

Epistemology, Ontology, Axiology, and the Formation of Research Paradigms and Methodology
in Relation to Vocal Pedagogy and Education

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INTRODUCTION

My goal in this paper is to understand research methodology to further my examination of the effects of mental health on vocal functioning. I hope to be able to illuminate further problems raised in previous literature reviews, regarding the limited studies on the direct impact of mental health concerns on vocal dysphonia, and also how prevailing attitudes about vocal injury may impact the behavior of performers—particularly student performers—when faced with their own vocal concerns. I am interested in how research designs and methods can be formulated by the practitioner-researcher that is engaged with the work on a professional practice level, outside of the world of traditional academic or scientific research structures. I am also looking to further explore ontological and epistemological points of view on vocal health from a variety of perspectives, to better understand my own personal biases to better understand those of potential subjects and practitioners.

While personal experience can be the impetus for the formation of a research question, particularly in performance based practice (Huber, et al., 2020), I also hope to examine the axiology of certain beliefs in research surrounding vocal health, and what questions are examined. For example, the literature surrounding vocal health in singers is greater in quantity and is often more detailed than those of the vocal health surrounding actors, though many actors also carry intense vocal load in performance and in life (Searl, Dargin and Bailey, 2021). As Jane Ginsborg writes in Chapter 6 of *Research book, Research Skills in Practice: Learning and Teaching Practice-Based Research at RNCM*, “research on performance practice is surely enhanced when it informs and is informed by the author’s own experience” but I am curious as to how more critical forms of thinking may lead to better vocal health performance outcomes for professional and pre-professional actors and singers, particularly when the complex hierarchy of university arts education is also considered. As Paulo Freire writes in “*Pedagogy of the Oppressed*”,

“Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world” (Freire, 1970).

EPISTEMOLOGY

Epistemology comes from the Greek words for “knowledge” and “reason” and has been a focus of philosophers for centuries, though the name is a relatively newer invention and

though different forms and versions have been in the forefront of the collective consciousness dependant on the cultural and social philosophical focuses of the day (Stanford Encyclopedia of Philosophy, 2016). It concerns the theory of knowledge, the study of what we can and cannot know, and if it is even possible to know something; and if so, how do we know it? Questions of whether it is possible to be certain of something in addition to knowing—and is that different from knowing—also arise (DeRose, 2005). The epistemology informs the methodology chosen in research (Crotty, 1998).

How we know things about the world can be acquired by sources including perception, memory, reason, and testimony (Sol and Heng, 2023). Perception are things we experience through the five senses—seeing, hearing, touching, smelling, tasting—however, our perceptions are often not as they really seem. In the world of voice, for example, our voices do not sound the same to us as they do to others, due to a variety of reasons including the structure of the ear, and the sound waves as they are carried through the air (Mulcahy, 2023).

Memory may be able to cause you to know a name or date, but is also not always accurate and can not be taken as knowledge with certainty on its own (Sol and Heng, 2023). Similarly, there is debate about whether reason is the same across all experiences and some epistemologists do not believe non-empirical knowledge can exist (Sol and Heng, 2023). Testimony, which exists outside of the personal experience of knowledge, are things we come to know based on other people's statements. But those too can be filtered through the agenda of what someone else might want us to think and therefore should be examined carefully (Sol and Heng, 2023). Epistemology informs the theoretical perspective, or paradigms, which in turn help to form the methodology and methods (Crotty, 1998). However, it is often more likely that we begin with a question that needs to be answered, a problem to be solved or investigated and the results of answering that question through research reveals the epistemological roots (Crotty, 1998). The types of epistemology that have emerged over the centuries are wide and varied, including the philosophies of positivism, post-positivism, constructionism, interpretivism, critical inquiry, naturalistic, and normative—all of which have long histories I will not elaborate on for the purposes of paper (Crotty, 1998).

