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Generalizability and qualitative research in a postmodern world

Abstract

In this paper, I will explore the idea of 'generalizability' as a methodological concept in the social sciences. First, I will look at how generalizability is depicted as a folk notion of science. In particular, I am interested in how generalizability has been constructed as a problem for qualitative research. Second, I will review the attempts of Robert Prus and Howard Becker to construct a uniquely qualitative model of generalizability. This is a model of 'generic social processes', which attempts to generalize about social processes, rather than populations. Third, I will discuss generalizability as an ideal that has been undermined by postmodern theory. Through this discussion, I will argue that the notion of 'generalizability' remains useful for qualitative research in a postmodern era.

Introduction

In an article titled, 'Qualitatively different: Teaching fieldwork to graduate students', Sherryl Kleinman, Martha Copp and Karla Henderson (1996) discuss the 'folk notions of science' that social scientists hold. These 'folk notions' are 'ideas about how scientific work should be done'. Folk notions of science are deeply ingrained and are strongly entwined with the positivist tradition of social science. They include the official definitions of 'reliability', 'validity' and generalizability' within the social sciences. In recent years, the critiques of postmodernism, post-structuralism and other 'post-al'

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theories have made these folk notions increasingly untenable (Scatamburlo-D'Annibale and Langman, 2002). From this position, these folk notions are re-defined as discourses that are mobilized during the social construction of a system of power/knowledge within the social sciences (Foucault, 1980; Gordon, 1980; Hughes, 1995). For social scientists wishing to transcend the limitations of positivism, these folk notions are barriers to be negotiated or overcome.

Using Kleinman et al.'s concept of the folk notion of science as a jumping-off point, I would like to explore the idea of 'generalizability' as a methodological concept. First, I will look at how generalizability is depicted as a folk notion of science. In particular, I am interested in how it has been constructed as a problem for qualitative research. Second, I will review the attempts of Robert Prus and Howard Becker to construct a uniquely qualitative model of generalizability. This is a model of 'generic social processes', which attempts to generalize about social processes, rather than populations. Third, I will discuss generalizability as an ideal that has been undermined by postmodern theory. In this section, I will also illustrate how Prus and Becker's model of 'generic social processes' may be qualified and retained as a useful analytic concept in light of the postmodern critique of social science. Through this discussion, I will argue that the notion of 'generalizability' remains useful for qualitative research, even in a postmodern era. While I choose to focus on postmodernism within this article, the main thrust of the argument applies to the critique of positivist social science that is found throughout various 'constructionist' forms of social science, including post-structuralism and post-Marxism.

Generalizability as a folk notion of science

Traditionally, generalizability refers to the ability to apply the results of research conducted on a sample of a population to a broader population (Babbie, 1995). This familiar notion of generalizability has been termed 'statistical generalization' by Yin



(2003).² As a folk notion of social science, this model of generalizability is desirable because it allows us to move beyond the boundaries of our research data. If we can generalize from a studied sample group to a population, then we feel that our research is more useful, or more important. As Babbie notes, 'Social scientists study particular situations and events to learn about social life in general. Usually, nobody would be interested in knowing about the specific subjects observed by the researcher' (Babbie, 1995: 302). Thus, generalizability is often invoked as a legitimizing discourse for social research. Research that is more generalizable may be read as more important to the collective process of knowledge-formation. Thus, the folk notion of generalizability may be used to assert the greater importance of quantitative ways of knowing, while marginalizing knowledge produced through qualitative inquiry.³

In quantitative research, generalizability is premised on the ability to gather a random sample of the population that the researcher is interested in. If the sample is representative of the larger population, it follows that research results can be extrapolated to the larger population. To achieve generalizability with a degree of assurance, the researcher incorporates accepted sampling procedures into the research design. From this perspective, generalizability is best achieved through the use of quantifiable measurement and random sampling. In other words, quantitative procedures are seen as more conducive to producing generalizable results, while qualitative research is seen as less generalizable.

In his discussion of field research, Babbie identifies three ways in which generalizability is problematic for qualitative research. At the risk of conflating

² Yin distinguishes between 'statistical generalization' and 'analytical generalization'. The former form of generalization refers to the ability to make statistical inferences about a 'population' based on research on a small sample of that population. This is the 'folk notion' form of generalizability that I deal with in this paper. As an alternative, Yin offers 'analytical generalization'. Smaling (2003) writes that analytical generalization, or 'generalization to a theory' occurs when 'research results are generalized [from one case study] by means of a suitable theory' to other cases.

