only during a specific period. Here, Weber uses the phrase "from the standpoint of the interest of the modern European value relatedness" (Weber, 2012 [1906a]: 323), indicating an equivalence between the concepts of interest and value-relevance. The third relationship is the values shape interests. Weber's various statements suggest that "interest" and "value" are not identical but that a researcher's values shape their interests. For example, Weber argues:

from the strictly methodological point of view, the only possible way of explaining the circumstance that certain individual components of reality are selected as objects of historical treatment is by reference to [the] fact that a corresponding interest exists. Indeed, from that point of view, which is not concerned with the question of the meaning of that interest, value relation can mean no more than that (Weber, 2012[1906b]: 162).

Similarly, Weber states: "It is our interest, which is oriented to values, and not the substantive causal relationship between our culture and (just) the Hellenic culture, that will circumscribe the group of cultural values governing a history of Hellenic culture" (Ibid., 230). He further notes that:

it is absolutely correct that every history is written from the standpoint of the value interests of the present and that, consequently, every new age poses – or at least: can pose – new questions to the historical material for the simple reason that its interest, guided by value ideas, changes (Ibid., 165).

This paper, like Julien Freund, (1968) advocates for the third type of relationship between interest and value. Based on Freund's example, if a historian is asked why they are interested in studying the French Revolution or Fichte's philosophy, or if a sociologist is asked why they are investigating social relations in a working-class town, their response will likely be: because it is interesting, or because it is important. However, this answer may not satisfy the audience, prompting them to ask a more appropriate follow-up: why is it important, and in relation to what is it important? Clearly, the answer to the first or second question requires reference to values. The criterion that determines our curiosity or interest, as well as the reasons that compel us to consider some things important and others secondary or dismissible, are values (Freund, 1968).

Regarding the relationship between the categories of value-relevance and cultural significance, it remains unclear whether these two concepts are the same in Weber's writings. Based on the category of cultural significance, in the social sciences, an aspect of reality becomes a research problem when it is connected to a socio-economic event and holds importance and meaning for us (Weber, 2012 [1904]). Some commentators, such as Drysdale, note Weber's preference for using the term cultural significance over Rickert's value-relevance. According to Drysdale's interpretation, "value-relevance" refers only to the culture of the researcher, whereas "cultural significance" extends

beyond the researcher's culture to include the culture of the subject being studied, as well as the context in which the scholar operates. For example, Weber's focus on asceticism in The Protestant Ethic does not merely reflect the cultural context of Weber and his audience but also refers to the cultural context of the 17th and 18th centuries, particularly in England, the Netherlands, and America (Drysdale, 1996).

The relationship between value interpretation and value-relevance in Weber's view can be explained as follows: according to Rickert's concept of value-relevance, the selection of a research problem cannot be independent of values. However, Weber sought to expand and deepen Rickert's achievements through the concept of value interpretation, drawing from Nietzsche's perspectivism and his emphasis on the plurality of values and the conflict of ultimate values. By introducing the concept of value interpretation, Weber provides a framework that reflects diverse value perspectives on reality. In other words, value-relevance determines the cultural interests and value assumptions that influence the selection of scientific problems, while value interpretation clarifies and differentiates these various value-relevancies in the choice of a research problem. This process enriches and diversifies the horizons of both the research and the researcher, thereby further deepening the scope of inquiry (Weber, 2012[1906b]).

In his essay Critical studies in the logic of the cultural sciences: A critique of Eduard Meyer's methodological views, Weber discusses the educational and intellectual effects of the value-interpretation category on the expansion and deepening of the researcher's intellectual and value horizons, which constitute part of Bildung. According to Weber, value-interpretation contributes to the development of inner life and psychological horizons; to valuing and reflecting on the possibilities of different lifestyles; to intellectual, aesthetic, and moral growth; and to fostering a sensitivity toward other values and cultures, as well as strengthening one's own values. Based on Weber's argument, when analyzing Goethe's letters, the Sermon on the Mount, or Marx's Capital, we may ask ourselves how the intellectual content of these works relates to our own values. In doing so – even if we do not share the value commitments expressed in these texts – engagement with such (great) works expands our intellectual horizons, enhances our inner life, and increases our sensitivity to value orientations (Weber, 2012[1906b]). Value-interpretation transforms our initial, unstructured valuations into explicit value judgments, thereby enhancing the coherence and clarity of both our own and others' value commitments (Ringer, 1997). Here, we are not concerned with the similarities and differences between Nietzsche's and Weber's perspectivism, but rather with the influence of Nietzsche's perspectivism on the development of Rickert's concept of value-relevance and Weber's creation of the concept of value-interpretation, a topic that has received less attention. With the proclamation of the death of God, Nietzsche established perspectivism as the guiding principle for understanding human beings, history, culture, ethics, and religion. According to Nietzsche, since God is dead, there no longer exists any foundation by which one viewpoint can claim legitimacy or superiority over others. In On the genealogy of morality, Nietzsche emphasizes that after the death of God, various deities (value systems) are compelled to struggle against each other. In one passage, Nietzsche writes about perspectivism:

Let us be on guard against the dangerous old conceptual fiction that posited a pure, will-less, painless, timeless knowing subject; let us guard against the snares of such contradictory concepts as pure reason, absolute spirituality, knowledge in itself': these always demand that we should think of an eye that is completely unthinkable, an eye turned in no particular direction, in which the active and interpreting forces, through which alone seeing becomes seeing something, are supposed to be lacking; these always demand of the eye an absurdity and a nonsense. There is only a perspective seeing, only a perspective knowing; and the more affects we allow to speak about one thing, the more eyes, different eyes, we can use to observe one thing, the more complete will our "concept" of this thing, our objectivity be (Nietzsche, 1967[1887]: 12).

