

Mixed Methods in Social Scientific Research

Kyle James McNew

Thesis Project

April 22nd, 2022

Dr. Andrew Russo, director

A thesis submitted to
the Department of Humanities and Philosophy
in partial satisfaction of the requirements for the degree of
Master of Arts in Liberal Studies
Jackson College of Graduate Studies
University of Central Oklahoma

Mixed Methods in Social Scientific Research

Mixed Methods in Social Scientific Research

Thesis Title

Kyle James McNew

Author's Name

04/22/2022

Date

Jackson College of Graduate Studies at the University of Central Oklahoma

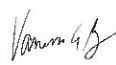
A THESIS APPROVED FOR

Kyle James McNew

By

Andrew Russo Digitally signed by Andrew Russo
Date: 2022.04.25 11:46:52 -05'00'

Committee Chairperson

 Digitally signed by Vanessa Bentley
Date: 2022.04.26 08:47:54 -05'00'

Committee Member



Committee Member

Committee Member

Abstract

The following paper maintains that a mixed methods approach produces explanations more likely to reveal causation while maintaining generalizability. In this paper, I attempt to illustrate that both methodologies and the explanations produced by each are essential to sociology. The quantitative methods employed by holists tend to produce generalizable explanations. The qualitative methods employed by individualists tend to produce explanations that reveal causation. Methodological holists are correct that explanations need to be generalizable, but the need for generalizability does not render causality irrelevant. Methodological individualists are correct that explanations need to reveal causality, but the need to reveal causality does not render generalizability irrelevant. Holism and individualism are not mutually exclusive. On the contrary, sociological explanations can benefit from the quantitative and qualitative methods employed by each methodological approach.

Table of Contents

Introduction	Page 4
The Preliminary Section	Page 7
Justifications for the Mixed Methods Approach	Page 19
Social Terminology	Page 38
Conclusion	Page 44
References	Page 47

Introduction

Sociological research and theory can be approached through one of three major methodological approaches:

1. Methodological holism primarily employs quantitative methods. Quantitative methods in sociology rely heavily on the statistical analysis of large data sets. The explanations produced by quantitative methods tend to be generalizable, meaning the explanations hold across the population being studied.
2. Methodological individualism primarily employs qualitative methods. Qualitative methods in sociology include focus groups, interviews, or any method in which a researcher is deriving data conversationally. The explanations produced by qualitative methods tend to reveal causation.
3. Mixed methods employ both quantitative and qualitative methods. A mixed methodologist might, for example, statistically analyze a group using census information and then go out into the world and conduct interviews with individuals from that group. The explanations produced by mixed methods will be more likely to reveal causation while maintaining generalizability.

The thesis of this paper is that mixed methods are more likely to reveal causation while maintaining generalizability. The qualitative methods employed by individualists are generally better suited to discovering causality since qualitative research conversationally engages with the population being studied. However, qualitative methods are less likely to produce generalizable

explanations since conversations are not typically generalizable. The quantitative methods employed by methodological holists are generally better suited to producing generalizable explanations since they deal in quantifiable data. For example, do you believe in X?; yes, no, or maybe. This is quantifiable since some respondents will choose each option. Since mixed methods employ qualitative and quantitative methods, they are more likely to produce explanations that reveal causation while maintaining generalizability.

In this paper, I attempt to illustrate that both methodologies and the explanations produced by each are essential to sociology. Methodological holists are correct that explanations need to be generalizable, but the need for generalizability does not render causality irrelevant. Methodological individualists are correct that explanations need to reveal causality, but the need to reveal causality does not render generalizability irrelevant. Further, holism and individualism are not mutually exclusive. On the contrary, sociological explanations can benefit from the quantitative and qualitative methods employed by each methodological approach.

The following paper is divided into four sections. Section one of this paper is titled *The preliminary section*. This section introduces the reader to methodological individualism, holism, and mixed methods. In this section, I first give the reader a brief history and extensive explanation of methodological individualism and holism. The two presentations contain the perspectives and views of those who defend the methodologies. It is important that the views offered in the preliminary not be conflated with the author's views. The preliminary is a presentation of the two approaches. After presenting the two approaches, I present the mixed-methods approach as it applies to sociological research. The preliminary section concludes with a brief section concerning the explanations produced by methodological individualism, methodological holism, and the mixed methods approach.

Section two of this paper is titled, *Justifications for the mixed-methods approach*. This section aims to provide justifications for the use of mixed methods. This section does contain the views of the author. The section is divided into three justifications. Justification one explores the mutual compatibility between statistical analysis and qualitative methods. Justification two focuses on qualifying and stabilizing terminology used in sociological explanations. Justification three focuses on how a mixed-methods approach can unite methods and help create homogeneity amongst multiple scientific disciplines. The justifications mentioned employ and discuss multiple philosophical arguments regarding methodological individualism or methodological holism. The justifications show the compatibility between the approaches and show that the either/or dichotomy hinders sociological research.

Section three of this paper is titled *Social Terminology*. This section does contain the views of the author. This section discusses the role of the mixed methods approach concerning terminology in sociological research. The section is crucial since terminology plays a large role in sociological research, and the terms used in sociological research create problems for the discipline. This section will help better clarify the reasons for defending a mixed-methods approach to research and illustrate how this approach can strengthen the terminology employed in sociological research.

Section four of this paper is titled *Conclusion* and will serve as a conclusion to the paper. This section will recap the information covered throughout the paper briefly. This section will restate the thesis. Further, this section will argue that the information presented within this paper supports the paper's thesis.

The Preliminary Section

Methodological Individualism

Methodological individualism is all about individuals, not collectivities. Methodological individualism maintains that social entities are not greater than the sum of their parts, nor do they act independently of the individuals comprising them. Therefore, causality does not extend past the individuals or parts of the whole. Thus, any complete explanation concerning social entities, social phenomena, or the social world must make some reference to individuals (Kincaid, 1993; Jones, 1996; Zahle & Colin, 2012). The references made to individuals, according to methodological individualists, includes but are not limited to beliefs, opinions, and actions. Individual beliefs, opinions, and actions can reveal the causation behind claims regarding social collectivities and social phenomena in sociological explanations. Harold Kincaid mentions three different (or disjunctive) claims or arguments made by methodological individualists (1993):

1. A complete explanation requires reference solely to individuals. Therefore, holistic explanations (explanations that reference social entities and phenomena) are dispensable in the social sciences.

OR

2. A complete explanation requires some reference to individuals. Therefore, neither methodological individualist nor methodologically holistic explanations are dispensable.

OR

3. Purely individualist explanations suffice to explain completely, and theorists can dispense with holistic explanations.

The three different (or disjunctive) claims or arguments of individualists have one thing in common: at some level or in some way, they reference individual opinions, beliefs, or actions. Further, the three claims or arguments refute that purely holistic explanations can, on their own, explain the social world. Thus, methodological individualists maintain that methodologically individualist explanations are indispensable in sociology.

Methodological individualism in the social sciences began with the work of Max Weber and focused on subjective human action and meaning (Heath, 2020; McIntosh, 1977). Weber was a major proponent of methodologically individualist explanations (Ritzer & Gindoff, 1992). He argued against the notion that collectivities could have beliefs and desires of their own. Individuals may use language alluding to collectivities, “our church believes in the power of speaking in tongues,” but the church itself can hold no such beliefs or desires, and if there are no beliefs or desires upon which to act, there are no actions. For example, only the individuals who attend the church can believe in the power of speaking in tongues. He argued that statistical explanations, in sociology, must refer to subjective meaning if they are to be useful. Sociologists need to know what speaking in tongues means to those who believe in its power and how the employment of this meaning translates into other meanings and actions. The argument revolves around his belief that “subjective understanding is the specific characteristic of sociological knowledge” and that other forms of explanation belong to disciplines other than sociology (Weber, 1994: 240). Weber’s work and commitment to the importance of subjective meanings was the first significant shift away from the holistic tradition of Durkheimian sociology.

