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**Original article**

## Methodological ontology

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### ABSTRACT

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The aim of this article is to consider the question why we can combine quantitative and qualitative methodologies, which represent different and contradictory epistemologies, in social research. This article suggests that, in addition to pragmatism, the more fundamental thing underpinning and legitimizing the mixture of the methodologies is the methodological ontology of objectivism.

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### 1. Introduction

Social scientists have debated whether quantitative methodology or qualitative methodology is more appropriate for the investigation on social phenomena (Bryman, 1988; Creswell, 2009). This debate is important because it relates to the epistemological concern – what is or should be regarded as knowledge. Indeed, the debate has not been solved because the quantitative sociologists disapprove the qualitative methodology and, on the other hand, the qualitative sociologists also disagree with the quantitative methodology. Recently, some social scientist try to solve the debate by addressing mixed methodology (Creswell, 2009; Feilzer, 2010; Small, 2011; Tashakkori & Teddlie, 1998). However, in addition to pragmatism, I have been puzzled by the question why we can combine two methodologies with different and even contradictory epistemologies, which are positivism and interpretivism.

From positivist point of view, the social world is like the physical world that is governed by a set of laws. Therefore, the goal of social sciences is to discover the social laws and regularities by using the methods of natural sciences in order to predict and control the social phenomena (Babbie, 2007). To be scientific, the positivists argue that social research must be value-free and objective. Thus, the positive social scientists tend to adopt quantitative methods such as experiment and survey, because such methods share the characteristics of natural sciences, including logical, deterministic, general, parsimonious and specific (Babbie, 2007).

On the other hand, the interpretive social scientists argue that we should not study the social world with the methods of natural sciences, because the subject of social sciences differs from that of the natural sciences. For example, there are social actors whose behaviors carry meanings in social world, but there is no meaning involvement in the natural phenomena (McNeill & Chapman, 2005). Therefore, interpretive social scientists emphasize that the best way to understand the social world is interpretation. As Weber suggests, social sciences “shall be taken to refer to a science concerning itself with the interpretive understanding of social action and thereby with a causal explanation of its course and consequence” (cited as Giddens, 1971, p. 146). As a result, the interpretive approach rests on three premises (Blumer, 1969): (1) human act towards things based on the meanings those things have for them (2) the meanings of things arise out of social interaction and (3) meanings are created through a process of interpretation. Hence, the interpretive social scientists would like to investigate social phenomena with qualitative methods, such as ethnography and in-depth interview.

Obviously, the distinction between positivism and interpretivism is clear and contradictory. Nevertheless, some scholars argue that we should use both quantitative and qualitative methodologies, which correspond to different epistemologies, in social research, because the dualism is unhealthful for us to grasp the social life accurately (Giddens, 1993). Thus, some scholars propose to study social phenomena with mixed methodology based on pragmatism (Feilzer, 2010; Small, 2011; Tashakkori & Teddlie, 1998). According to pragmatism, we can study social phenomena with any method that best fits to the research problem. Thus, researchers have freedom to use any quantitative, qualitative or mixed methods for their investigations. Moreover, pragmatism also suggests that mixed methodology helps to triangulate the reliability and validity of social research (Creswell, 2009). To some extent, mixed methodology and pragmatism implies a coherence of quantitative and qualitative methodologies as well as positivism and interpretivism.

However, as I asked at the beginning of this article, why can these two different epistemological paradigms coordinate in one research? For me, there should be more fundamental component underpinning of the mixture in addition to pragmatism. For Goldthorpe, this component is the logic of inference: A logic of relating evidence and argument. He portrays:

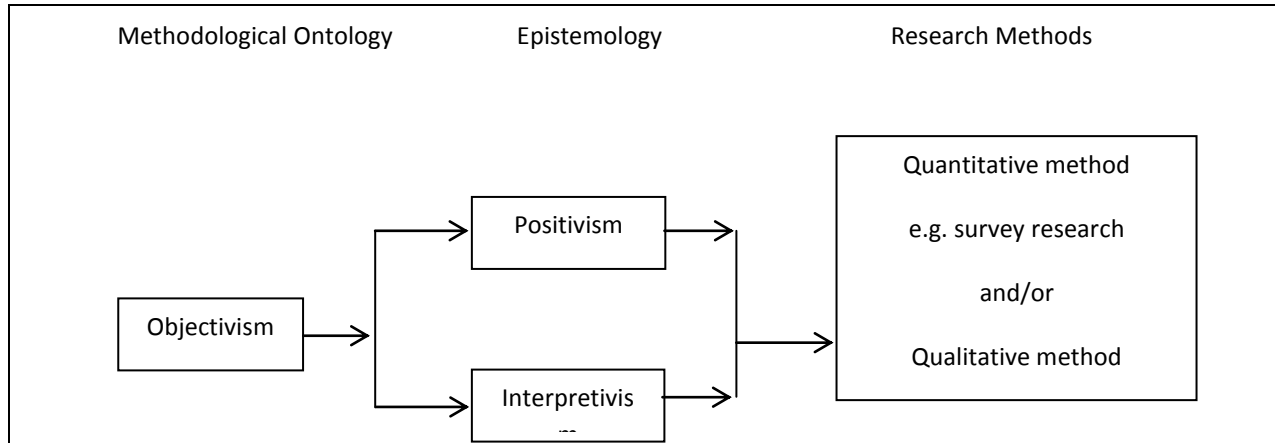
The methods of enquiry that are used across the natural and the social sciences alike are informed by what might be referred to as a common logic of inference ... The application of this logic presupposes that a world exists independently of our ideas about it, and that, in engaging in scientific enquiry, we aim to obtain information, or data, about this world, which we can then take as a basis for inference that extend beyond the data at hand, whether in a descriptive or an explanatory mode. (Goldthorpe, 2007, p. 63)

He also emphasizes that if social research abandons this logic, it will not be a scientific research. However, I think Goldthorpe makes a mistake. According to him, the logic of inference is equal to positivism so that he is trying to say positivism is the common ground for all research. However, it does not make sense. I think most of qualitative and interpretive social scientists will not tell you and agree that they are positivists.

Therefore, I think the common ground between quantitative and qualitative methodologies are not about epistemology but ontology, or what I call methodological ontology. As Goldthorpe’s argument points out that the social world is like an object or a thing existing independently out of our will, so we can study it. This idea is similar to Durkheim’s social fact. It suggests the reality is objective (Zeitlin, 1987). By following to this idea, I think that methodologically we should treat social phenomena as objects or things when we are studying it. As a result, the common and fundamental component for social research should not be the epistemology of positivism or interpretivism. Rather, it should be the methodological ontology of objectivism.

It is noted that the usage of the term objectivism here is different from the traditional use. Traditionally, objectivism is the ontological position that suggests the reality as existing independent of human’s consciousness. However, objectivism I used here means that we need to view the social phenomena that we are investigating as objects or things while we are conducting research. It is similar to the situation that we have to reflectively objectivate ourselves if we want to understand what we are doing or thinking (Giddens, 1984). If we do not do so,

it may not be possible for us to study it. In this sense, I have no intentions to say objectivism is the only ontology for social scientists. Thus, I call this objectivism as methodological ontology rather than ontology only.



**Fig. 1.** The relationship between methodological ontology, epistemology and research methods in social research.

If social research (positivistic and/or interpretive) stands on the same ground (objectivism), we can then mix quantitative methodology with qualitative methodology (Figure 1). Therefore, my answer to the question I asked in this article – why can we combine quantitative and qualitative methodologies which represent different and even contradictory epistemologies – is not simply the pragmatism proposed by the mixed methodologists or any epistemological concerns. Rather, my answer is the methodological ontology of objectivism.

## References

- Babbie, E., 2007. *The practice of social research* (11th ed.). Belmont, CA: Thomson Wadsworth.
- Blumer, H., 1969. *Symbolic interactionism: Perspective and method*. New Jersey: Prentice-Hall.
- Bryman, A., 1988. *Quantity and quality in social research*. London: Routledge.
- Creswell, J.W., 2009. *Research design: Qualitative, quantitative, and mixed methods* (3rd ed.). California: Sage Publications.
- Feilzer, M.Y., 2010. Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, 4(1), 6-16. doi: 10.1177/1558689809349691
- Giddens, A., 1971. *Capitalism and modern social theory: An analysis of the writings of Marx, Durkheim and Max Weber*. Cambridge: Cambridge University Press.
- Giddens, A., 1984. *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.
- Giddens, A., 1993. *New rules of sociological method: A positive critique of interpretative sociologies* (2nd ed.). Cambridge: Polity Press.
- Goldthorpe, J.H., 2007. *On Sociology* (2nd ed. Vol. 1). Stanford: Stanford University Press.
- McNeill, P., Chapman, S., 2005. *Research methods* (3rd ed.). London: Routledge.
- Small, M. L. (2011). How to conduct a mixed methods study: Recent trends in a rapidly growing literature. *Annual Review of Sociology*, 37, 57-86.
- Tashakkori, A., Teddlie, C., 1998. *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks: Sage Publications.
- Zeitlin, I.M., 1987. *Ideology and the Development of Sociological Theory* (3rd ed.). Englewood Cliffs: Prentice-Hall.