Weber accepted Nietzsche's idea that knowledge is always knowledge from a particular standpoint, that is, from within a system of values. Based on Weber's Nietzschean perspectivism, the social scientist is inevitably required to select specific aspects of life from value-standpoints (Weber, 2012[1904]). According to Weber, a researcher who intends to engage in scientific work must construct the segment of reality that is to be studied according to the researcher's ultimate values and cognitive interests. Since the values guiding research are not universal, a researcher is inevitably bound to a form of perspectivism and one-sidedness. Weber writes:

There is no absolutely objective scientific analysis of cultural life – or (to use a term which is perhaps somewhat narrower but which, for our purposes, does not have an essentially different meaning) of social phenomena – independent of special and one-sided points of view, according to which [those phenomena] are – explicitly or implicitly, deliberately or unconsciously – selected as an object of inquiry, analyzed and presented in an orderly fashion (Ibid, 113).

At this point, we can refer to the capacity and potential of Weber's perspectivist approach in explaining how specific economic, social, and political "conditions" influence the selection of research topics and problems. According to Weber's Nietzschean framework, knowledge is always perspectival, and these perspectives are multiple and changing, transforming or disappearing alongside social, cultural, economic, and political changes. Based on Weber's argument, empirical reality becomes a subject for social research only when it is transformed into culture, that is, when it is related to value-ideas. However, since culture is constantly evolving, the dominant value-ideas also change. This continual transformation leads social scientists to formulate new horizons for an issue or to reframe it in novel ways, in light of shifting values that, despite their variability, retain general cultural significance. Researchers might highlight aspects that others, based on their different value-references, consider irrelevant. According to Weber, in the age of specialization, the mere analysis of data becomes the objective of social sciences, independent of evaluating the significance of particular

realities in relation to value-ideas. However, a time will come when circumstances change; the meaning of previously un-reflected perspectives becomes uncertain, and then the great cultural problems illuminate once again (Weber, 2012[1904]).

The Three-Stage Process of Value Influence in the Selection and Formulation of Research Problems

To systematically explain Weber's view on the mechanism of value intervention in the selection and formulation of scientific problems, it appears that values influence the problem-identification process through a three-stage process. In the first stage, we develop an interest in a particular subject (historical or cultural interest). A researcher without any specific interests might experience a form of intellectual depression, leading to what Weber calls a depressed intellect. A researcher, therefore, should possess an intellect that is not depressed but rather engaged with the world, driven by curiosity to move towards a phenomenon. This notion of interest seems to be borrowed from Kant, who distinguishes between practical interest and theoretical interest of reason (Kant, 1996 [1781]; 1999 [1788]). However, while Kant's interests were transcendental, Weber transforms them into "historical interest" or "cultural interest", which guide researchers in selecting phenomena for study based on historical or cultural concerns. First of all, the possibility of selection from the infinity of determinants is conditioned by the nature of our historical interest (Weber, 2012[1906c]). In the second stage, a specific value is chosen (value-relevance and cultural significance). At this point, the distinction between Drysdale's concepts of value-relevance and cultural significance is not crucial to our discussion. In this stage, researchers select aspects of social phenomena as their research problem based on their personal cultural values, the shared values of scientific communities, or the cultural values of the subject under study, their society, and their era. In the third stage, researchers reveal the relationship between their interests and the diverse and multiple possible values (value interpretation).

To clarify the three-stage process of how interests and values influence the selection and formulation of research problems, we can consider the example of familial homicides. An intellect that lacks any genuine interest might easily overlook this phenomenon, while an intellect interested in entirely different domains – such as a nuclear physicist – would likely have no inclination to explore this social issue as a research topic. Similarly, a sociologist whose interests lie in the sociology of science and technology, rather than social problems or family relations, might never engage with the topic of familial homicides throughout their entire career. However, a researcher whose intellectual interests are focused on family and social relationships would approach this subject with passion and seriousness, shaping it into a research problem worthy of investigation. If we seek to identify the different historical interests that might be applied to the study of family homicides, as Weber applied to figures such as Bismarck in Germany, the Aztec and Incan civilizations, the emergence of Native American states, ancient cultures, and Goethe's letters to Frau von Stein (Weber, 2012[1906b]), at least six distinct interests can be delineated:

The first interest might view the statistics on family murders as indicative of a crisis within the institution of the family. Another interest might interpret the statistics as a reflection of broader social pathologies, indicating the overall deterioration of societal conditions. A third interest might assess the family murders in relation to the political situation of the society. A fourth interest might scrutinize family murders from the standpoint of religious values. A fifth interest finds these statistics significant in terms of the deterioration of the psychological and mental well-being. A sixth interest approaches cases of domestic homicide from the perspective of feminist concerns. Now that these six interests' direct researchers towards the study of family murders, Weber's concepts of value relevance and value interpretation can demonstrate how researchers' values operate within each interest, as values determine which aspects of the issue are selected for examination.