Weber argued that collectivities could not possess intentional states existing separately from the individuals that comprised the collectivity (List & Spiekermann, 2013). A collectivity, according to individualists, is not greater than the sum of its parts, nor does it have causal powers.

Weber wrote: “for sociological purposes, there is no such thing as a collective personality which ‘acts ‘... references made to “nation,” “state,” “family,” or other similar collectivities only [refer to] a certain kind of development of actual or possible social actions of individual persons” (Weber, 1994:239). For example, Alexandria Ocasio-Cortez and Joe Biden are members of the Democratic party, although their beliefs and policy stances are significantly disparate. Joe has been politically attacked for being in the same party as Alexandria and vice versa. Joe and Alexandria have publicly distanced themselves from each other’s beliefs, desires, and policy stances.

Concerning the above example, the individualist would claim that Alexandria and Joe have beliefs, desires, and personalities that act; the Democratic party does not. Any attempt to combine these two personalities into a collective whole is simply an attempt at convenience, and any attempt to attribute causal powers to such a collectivity is misguided, according to the individualist. Joe’s actions, beliefs, and desires affect the social world, as do Alexandria’s beliefs, desires, and actions. The causal powers lie with Alexandria and Joe and do not extend into the collective personality denoted by the term Democratic party. The Democratic party is not what acts. Joe, Alexandria, and other individuals are what act. Thus, subjective meanings and individual actions are indispensable in sociological explanations.

The focus on subjectivity and individual actions causes the individualist to view quantitative methods skeptically. If causal power lies with Joe and Alexandria, not the Democratic party, statistical explanations employing the term Democratic party might be guilty of making up people. I can find correlations that support my employment of the term Democrat, and I can find correlations that refute it. According to the individualist, I can find correlations that support the employment of any term, and this is precisely the issue.

Suppose I want to understand support for a single-payer healthcare system, and I dispensed surveys throughout the nation. In this scenario, correlational research would likely indicate that New Yorkers, Democrats, and younger adults are more likely to support a single-health payer system than Texans, republicans, and seniors. According to the individualist, these correlations produce poor explanations. Joe does not support a single-payer system, but Alexandria does, so how does being a Democrat explain support? Midland, Texas, residents do not support a single-payer system, but residents of Austin, Texas, likely do, so how does being a Texan explain support? It may be convenient to group people together, even when the parameters for doing so are as arbitrary as state lines, but being from Texas does not cause or explain support for a single-payer system. According to the individualist position, correlational research that lacks causation is insufficient. I can correlate the daily consumption of bananas to the likelihood that someone will commit murder or have twins; thus, a correlation without a cause is a problem for the individualist.

According to Weber: “Statistical uniformities... constitute sociological generalizations only when they can be regarded as manifestations of the understandable subjective meaning of a course of social action” (Weber, 1994:237). Weber’s statement is concerned with causes, not correlations. If the residents of Texas tell me why being a Texan means not supporting a single-payer system; if they explain their subjective interpretation of why identifying as a Texan leads them to vote against a single-payer system, then I have a cause. The cause, however, will be a statement, not a number; it will be the product of an interview, not an equation in SPSS. This is the crucial point the individualist wants to make, that qualitative methodologies are better suited to identifying causes, and causes are essential to explanation. Thus, methodological individualism is indispensable.

In closing part one of the preliminary section, we can note three things about methodological individualism. It should be noted that individualists are not a monolithic group:

1. The whole is not greater than the sum of the parts. Collectivities do not have “personalities that act,” only individuals described by the term denoting the collectivity have beliefs, desires, and personalities that act. Therefore, sociological explanations must reference individuals.
2. Correlations lacking causation are problematic and produce insufficient explanations.
3. Evidence for the causation of social level phenomena can only be found in the subjective meanings, beliefs, desires, and actions of individuals.

Methodological Holism

Methodological holism is all about collectivities, not individuals. Methodological holism maintains that social entities are greater than the sum of their parts and can act independently of the individuals that comprise them. Therefore, causality does extend past the individuals or parts of the whole. Thus, according to holists, any complete explanation concerning social entities, social phenomena, or the social world must refer to collectivities. The references made to collectivities, according to methodological holists, includes but are not limited to nations, states, and families. Social collectivities and social phenomena can be evidence for claims regarding social collectivities and social phenomena in sociological explanations. Like their individualist counterparts, methodological holists are not a monolithic group and share various beliefs

concerning the role of their methodology (Agassi, 1960; Kincaid, 2015; Ritzer & Gindoff, 1992). Kincaid mentions four different (or disjunctive) claims or arguments made by methodological holists (2015):

1. A complete explanation requires reference solely to social-level collectivities and phenomena. Therefore, individualistic explanations (explanations that reference individuals) are dispensable.

OR

2. A complete explanation requires some reference to social-level collectivities and phenomena. Therefore, neither holistic nor individualist explanations are dispensable.

OR

3. Purely holistic explanations suffice to explain completely, and theorists can dispense with individualist explanations.

OR

4. Individualist explanations are unnecessary, counter-productive, and lie outside of the parameters of sociology and thus, should be dispensed.

The four different (or disjunctive) claims or arguments of holists have one thing in common: at some level or in some way, they reference social collectivities and social phenomena. Further, the four claims or arguments refute that purely individualist explanations can, on their own, explain the social world. Thus, methodological holists maintain that methodologically holistic explanations are indispensable in sociology (Zahle, 2016).

Methodological holism is primarily derived from the works of Émile Durkheim, who was heavily influenced by the philosopher and father of sociology Auguste Comte (Ritzer & Gindoff, 1992; List & Spikermann, 2013). Comte introduced the positivist philosophy. The positivist philosophy would inspire the logical positivists and their deductive approach to acquiring and categorizing knowledge. However, while Comte and the logical positivists strove for unification, their definitions of unification differed. The logical positivists sought a singular set of laws and statements to explain all phenomena, a scientific structure that reduced one discipline to another. Comte sought homogeneity among the sciences and unity of methods for exploring phenomena. In “Introduction to Positive Philosophy” (1988: 32), Comte states:

“The object of this course is by no means to present all-natural phenomena as being at bottom identical. The scientific product does not need to be unified; it is sufficient that it be homogenous. It is, therefore, from the double standpoint of unity of method and homogeneity of scientific propositions that the different classes of positive theories will be considered.”

One class of positive theories, according to Comte, was social physics. Durkheim would transform social physics into modern sociology; thus, he is often referred to as the first academic sociologist. Durkheim, like Comte, refused reducibility and maintained a homogenous scientific outlook. Durkheim’s outlook on the structure of science and sociology led to his principle of *sui generis*, a principle that is paramount to the methodological holist approach.

The principle of *sui generis* is the previously mentioned idea that the whole is greater than the sum of the parts, stated as a principle. It may infuriate philosophers that such an idea is considered a principle, but Durkheim got away with it, and so in sociology, *sui generis* is regarded as a principle. The implication of this principle in sociology is that social level

collectivities and phenomena are not reducible to individual beliefs, desires, and actions. Since the whole is greater than the sum of the parts, the whole is not reducible to the parts. Society is composed of individuals, but society is not reducible to individuals' behaviors, psychology, or biology.

