Ontological, Epistemological and Methodological Assumptions: Qualitative Versus Quantitative

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2008

Introduction

The review to follow is a comparative analysis of two studies conducted in the field of TESOL in Education published in <u>TESOL QUARTERLY</u>. The aspects to be compared will be as follow. First, brief description of each study will be presented. Second, the ontological, epistemological and methodological assumptions underlying each study will be compared. Third, the ethical issues that researchers of each study breached will be pinpointed. In addition, some aspects of the socio-political contexts of each study will be handled. Finally, a critique of each study will be presented.

Brief Description of the First Study

The first study in the comparison is entitled: *Becoming "Black Lambs" Not "Parrots": A Poststructuralist Orientation to Intelligibility and Identity.* The aim of this study is to answer the following question: How do international speakers of English assert their identities as legitimate teachers of English given the privileged position of the native speakers? To answer this question, case studies of two Taiwanese students in their first year of study in a two- year Master of Arts in TESOL (MA TESOL) programme were presented. The data was collected using interviews and reaction papers written in a pronunciation pedagogy course in response to challenging readings. At first, it was found out that the pre-service teachers had multiple and conflicting identities as legitimate speakers and teachers of English. The interviews and the written texts were analysed using the constant comparative method in which categories were coded and compared across similar incidents in the same category. Two main findings were highlighted: First, these teachers were able to appropriate and imagine new identities as legitimate speakers and teachers of English through the linguistic resources provided by the course readings. Second, these teachers also recognized that they had other means besides native-like pronunciation to establish their legitimacy as competent speakers and teachers of English. [1]

Brief Description of the Second Study

The second study is entitled: *The Effects of Listening Support on The Listening Performance of EFL Learners.* It is designed to develop the listening performance of EFL learners. It is considered a support for 160 Business college Taiwanese students whose listening performance is low. The researchers of the present

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[1] Golombek, P. & Jordan, S. (2005). *Becoming "Black Lambs" Not "Parrots": A Poststructuralist Orientation to Intelligibility and Identity. TESOL QUARTERLY* Vol. 39, No. 3.

study investigated the effects of four different types of listening support: previewing the test questions, repetition of the input, providing background knowledge about the topic and vocabulary instructions. Samples used were of least and most anxious students. The researchers conducted their experiment on four groups of intact classes. The groups were exposed to the four different types of listening support mentioned earlier. Results showed that the most effective type of treatment was providing background knowledge about the topic, followed by repetition of the input. As for previewing test questions, it had little significance. Vocabulary instruction was the least useful type of support. [2]

The Ontological Assumptions

Prior to clarifying the type of ontology used in these studies, it is important to define ontology. Ontology is defined by (Crotty: 2003:10) as "the study of being". It is concerned with "what kind of world we are investigating, with the nature of existence, with the structure of reality as such". Guba and Lincolin (1989:83) state that the ontological assumptions are those that respond to the question 'what is there that can be known?' or 'what is the nature of reality?'

Having given these definitions of ontology, it is now worth identifying the ontology of the first study. The first study uses an ontology which is essentially of a social world of meanings. In this world, researchers have to assume that the world they investigate is a world populated by human beings who have their own thoughts, interpretations and meanings. The researchers' investigation of this world is clearly manifested in their use of the different research methods and techniques of the interpretive design such as interviews and reaction papers written in a pronunciation course in response to challenging readings in order to interpret the students' feelings, and inner thoughts. Moreover, using the case study as a methodology of the present study focuses the students' opinions, feelings, experiences and inner thoughts.

As for the second study, it adopts a realistic ontology. One that follows the physical world in which the researchers assume the existence of a world of cause and effect. It is not ontology of mechanical causes caught in the cause-effect relationships. In this study, the researchers assume that there are some realities "i.e. the four different types of listening support mentioned earlier", which exist in the world and may affect the listening performance of the 160 business Taiwanese college students. So, I think that they follow a realistic ontology I also think that they view it as a causal reality. Pring (2004:62) referred to this notion saying "One purpose of research is to explain what is the case or what has happened. A reason for seeking explanations

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[2] Chang, A. & Read, J. (2006). *The Effects of Listening Support on the Listening Performance of EFL Learners. TESOL QUARTERLY* Vol. 40, No. 2.

might be to predict what will happen in the future or what would happen if there were to be certain interventions." This is clearly shown in the aim of the study that is targeted at examining the effects of different listening support on developing the listening performance of the 160 Taiwanese business college students. This means that the researchers are looking for what will happen to the students if we use a certain type of listening support. They assume that any improvement in the students' performance may be attributed to the listening support intervention.

