Discerning Knowers:

Exploring University Students' Perceptions of Knowledge Claims.

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Abstract

Sociologists often view the authority of knowledge as a reflection of social power. Educational research mirrors with theories that treat knowledge as primarily "knowledge of the powerful" (Young 2009:13). This study employed conceptual tools from Legitimation Code Theory (Maton 2014) and Systemic Functional Linguistics (Eggins 1994; Martin 1993) to explore university student's perceptions of knowledge claims and if knowledge is deemed to be shaped both by *social relations* and *epistemic relations.* Sixteen semi-structured interviews were conducted in 2012 for an honours research project with participants from four Sydney based Universities. Results indicated that students perceive knowledge to have its own organizing principles, its legitimacy and power not reducible to who has the social power to claim knowledge.

The study discussed in this paper explores how university students perceive the legitimacy of knowledge claims and whether students' believe legitimacy derives from something characteristic of knowledge or that its authority is an epiphenomenon of social relations of power. To investigate this empirical concern, the question was further broken into three sub-questions: who do students perceive have the authority to claim legitimate knowledge; what kind of knowledge claims do students recognize; and where are these different types of knowledge claims are deemed legitimate? It was found that University students recognize different types of knowledge claims, which realise varied levels of legitimacy, depending in part on the context in which they are employed irreducible to social patterns of authority. This demonstrated a prioritising principle with regards to who can claim different types of knowledge and where. In this paper, the research question will be first situated in the literature before moving on to describe the theory and methods, and present a discussion the main findings of the study.

Situating the Problem

Sociologists have often viewed the legitimacy of knowledge as a function of power relations, with dominant social groups defining what constitutes legitimate knowledge to the detriment of subordinate groups (Marx and Engels, 1967; Mannheim, 1976; Swindler and Aridti, 1994). In this approach to the sociology of knowledge, the emphasis is on the effects of social position or structures on the ordering and legitimacy of knowledge. Similar approaches in the sociology of education have focused on what Young (2009:13) terms "the knowledge of the powerful". Bourdieu's and Passeron's (1977:4) discussion of "symbolic violence" is a prime example of an analysis of educational knowledge is rendered as knowledge of the powerful. Bourdieu and Passeron (1977:4-5) argue that schools imposes symbolic violence on dominated social groups through the *misrecognition* of arbitrary cultural forms as legitimate non-arbitrary knowledge. Schools are thus thought to favour dominant social

groups whose dispositions align with the 'neutral' curriculum. While this general approach contributes to understanding the reproduction of social stratification through education, it provides no means to distinguish between different types or specific aspects of knowledge.

Young (2009:13) argues that discussion of knowledge solely in terms of "the knowledge of the powerful" belies one of the central purposes of schools: to teach "powerful knowledge" that is not available to all social groups outside of formal education. Bernstein (1990:165) drew a similar distinction between "relations to" and "relations within" analysis of education. The first analysis, relations to, situates education in the wider social context; while the second mode of analysis, relations within, seeks to elaborate the organizing principals of education and the specialized forms of communication that determine success within the field. In recent years, social realists (Moore and Maton 2010; Maton 2014), building on the groundwork laid by Bernstein and others have developed a sociological approach to the organizing principles of knowledge practices that seek to avoid the duel trap of rendering knowledge as a platonic absolute or relativistic standpoint. It is from this body of theory and research that the current paper draws its theoretical framework.

Research Design Theory and Methodology

The theory that informs the research design is drawn from Legitimation Code Theory and Systemic Functional Linguistics. In particular, Maton's (2014) specialization codes, Martin's (1993) work on technicality in scientific discourse, and Eggins (1994) discussion of how agentive and nominalized language shapes meaning. Form these sources a framework for the operationalization of knowledge claims and their communication was developed and integrated in the stimulus material which was used in the semi-structured interviews.