Zahle (2016) notes that Durkheim believed the causes of a social phenomenon should be sought amongst the social collectivities and social phenomena preceding the phenomenon. Thus, a reference to individuals was unnecessary. If Oklahoma experiences an increase in registered Democrats and increased support for a single-payer system follows, then being a Democrat increases the likelihood that you will support a single-payer system. Individual beliefs, desires, and actions are irrelevant to the correlation, and the correlation can stand independently. The power of the correlation is that it is generalizable; whether or not being a democrat is the actual cause of the correlation is secondary.

The focus on social collectivities and social phenomena cause the holist to view qualitative methods skeptically. If the result is generalizable and holds in most cases, what is the point of employing qualitative methods? What do they add to the explanation, and might they, in some cases, be counter-productive? The methodological holist would argue that an interview with Joe and Alexandria would not help me understand the correlation between an increase in registered democrats and an increase in support for a single-payer system. The point is that correlations allow us to find patterns not viewable from the individual level. Thus methodological holism is indispensable.

In closing part two of the preliminary section, we can note three things about methodological holism. It should be noted that holists are not a monolithic group:

1. The whole is greater than the sum of the parts. Thus the whole is not reducible to the parts. I.e., conducting interviews with Joe and Alexandria will never help us understand the abovementioned correlation.
2. Correlations can lack causation and still provide sufficient explanations because they produce generalizable explanations that hold.
3. The causes of social phenomena can be found in social collectivities and other preceding social phenomena. Individual and qualitative level data is not necessary and can mislead research.

Mixed Methods

Mixed methods refer to combining holistic and individualist methodologies, or more specifically, quantitative and qualitative methods. In the above sections, we have talked about causation and generalizability. Methodological individualism seeks causation, and holism seeks out generalizable correlations. Rather than arguing which is best, we could and should seek explanations that reveal causation while maintaining generalizability. This is the goal of mixed methods research.

Causation, generalizability, individualism, and holism are great philosophical terms, but they are too abstract and broad-reaching for sociological research. In order to arrive at

explanations that reveal causation while maintaining generalizability, we first need to ensure that sociological research produces conclusions that are both valid and reliable. The way to ensure validity and reliability is to combine quantitative and qualitative research methods. As mentioned earlier, holists perform quantitative research and individualist perform qualitative research, so while we are straying slightly from our original terminology, things should remain consistent.

Methodological individualism implements qualitative methods. Qualitative methods employ interviews, focus groups, and similar methods of extracting information that focuses on individual participants and the subjective meanings they hold and employ to develop conclusions. A conclusion is valid if it measures what it claims to be measuring (Steward, 2020). For example, does a survey claiming to measure fear- measure fear? Qualitative methods tend to be valid as they are produced by direct and often extensive interaction with participants. The downfall of this approach is that the results produced under this class of methods are not very generalizable. Our interviews with Joe and Alexandria will not map onto Democrats nationwide significantly since two in-depth interviews will never be identical or reproducible. In order to achieve reliability, sociologists need to introduce holistic methodologies into their research programs.

Methodological holism implements quantitative methods. Quantitative methods employ surveys, statistics derived from census information and other demographic programs, and similar extraction methods to develop conclusions. A conclusion is reliable if its results can be reproduced (Steward, 2020). Quantitative methods tend to be reliable since the information deals with population trends and large numbers of participants. The results from a survey dispensed to a stratified population sample will likely be reliable and generalizable if the stratified population sample is large enough. Thus, the results of the surveys are reliable. The downfall of this

approach is that the results produced within this class of methods are not always valid. The decision to register as a Democrat and the decision to support a single-payer system may both be influenced by one's religious preference and have nothing to do with political preference. The correlation may be generalizable, but the inferences drawn from such correlations may prove invalid. For example, if I infer that political preference, not religious preference, is central to explaining support for a single-payer system, I will be wrong if religious preference dictates both. Invalid inferences such as these are a symptom of creating correlations without causation.

The mixing of methods in sociology is crucial for research because sociologists are concerned with delivering valid and reliable conclusions. In producing reliable and valid conclusions, mixed methods provide explanations that are more likely to reveal causation while maintaining generalizability. For example, researchers can conduct surveys and use the results to build large-scale correlational patterns, like those between registration rates into the Democratic party and support for a single-payer healthcare system. Additionally, researchers could conduct open-ended interviews and focus groups to validate the correlational pattern with rich descriptions derived from the interviews and focus groups. Another common practice is for researchers to conduct focus groups and then use the information gathered to produce surveys for the larger population. The mixing of methods is not complicated, although it does require extra time and funding. Despite the additional cost and time, it is widely recognized that mixed methods can increase the reliability and validity of research results, producing explanations that are more likely to reveal causation while maintaining generalizability.

The above sections of the preliminary are meant to present an accurate presentation of methodological holism, methodological individualism, and mixed methods. Methodologically holistic explanations suffer from validity problems, and this failure is a symptom of their

tendency to produce correlations that lack causation. Methodologically individualist explanations suffer from problems of reliability and generalizability (Steward, 2020). Luckily each of these failures can be rectified by adopting the methods of the other methodology. Where individualism fails, holism excels, and vice versa. In the following, *Justifications for the mixed-methods approach* section, we will discuss further arguments and examples for the employment of mixed methods. Each justification and its examples will reaffirm the thesis that mixed methods produce explanations that are more likely to reveal causation while maintaining generalizability.

Justifications for the mixed-methods approach

Justification One: Mutual Compatibility between statistical analysis and qualitative methods

Justification one concerns the compatibility between statistical analysis (quantitative methods) and qualitative methods. This section contains three arguments. The general strategy of these arguments is to offer an argument in favor of methodological holism and the statistical methods it employs and then show how qualitative methods can expand statistical research and help produce explanations that are more likely to reveal causation while maintaining generalizability.

Argument one is the argument from social phenomena as causes; essentially, this argument claims that social collectivities and social phenomena can be sufficient explanations for social phenomena. Argument two concerns individual behavior and social terms; essentially, this argument claims that social terms are often or always sufficient explanations for individual behavior. Argument three concerns statistical methods and pragmatic concerns; essentially, this argument claims that quantitative methods produce more generalizable explanations and that generalizable explanations are essential to the progress of sociology and the social sciences.

Justification One part one: Social Phenomena as Causes.

Social Phenomena as Causes presents the holist argument that correlation research can produce complete or sufficient explanations; thus, qualitative methodologies are unnecessary. Whether an explanation is considered complete or sufficient depends on the specific goals of the research being undertaken. I counter this argument by showing how qualitative methods can help researchers identify spurious (illegitimate or invalid) correlations and non-causal variables.

In agreement with Durkheim, methodological holists maintain that social collectivities and social phenomena cause social phenomena and affect social collectivities (Zahle, 2016). The evidence for such conclusions in sociological research is generally correlational. For example, we know that crime rates increase during recessions because the two are statistically correlated. Thus, we often hear or read that recessions (social phenomena 1) cause increased crime (social phenomena 2). According to methodological holists, this correlational relationship maintains regardless of the individual causes of crimes, the individual crimes, or the individual efforts to prevent crime, all of which can be revealed through the employment of qualitative methodologies. This correlation's historical consistency leads holistic methodologists to conclude that the correlation is causative, and thus a recession is a sufficient explanation for an increased crime rate. Methodological individualists question how a correlation can serve as evidence of causation. In the absence of knowledge about individual reasons for committing crimes, individual crimes, and individual efforts to prevent crime, how does one know the correlation is not spurious (Kincaid, 2015).