³ This raises the question of whether the knowledge produced through qualitative research is really that different from the knowledge produced through quantitative research. I believe that there is an important distinction. Quantitative research seems to excel at providing a more abstract, simplified picture of what the social world looks like. While this can be valuable, it tends to overlook the smaller-scale social processes that construct this larger-scale picture. Furthermore, qualitative research is often more adept at exploring the 'deviant cases' that are marginalized in quantitative research.



objectivity and replicability, Babbie asserts that qualitative research is fundamentally more 'subjective' than quantitative research, as data gathering involves personal 'observations and measurements . . . that would not necessarily be replicated by another, independent researcher.' Due to the higher level of 'objectivity' obtainable through highly standardized quantitative research instruments, the subjectivity of quantitative researchers is less of a problem (Babbie, 1995: 302). Second, the focus of qualitative research on a small number of cases, which are explored deeply, is less conducive to generalizability than quantitative 'results based on rigorous sampling and standardized measurements' (302). Finally, due to the typically small number of research participants in qualitative social research, the researcher is never sure whether the sample is actually representative of the larger population. For Babbie, smaller numbers lead to an 'endless' potential 'for biased sampling (302). Taking these comments together, we are led to a construction of qualitative research as 'more valuable as a source of insight than as proof or truth' (302). In Babbie's account, the ability to produce 'truth' is limited to quantitative research, due to its norms of random sampling, large populations and objectivity. The relationship between the folk notion of generalizability and qualitative research is easily summed up by Cresswell. In evaluating the strengths and weaknesses of qualitative research, he notes, 'Overall . . . generalizability [plays] a minor role in qualitative inquiry' (Cresswell, 2003: 195).

From this perspective, the folk notion of generalizability is not conducive to qualitative research, with its use of low numbers of cases and more open system of data collection. For qualitative researchers that adhere to the folk notions of social science, generalizability may seem like a far-off goal, something to strive for but never reach. For a qualitative researcher to be able to claim that his results are generalizable, he must either adopt research design principles from quantitative methodology, or use a mixed methods approach, wherein qualitative data-gathering is 'reinforced' with the use of a secondary, quantitative research tool. If qualitative researchers are unwilling to adapt to the positivist-defined rules of the game, they are unable to claim that their work is 'generalizable.' In order to achieve status for this work within a system of academic power/knowledge, the folk model of generalizability must be engaged.



Miles and Huberman argue in favour of adding quantitative measures to qualitative research projects as a means of increasing confidence in generalizing about results. They note that the 'careful measurement, generalizable samples, experimental control, and statistical tools of good quantitative studies are precious assets' that should not be ignored by qualitative researchers (Miles and Huberman, 1994: 42). David Silverman also approaches the issue of generalizability in this way. In order to overcome the shortcomings of sampling in qualitative research, Silverman suggests that researches obtain quantitative data within a broadly qualitative study (Silverman, 2001: 249-250). Alternately, qualitative researchers can use more rigorous sampling procedures to attempt to meet the goal of generalizability. According to Silverman, purposive or theoretical sampling can be used to 'overcome the dangers of purely "anecdotal" qualitative research' and to strengthen claims for generalizability (254). Miles and Huberman also discuss several sampling strategies that can help overcome the problems associated with small research samples. By using one of Miles and Huberman's theoretically-driven 'sampling strategies', claims for generalizability can begin to approximate the quantitative ideal (Miles and Huberman, 1994: 27-30).

Towards a distinctly qualitative model of generalizability

The strategy endorsed by Silverman, as well as by Miles and Huberman, argues for making qualitative research more like quantitative research. By doing qualitative research in this vein (which then becomes mixed-methods research), we are able to mobilize the discourse of generalizability in its 'folk notion of science' form. However, other qualitative researchers have critiqued the folk notion of generalizability that is tied to the positivist, quantitative tradition. Howard Becker critiques the folk notion of generalizability for perpetuating 'one of the great scams of our society: the notion that things called by the same name are the same in other respects' (Becker, 1990: 238). Thus, quantitative generalizability can gloss over meaningful differences in the social processes



that occur in social settings which have been sorted into the same analytical category. This process of abstraction via generalizability can sometimes obscure findings more than illuminate them. For example, as Becker writes, Some things called schools may actually resemble places that go by other names more than they do other places called schools' (239).