The Epistemological Assumptions

Epistemology is 'a way of understanding and explaining how we know what we know', (Crotty,2003:3). Epistemology is also 'concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate.' (Maynard, 1994:10) in Crotty, Ibid, 8).

The Epistemological stance used in the first study is constructionism. Constructionism is defined by Crotty (2003:42) as "the view of that all knowledge and therefore all meaningful reality as such is contingent upon human practices, being constructed in and out of interaction between human beings and their world and developed and transmitted within an essentially social context." Thus, meaning is not discovered, but constructed.

The reasons why constructionism is the epistemological stance of the first study are as follow. First, the researchers are trying to find an answer to the question "How do international speakers of English assert their identities as legitimate teachers of English given the privileged position of the native speakers?" by presenting case studies of two Taiwanese students in their first year of study in a two-year Master of Arts in (MA TESOL) programme. Second, the construction of meaning is transmitted within an essentially social context this is shown in the interviews and reaction papers. Finally, constructionists view that there is no true or valid interpretation. This is represented in the conclusion as researchers suggest new directions for pronunciation pedagogy in general and for teacher education in particular. These suggestions do not mean that they are true or valid. So, the present study is an invitation to reinterpretation.

As for the second study, objectivism is the epistemological stance. Objectivist epistemology holds according to (Crotty, Ibid) that meaning, and therefore meaningful reality, exists as such apart from the operation of the any consciousness. It means that the mind of the investigator is thought to be separate of the world of objects, of what is investigated. In the second study, the researchers separated themselves away

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from the objects they are studying. They are looking for the effect of listening support (as realities exist in the world) on the listening performance of EFL learners. Researchers concluded that the types of treatment had different effects on the learners listening performance. Here they claim that they have found "the way things really are and the way things really work." (Pring, 2004).

The Theoretical Perspective

The theoretical perspective is defined as "the theoretical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria." (Crotty, 2003:7). Since the ontology of the first study is mainly concerned with the human world of meanings and interpretations and the epistemological stance is mainly constructionist in nature, thus, it is logically sequenced that interpretivism is the theoretical perspective underpinning this study.

I would argue that interpretivism is the theoretical perspective of the first study for the following reasons. First, from an interpretivist viewpoint, "people are deliberate and creative in their actions, they act intentionally and make meanings in and through their activity." (Blumer, 1969). Second, people actively construct their social world – "they are not 'the cultural dopes' or 'the passive dolls' of positivism." (Becker, 1970). Third, "the social world is studied in its natural state without the intervention of, or the manipulation by the researcher." (Hamersley and Atkinson, 1983). In addition, Cohen et al (2002:22) advocates the use of interpretivism stating that (1) individuals are unique and largely non-generalizable. (2) there are multiple interpretations of, and perspectives on, single events and situations. (3) situations need to be examined through the eyes of the participants, rather than the researcher.

As for the theoretical perspective of the second study, I would argue that it is positivism. Positivism as Tashakkori and Teddlie (1998:7) considers it "bases knowledge solely on observable facts and rejects speculation about 'ultimate origins'." In addition, Crotty (2003:27) states that "one thing is certain: positivism is linked to empirical science as closely as ever." Moreover, Pring (2000:36) clarifies stating "one aspect of the scientific paradigm, which educational research might emulate is the experimental design". As for the second study, it is theoretically positivist for the following reasons. First, it is based on an experimental design of research. Second, it is based on 'causal linkages'. Tashakkori and Teddlie (Ibid:7) state that "positivists believe that that there are real causes that are temporally precedent to or simultaneous with effects." Moreover, "there is an emphasis on a priori hypotheses or (theory)". Tashakkori and Teddlie

(1998:7). In this study, the researchers hypothesize that the suggested listening support will have an effect on developing the EFL Listening performance. Finally, the researchers verify their hypotheses using statistical analysis of data.