Most methodological individualists likely believe the two social phenomena are correlated. The concern of the individualists is more epistemological. The word "cause" rings in their ear as they envision all of the policy decisions that may be derived from a belief that the correlation is causative. From the individualist's perspective, no evidence of causation has been presented; quantitative researchers have just thrown a bunch of numbers into SPSS and used the numbers to spit out flashy, eye-catching journal articles. The individualist maintains that we can only know the correlation is causative if we qualitatively assess those who committed crimes during a recession, and they reference variables related to recessions in conjunction with their decision to engage in criminal activity.

The crime rate never increases because of a single variable, and the correlation between crime and multiple variables likely rise together. The correlation between poverty and crime, mental illness and crime, and similar correlatives likely strengthen in conjunction with the correlation between a recession and crime. In the absence of qualitative methods, a researcher may not be able to rule out alternative correlations, and the alternatives may be crucial to the social world. For example, what if crime caused the recession, or mental illness is the underlying cause of both the recession and the increased crime rate? If the alternatives happen to be the case, but policy decisions are informed by recessions being the explanation for increased crime, we could end up with counter-productive crime prevention methods. Thus, the methodological individualist maintains that causative correlations are crucial to sociological research, and reiterate that correlations, even historically consistent correlations, do not, on their own, prove causation.

The methodological individualist seeks to qualify correlational research that produces holistic explanations with multiple accounts of individual-level phenomena, and there is no good argument for denying them the opportunity to conduct such research. The correlation between recessions and increased crime is generalizable, but it does not reveal causation. Correlations do not equate with causation because they tell us how something is, not why something is. In providing qualitative backing to statistical analysis, the mixed methods approach can help reveal the causes behind this correlation. I maintain that quantitative and qualitative methodologies are mutually compatible. The explanations and conclusions produced by each methodology ought to complement one another, and if they do not, there is a problem with the research, not the methodology. A conflict between quantitative and qualitative methods concerning a particular research problem in statistics should indicate an issue with the research. The mixed-methods approach allows qualitative methodologies to check statistical correlations, thus ensuring high-

quality research and explanations that are more likely to reveal causation while maintaining generalizability. Thus, the argument from social causes as phenomena (in defense of methodological holism) does not negate the potential contribution of additional methods derived from the individualist methodology. Statistical analysis and qualitative methods are mutually compatible, not mutually exclusive. Justification one (mutual compatibility) is likewise applicable to the holistic argument that individual behavior can only be explained in social terms.

Justification One part two: Individual behavior and social terms.

Individual behavior and social terms present the holist argument that social terms (such as Democrat or Oklahoman) are often the best explanation for individual behavior. Thus qualitative methodologies are unnecessary. I counter this argument by showing how qualitative methods can help holistic researchers better explain and understand individual behavior.

Strict methodological holists maintain that social terms are the only way to explain various individual behaviors. The argument stems from human beings being subjected to social norms and responding to social norms (Jones, 1996). For example, I hold the door open for others because such an action is a social norm in Oklahoma. I was born and raised in Oklahoma and have internalized many of its social norms. Methodological holists cite Durkheim's principle of *sui generis* to explain my predisposition to hold the door open for others. The whole is greater than the sum of the parts, and it is the whole that I internalize and express when adhering to social norms such as holding the door open for others.

The argument that social terms are the only or best way to explain various individual behaviors implies that individuals merely respond and react to social stimuli. The implication

bypasses any process involving interpretation and interaction with stimuli before responding. Social norms, admittedly, affect and explain our behavior to a degree, but this argument, like most of the arguments from Durkheim, implies that social norms alone suffice as an explanation for behavior. The explanation is generalizable, but according to the individualist, the explanation is problematic. The explanation is problematic because, like most of Durkheim's work, it is based on correlational evidence but implies causation.

The methodological individualist is quick to point out that a social norm is one of many variables, and isolating a variable in research is problematic since variables are not isolated in the real world (Risjord, 2014: 215). Moreover, it should be obvious that an isolated variable can never serve as a sufficient explanation for human behavior. Social norms may influence individual behavior, but terms denoting the social aspect of individual behavior may not produce the best explanation of individual behavior. Social norms are generalizable but unlikely to produce complete or sufficient explanations of behavior since behavior is obviously not predicated solely on social norms. If there was little to no variation in individual behavior and individuals were unlikely to stray from social norms, then social norms may serve as sufficient explanations of individual behavior. However, this is not the case. For example, Billy may view holding the door open for others as an honorable act because of the social norm, but this does not mean he will always feel like doing the honorable thing. The argument that social norms sufficiently explain individual behavior only makes sense if you believe prevailing social norms significantly influence individuals and social collectivities.

Once again, we are meeting a generalizable holistic explanation derived from correlational research and an individualist questioning the use of correlations that do not account for causation. For example, individuals in Oklahoma, on average, hold doors open for others

more often than residents in New York. However, being from Oklahoma does not cause door holding. The idea that a causal relationship exists between geographic location and a propensity to hold doors is unconvincing, even if the two are correlated. Thus, any correlation implying such a cause is problematic for the individualist.

According to the holist, Billy is more likely to hold doors open for others. The holist will argue that when he holds doors open for others, the social norm suffices as an explanation for his behavior. However, the social norm is only one variable, as previously stated. If Billy is in a hurry, he may not hold the door open for others; if he is in a hurry but sees someone struggling, this may entice him to hold the door. The point is that Billy does not automatically hold open doors because the social norms have conditioned him to do so. Billy may decide never to hold doors open for police officers because of his personal history and past experiences. Therefore, while the social norm influences Billy, the social norm is not the sole or even the primary predictor of his individual behavior and is thus not a sufficient explanation for his behavior.

A qualitative researcher may quickly find out that Billy only holds the door open for others under specific circumstances and that the circumstances play a larger role in his behavior than the social norm. Further research may reveal that the social norm consistently provides a poor explanation of individual behavior, regardless of how generalizable the explanation at first appears. Such generalizable explanations fail due to their lack of causal power. The correlation may hold but be useless for explaining individual behavior. However, the generalizability of the social norm should not be dismissed; such explanations are not without their uses. We are searching for explanations that reveal causation while maintaining generalizability, and the social norm provides generalizability. Qualitative methods can improve quantitative explanations, and

quantitative explanations can improve the explanatory conclusions derived strictly from qualitative methods. Thus, both are essential.

Justification One part three: Statistics and pragmatic concerns.

Statistics and pragmatic concerns present the holistic argument regarding the pragmatic strengths of correlational research and the generalizable explanations it produces. Thus, qualitative methodologies are unnecessary. I counter this argument by showing that qualitative methods can and do safeguard such correlations against charges of spuriousness (illegitimacy and invalidity) and data manipulation.

In defense of methodological holism, individualists must admit that while statistical correlations do not prove causation, they do provide useful explanations that maintain in the social world. Recessions are strongly correlated with an increase in crime, and while this does not prove causation, the correlation does hold. The struggle to uncover causation comes at a cost. The deeper we dig into causation, the less generalizable the explanation.

The argument from pragmatic concerns regards methodological holism's ability to better create generalizable explanations and illustrate such explanations' strengths (Jones, 1996). A list of every individual crime, every reason for individual crime, and every crime prevention effort that takes place during all known recessions would be just that, a list. A list is not an explanation of anything. The data must be synthesized if it is to be understood. The amount of time, money, and effort needed to synthesize and produce explanations from such lists assuredly outweigh the resources of any college, non-governmental organization, think tank, or similar organization. We need to collect, comprehend, reduce, and transmit information as a society. Statistics are the

means we use to reach these goals. Statistics are never perfect and are often misleading but understanding the social world would be extremely difficult without statistical analysis.