Maton's (2014: 29) concept of "specialization codes" provides a sociological instrument to conceptualize knowledge practices and the basis of legitimate knowledge within different

fields. Specialisation codes operationalizes knowledge practices along two dimensions, "*epistemic relations"* (ER) and "*social relations"* (SR) recognising that knowledge practices entail both a statement about the nature of things and statements by someone who claims to know (Maton 2014: 29). The strength of epistemic relations denote stringency of how something can be claimed as knowledge - the procedures used to produce legitimate knowledge of an object of study - while social relations denote the types of knowers within a field that can claim legitimacy. The strength of these two dimensions can vary independent of each other to produce four different code modalities: knowledge codes (ER+, SR-), knower codes (ER-, SR+), elite codes (ER+,SR+) and relativist codes (ER-,SR-). The basis of legitimacy is determined by a code match between the social actor's coding orientation and the dominant code, a clash between these two elements can signal failure and illegitimacy.

Martin (1993) and Eggins (1994) provide a means to understand language as a proxy for the analysis of knowledge claims. In this study, informal, formal and technical language was deemed to be indicative of different specialization codes. Eggins (1994:59) notes that a significant feature of formal or written language is a process called "nominalization", where words are transformed into nouns or groups of words rendered as nouns to signify things and processes. Formal language places a distance between the author and the statement by constructing nominal groups and allows for the elaboration of logical relationship between nouns; as opposed to agentive constructions which focuses on personal agency through the use of pronouns and verbs and is indicative of spoken and informal language. This is important for understanding the communication of knowledge claims, as either distanced is placed between the author and statement through nominalization, emphasising the known, or drawn together through an agentive construction, emphasising the knower.

Beyond informal and formal language, technicality is feature of scientific and academic discourse that helps in "building up an uncommon sense interpretation of the world" (Martin

1993:225). On the level of lexicon, scientific discourse constructs technical terms that "accumulate meanings in a single word" and classify objects of study (Martin 1993:225). There is not an equivalent relationship between technical terms and everyday words, as technical terms 'distil' meanings and transform them into specialized understandings. The notion of technicality informed the use of technical words in the stimulus material used during the interviews which were deemed to indicate higher epistemic relations.

Methods

Sixteen semi-structured interviews were conducted with university students from the Sydney region. Participation was secured using convenience sampling, flyers were distributed around four Universities and social media pages dedicated to University clubs, with further snow-balling after the initial intake. The final sample consisted of sixteen students drawn from the University of Sydney (10), University of New South Wales (4), University of Technology Sydney (1) and Macquarie University (1). A spectrum of degree courses were represented, from Science and Engineering (4), combined Arts and Science (2) and Humanities, Law, and Social Science (10) degrees at various stages of completion ranging from 2nd year undergraduate to post-graduate masters students.

The interview schedule had three main sections, based around stimulus material and prompt questions: The first set of stimulus material, 'text and author', comprised two text modified from Eggins (1994) that exemplified informal language (a mother talking about her baby) and formal (a written text on the causes of infant's distress). The second part, 'agreement scenario', had an interviewer and interviewee discussing an economic sector employing clashing specialization codes. The final scenario, 'teacher and student', had a teacher engaging a student in a discussion of social media and social capital exhibiting a clash in specialization codes, technical and non-technical language in a pedagogic context.

Results and Discussion

The following section is divided into three parts, mirroring the interview themes and sets of stimulus material which participants responded to.

Text and Author

In response to the first set of stimulus, the use of informal and formal language was central to the participants' identification of the social position of first author as a mother and the second as a professional producing written text. In a comparison of the two text's legitimacy, Participant 6 (F) drew a sharp distinction between "credibility of the information" and "credibility of the realistic-ness (sic) of the situation". "Credibility of the information" was defined by Participant 6 (F) in terms of the author's possession of specialist knowledge (ER+,SR-), while "credibility of the realisticness (sic) of the situation" was used to describe the authenticity of the individual's personal experience (ER-,SR+).