ONTOLOGY

Ontology is the study of what there is, and forms some of the basis for the largest of classical philosophical questions (Udaho.edu, 2019). Ontology helps researchers ask big questions, and creates the launching pad for large queries in research (University of Warwick, 2017). Ontology can also inform the theoretical perspective of the research question and

methodology, and is often working hand in hand with epistemology in forming the basis of research (Crotty, 1998). Ontology for the researcher of voice and work based practice is less about the metaphysical concerns, but more of the claims that a researcher can make about reality (Moon and Blackman, 2017). On either end of the spectrum are realist ontology, and relative ontology: a realist would view the world as one unified experience with little variation for individual human variances, whereas a relativist would posit that not one unified reality can exist due to the expanse of personal experiences (Moon and Blackman, 2017).

AXIOLOGY

Axiology comes from the greek word axios, meaning worth or value, and logos, meaning logic. It is concerned with categorizing things as good and how good they are (Atria University, 2022). Axiology encompasses ethics, though it is not the same as ethics. Axiology is the study of value, whereas ethics is the study of moral principles. Ethics is concerned with right conduct, and does not include aesthetics, which axiology does (Atria University, 2022). Values focus and motivate research—they ask “what matters? Why research?” and all research is grounded in trying to answer a question that matters (Farrow et al., 2020).

PARADIGMS

Connected with the above are the research paradigms. The word ‘paradigm’ also comes from the Greek, meaning “pattern”. (Kivunja and Kuyini, 2017). It reflects the researcher’s worldview, or interpretation of the world, and is the lens through which the researcher sees the world (Kivunja and Kuyini, 2017). The epistemological, ontological, and axiological views of the research are visible through their research paradigm, with overlap between the positivist, interpretivist or constructivist paradigms, and more (Kivunja and Kuyini, 2017). For example, if the ontological belief is that there is one unified reality, we would be working within positivist, or post-positivist paradigms, which would then inform the research methods and methodology chosen (Patel, 2015). If we are working from the positivism point of view, the methodology could be grounded in experimental research or and quantitative research (Patel, 2015). However, if we are operating under the ontological point of view that there is no one reality, our epistemological purpose would be to understand the underlying meaning of events, using a constructive or interpretive paradigm, through qualitative methods, such as observations and case studies (Patel, 2015).

RESEARCH METHODS & METHODOLOGY

Research methods are “the techniques or procedures used to gather and analyze data related to some research question or hypothesis” (Crotty, 1998). As discussed above, the paradigm, informed by the ontological and epistemological points of view, can inform what research methods are chosen (Patel, 2015). These methods can generally be divided into quantitative, qualitative, or mixed-methods.

If research methods are the specific strategies and exercises employed to help answer a hypothesis, research methodology, or research designs, are the overarching plan that links the actions to the research question (Crotty, 1998).

Quantitative research is “a means for testing objective theories by examining the relationships among variables” (Creswell, 2008). Quantitative research includes studies related to how sets of numbers or variables can correlate to each other, scientific experiments, surveys with predetermined responses that can be translated into data (Smith, 2023). Quantitative research is tied most closely with positivism and post-positivism paradigms (Patel, 2015). The specific methods used in quantitative research in social sciences can be questionnaire and focus group interviews, with a specific focus on closed-ended questions, the structure of which I go into further below (Patel, 2015).

Qualitative research is a multi-disciplinary approach to research used to explore a wide array of topics and learn about social reality. It is about the way humans give meaning to their realities. (Oxford Handbook) Qualitative strategies include observation, open ended interviews, historiography (Berg, 1995), and in the emerging field of performance or practice based research (Huber et al., 2020). Qualitative studies can also include literary analysis and case studies when dealing with subjectivism and critical research paradigms (Patel, 2015).

Ontologically, I am interested most in the subjective and critical views: that reality is what humans perceive to be real, and is also socially constructed (Patel, 2015), particularly in the world of voice and how it is taught to college aged students. For those reasons, I will be focusing on open-ended interviews, Historiography, or Oral Histories, and practice based research.

INTERVIEWS

One major method of collecting data in research is the interview. Interviews can be formal or informal, structured or unstructured, but for the purposes of this paper we will talk about the three versions outlined Bruce Berg’s “Qualitative Research Methods for the Social

Sciences”: the standardized formal interview, the unstandardized informal interview, and the semi standardized guided-semi structured interview (Berg, 1995).