Instead of lamenting qualitative social science's inability to achieve the ideal of statistical generalizability, sociologists like Howard Becker and Robert Prus have attempted to construct a model of generalizability that is unique to qualitative research. This model focuses on the ways in which qualitative research can be used to generalize about social processes, while abandoning any claims to generalizability about populations. In this distinctly qualitative model of generalizability, the goal is no longer to study a sample of police officers, punk rockers, or kung fu students so that we can make generalizations about all police officers, punk rockers, or kung fu students. Instead, we examine the social processes that go on in police work, the punk rock subculture, or in the martial arts dojo. In analyzing these processes, we might see how they play out in potentially diverse social settings.

Prus describes this form of generalizability as a focus on 'generic social processes' (Prus, 1994: 394). This model focuses on 'social activity' rather than on the quantifiable attributes of social actors or institutions. Here, the term 'generic' refers to the ways in which forms of social interaction transcend the specific historical-spatial location in which they occur. Generic social processes are 'abstracted formulations of social behaviour' (395). Those who are interested in generic social processes are less concerned with how all members of a particular socially-constructed category are alike; they are more concerned with documenting processes that operate across social sites. It is important to emphasize that focusing on 'generic processes' as a form of generalizability is not an effort to render invisible the social-historical specificity that often gives qualitative research its depth. As Schwalbe et al. note: 'To call these processes "generic" does not imply that they are unaffected by context. It means, rather, that they occur in multiple contexts wherein social actors face similar or analogous problems. The precise



form a process takes in any given setting is a matter for empirical determination' (Schwalbe et al., 2000: 421). Abandoning aspirations to be more like quantitative social science, this model still allows the researcher to 'transcend the particular settings in which the data was gathered' (Prus, 1994: 394). Goffman's work on total institutions is cited by Becker as an example of this type of generalizability (Becker, 1990: 238). Through this work, Goffman illuminates how similar social processes operate in army units, convents and mental asylums. For Becker, this sort of processual generalization is ultimately more interesting than the statistical, population-focused generalizability embodied in the folk notion of science.

Schwalbe et al.'s article on social inequality provides a model for how this uniquely qualitative form of generalizability can work. Through a qualitative meta-analysis of a large and diverse body of research on social inequality, the authors distill a typology of social processes that appear to operate in many different settings. The authors describe variations on four main processes: 'othering', 'subordinate adaptation', 'boundary maintenance', and 'emotion management'. Through these generic social processes, the everyday interactions of individual social actors work to perpetuate social inequality, oppression and privilege across space and time until they are perceived as social 'structure' (Schwalbe et al., 2000: 439). Thus, in addition to describing how similar social processes may work across a variety of social locations, the processual focus of this notion of generalizability also emphasizes the constructed nature of 'social reality'. As such, it moves us away from a reified construction of 'social structure' as something concrete and unchanging.

Finally, I would like to use an article by Robert Emmet Jones and Riley Dunlap on environmental attitudes to illustrate how the notion of generic social processes can illuminate a lacuna in the folk notion of generalizability, as it appears in quantitative research (Jones and Dunlap, 1992). In a 1992 article from *Rural Sociology*, Jones and Dunlap use quantified American national survey data to look at the relationship between 'environmental concern' and various socio-economic factors. While their work might tell us, among other things, that there is a generalizable correlation between levels of formal



education and environmental attitudes, it tells us nothing about *how* the process of education works to form environmental beliefs. If we re-focused on social processes, we might begin to ask how people use educational resources to make sense, not only of environmental problems, but also of other social issues, like American militarism, First Nations land claims, or police brutality. By shifting our focus towards processes rather than populations, we may gain more insight about how attitude formation works across a variety of social sites. Working with the model of generic social processes as the guide for generalizability, we might gain a more complex understanding of attitude formation than can be captured in the statistical correlation between education and environmental belief as mathematical variables.

Prus and Becker offer one solution to the 'problem' posed by the folk notion of generalizability to qualitative social science. Rather than trying to make qualitative research more closely approximate a quantitative ideal, Prus and Becker describe a uniquely qualitative form of generalizability, one that is 'attentive to the interlinkages of theory, methods, and research' that is also 'genuinely attentive to the ways in which human group life is accomplished and experienced on a day-to-day, moment-to-moment basis' (Prus, 1994: 409). This re-construction of 'generalizability' disrupts the folk notion of science that has traditionally favoured quantitative research for being more generalizable.