In the first interest, the sociologist collects data on family murders through the lens of the crisis in familial values. This involves selecting data that can serve as indicators or evidence of the breakdown in family relations, which in turn contributes to an increase in family murders. The researcher focuses on data related to familial values such as affection, self-sacrifice, mutual understanding, and respect. In the second interest, the sociologist examines family murders as a manifestation of broader social pathologies. The researcher collects and selects data related to social issues such as prostitution, addiction, and poverty. For instance, the analysis might focus on the role of prostitution under the value of social decency, addiction in terms of physical and mental health, and economic deprivation concerning justice and human dignity. In the third interest, the sociologist investigates family murders in relation to the political context of society. For instance, questions might be raised such as whether these murders are associated with an authoritarian political structure, whether they occurred in a society experiencing revolutionary upheaval or conflict, or whether they are linked to rapid state development. The analysis will focus on understanding these murders through the lens of political values such as political stability or national cohesion. Only by examining the data in relation to these political values can the political causes of family murders be explored. In the fourth interest, Family murders are examined in light of religious values. Data will be collected and selected based on the degree, nature, and quality of religious adherence among the individuals involved. Researchers who do not recognize or are not sensitive to religious values will not gather or analyze religious data related to these murders. The fifth interest is about psychological factors where the researcher seeks to understand the causes of family murders by examining the psychological history or mental health status of the individuals involved. In this case, the value of mental health provides a framework for collecting data related to the mental state of the perpetrators. In the sixth interest, the very term "domestic homicides" is fundamentally challenged based on feminist values and political frameworks, with alternative concepts such as femicide, violence against women, or gender-based violence being preferred. As illustrated, the methodological examination of family murders reveals how interests and cultural values influence data collection, selection, and cause identification. This demonstrates that issue formulation is guided by cultural values and historical interests, underscoring the necessity for researchers to incorporate their own interests and values into the problem formulation process. This example also reveals the role of emotional and affective elements in the process of problem selection.

The Rational Legitimacy of the Intervention of Values: Value Relevance and Kant's "Ideas of Reason"

Based on what has been discussed thus far, it can be argued that Weber's ideal model is not purely logical and rational; rather, according to this model, emotions and affective elements also play a role in the selection of research problems. This is because, first, values possess a non-rational nature, and second, the concept of "interest" within Weber's conceptual framework implies the involvement of emotional and affective elements in problem selection. However, it is now necessary to establish a rational justification for the entry of values and interests into the process of selecting research problems. In this regard, Anthony Giddens argues that, according to Weber's perspective, outside of a value system, there is no objective criterion for selecting research problems. He contends that we cannot objectively determine what is worth knowing unless it is grounded in values that dictate why certain phenomena are of interest (Giddens, 1972). Similarly, Michael Root maintains that researchers must rationalize their interests, asserting that these interests become rational when the research is related to values. Referring to values provides a rationale for supporting one question or research over others, thus making the role of values in question selection and formulation a rational process (Root, 1993).

However, the question arises: how can the intervention of values in research topic selection be rationally justified? In other words, if values render the choice of research topics rational, what is the relationship between values and rationality? Here, we aim to elucidate what Root and Giddens have only briefly touched upon, using Kant as a framework. Additionally, we seek to determine the place of "value relevance" based on Kant's theory of knowledge. Referring to Kant's framework, we see that he distinguishes significantly between three sources of knowledge: sensibility, understanding, and reason. For Kant, the path of cognition begins with sensibility, moves to understanding, and concludes with reason (Kant, 1999 [1788]). Objects and things are given to us through sensibility, but they are conceptualized through the categories of understanding and are organized by the ideas of reason. Categories are constructs of understanding and do not arise from experience, but their legitimacy in application is derived from empirical data. In contrast, ideas are produced by reason and do not derive their legitimacy from empirical data; they are not dependent on empirical matters and have a "regulative" character. According to Kant, reason has the capacity to first generate ideas and then deduce ideals from these ideas to determine them. If reason fails to generate ideals, data emerging from reality are left in a state of chaos and disorder (Ibid).

What does Kant's conceptual framework on the threefold origin of knowledge mean for the rational basis of value relevance in Weber's approach? According to this fram-

ework, values function similarly to the "ideas of reason", providing a regulative role for experiences. Without the guidance of overarching values from reason, experiences seem to drift aimlessly without any rational direction. Thus, reason provides the fundamental values through which issues are viewed. Within this framework, the concept of "value relevance" as discussed by Rickert and Weber gains meaning. According to the principle of value relevance, social issues that emerge from experience are limitless and are only selected and addressed within the context of the values constructed by reason.

In Weber's view, the selection and formulation of research problems depend on "value ideas". In other words, empirical reality only becomes a subject of social research when it is connected to value ideas: "Empirical reality is 'culture' for us because, and to the extent that, we relate it to value ideas; it comprises those, and only those, elements of reality that acquire significance for us because of that relation. Only a tiny part of the individual reality that we observe at a given time is colored by our interest, which is conditioned by those value ideas, and that part alone has significance for us; it has significance because certain of its relations are important to us by virtue of their connection to value ideas" (Weber, 2012[1904]:116).