Researchers, philosophers, and social scientists often discuss the best ways to perform research and the proper methodologies for performing research. Methodological individualists want to reveal causation, which is a worthy goal, but the best methods may not be practical when pressed against a budget and timeline. In conjunction with the arguments from social phenomena as causes and the use of social terms to describe individual behaviors, pragmatic concerns highlight the need for mixed methods.

Quantitative statistical methods categorize and transform endless amounts of research data into understandable and digestible journal articles, statistical tables, and pie charts. Sociology and the social sciences, at this point, could not progress without statistical methods because the amount of sociological data in the world is, to say the least, overwhelming. Quantitative statistical research is, however, far from perfect. List & Spikermann assert that “One cannot mistake spurious (illegitimate or invalid) correlations for explanations” (2013). However, any methodologically holistic researcher would admit that such correlations inevitably find their way into academic journals.

Further than this, we are all aware of the prevalence of data manipulation and its consequences. The qualitative methods employed by methodological individualists can safeguard statistical analysis from creating spurious yet generalizable correlations by going into the social world and qualifying the correlation and the social terms used to denote the categories used in the correlations. Interacting with the population to which the statistics refer is a great way to safeguard a statistical analysis against charges of spuriousness and data manipulation. The primary reason such methods help safeguard is that they reveal or reassert the causation behind

the correlation. Methodological individualism and the qualitative methods employed by individualist researchers are compatible with methodological holism and the statistical methods employed by holistic researchers. Rather than being mutually exclusive, the two can safeguard one another and allow the production of explanations that are more likely to reveal causation while maintaining generalizability.

Justification Two: Qualifying Variables and Stabilizing Definitions

Justification two focuses on qualifying variables and stabilizing the definitions of terms used in sociological research. The two arguments detailed in this section are generally leveled by methodological holists against methodological individualists. Argument one concerns multiply realizable properties and how these properties may be correlated. Argument two concerns emergent properties in sociology. The two arguments presented in this section prove the indispensability of methodological holism but fail to prove that methodological individualism is dispensable. The conclusion of these sections reaffirms the thesis that a mixed methods approach increases the likelihood that sociological explanations will reveal causation while maintaining generalizability.

Justification Two part one: The Multiple Realizability Argument

The Multiply Realizability Argument states that if a whole, being more than the sum of its parts, can be realized through differing individual actions that alone cannot explain the whole, then individualist methodologies are unnecessary. I counter this by arguing that individualist

methodologies provide evidence for holistic explanations and thereby improve holistic explanations.

Previously we discussed the whole being greater than the sum of the parts. The individualist disagrees and wants the parts to be included in any explanation of the whole. Methodological holists contend that some systems and properties cannot be explained in this manner because the parts comprising the whole are too varied (Funkhouser, 2007; Klein, 2013). For example, we can list several variables that may contribute to crime rates in the United States: drug laws, drug abuse, mental health metrics, gun ownership rates, gun laws, police tactics, policing policies, domestic abuse rates, lack of after school programs, education, teen pregnancy, and so on. The endless list of variables is often aggregated together into one metric. Thus, the individual variables that comprise the crime rate are varied, and this is what is meant when philosophers state that a crime rate is multiply realizable.

The concept is crucial to explanation, according to methodological holists, because the variables themselves are unlikely to explain anything when viewed in isolation. For example, drug abuse is defined by drug laws and likely correlated with education, domestic abuse, and so on. According to strict methodological holists, isolating a single variable and investigating it detracts rather than adds to explanation. The multiply realizability argument states that holistic descriptions maintain despite differences in individualist fluctuations (Heath, 2020; Jones, 1996). If Joe and Alexandria drop out of school and start using drugs, it will likely add to an increase in crime, but this minor individualist fluctuation is unlikely to have any significant or recognizable effect on the crime rate. If we focus on this minor fluctuation, research may mislead and overstate the importance of drug use on the overall crime rate. Thus, the holist argues that focusing heavily on individual cases can create fallacies (Heath, 2020).

The concept of multiply realizability is used to justify what methodological holists call the micro-realization robustness argument. Essentially, this argument maintains that if two or more multiply realizable properties or systems are significantly correlated, individualist explanations are unnecessary (List & Spiekermann, 2013). People commit crimes during a recession for a vast variety of reasons, but lists of reasons are not explanations. Methodological holists maintain that holistic explanations such as “recessions lead to increased crime rates” hold regardless of the vast variety of individual reasons contributing to increased crime (Heath, 2020; Jones, 1996).

According to the methodological holist, the varied reasons are unnecessary and may hinder explanation. Knowing that Joe and Alexandria broke into a house during a recession to steal goods that they could then pawn for rent money is useful but not generalizable. The researcher can justify citing this individualist case study in defense of the holistic explanations. However, the fear is that others will conflate the case study with the cause for the correlation between recessions and increased crime rates, even though such case studies are not necessarily generalizable. The holist essentially argues that such case studies are an unnecessary distraction since they are not generalizable. If such case studies inspire further research, we will end up with a list of case studies, and while they may all reveal causation at the individual level, they will not reveal social-level causation or be generalizable. Thus, they hinder explanation. We may reveal causation, but we lose all hope of maintaining generalizability.

The point of disagreement here revolves around the function of case studies. Are they a distraction that can mislead, or do they serve to qualify the variables used in research? The hypothetical case study above provides evidence that poverty, which a recession can induce, can lead to criminal activity. However, it also emphasizes variables such as socioeconomic status

over and above other variables such as race, and this is precisely the problem. Once you start breaking things down into little pieces, you begin to lose the big picture. I am not certain this argument is resolvable since both methodological individualists and holists present strong arguments. I will, however, contend that evidence is always more important than concerns about conflation, especially since any researcher can simply state in their articles, “this case study may serve as evidence for the above correlation, but this evidence is not assumed to be the sole cause for the correlation.”

In closing this brief section, I would like to reiterate that there is nothing wrong with a holistic approach to research that produces explanations such as “recessions lead to increased crime rates.” The arguments from multiply realizability and micro-realization robustness do not make a strong case for dispensing with methodological individualism. Methodological individualism and qualitative methods can provide evidence, reveal causation, and bolster holistic explanations. The fact that an emphasis on qualitative methods and individualist explanations can create fallacies does not mean such emphasis must create fallacies. The role of individualist explanations can easily be explained within each journal article that references their explanations. Thus, the mixed methods approach increases the likelihood of explanations that reveal causation while maintaining generalizability.

Justification Two, part two: The Emergent Property Argument

The Emergent Property Argument states that some social entities and their properties are wholes greater than the sums of their parts. Thus individualist methodologies are unnecessary. I counter this argument by illustrating how individualist methodologies stabilize variables and provide definitions for terms frequently used in sociology.

The emergent property argument maintains that wholes which are greater than the sum of their parts arise from sufficiently complex systems. The whole is considered greater than the sum of its parts when the whole cannot be explained or predicted by reference to the parts (Francescotti, 2007; Prosser, 2012). In such cases, philosophers say the whole has emergent properties because its causal powers exceed that which can be explained by its parts (Shrader, 2010).

Sociologists, especially methodologically holistic sociologists, tend to focus their research on the properties of wholes which are greater than the sum of their parts. The research focus employed tends to imply the existence of wholes and their properties since anything with causal powers must, in some sense of the word, “exist.” The implications are at times stated explicitly and at times stated non-explicitly, yet however they are stated, the implications are a significant source of contention among methodological individualists and holists. Many individualists claim that without a reference to individual-level phenomena, the implication is nothing more than an implication. Other individualists hold that such implications are complete fiction and an affront to the social sciences. Holists respond to such charges by pointing to the predictive power of significant statistical correlations. For example, a holist will argue that there is a significant correlation between being a Democrat and holding pro-choice beliefs. Therefore, the entity “Democrat” does in some sense exist and has causal powers over individuals.