Generalizability in a postmodern world

This model of processual generalizability, or 'generic social process', seems better suited to qualitative research than the folk notion of generalizability, with its emphasis on statistical extrapolation from research samples to populations. Whereas the folk notion of generalizability is a barrier to be overcome in qualitative research, the model of generic social processes works with the strengths of qualitative research, which seeks to explain how a sense of 'social reality' is accomplished by its participants. In this final section, I



would like to look at how well this model of generalizability holds up to the postmodern critique of the positivist paradigm.

The postmodern turn in the social sciences has radically disturbed the positivist moorings of the social sciences. According to Denzin, the postmodern critique has left social science in a 'triple crisis of representation, legitimation, and praxis' (Denzin, 1997: 3). To oversimplify, postmodernism encourages a deep skepticism about 'the possibility of any totalizing or exhaustive theories or explanations' about the social world (Gubrium and Holstein, 1997: 75). Postmodernism sees all knowledge as a social construction which is intimately connected with those who create it. Thus, knowledge is not an object that is found 'out there'. It is formed by intellectual workers who have particular experiential standpoints and ontological perspectives. As knowledge is essentially social, it becomes impossible to accurately represent any 'social reality' that exists separately from the observer. As Gubrium and Holstein write: 'Because "truth" is necessarily relativized, if not impossible, then social scientific reports should enjoy no special privilege over any other set of accounts' (92). Taking postmodernism seriously means that the positivist notions of validity, reliability and generalizability become increasingly untenable. For Denzin, social scientists should abandon the pretensions of positivism in favour of an approach that is 'post-structural to the core, . . . emotional, biographically specific, and minimalist in its use of theoretical terms' (Denzin, 1997: 26). Instead of seeing the research article as an omnipotent, neutral account, we should realize that our texts are primarily concerned with the ways in which 'our subjectivity becomes entangled in the lives of others' (27).

As Davies notes, the radical reflexivity of postmodernism is a valuable contribution to the social sciences (Davies, 1999). The postmodern critique of traditional, positivist and naturalistic social science is too compelling to ignore. Lincoln and Denzin's assessment of the situation seems accurate: 'It is not that we might elect to engage in work that is postmodern. Rather, it is that we have inherited a postmodern world, and there is no going back' (Lincoln and Denzin, 2000: 1059). If we take postmodernism seriously, then our folk notions of science, including the notion of generalizability, are seriously undermined. Instead of working as tools for establishing the 'truth' of a social



science text, generalizability, validity, and reliability become 'the researcher's mask of authority that allows a particular regime of truth within a particular text ... to work its way on the reader' (Denzin, 1997: 7). Generalizability can no longer be invoked to prove the validity of an objective account of the 'world out there'. Rather, it is revealed as a rhetorical device for convincing the reader of the researcher's authority. Through a Foucauldian lens, generalizability may be viewed as a discourse that is invoked to privilege certain forms of research in the construction of academic knowledge.

At first glance, it might appear that the model of generic social processes is also undermined by the postmodern critique. After all, the notion of processual generalizability seems to rely upon the naturalistic assumptions of a realist 'world out there', a research model which strives to minimize its subjectivity. This notion also relies on the idea that the 'real world' can be 'faithfully' represented in an academic 'realist tale' (Gubrium and Holstein, 1997: 36). In light of the postmodern critique, where social science texts are stripped of their claims to objectivity and authority, we are left asking whether the notion of generalizability continues to make any sense. If each text is the result of a subjective interaction between an individual researcher and a particular social group, can we learn anything about social process that is applicable across social settings? In the remainder of this section, I will use Foucault's notion of power/knowledge to illustrate how a more tentative notion of 'generic social processes' can be quite useful in a postmodern world.

In the 'two lectures in *Power/Knowledge*, Foucault distills a general theory of power and knowledge from his work on sexuality, imprisonment and madness. Put briefly, Foucault writes:

'In a society such as ours . . . there are manifold relations of power which permeate, characterize and constitute the social body, and these relations of power cannot themselves be established, consolidated nor implemented without the production, accumulation, circulation and functioning of a discourse. There can be no possible exercise of power without a certain economy of discourses of truth which operates through and on the basis of this association (Foucault, 1980: 93).