Therefore, based on Kant's theory of knowledge, the process of selecting and formulating a research problem involves two complex processes occurring in the mind: values from within and data from without. At the level of experience, we confront an infinite, diverse, and multifaceted reality. Initially, these data are collected through observation. However, the mind is not merely a passive mirror reflecting data; it selects and evaluates data based on values derived from reason. For example, if people attempt to grow their mustaches excessively or trim their beards in unusual ways, this could be considered a social issue. But does this topic hold priority and importance compared to, say, the high rate of suicides among students or people in a specific region? Which issue receives priority and how is it determined by a researcher? In this example, reason, guided by values such as preserving the lives of students and residents in a region, would prioritize this issue over a superficial value like societal norms regarding personal grooming. As the example illustrates, from a Kantian Weberian perspective, the salience of an issue is not related to its causality or effect but rather to the significance and meaning it holds for reason and its values: "Even though a social-economic problem does not exist in all cases where economic elements are involved as effects or causes – as such problems only arise when the significance or importance of those factors is problematical" (Weber, 2012[1904]:110).

Personality, Beruf, Bildung, the Ethics of Responsibility, and the Role of Values in the Selection of Scientific Problems

In the concluding section, by arguing that Weber, in the age of disenchantment, the dominance of instrumental rationality, and capitalism, reconstructs sociology and the social sciences based on the concepts of personality, vocation, Bildung, and the ethics of responsibility, we infer the role of values in the selection and formulation of social science problems from Weber's perspective.

Social Sciences and the Personality of the Scientist

We begin by seeking to develop a unified understanding of Weber's concept of "personality" through his texts and to deduce the components of the personality of a scientist. In these writings, Weber clarifies his view by addressing when a person, in general, and specifically a politician or social scientist, can be said to possess personality. In his lecture *The profession and vocation of politics*, inspired by the ideal personality of a Puritan, Weber considers a politician to have personality only if they possess three essential traits: passion for a cause, a sense of responsibility, and a sense of proportion in relation to reality. According to Weber, a politician must be able to unify the warm passion for ideals with the cold sense of "proportion in relation to reality" within a single personality (Weber, 1998[1919]:352-353).

In his essays, The Meaning of value freedom in the sociological and economic science, and Objectivity of knowledge in social science and social policy, Weber considers an individual to possess personality if their life is organized around "ultimate values" and they support specific values (Weber, 2012[1906a]; 2012[1904]). In his lecture Science as a profession and vocation, Weber attributes "personality" only to someone who dedicates themselves entirely to their work (Weber, 2012[1917]). For Weber, a strong personality does not attempt to impose personal coloration on everything. According to Weber's reasoning, every professional task has "inherent norms" that must be observed. Therefore, the notion that personality is a unified "whole" that must remain so, and is damaged if it does not express itself in every possible circumstance, holds little truth (Weber, 2012[1906a]). In Science as a profession and vocation, Weber assigns personality only to the scientist who seeks to respond to the demands of the time as a specialist, not as a savior, political leader, or academic prophet. From Weber's perspective, a person who enters the scientific field and seeks a role beyond that of a specialist is not, in any sense, possessed of personality (Weber, 2012[1917]). Thus, from Weber's viewpoint, adhering to ultimate values is a necessary but not sufficient condition for a scientist to possess personality. A scientist has personality if they organize their scientific life around ultimate values and, as a specialist, respond to the demands of the time. Accordingly, becoming a scientist does not entail rejecting passion, and a scientist without passion should seek another vocation. In Weber's view, for a human being, the only thing of value is that which they can pursue with passion and self-sacrifice. Therefore, science is not an activity carried out with a cold mind, devoid of the heart and soul. While calculation is necessary in scientific activity, the scientist or researcher is not a mere calculating machine. If they have no ideas about the direction of their work or its results before or during their research, they cannot even achieve minor outcomes (Ibid, 306,307).

Social Sciences as a Beruf (Profession and Vocation)

Weber builds sociology and the social sciences on the concept of "Beruf" Throughout his intellectual life, he grappled with the question of whether the vocation of science is merely a job through which an individual seeks to earn an income or whether the scientist, as an idealistic figure, serves the broader society and how a scientist, in their

profession, engages with universal values and social ideals. Weber's reflections can be seen as an intellectual effort to find a solution to the complex situation of the academic vocation in the era of capitalism, disenchantment, and specialization. Marx, in discussing the bourgeoisie's role in desacralizing professions, states: "The bourgeoisie has stripped of its halo every occupation hitherto honored and looked up to with reverent awe. It has converted the physician, the lawyer, the priest, the poet, the man of science, into its paid wage laborers" (quoted in Berman, 2004:140-141).

In response to Marx's critique, which asserts that as commodification and monetary systems penetrate all aspects of societal life, the sacred halo surrounding professions disappears, reducing all to the pursuit of money and capital accumulation, Weber explores how young Germans could be motivated to build a new Germany through the vocation of science or politics. The term "vocation" in Christian theology traditionally means a calling or service in the name of God. However, Weber rejects religious missions in the rational modern world, instead emphasizing the development of the ethics of responsibility and the acceptance of a mission in politics or science. So, in his lectures *Science as a profession and vocation* (1917) and *The profession and vocation of politics* (1919), Weber calls on German youth to take up the duties of their era and generation: either to pursue intellectual life in the world of science in search of truth and personal authenticity or to engage in political action to overcome the difficult social and economic challenges of post-war Germany (Turner, 2003:21, 22).