The Methodological Assumptions:

Methodology is "the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of the methods to the desired outcomes." Crotty, (2003: 3). It aims to describe, evaluate and justify the use of particular methods. (Wellington, 2000).The methodology of the first study is case study. A case study is defined by Adelman, et al (1980) as 'the study of an instance in action'. It is also defined by Pring (2000:40) as 'the study of the unique case or the particular instant'. Cohen (2000:181) states that case studies provide a unique example of real people in real situations, enabling readers to understand ideas more clearly than simply presenting them with abstract theories. The case study used in this study as Yin, R.K (1984) puts it, is evaluative (explaining and judging). This is clear in the explanatory case studies in the cross section analysis.

As for the methodology employed in the second study it is the experimental research methodology. The researchers of the present study investigated the effects of four different types of listening support. They designed four experimental groups to investigate the effect of each type of listening support separately. Samples were of least and most anxious students. Data was statistically analyzed and the interview responses were transcribed and analyzed manually. Results showed that the most effective type of treatment was providing background knowledge about the topic, followed by repetition of the input. As for previewing test questions, it had little significance. Vocabulary instruction was the least useful type of support.

Methods

Methods are 'the techniques or procedures used to gather and collect data related to some research question or hypothesis'. (Crotty, 2003: 3). The use of the case study methodology in the first study justifies the use of the methods. There are two methods used in this study; the interview and the reaction papers. The interviews and the written texts were analyzed using the constant comparative method in which categories were coded and then compared across similar incidents in the same category. The spoken and the written data

for this study were analyzed to uncover the tacit ideologies at work in participants' talk. The words and terms our participants employed were important because words are a powerful tool for characterizing, sanitizing or intensifying a categorization or an interaction.

As for the second study, the listening comprehension test, and the interview schedule were used. The test consisted of two short scripted listening talks, each of which had 15 multiple-choice items making 30 items for the test. An informal interview was to be conducted to elicit the students' feelings, perceptions of the effectiveness of the form of the listening support they received and their report of the strategies they used to answer the test items. Samples used were of least and most anxious 160 Taiwanese business college students. SPSS 10.1 for windows was employed for the statistical analysis. A univariate analysis using a generalized linear model was performed The interview responses were transcribed and analyzed to interpret the results of the statistical analysis.

Some Ethical Considerations

Ethics is defined by Simons (1995) in Pring (2000: 142) as "the search for rules of conduct that enable us to operate defensibly in the political contexts in which we have to conduct educational research" Chilisa (2005) highlights research ethics and legitimacy of knowledge saying "ethical issues in research include codes of conduct that are concerned with protection of the researched from physical, mental, and/or psychological harm. The codes of conduct to protect the researched include ensuring anonymity of the researched and confidentiality of the responses."

Ethically speaking, there are two different positions that most researchers follow; the utilitarian and the deontological. The first study follows the deontological position as it sketches two case studies only and its results can't be generalized on each and every case study. On the other hand, the second study follows a utilitarian position**.** Pring (2000:144) sums up the meaning of utilitarianism saying "the utilitarians attach supreme importance to the creation of happiness for the greatest number." Moreover, Tarrant (2001) defines utilitarianism as "an ethical theory which has shown itself to be both flexible and comprehensive".The second study is considered utilitarian in nature due to its support to 160 business college Taiwanese students.

Kfir and Shainai (2002), Trites and Belanger (2005) MacDonald (1974) in Pring (2000) provided a number of ethics violation in research work. I will deal only here with those ethical issues related to the first study. First, the researchers of the present study didn't show that they have got the informed consent of the participants. The researchers justified saying "Early in this semester, Stephanie, in Paula's absence, explained the study and asked for volunteers." This shows that they didn't get a documented approval of the students'

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participation. Second, both researchers exploited their positions as university lecturers and didn't get permission of the university administration to conduct the research. Another unethical issue is publishing parts of the students' words without their permission. This is clearly shown on pages 519 – 527 in the study report. In addition, participants were not fully acquainted with the secondary use of data. What added insult to injury is that one of the researchers is conducting the research herself which is called the researcher's confirmation bias. Finally, the interpretations of the interview were not accurate as the transcribed audio-tapes were not submitted back to the students to reflect, modify or change them.