Thus far, this paper has been concerned with generalizability, causation, correlations, and case studies. At this point in the discussion, I will momentarily shift into a related but slightly different direction. The shift is necessary because the argument concerning emergent social entities and their properties is complicated by sociology's dependence on terms with highly unstable definitions. The term emergent property is most commonly associated with biological and physical processes. Biological and physical processes are generally described using terms with stable definitions. For example, water is composed of two hydrogen atoms, one oxygen atom, and a nonpolar covalent bond. Water thus has a stable definition, but such stability is not a feature of terms used in sociology.

For example, the social entity denoted by the term Democrat is highly unstable. Even if we forgive and set aside the fact that there have been multiple political party flips in the United States, the term is still highly unstable. Every day we hear people say, "Democrats think, this, that, or the other," and the variation in positions destabilizes the term Democrat. Values and beliefs associated with the Democratic party vary based on age, race, geographic location, socioeconomic background, and whether or not the democratic party runs the country. Needless to say, the Democratic party is not a monolithic group, and this is precisely the issue for methodological individualists. The individualist wonders how beliefs as disparate as those of Joe and Alexandria can justifiably be aggregated into the same variable. The strict methodological individualist maintains that such aggregations are arbitrary fictions, and their arguments are worth hearing. An individualist would likely argue that since the perspectives of Democrat Joe and Republican Mitt are more closely aligned than Democrat Joe and Democrat Alexandria, the variable Democrat will hinder an explanation's ability to reveal causality. While it may create highly generalizable explanations, the generalizations will be poor.

The variability of beliefs and values held by Democrats destabilizes the variable Democrat, and this instability is why individualists maintain that holists must prove the variable Democrat is not an arbitrary aggregation. If the aggregation is arbitrary, it is not a whole with emergent properties, and methodological individualists maintain that the aggregation is arbitrary. The instability of the variable Democrat is directly related to the instability of the word Democrat. The only definition I can think of for a Democrat that would hold water is a reference to what they are not. A Democrat is not a Republican or an Independent, but this definition is not great since the terms Republican and Independent, like Democrat, are surprisingly difficult to define. The methodological individualist wants to know how methodological holists can justify the employment of variables and terms they cannot define.

The best response to methodological individualist is that employing such variables and terms is effective and pragmatic. Does our human inability to unravel all of the nuances of a whole mean that the whole is non-existent or less than the sum of its parts? In *The Grand Design*, authors Stephen Hawking and Lenard Mlodinow present the idea of effective theories. Effective theories are employed when prediction is impossible (or impractical) due to the complexity and number of variables needed to determine an outcome (Hawking & Mlodinow, 2010). Methodological holists argue similarly. The variable Democrat is effective, and using the variable is justified because unpacking the variable Democrat would lead to an astronomical number of variables and make any prediction or correlation impossible (or impractical).

Auguste Comte posited that social physics (sociology) would be the most complex of all the sciences due to the number of variables involved (Comte, 1988). Right or wrong, all sociologists can agree that innumerable variables complicate social research and innumerable variables are always present. Therefore, even if one believes that certain variables represent

arbitrary aggregations, employing them in sociological explanations is not unreasonable if they are effective.

Sociologists should be able to employ aggregated variables such as democrat, even though such variables may imply the unjustified existence of causal powers. Effective theories are effective. The de-aggregation of a variable such as Democrat in statistical analysis would lead to an astronomical number of variables that would severely impede or make predictions and correlations impossible. That being said, the argument that using such variables is effective is not grounds for dispensing with methodological individualism and the qualitative methods the approach employs. Rather, the argument presents an opportunity for mixed methods. If qualitative methods can help stabilize variables, it would be senseless to dispense with such methods.

In taking their cue from Weber, methodological individualists seek to understand how people construct their worlds from the subjective interpretations and meanings they attach to experiences (Merriam & Tisdell, 2016). Subjective interpretations and meanings are essential because we generally turn to them when we seek out a definition for terms such as Democrat. Why Joe and Alexandria both identify as Democrats has to do with their subjective interpretations of past experiences, and knowledge of this is derived from qualitative, not quantitative, methods.

An open-ended interview or focus group asking: “What does being a Democrat mean to you?” would help build and stabilize the definition of the term democrat and qualify the variable. A holistic researcher seeking to link Democratism to socialism (one social phenomenon to another) would benefit from qualitative research that helps to define Democratism better. If 80% of respondents wrote, “being a democrat means supporting green energy,” then “supporting

green energy” assists in qualifying the definition of a democrat. If “supporting green energy” cues up with defining qualifiers of socialism, then maybe the holistic researcher is on to something. An individualist would have a difficult time arguing against the causal and predictive powers of variables such as Democrat if definitions derived from qualitative work showed consensus because the consensus would decrease the variability of the variable and increase its stability. Factor analysis and other statistical methods can stabilize variables to an extent, but such statistical methods will never be as valid as the methods employed by qualitative researchers.

In closing this section, we acknowledge that neither methodological individualism nor methodological holism are dispensable in sociological explanation. Specific variables derived from words that are largely undefinable, may be emergent, fictional, have or not have causal powers. The argument is secondary to the fact that such variables help produce effective explanations. The explanations produced are generalizable and useful. Thus, methodological holism is indispensable in explanation. However, the indispensability of methodological holism does not equate with the dispensability of methodological individualism. Since such variables are effective, one can decide that ongoing methods seeking to qualify variables and define the terms that denote them are unnecessary, but to do so would only harm the legitimacy of the field and the explanations it produces. Scientists should make every effort to validate their research, and mixed methods are undeniably the best avenue for achieving both validity and reliability. In stabilizing terms and variables, we can come closer to producing explanations that reveal causation while maintaining generalizability.

Justification Three: Unity of Methods and homogeneity.

Justification three focuses on the importance of unifying methods and the consequences of employing singular methods in research. Justification Three is composed of one argument: the argument from explanatory regress.

Justification Three part one: Refuting the argument from explanatory regress.

Comte maintained that there should be a unity of methods among the sciences. The mixed-methods approach helps ensure unity of methods among social scientists and unity of methods between disciplines. For example, at the intersection of sociology and psychology lies the study of social psychology. The interdisciplinary subject establishes multiple methods that span and unite social psychology, thus creating a unity of methods and a homogeneity among the sciences.

Durkheim deviated slightly from Comte concerning the unity of methods among the sciences. If the whole is greater than the sum of its parts, the whole is non-reducible. Strict methodological holists maintain this non-reductive view, and their defense is often the argument from explanatory regress. The argument from explanatory regress argues that the process of reducibility applies equally to holistic and individualistic explanations (Zahle, 2016). Thus, if one maintains that methodologically holistic explanations can be reduced to individual-level phenomena, one must also recognize that individual-level phenomena are reducible to psychological, biological, and chemical phenomena. Methodological holists claim there is no reasonable explanation for not including deeper-level phenomena in sociological explanations. Methodological holists maintain that stopping at the individual level is arbitrary.

The argument from explanatory regress is not necessarily incorrect since what any discipline covers is always up for debate, but if sociology was to stay holistic, it could not participate in

interdisciplinary work. Holism would inhibit any expansions of sociology, and clearly, that is not in sociology's best interest. Methodological individualism facilitates interdisciplinary work and the expansion of sociology, as we have seen with subjects such as social psychology.

Psychological research is bridged to chemistry through neuroscience, and both neuroscience and psychological research are bridged to sociology through the interdisciplinary work done in social neuroscience. These interdisciplinary relationships further our understanding of sociology, psychology, and neuroscience. If we follow the advice of holists on this matter, sociology budgets would further wither in isolation, as would the sociologist's understanding of other academic disciplines.