As previously explained about the concept of personality, Weber attributes two dimensions to the notion of vocation, encompassing two intertwined meanings: specialization combined with mission, and a sense of responsibility (Zijderveld, 2006: 332). On the first level, Weber closely links vocation to an internal sense of duty, arguing that a vocation without a sense of duty is not truly a vocation, but rather a "committing oneself unreservedly to a cause" (Weber, 2012[1906a]: 307). According to Weber, only by pursuing a specific "vocation" can one cultivate "personality" (ibid,). Weber also emphasizes a second level of vocation, which involves specialization and the fragmentation of vocations. Specialization enables a vocation to seriously engage with a specific matter and avoid meaningless generalizations. Yet, this process of vocational specialization, with its focus on precise details, presents a danger: the loss of a broader perspective. Neglecting this broader perspective fosters, the development of specialists and professionals who do not attend to general responsibilities. This, in turn, creates a real divide and anxiety within society. Weber refers to this anxiety at the conclusion of his Protestant ethic and the spirit of capitalism, describing it as the emergence of "specialists without heart and soul" (Weber, 2001 [1930]: 124). He seeks to bridge this divide, raising the question of how, in an era of increasing specialization, one can pursue the vocation of science without becoming soulless specialists. In his lecture Science as a profession and vocation, Weber formulates the central issue of the scientific vocation as follows: In an era marked by the collapse of the Christian worldview, the death of ultimate values, and a secular, disenchanted, and rationalized world, what significance and value does scientific activity hold? (Weber, 2012[1917]).

Social Sciences as a "Bildung" (Self-Cultivation)

Weber sought to reconstruct the university and social sciences under the ideal of Bildung by redefining the traditional ideal of Bildung in the context of modern social and political conditions. In the early decades of the nineteenth century, German universities, faced with the challenges of industrial capitalism, utilitarian studies, and commercialization resulting from rapid urbanization and technological changes, were under attack. The orthodox majority of German mandarins, grounded in the German tradition of Bildung, expressed open hostility towards educational reforms, describing these changes with terms like shallow utilitarianism, social fragmentation, and moral decay. On the other hand, a minority of German academics, including Weber, while sharing some concerns with the majority and the older professors, opposed the overall anxieties of these scholars. According to the minority group, certain changes were irreversible, and therefore, they sought to adapt Germany's cultural heritage to the new conditions. In these class and intellectual conflicts, Weber worked to synthesize the approaches of both the majority and the minority involved in the transformation. Figures such as Weber, Simmel, the young Lukács, and many Neo-Kantians of the Southern Heidelberg School made large efforts to preserve the dignity of the individual, professional integrity, values, and the cultural heritage of their homeland through the ideal of Bildung (Myers, 2004: 272, 274).

As evident from Gadamer's Truth and Method, in the German tradition, the concept of Bildung refers to the cultivation and shaping of the self (Gadamer, 1975). Weber's support for the ideal of Bildung and his redefinition and connection of it with modern scientific institutions is most clearly expressed in his methodological essays, particularly in his essay The meaning of value freedom in the sociological and economic science. In these texts, Weber attempts to reconstruct the university in general and the social sciences in particular by redefining the ideal of Bildung around the doctrine of value-free science. Weber describes the characteristics of the individual needed to implement the doctrine of value-free science, which is based on the distinction between value relevance and value judgments, as well as the distinction between science and ideology, science and worldview, academic work and party activity, value freedom and moral indifference, character and tendency. In his view, "intellectual honesty" is the most important virtue that the modern academic should possess. Professors and students must be able to exhibit the intellectual honesty necessary to distinguish between two entirely disparate issues: the distinction between stating the truth (determining the internal structure or logical/mathematical relations of values within a problem) and responding to questions concerning the values of a culture and its content or how one should act within a cultural society and political associations (Weber, 2012[1906a]).

From Weber's perspective, the primary aim of the university is to cultivate specialists who understand that the ultimate questions of life cannot be resolved through technical expertise or scientific reasoning alone (Weber, 2012[1906a]/; 2012[1917]). At the same time, Weber expressed concern that the university might gradually evolve into a system in which professors would function merely as "operators" and "technical experts" within an increasingly bureaucratic machine. While Weber valued technical

specialization, he insisted – drawing on the ideal of Bildung – that technical skills should not be prioritized over a broader, more humanistic outlook (Myers, 2004).

Social Sciences Based on the "Ethics of Responsibility"

Weber grounds social sciences in the concept of the ethics of responsibility. According to Weber, social and human science scholars must operate within this ethical framework. The ethics of responsibility involves reasoning in terms of means and ends, and rationally weighing the potential side effects of various possible means and ends. Within this ethical model, social scientists cannot use science to affirm or reject the validity of values, dictate which values should be chosen, or determine which values are superior. Nor can they resolve value conflicts. However, by understanding values as empirical realities and critically analyzing value judgments, social scientists can facilitate informed value choices and responsible social action. In doing so, they can contribute to the realization of the ideals and values cherished by both the scholar and the society under study (Weber, /2012[1906a]; Gane, 2002; Bruun, 2007; Brubaker, 1988).