On the other hand, the second study has it ethical issues. First of all, the researchers of the present study manipulated the participants concerning their aims by using their authority as associate professors. They used the participants involuntarily to conduct their experiment. Second, the researchers did not get the consent of both the students and the university administration for conducting the study. Third, they published parts of the students' words without their permission on pages 391 and 392 of the study report. Fourth, the interpretations of the interview conducted with the students were not accurate as the drafts of the transcribed interview were not submitted back to the students to modify, or change them. Moreover, participants of the present study were not knowledgeable about the purpose of the study and those who will have access to the data at present or at the future. Finally, one of the researchers of the present study is conducting the experiment himself and this is what is unethically called researcher's confirmation bias.

From my own point of view, there are some unethical issues in the second study. First, the researchers should have enclosed the translated version of the Interview and the Listening Comprehension Test in English as appendices to reveal their honesty and accuracy in conducting research. Second, the researchers showed no proof the test validity. Finally, there is a reference to gender issue, 'she', 'he' and 'her' in the study report on page 391. This gender reference might be ethically problematic in terms of participants' confidentiality.

Some Socio-political Contexts

Denotationally speaking, the term "socio-politics" refers to the context in which both society and its politics interact together. As both studies are about Taiwanese students and Taiwanese society, thus, it is worth pinpointing a shared number of socio-political contexts.

On the international context, English has become the world's most common means of communication. Jean and Lee (2006) stress that "English is the most commonly used language in the world. As it has become the language that provides access to higher education and job opportunities, and has become almost

exclusively the language of diplomatic discussion and business negotiation." This applies to the first study in terms of the case studies of two Taiwanese students coming to the U.S. to do their M.A. in TESOL. This gives these Taiwanese students more credibility as teachers of English in their country in addition to being prestigious internationally. This also applies to the second study in terms of teaching English to the 160 business college Taiwanese students. Law (1996) clarifies that saying "The awareness of the importance of making Taiwan more international has not been only the concern for the government but also for the academics in the university sector."

On the national context, Apple (1996:42) states that "beyond their ideological premises and assumptions, educational policies are deeply embedded in a society's socio-economic structure and political conflicts. As such, they can not be comprehended outside the immediate political and cultural context in which they are constantly formulated and negotiated." This applies to the first study in terms of giving their teachers of English the chance to travel abroad to get their degrees from an English speaking country. As for the second study, the researcher's statement of the word 'required' in the phrase," They were all taking a required English listening course at a college at Taiwan" denotes the hidden national socio-political agenda to cope with the required national standards of study at university and thus be able to compete with their business counterparts internationally.

Chen (2006) highlights that "Taiwan adopted the English education policy to develop English communicative proficiency in order for Taiwanese students to be competitive in the globalised world." In order to enhance the Taiwanese competitiveness in the global market, Weng (1999) states that "The Taiwan government has begun to expand its higher education in the last decade and allow private universities to flourish. More recently, The Taiwan government has put even more emphasis on education and openly declared that 'the higher the quality of human resource is, the stronger the state is.'

On the local context, Taiwanese political system is democracy which is reflected in the decentralization of education. This is clear in both studies as students are free to join whatever specialization they like bounded by some requirements. In the firs study, the students have gone to the U.S. to do their M.A. degree. In the second study, students are given the chance to join the business department as they like.

On the institutional context, we find Taiwanese universities urging and encouraging their students to make full use of education. Working within any institution as teachers should encourage our students to exploit their potential as Kumaravadivelu (2003:44) states "Our first and foremost duty as teachers is to maximize learning opportunities for our learners". In the case of the first study, the two case studies go to Pennsylvania state university in America to be experienced in their teaching of English as a foreign language. As for the

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second study, the researchers are investigating the effect of listening support to maximize the learning opportunities for their students, yielding in better results and improved performance in their listening comprehension in particular and language proficiency in general.