The Comtean quest for unity of methods and homogeneity among the sciences is a noble goal and is furthered by the mixed methods approach to sociological research. Methodological individualists and holists can only benefit from the inclusion of both methodological approaches, as there is no downside excepting time and money. Including both methodological approaches can help sustain sociology while expanding research methodologies. Thus, the mixed methods approach is the best approach for sociology.

Social Terminology

Problems with terminology

Theory and practice are essential to the field of sociology. In the above sections, I have primarily argued for the importance of the mixed-methods approach as it concerns the explanatory power of sociology in practice. This section will discuss the importance of the mixed-methods approach concerning terminology. This section aims not to present an argument for or against specific methodological approaches concerning terminology but to discuss my opinions regarding the mixed-methods approach as it relates to terminology.

The tension between methodological holists and methodological individualists appears to heavily concern terminology central to sociology. The terminology is problematic, especially since such terms often denote statistical variables. Addressing the language used in sociological research is therefore crucial to my thesis. I will not attempt to discuss matters that may concern the philosophy of language. I am sure such philosophers hold an array of instructive opinions concerning the language of sociological research, but such opinions are not the subject of this paper. My only purpose in this section is to discuss the language of sociology, specifically the subset of terminology that I find problematic.

Sociologists are often accused of performing “soft science,” which is an underhanded way of drawing attention to the differences between the social and natural sciences. The work of sociologists is portrayed this way, and is this way to an extent, due to the social constructs that must be reckoned with in sociology. Since human societies create and use social constructions, sociologists must employ terminology referencing social constructions in their research. The problematic language employed within sociology revolves around these social constructions.

Durkheim introduced the concept of social facts. Social facts are social norms, and social norms arise from institutions, hierarchies, and similar structures. Durkheim also stated that sociology is the study of these social facts, and indeed social facts are central to the study of sociology. The issue, however, is that social constructions are reified by the populations from which they arise, which means no social construction or social fact is static. The use of “fact,” “construction,” and the like may be aesthetic flaws since such words imply a static state of which social facts and constructions are not; as Ian Hacking has mentioned, they are moving targets (Hacking, 1999). The question concerning these social facts and social constructions is then whether or not they are, or the degree to which they are, real. I cannot answer this question, nor do I believe anyone can. We can, however, delve deep into a specific example to see how explanations become problematic.

Example: the economy is a social construction. A recession is an economic contraction and thus a state of affairs existing within a social construction. Recessions are subjected to various forms of analysis that alter with time and are frequently defined after their occurrence. So, we must ask, is a recession real? We can certainly feel the effects of recessions, but what qualifies as a recession is open to interpretation. The interpretation that a set of circumstances is a recession is further complicated since that set of circumstances exists within the economy, which is another social construction. Like a set of Russian nesting dolls, we open one abstract concept only to find another. How far into the set of nesting dolls can we go and still claim that our concepts represent reality? What is an economy? What qualifies as a recession? Regardless of the answers to such questions, sociologists must use and reference these abstract terms since, real or not, they are part of the social fabric.

Social theories related to Durkheim, which is most theoretical work related to methodological holism, thus suffer and open themselves up to philosophical analysis. One cannot lackadaisically employ abstract language and not expect a visit from the philosophers. Due to the issues mentioned above, the moniker “soft science” has been applied to sociology and is not necessarily incorrect. The theoretical underpinnings of Durkheim have moved sociology in this direction, and methodological individualists have moved in the opposite direction.

Symbolic interactionists and strict methodological individualists have opted to abandon most if not all of the problematic language in sociology. Max Weber wrote: “for sociological purposes, there is no such thing as a collective personality which ‘acts ‘... references made to “nation,” “state,” “family,” or other similar collectivities only [refer to] a certain kind of development of actual or possible social actions of individual persons” (Weber, 1994:239). The implication I am taking from this statement is that collective personalities (since they cannot act) are social constructions. In the absence of being capable of action, collective personalities exist in language, but evidence supporting the existence of collective personalities cannot be found in society. Protestantism does not act; only Protestants act and all Protestants are also either Republicans or Democrats, Floridians or Oklahomans, and the list continues. The language employed by the symbolic interactionist and strict methodological individualist is devoid of terminology that invokes social constructions. In avoiding such language, they avoid an array of issues.

The avoidance of such language, while convenient, is not, in my opinion, a great path forward for sociology. Even if there is no such thing as “nations,” “states,” “families,” and other collectivities, people and societies still have to deal with them. Things defined as real are real in their consequences (Steward, 2020). The perceived existence of these collectivities is more

essential than the actual existence of these collectivities. Sociologists must use, reference, and research social facts, collective personalities, and social constructions (even when they only exist in language). However, due to the tangibility of their existence, qualitative methodologies should be employed to better define the terms of sociological language.

In closing this discussion, sociology needs terms and language not based on either the theories of Durkheim and other holists or the terms of Weber and other methodological individualists. Sociology needs terminology that mediates between the tendencies of both theoretical approaches. Society abounds with social constructions, and while these social constructions are inconvenient, methodological individualists must contend with them. Contending with all the insanities of human society is part of being a sociologist. However, these reified constructs cannot be studied in the absence of methodologies that inform us as to what is meant by the terms that describe these elusive constructions. Therefore, the language employed by sociologists and the theoretical frameworks that guide the discipline benefit from including methodological holism and individualism; quantitative and qualitative methodologies.

Language and meso-level phenomena (a quick note).

Sociologists study the micro-level, meso-level, and macro-level. The meso-level could be viewed as an intermediary between the macro and micro levels. Language concerning the meso-level often denotes objects that lie between the examples listed in this paper. For example, businesses are situated between the economy and individuals, and businesses certainly qualify as meso-level entities. Meso-level entities are not necessarily social constructions, yet they are also not agents. Businesses not being agents is debatable, but in this paper, I have employed a

working definition given by Weber to denote the divide between methodological individualism and holism.

The collectivities mentioned by Weber include collectivities at the macro-level and meso-level. The quest for terminology that suits a mixed-methods approach may invoke discussions and questions concerning meso-level entities and phenomena since it involves institutions beneath the macro-level. Thus, this brief section was added to thwart such a discussion. The meso-level is an intermediate level, but it is not relevant to the arguments covered in this paper since the meso-level is contained within methodological holism. One cannot conduct an interview with a family, only with family members. Language referencing families is useful and has a purpose, but the family is still a whole which may not be greater than the sum of its parts. Therefore, references to the meso-level do not help one mediate between the theoretical tendencies of methodological individualism and holism.

Ideal Types

An ideal type is an analytical construct that seeks to realize an exhaustive list of qualities and serves as an unrealizable definition for terms denoting social constructions (Papineau, 1976; Watkins, 1952; Zaleski, 2010). The definition must be unrealizable since, in most cases, the motives determining action are “qualitatively heterogeneous” (Weber, 1994:246). The ideal type, concerning Democrats, will be an “accentuation of [the] typical courses of conduct” of Democrats but will never “correspond to concrete reality” (Coser, 1977: 223). Thus, no single Democrat will identify with all of the qualities listed, but all democrats will likely identify with some of the listed qualities. Ideal types are qualitative definitions of social level terms.

By grounding the social level term in individual-level phenomena, sociologists and the world can view evidence and justification for the term's existence. Ideal types stabilize social-level terminology and thereby qualify variables that describe themselves using social-level terminology. The statement, 'The Protestant work ethic led to a rise in capitalism' is a methodologically holistic explanation because it does not reference individuals. However, the ideal types of "Protestant" and "capitalist" perform the function of defining a qualitatively heterogeneous community and the economic organization that resulted from their ethical system. The ideal types achieve this by citing cases of individual-level phenomena within the groups categorized as "Protestant" and "capitalist."