Weber theorizes a social science model based on the ethics of responsibility that stands between positivist social sciences, based on instrumental rationality, and value-oriented social sciences, grounded in ethics of conviction. Social science based on the ethics of responsibility rests on the distinction between value relevance and value judgment. This, in turn, establishes a separation between science and ideology, science and worldview, scholarly work and political activity, value freedom and moral indifference, character and tendency. According to these distinctions, the academic specialist is not indifferent to values and norms but emphasizes values while being fully aware of where values end and facts begin. If these distinctions are not clearly articulated in the researcher's mind, social science risks sliding either into ideology or positivism. Weber's endeavor is to shield social sciences from falling into either of these extremes. Weber is critical of those academic specialists who, under the guise of science, propagate their ideological values. He refers to such individuals as "quasi- academic prophets" and "certified prophets" (Weber, 2012[1906a], 2012[1917]).

Personality, Beruf, Bildung, the Ethics of Responsibility: The Value-Laden Nature of Scientific Problem Selection

After establishing that Weber grounds social sciences in the intertwined elements of personality, vocation, Bildung, and the ethics of responsibility, it is now possible to infer and examine the intrinsic connection between the scholar's personality, values, and the identification of scientific problems. The problem-identifying scholar is not merely a specialist or professional striving for income and livelihood. Rather, they organize their life around ultimate values and shape their academic profession and research agenda within a framework of commitment to these values, moral living, and the principles of Bildung. Identifying scientific problems requires more than familiarity with research methods and techniques; it demands the courage and audacity to engage in social and cultural critique based on values and ideals. A social researcher must give

SOCIOLOGISK FORSKNING 2025

special attention to their concerns, orientations, and challenges with the research topic because knowledge, primarily, is the result of the tension between the individual and their surroundings. This tension arises from values ingrained in the individual's mind, which reflect on the incompatibility with the surrounding reality. The researcher seeks to transform this incompatibility into harmony and turn the diversity within themselves into unity with the environment. This implies that the researcher is not merely a machine for collecting information; rather, they are a human being with flesh, skin, senses, and ideals. From this perspective, a subject in society becomes a problem for them, while another subject may hold no value at all. The researcher moves toward what is valuable and forgets that which is not deemed valuable. In this view, there is no longer a separation between ideals, values, and the scientist. Instead, these values and ideals are internalized within the scholar, though they must also recognize that social realities may conflict with their values and ideals. From the feeling of conflict and incompatibility between values and social realities, significant and compelling problems worthy of exploration are generated. As Weber states:

The contributors to a journal which has come into being under the influence of [the] general interest in a concrete problem will therefore often be individuals whose personal interest in that problem stems from a belief that certain concrete circumstances are incompatible with, and threaten, ideal values that they believe in (Weber, 2012[1904]:107).

In other words, in Weber's social science methodology, social analysis begins when a fundamental problem is felt at the level of values. Once a value is perceived as threatened, a reality-based analysis is conducted to determine how any value-driven program can be realized and to evaluate its costs and consequences (Rossides, 1972). From Weber's perspective, the distinctive characteristics of a value-oriented researcher can have a beneficial impact on scientific work. Such a researcher may identify value relationships that might not occur to the average scholar (Bruun, 2007:137). For instance, the nature of an anarchist's beliefs, which exist outside the assumptions and conventions that seem self-evident to others, allows them to grasp fundamental issues underlying legal theory – issues that may never cross the mind of someone who takes these conventions for granted (Weber, 2012:27-28). In this context, the methodological implications of the concepts of personality, vocation, Bildung, and the ethics of responsibility on the nature of the value-laden choice of research problems throughout Max Weber's professional life in 19th-century Germany and the first two decades of the 20th century become apparent.

Although Weber sometimes defines scientific problems purely based on scientific objectives, he nonetheless relies on political values, familial and class values, and an existential commitment to values of freedom and independent action, in selecting and defining his). [, in a passage from her biography of her husband, notes that one of Weber's guiding principles in choosing research materials was the belief that human happiness and well-being are not the primary issues; rather, it is the higher and ultimate

values – such as freedom, dignity, and human honor – that must be attainable for everyone (Weber, 1975 [1926]). In his annual lecture in Freiburg, Weber states, "I am a member of the bourgeois (bürgerlich) classes. I feel myself to be a bourgeois, and I have been brought up to share their views and ideals" (Swedberg and Agevall, 2016:229). Consequently, as a liberal with class awareness, Weber reflected on the effects of capitalism and bureaucratic dominance on the weakening of liberal values, focusing on three central issues: how to protect the necessary conditions for individual freedom in the era of large organizations, especially within the authoritarian political tradition of Germany; how to integrate the working class into the capitalist regime without jeopardizing private property; and how to establish independent political leadership within a parliamentary system and democracy based on popular votes (Beetham, 1974).