The standardized formal interview is the most structured of the three, and often used when researchers know what kind of information they are looking for (Berg, 1995). The questions are structured in a way so as to get answers from all subjects that may be compared to each other without much variance in potential responses, and “operate from the perspective that one’s thoughts are intricately related to one’s actions” (Berg, 1995).

The unstandardized informal interview is more free flowing and does not involve a set of predetermined questions, with the interviewer creating and adapting on the spot, furthering their line of questions as the subject inspires. These types of interviews can also further the rapport between subject and interviewer and lead to a different kind of fruitful conversation than the previously described structure (Berg, 1995).

The semi standardized falls somewhere between—with questions laid out in a specific way but with the allowance to follow different paths of and lines of questioning as the interviewer feels warranted (Berg, 1995).

A variation on this concept is the one outlined by the Pew Research Center in 2021, which describes what Berg would call standardized as “closed-ended” and unstandardized as “open-ended” (Pew Research Center, 2021). Answers collected in an open-ended survey that are repeated with frequency may, in the future, be used as potential answers in a closed-ended survey (Pew Research Center, 2021).

The wording and structure of questions can both help and hurt an interviewer depending on the language they choose (Berg, 1995). Specificity in what is being asked of the participant in their answer, if they can answer in their own words, and avoiding phrasing questions that ask more than one question at once, such as “do you approve of A and B?” can alter results unintentionally (Pew Research Center, 2021). In the world of vocal health, I am curious to discover if the kinds of questions posed or who is asking the questions, especially when exploring vocal injuries in young performers would have the potential of upending the research by creating an environment where performers did not feel comfortable disclosing information they fear might not be handled with the greatest of care (Estes et al., 2023). “Social desirability bias” may cause interview participants to answer in a way that will make them feel valued and liked, rather than accurate (Pew Research Center, 2021).

Along with this, it might be of interest to the researcher to use sociometry to examine the attitudes of participants and organizations regarding vocal injuries before formulating their interview structure and questions. Sociometry is “a procedure that allows the researcher to

make assessments about the affinity or disdain members of some group have towards one another” (Berg, 1995). This is a particularly interesting concept to me, considering the power dynamic teachers at conservatories often hold over students, and how many young performers feel judgment from their professors (Estes et al., 2023). As Estes et. al wrote,

“Several studies have indicated that when encountering vocal problems, performers frequently rely on voice teachers as their principal sources of education and assistance, regardless of whether they already have an established relationship or wish to engage with a new voice teacher to address their vocal symptoms” (Estes et al., 2023).

This raises questions for me about the ontological perspective in which those voice teachers may be bringing to vocal pedagogy overall, and if that then will affect the perspective of the students. If the students operate from the positivist point of view, that there is one reality and it is influenced by the instruction of a voice teacher with negative perceptions of their vocal health, what sorts of research methodology and methods can we introduce to investigate that claim further? The critical perspective may suggest that this reality is actually socially constructed and a methodology involving discourse and analysis of that discourse may lead to a different outcome than the positivist point of view.

HISTORIOGRAPHY AND ORAL HISTORIES

Historiography, or historical research, is another research methodology touched on by Berg in his book. Unlike the mere studying of facts from history, historiography involves understanding the world, circumstances, culture, society and more that shaped the events as they happened, and how they are just as important as the events themselves (Berg, 1995). The studying of these things can happen through written primary documents, though they do hold a skewed view of events. As the official documentary records, they may also be biased towards a particular point of view based on who the record keeper of the time may have been—for instance, a government official or other leader/dignitary (Berg, 1995). Because of this, there is the benefit of incorporating oral histories into research to add further illuminations. As Berg writes, “first-person accounts such as oral histories and biographies are necessary if a researcher is to understand the subjectivity of a social group that has been ‘muted, excised from history and invisible in the official records of their culture’ (Long, 1987, p.5)”.

Additionally, I am interested in the use of historiography in reference to voice and actor training and how it has evolved in the past to better inform the way we use it in the present.