On the discursive context, the native speakers of English mania is important. Parents, administrators, employers prefer the white native speakers of English to their non-native counterparts to teach English. This is obviously shown in Yeh (2002) saying "Native speakers are the major attractions in such schools. Parents clamor for them and schools which have them recruit students faster." In reality, the preference of the native speakers of English is represented in the increase in their salaries and the employability. On the other hand, this preference has its dire consequences as the Taiwanese teachers of English become de-motivated and dissatisfied at work. This will affect the Taiwanese teachers negatively as Yeh says in the conclusion "It creates a cold tension that affects not only the workplace but also the level of their performance."

The research influence on the socio-political context is great. As for the first study, the two Taiwanese teachers have in mind that they will be back to their country holding a degree in English from America showing that they are equal to their native counterparts. In addition, they will be empowered with the experience required to be transferred to their Taiwanese students. Thus, they have been qualified enough to teach the English language efficiently and effectively. This will influence their teaching of the English language to their students who will be efficient in their use of the language and competitive internationally.

The research influence of the socio-political context of the second study is also useful. Preparing 160 business college Taiwanese students to be competent in English will help them compete in the globalised market with their international counterparts. This asserts what Mok (2000) said about the former Minister of Education vision of education. "He conceives that the future society should be 'learning society' in the coming century. Thus, he is particularly keen to develop Taiwan as a 'lifelong learning society' while Taiwan people can be educated to be creative and adaptive to changes and challenges ahead." In this way, improving these students' English language is one of their tools to adapt to the changes and challenges of the future society to be creative lifelong learners. Thus, on the micro socio-political level, the students benefited from the research as their listening comprehension improved and on the macro socio-political level, part of the educational policy goals is achieved.

Critique of the first study

Hitchcock and Hughes (1995:322) consider that a case study has several hallmarks:

- It is concerned with a rich and vivid description of events relevant to the case.

- It provides a chronological narrative of events relevant to the case.
- It blends a description of events with the analysis of them.
- It focuses on individual actors or group of actors and seeks to understand their perceptions of events.
- It highlights specific events that are relevant to the case
- The researcher is integrally involved in the case.
- An attempt is made to portray the richness of the case in writing up the report.

Despite the above mentioned hallmarks of case studies, Nisbet and Watt (1984) in Cohen, et al (2000: 184) have mentioned some of the weaknesses of case study. First, the results may not be generalizable except other readers/researchers see their application. Second, they are not easily open to cross-checking, hence they may be selective, biased, personal and subjective. Finally, they are prone to problems of observer bias, despite attempts made to address reflexivity. In addition, Cohen et al (2000: 183) criticize case study saying "its sympathy to the interpretive paradigm has rendered case study an object of criticism, treating peculiarities rather than regularities". Moreover, the researchers violated some of the ethics of educational research that are previously mentioned in the review.

From my own point of view, the researchers of the first study used only two case studies which is a small number. This small number doesn't give the case studies its credibility and as a result their claims are not much convincing. If the researchers could have conducted the study on five to ten case studies, it would have been more credible and valid. Moreover, if the researchers had tried a different approach such as ethnographic study or action research, they could have gained more valid interpretations to the real status quo where the participants live and interact on one hand and a developed, tested and critically examined rational for what they are doing.

Critique of the second study

From my own point of view, the experimental design applied in the second study has some good qualities. First, it follows the scientific paradigm that is objective. Second, when the sample is representative of the population, it gives credibility to the research. Finally, generalizability is an issue of the experimental design when all the variables are well-controlled.

Despite the above mentioned advantages of the second study, it is likely to have points of weakness. First, it is clear that the sample was not randomly assigned. This shows that other extraneous factors might have influenced the improvement in the students' level. Second, the researcher's confirmation bias is one of the weaknesses of this study as one of the researchers conducted the researchers himself. Moreover, the

researchers violated some of the ethics of educational research that are previously mentioned in the review. Finally, as an experiment, the second study lacks the interpretations and explanations of the participants themselves. It could have been better if the researchers of this study combined mixed methodology in the research to get the objectivity of the experimental design and the interpretation of the qualitative studies.

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