In his early career, Weber approached society and politics in Germany and Europe from the perspective of a conservative liberal, advocating for a "strong Germany." His first social research, conducted at the age of twenty-eight at the request of the Social Policy Association, focused on the conditions of agricultural workers in the Elbe region of East Prussia. While other researchers commissioned by the Association examined the issue from the standpoint of employers and landowners, Weber's analysis of the relationships between workers and employers reflected a "national" perspective. He critiqued the seemingly stable political system, military power, the future of German culture, and the role of the Junkers in undermining that system. According to Weber, the large landowners of Eastern Germany no longer served the interests of the nation; instead, they transformed German workers into a proletariat and imported Polish workers, thereby lowering living standards and weakening the military and national power of Eastern Germany for their own benefit. Based on this analysis, Weber proposed closing the eastern borders and addressing the needs of workers (Dibble, 1968). Accordingly, as Weber's professional trajectory itself demonstrates, the founding of sociology and the social sciences upon the categories of personality, vocation, Bildung, and the ethics of responsibility – all structured around the principle of value-free science – inevitably renders the selection of scientific problems inherently value-laden. In this view, objectivity within the social sciences no longer signifies "moral indifference." It does not imply that the social scientist must select and formulate research topics with "indifference" toward personal or societal ideals and values. As Weber emphasizes: "Lack of conviction has no inherent affinity whatsoever to scientific objectivity" (Weber, 2012[1904]: 106).

References

- Agevall, O. (1999) A Science of Unique Events, Max Weber's Methodology of the Cultural Sciences. Uppsala University, Sweden.
- Albrow, M. (1990) Max Weber's Construction of Social Theory, St. Martin's Press New York.
- Beetham, D. (1974) Max Weber and the Theory of Modern Politics. London: Allen & Unwin.
- Berman, M. (1988) All That Is Welts into Air, The Experience of Modernity, Penguin books.
- Bruun, H. H. (2007) Science, Values and Politics in Max Weber's Methodology, London: Ashgate.
- Burger, T. (1987) Max Weber's Theory of Concept formation. Expanded edition. Durham: Duke University Press.
- Dibble, V. K. (1968) "Social Science and Political Commitments in the young Max Weber", *European Journal of Sociology*, 9(1): 92–110. https://doi.org/10.1017/s000397560000165x
- Drysdale, J. (1996) "How are Social-Scientific Concepts Formed? A Reconstruction of Max Weber's Theory of Concept Formation", *Sociological Theory*, 14(1): 71–88. https://doi.org/10.2307/202153
- Eliaeson, S. (1990) "Max Weber and His Critics: Critical Theory's Reception of Neo-Kantian Methodology", *International Journal of Politics, Culture, and Society*, 3(4): 513–537. Published by: Springer. https://doi.org/10.1007/bf01384974
- Farris, S. R. (2013) Max Weber's Theory of Personality Individuation, Politics and Orientalism in the Sociology of Religion, Leiden, Boston. https://doi.org/10.1163/9789004254091
- Freund, J. (1968) *The Sociology of Max Weber, Trans by Mary Ilford*, London: Allen Lane; Penguin Press.
- Gadamer, H. G. (1975) Truth and Method, Sheed and Ward, London.
- Gane, N. (2002) Max Weber and Postmodern Theory: Rationalization versus Re-enchantment, New York: Palgrave. https://doi.org/10.2307/1556523
- Giddens, A. (1972) Politics and Sociology in the Thought of Max Weber, Polity Press.
- Goddard, D. (1973) "Max Weber and the Objectivity of Social Science", *History and Theory*, 12(1): 1–22, Wesleyan University. https://doi.org/10.2307/2504691
- Hekman, S. J. (1994) "Weber and post-positivist social theory." In A. Horowitz & T. Maley (Eds.), *The barbarism of reason: Max Weber and the twilight of enlightenment*, (pp. 267–286). Toronto, Canada: University of Toronto Press. https://doi.org/10.1177/004839319702700407
- Hennis, W, U. Brisson & R. Brisson. (1994) "The Meaning of "Wertfreiheit" on the Background and Motives of Max Weber's "Postulate", *Sociological Theory*, 12(2) https://doi.org/10.2307/201858
- Kieran, A. (2004) Max Weber: A Critical Introduction, Pluto P Press London.
- Kant, I. (1999 [1788]) Critique of Pure Reason, Translated and edited by Paul Guy-