Ideal types are mentioned here because they help solve problems with terminology by giving terms expressed as social collectivities or entities a definition that refers to individual subjective meaning. Methodological individualists are given a definition that stabilizes terms they deem problematic. Methodological holists who employ ideal types in research avoid many of the criticisms lobbed at them by methodological individualists. Ideal types help resolve disputes concerning terminology in sociology and are thus important to the mixed methods approach.

Conclusion

In conclusion, sociological research and theory can be approached through one of three major methodological approaches:

1. Methodological holism primarily employs quantitative methods. Quantitative methods in sociology rely heavily on the statistical analysis of large data sets. The explanations produced by quantitative methods tend to be generalizable, meaning the explanations hold across the population being studied.
2. Methodological individualism primarily employs qualitative methods. Qualitative methods in sociology include focus groups, interviews, or any method in which a researcher is deriving data conversationally. The explanations produced by qualitative methods tend to reveal causation.
3. Mixed methods employ both quantitative and qualitative methods. A mixed methodologist might, for example, statistically analyze a group using census information and then go out into the world and conduct interviews with individuals from that group. The explanations produced by mixed methods will be more likely to reveal causation while maintaining generalizability.

The thesis of this paper is that mixed methods produce explanations that are more likely to reveal causation while maintaining generalizability. In this paper, I have offered three justifications for the employment of the mixed-methods approach. Justification one explores the

mutual compatibility between statistical analysis and qualitative methods. Justification two focuses on qualifying and stabilizing terminology used in sociological explanations. Justification three focuses on how a mixed-methods approach can unite methods and help create homogeneity amongst multiple scientific disciplines. The justifications mentioned employ and discuss multiple philosophical arguments regarding methodological individualism or holism. The justifications show the compatibility between the approaches and show that the either/or dichotomy hinders sociological research.

Further, I have shown that terminology plays a large role in sociological research and that terminology can often lead to disputes between methodological individualism and methodological holism, especially where social constructions and collectivities are concerned. Terminology denoting social constructions creates concerns in sociology, and it is around these concerns that the arguments amongst methodological holist and individualist center. Weber's ideal types illustrate a mixed-methods approach to issues concerning terminology since ideal types create qualitative definitions of social constructions. Mixed methods may help rectify current and future problems within the discipline of sociology concerning terminology.

In closing, sociology can be difficult. Physicist Neil deGrasse Tyson even admits that "In science, when human behavior enters the equation, things go nonlinear. That is why physics is easy and sociology is hard" (Guhin, 2016). The difficulty stems from the fact that sociology is a quantitative science dealing in qualitative social constructions. The qualitative definitions of social structures are based upon the subjectivity of the individuals comprising and contributing to the social constructions. One can measure the amount of uranium in a sample, but one cannot measure the amount of Protestantism in an individual or the degree of capitalism in society. The terms must be defined qualitatively, and even when a definition is reached, the definition is not

static but differs as a function of multiple variables. Due to these difficulties, sociologists generally adopt a mixed-methods approach to social research, and due to these difficulties, the mixed-methods approach is the best approach for sociology. Mixed methods are more likely than either holism or individualism, practiced independently, to produce explanations that reveal causation while maintaining generalizability, and such explanations should be the goal.

References

- Agassi, J. (1960). Methodological Individualism. *The British Journal of Sociology*, 11(3), 244–270. JSTOR. <https://doi.org/10.2307/586749>
- Comte, A. (1988). *Introduction to Positive Philosophy* (F. Ferré, Ed.). Hackett Publishing Company, Inc.
- Coser, L. (1977). *Masters of Sociological Thought*. Waveland Press Inc.
- Elster, J. (1982). The Case for Methodological Individualism. *Theory and Society*, 11(4), 453–482.
- Francescotti, R. M. (2007). Emergence. *Erkenntnis (1975-)*, 67(1), 47–63.
- Funkhouser, E. (2007). A Liberal Conception of Multiple Realizability. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 132(3), 467–494.
- Guhin, J. (n.d.). *Neil deGrasse Tyson wants a nation ruled by evidence, but evidence explains why that's a terrible idea*. Retrieved December 4, 2021, from <https://slate.com/technology/2016/07/neil-degrasse-tyson-wants-a-nation-ruled-by-evidence-but-evidence-explains-why-thats-a-terrible-idea.html>
- Hacking, I. (1999). *The Social Construction of What?* Harvard University Press.
- Hawking, S., & Mlodinow, L. (2010). *The Grand Design*. Random House Publishing Group.
- Heath, J. (2020). Methodological Individualism. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Summer 2020). Metaphysics Research Lab, Stanford University. <https://plato.stanford.edu/archives/sum2020/entries/methodological-individualism/>
- Jones, T. (1996). Methodological Individualism in Proper Perspective. *Behavior and Philosophy*, 24(2), 119–128. JSTOR.
- Kincaid, H. (1993). The Empirical Nature of the Individualism-Holism Dispute. *Synthese*, 97(2),

- 229–247. JSTOR.
- Kincaid, H. (2015). Open Empirical and Methodological Issues in the Individualism-Holism Debate. *Philosophy of Science*, 82(5), 1127–1138. JSTOR.
<https://doi.org/10.1086/683445>
- Klein, C. (2013). Multiple realizability and the semantic view of theories. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 163(3), 683–695.
- List, C., & Spiekermann, K. (2013). Methodological Individualism and Holism in Political Science: A Reconciliation. *The American Political Science Review*, 107(4), 629–643. JSTOR.
- McIntosh, D. (1977). The Objective Bases of Max Weber's Ideal Types. *History and Theory*, 16(3), 265–279. JSTOR. <https://doi.org/10.2307/2504833>
- Papineau, D. (1976). Ideal Types and Empirical Theories. *The British Journal for the Philosophy of Science*, 27(2), 137–146. JSTOR.
- Prosser, S. (2012). Emergent Causation. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 159(1), 21–39.
- Risjord, M. (2014). *Philosophy of Social Science: A Contemporary Introduction*. Routledge.
- Ritzer, G., & Gindoff, P. (1992). Methodological Relationism: Lessons for and from Social Psychology. *Social Psychology Quarterly*, 55(2), 128–140.
<https://doi.org/10.2307/2786942>
- Shrader, W. (2010). Shoemaker on emergence. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 150(2), 285–300.
- Steward, G. (2020). *Lecture for Qualitative Methods*.
- Watkins, J. W. N. (1952). Ideal Types and Historical Explanation. *The British Journal for the*

Philosophy of Science, 3(9), 22–43. JSTOR.

Weber, M. (1994). *Sociological Writings* (W. Heydebrand, Ed.). Continuum Publishing Company.

Zahle, J. (2016). Methodological Holism in the Social Sciences. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Summer 2016). Metaphysics Research Lab, Stanford University. <https://plato.stanford.edu/archives/sum2016/entries/holism-social/>

Zahle, J., & Collin, F. (2012). ENPOSS 2012: The First Conference of the European Network for the Philosophy of the Social Sciences (Copenhagen, September 21–23, 2012). *Journal for General Philosophy of Science*, 44(1), 225–226. <https://doi.org/10.1007/s10838-013-9214-8>

Zaleski, P. (2010). Ideal Types in Max Weber's Sociology of Religion: Some Theoretical Inspirations for a Study of the Religious Field. *Polish Sociological Review*, 171, 319–325. JSTOR.