I believe that Foucault's model of power/knowledge may be viewed, in one sense, as a type of generic social process. In Foucault's own work, the reader sees how discourses embody power and knowledge to govern social life across several sites. In two different articles, David Ralph Matthews and Mary Curran illustrate how the generic social process of power/knowledge operates in the field of environmental regulation and management, an area far removed from Foucault's work on sexuality, mental illness, and imprisonment. Through these examples, we see how a particular generic social process can be used to illuminate similar aspects of diverse social situations.

Matthews uses Foucault's work to examine the ways in which the Canadian state used environmental discourse to legitimize their actions in the 1995 'turbot war' with Spain (Mathews, 1996). In this instance, ecological discourse was mobilized by the state to justify its claims of power over fishery resources. In essence, the state invoked environmental discourse in order to bring 'Canadian turbot' under the government of the Canadian state. Foucault writes, 'The bourgeoisie is interested in power, not in madness, in the system of control of infantile sexuality, not in that phenomenon itself' (Foucault, 1980: 102). In light of Mathews' analysis, we could add that the Canadian state is interested in power over 'Canadian' ecological resources, not necessarily in the health of turbot populations for their own sake. Environmental discourse becomes a means of creating this power.

Similarly, Mary Curran uses Foucault's notion of power/knowledge in her analysis of public hearings on the regulation of industrial pig farming in Kentucky. For Curran, the notion of power/knowledge is useful for explaining 'the role of power relations in determining what is included and excluded' in the public hearings that shape the regulatory framework for industrial pig farming (Curran, 2001: 15). By analyzing the public hearings discourse through a Foucauldian lens, she is able to illuminate 'the power relations embedded within existing social arrangements within which regimes of truth are developed and deployed' (31).

Through these two brief examples, we see how the concept of power/knowledge, as a generic social process, can be removed from its 'home' in the study of prisons and mental illness, and transplanted to the dramatically different social worlds of Kentucky



pig farming and Canadian turbot fishing. From a post-structural perspective, we should not let the fact that power/knowledge may act in various ways across diverse sites deter us from recognizing the utility of making generalizations about this process. Of course, the regulation of fisheries, or industrial pig farming, is not literally *like* the discursive construction of sexuality or madness. However, there is something familiar enough about the social processes going on in both settings that allows us to describe them using the same analytical language.

Elsewhere, Aull Davies has suggested that we should treat 'Weberian ideal types' more like literary metaphors than like objective social facts (Davies, 1999: 218). I would like to suggest that we should think about generic social processes in a similar way, as metaphors rather than reifications. If we take postmodernism, post-structuralism and other 'post-al' approaches seriously, if we let go of our ability to make authoritative claims about 'social reality', then a more tentative, qualified form of processual generalizability may continue to be useful for social scientists in a postmodern world. Through an amended notion of generic social processes, we can continue to draw on the primary benefit of 'generalizability', the ability to connect our work to the world beyond our immediate research data.

Conclusion

'Generalizability' describes the ability to make inferences about our research that go beyond the specific units of analysis that we have collected information about. As a 'folk notion of science', generalizability has been treated as a strength of quantitative research, which uses statistical methods to make inferences about 'populations' from data on smaller sample groups. This notion of generalizability is often mobilized to assert the legitimacy and relevance of social research. Insofar as generalizability has been constructed as an inherent weakness in qualitative social research, this folk notion of science has benefited quantitative forms of knowledge.



It is possible to retain an analytically useful notion of generalizability. Such a notion of generalizability is different from the 'folk notion of science' form of generalizability, wherein random sampling is used to extrapolate research results to an entire population. A distinctly qualitative model of generalizability is concerned with social processes rather than populations. It points out how similar 'generic social processes' can operate in a diversity of social settings. Whereas the statistical generalizability of quantitative research appears as a barrier to qualitative social science, this model of processual generalizability plays to the strengths of qualitative research.

However, insofar as this model is rooted in naturalistic assumptions about the nature of 'social reality' and the stance of the researcher, it should be further refined for our postmodern world. A post-structural model of processual generalizability would not claim to represent processes as social facts; it would also eschew claims to represent *the truth* about any particular social process. Without reifying the social processes it describes, a model of processual generalizability may still be useful for qualitative research. If we think of generic social processes as resembling literary metaphors more than social facts, they can be useful for increasing our understanding of how similar processes operate across such diverse settings as mental institutions, prisons, fisheries and pig farms. Such a post-structural construction of generalizability allows us abandon one of our old folk notions of science in favour of a notion of generalizability that is more tenable and useful for qualitative research in a postmodern world.

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