- er and Allen W. Wood. Cambridge University Press. https://doi.org/10.1017/s1369415400000418
- Kant, I. (1996 [1771]) Critique of Practical Reason, (Cambridge Texts in the History of Philosophy) 2nd Edition, by Mary Gregory. Cambridge University Press. https:// doi.org/10.1017/s001221731500102x
- Lassman, P. (1980) "Value-Relations and General Theory: Parsons' Critique of Weber", *Zeitschrift für Soziologie*, 9(1) Schwerpunktheft: Talcott Parsons (1902–1979), pp. 100–111, Published by: Lucius & Lucius Verlagsgesellschaft mbh. https://doi.org/10.1515/zfsoz-1980-0105
- Lowith, K. (2003) Max Weber and Karl Marx, Series: Routledge Classics in Sociology, Editor: Bryan S. Turner, Publisher: Routledge. https://doi.org/10.4324/9780203422229
- Merton, R, K (1959) Notes on problem-finding in sociology, Sociology today. Problems and prospects. New York.
- Mommsen, W. J. (1989) *The Political and Social Theory of Max Weber*, The University of Chicago Press.
- Myers, P.. (2004) "Max Weber: Education as Academic and Political Calling". *German Studies Review*, 27(2): 269–288, The Johns Hopkins University Press. https://doi.org/10.2307/1433082
- Nietzsche, F. (1887/1967) *On the Genealogy of Morals*. Translated by Kaufmann, Walter. New York: Vintage Books.
- Oakes, G. (1982) "Methodological Ambivalence: The Case of Max Weber", *Social Research*, 49(3): 589–615, Published by: The New School
- Oakes, G. (1988) "Reading Weber's "Wissenschaftslehre: Remarks on the Recent German Literature", e: *Sociological Forum*, 3(2): 301–307, Published by: Springer. https://doi.org/10.1007/bf01115299
- Oakes, G. (1990) Weber and Rikert: Concept Formation in the Cultural Sciences, Massachusetts: The MIT Press.
- Parkin, F. (2002) Max Weber, Edited by: Peter Hamilton, Routledge.
- Parsons, T. (1949) "Natural and Social Science", in "The Structure of Social Action" (Glencoe, III: The Free Press), 591–601.
- Rex, J. (1977) "Value-Relevance, Scientific Laws, and Ideal Types: The Sociological Methodology of Max Weber", Source: *The Canadian Journal of Sociology / Cahiers Canadians de sociology*, 2(2): 151–166. https://doi.org/10.2307/3340569
- Ringer, F. (1997) *Max Weber's methodology. The unification of the cultural and social sciences.* Cambridge, MA/London: Harvard University Press. https://doi.org/10.1007/s11577-003-0012-x
- Root, M. (1993) Philosophy of Social Science: The Methods, Ideals and Politics of Social Inquiry. Wiley-Blackwell.
- Rosenberg, M. M. (2016) "The conceptual articulation of the reality of life: Max Weber's theoretical constitution of sociological ideal types", *Journal of Classical Sociology*, 16(1): 84–101. https://doi.org/10.1177/1468795x15574414
- Rossides, D. W. (1972) *The Legacy of Max Weber: A Non-Metaphysical Politics*, 42(3-4): 183–210. https://doi.org/10.1111/j.1475-682x.1972.tb00236.x

- Roth, G. & Schluchter, W. (1984) *Max Weber's vision of History, Ethics and Methods*, University of California Press. https://doi.org/10.1525/9780520324107
- Salomon, A. (1934) Max Weber's Methodology, *Social Research*, 1(2): 147–168, Published by: The New School.
- Segre, S. (2004) "Understanding Lived Experience: Max Weber's Intellectual Relationship to Simmel, Husserl, James, Starbuck, and Jaspers", *Max Weber Studies*, 4(1): 77–99. https://doi.org/10.15543/mws/2004/1/6
- Swedberg R. & O. Agevall. (2016) *The Max Weber Dictionary: Key Words and Central Concepts*, Second Edition, Stanford University Press. https://doi.org/10.1515/9781503600225
- Turner, B. S. (2003) *Preface to the new edition of Karl Löwith's, Max Weber and Karl Marx*, Series: Routledge Classics in Sociology, Publisher: Routledge.
- Weber, M. (1975 [1926]) *Max Weber: A Biography*. Translated by Harry Zohn. New York: Wiley. https://doi.org/10.1093/sf/55.1.198
- Weber, M. (1998 [1919]) *The Profession and Vocation of Politics, in Weber Political Writings*, edited by Raymond Guess and Quintin Skinnier, Cambridge.
- Weber, M. (2001 [1930]) *The Protestant Ethic and the Spirit of Capitalism*, T. Parsons (trans.), A. Giddens (intro), London: Routledge.
- Weber, M. (2012 [1902-1903]) Note marked "Rickert's 'values" (The "Nervi fragment"), in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Weber, M. (2012 [1904]) "Objectivity of knowledge in Social Science and Social Policy", in *Max Weber on the Methodology of the Social Sciences*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.4324/9780203804698
- Weber, M. (2012 [1905]) "Roscher and Knies. The Logical Problems of Historical Economics", in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Weber, M. (2012 [1906a]) The Meaning of "value freedom" in the Sociological and Economic science, in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Weber, M. (2012 [1906b]) "Critical Studies in the Logic of the Cultural Sciences: A Critique of Eduard Meyer's Methodological Views", in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Weber, M. (2012 [1906c]) "Critical Studies in the Logic of the Cultural Sciences: Objective possibility and adequate causation in the historical causal approach", in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446

- Weber, M. (2012 [1906d]) "Letter to Friedrich Gottl 29 March 1906", in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Weber, M. (2012 [1910]) "German Sociological Society, General Meeting, Frankfurt 1910", in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Weber, M. (2012 [1917]) "Science as a profession and Vocation", in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Weber, M. (2012 [1902-1903]) Note Marked "New sciences", c., in *Max Weber: Collected methodological writings*, edited by Hans Henrik Bruun and Sam Whimster, Translated by Hans Henrik Bruun, London and New York, Routledge. https://doi.org/10.1017/s0003975612000446
- Whimster, S. (2007) *Understanding Weber*, London and New York: Routledge.
- Zijderveld, A. C. (2006) Rickert's Relevance, The Ontological Nature and Epistemological Functions of Values. Brill, Leiden, Boston. https://doi.org/10.1163/9789047409793_009
- Zuckerman, H. (1978) *Theory Choice and Problem Choice in Science, sociological inquiry*, Blackwell, pub. https://doi.org/10.1111/j.1475-682x.1978.tb00819.x

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