Specifically, voice work for actors and the evolution it has undertaken throughout the course of theatre history, and even earlier into the oral traditions. Voice training for actors is a newer field of study, particular in its present form, compared to voice training for singers. Particularly in this arena, I find myself drawn to the words of Ingrid E. Peterson from Chapter 5 of “Research and Research Education in Music Performance and Pedagogy” as she describes the oral tradition in the performing arts:

“The oral world is intimately bound up with the experience of being human, and as such, orality is characterized by a practice-based perception of an articulation of all knowledge, i.e. by way of personal knowledge derived from participation or observation...Performers in the Western Art tradition often learn imitatively, in the one-to-one lesson, as well as in the studio class and masterclass arenas...As musical performance is deeply embedded with the world of experience, perhaps the most useful knowledge about performance might be known only to performers!” (Harrison, 2013).

While this speaks specifically of the music performance field, and my own area of research is voice for the actor, this tradition of a master teacher orally sharing knowledge with students can be found in most narratives of actor training as well. For instance, John Barton’s “Playing Shakespeare”, Stanislavsky’s writings in “An Actor Prepares”, and Boleslavsky’s “Acting: The First Six Lessons”. While these are written texts, they are translated from the oral tradition of how these master teachers taught students. Barton’s text itself is taken from the transcript of a video series, not a book written down in traditional form (Stanislavski, 1936; Boleslavsky, 1949; Barton, 2010).

ETHICS

Research ethics are a considerably new phenomenon, considering the long history of epistemological philosophy (Berg, 1995). Institutional Review Boards exist to prevent the violation of rights and invasion of privacy of study participants, and to ensure they have given informed or implied consent to the details of the study (Berg, 1995). Voluntary participation is the ideal, without coercion or manipulation, though maintaining that ideal is often gray, as studies involving those who cannot give full consent or where the power scale is tipped too far one way make that difficult (Berg, 1995).

Beyond the active practice of maintaining ethics in research methods, there are issues in the analyzation and dissemination of research to be considered (Creswell, 2008). Ownership of data, word choice that pass a judgment or otherize participants, and anticipating the

repercussions of performing or publishing certain research on groups of people must be considered (Creswell, 2008).

Of particular importance to note for my own research considerations are ethics around student participants of research. One study found that 77% of all research undertaken and published in two popular scientific psychology journals was done with students (Shen, 2021). Incentivizing participation in research may seem to faculty like a way to engage students in their research, the inherent power dynamic between professor and student can cause the participation to feel like an obligation rather than an option (Shen, 2021). Even students who have positive relationships with faculty may feel obligated to participate in order to continue the relationship (Ferguson, Yonge and Myrick, 2004). Combined with the particularly sensitive feeling mentioned above between voice teacher and student when it comes to voice injuries and health, research around the vocal health of students can be tricky to regulate. Some solutions outlined for the social sciences, such as randomization of student participants to faculty who may or may not have a direct relationship to the student, are less possible in with the smaller pool of student actors and singers compared to other majors at the average university, as well as a smaller number of researchers investigating vocal health (Shen, 2021).

CONCLUSION

Epistemology, ontology and axiology come together to form a research point of view, or paradigm, which in turn creates a methodology which we can use to answer our questions about the voice and vocal health (Patel, 2015). In exploring these points of view, I can see the value in each. The question of how we view reality, as a set and single truth, an individual perception, or a socially constructed entity (Patel, 2015) has impacts on the way we treat and view mental health and its connection to the voice. For example, the fixation and fear that many performers have of vocal injuries as career ending tragedies, when they are actually quite prevalent and treatable (Harvey, 2003). If this is a belief they hold in a positivist way, as the single truth and reality, it should affect the way voice teachers speak about such injuries. While many quantitative studies have been done on the effects of vocal injury, I am interested more in the qualitative work of examining what stories performers tell themselves about their voices and how it affects performance outcomes. This is of particular importance when dealing with the ethics of working with student performers, and the ethical concerns mentioned above. As Efva Lilja writes in her essay “The Pot Calling the Kettle Black” in *Knowing in Performance*, p. 33, “Research (at its best) stimulates collegial interaction and makes collective effort possible”. By having a basis of the epistemological, ontological, and axiological of how and why we research,

voice teachers and students may collectively find answers to questions that impact and benefit our vocal health community.

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