The use of formal language was thought to convey legitimacy in the formulation of specialist knowledge (ER+, SR-). Participants deemed it more precise than informal language and therefore entailing less potential for ambiguity and less dependence on the listeners' understanding of the author or their particular situation. The participants perceived language features to have an effect on the communication of knowledge claims, formal language contributes to the speaker's legitimacy because it allows the author to communicate ideas logically and distinct from their immediate experience. As Eggins (1994:59) explains, the power of formal and written language is an outcome of allowing us to "organize our text not in terms of ourselves, but in terms of ideas, reasons, causes" and to load sentences with more content carrying words. Bourdieu's (2012) sociological account of linguistic utterances

suggests that the power of language derives not from its constituent features but from its association with dominant social groups or institutions: educational institutions are said to present a particular cultural arbitrary as legitimate. The participants identified formal language as indicative of a knowledge code and inferred from the formal language that the author held a position of authority.

Argument Scenario.

The second set of stimulus material involved discussion of an interview transcript with a representative from the small business sector. The interviewer relied on statistical information as the basis of their knowledge claims, while the interviewee based their claims to legitimacy on an acquaintance with the quotidian aspects of the business sector. This was an attempt to ascertain the importance of different kinds of knowledge claims; to see whether participants differentiated between two specialization codes in the scenario, and the legitimacy that derived from each.

The interviewer's knowledge claims were described by the participants as emphasising "routine knowledge" (Participant 4) of the object of investigation, indicating stronger epistemic relations (ER+). No explicit attempt was made to emphasise the interviewer's social position or attributes, which would indicate weaker social relations (SR-). Alternatively, the interviewee's social position and experience was identified as the basis for their knowledge claims, which indicates stronger social relations (SR+). The interviewer's poor grasp of the issue beyond their own experience was negatively evaluated, as indicating weaker epistemic relations (ER-). Thus, participants identified a clash between a knowledge code (ER+, SR-) and knower code (ER-,SR+) which they took to be a clash of different kinds of legitimacy. The knowledge code was deemed to confer more legitimacy in terms of explanatory power, however, in the context of a television interview, the knower code was

also deemed to be an effective means to appeal to "common sense" as Participant 3 (M) said "this is the kind of argument that would get by on television, but in written form it wouldn't stand up to scrutiny". Two participants commented directly on the propositional content of the argument, with Participant 14 (M) rejecting assumptions implicit in the interviewer statements and Participant 1 (F) described the interviewee as engaging in a "bourgeois kind of discourse". This indicates that specialization codes, while an important tool to understanding knowledge practices, are only one dimension of legitimacy indicating the need to consider participants affects and values.

The participants' generally agreed that different knowledge claims have different levels of legitimacy based on the context in which such claims are expressed. Whilst students clearly identified the different kinds of knowledge claims on which the discussants based their arguments, and attribute different levels of legitimacy to each claim in terms of what it attempted to demonstrate, an important question of 'where' these claims are made was deemed a determinate of legitimacy.

Teacher and Student.

With the third set of stimulus material, the participants were presented with a transcribed dialog between student and teacher where the student failed to engage with the technicality of the discussion and its wider application beyond their own personal experience. Unlike the previous two sets of stimulus materials, the context was relatively well defined and allowed participants to discuss the issue of 'where' different forms of knowledge claims have authority.

All participants noted the clash between the level of knowledge that the teacher seeks to elicit from the student and the student's lack of engagement with the terminology or specialization code of the teacher. While some participants' felt that the student's responses to the teacher

were inappropriate to the context and demonstrated a clear lack of understanding, other participant's felt, at first, that the student's responses were appropriate to the context. Participant 5 (M)? did not see the student's colloquial and personal responses "as a problem" as "long as the idea is there". Participant 14 (M) though he acknowledged the difference between the teacher's "theoretical" approach and student's use of personal examples still felt that it was still appropriate to a University tutorial.

Participant 13 (F) pointed out that students often do engage in tutorials in that manner. Though she argued this isn't necessarily the most effective way of answering the question posed by the teacher as the student didn't engagement with the technical language of the field. There was a minor divergence of opinion in the sample on this point. Participants with a social science and humanities background were more accepting of the student's responses at first, while generally coming to the conclusion that the knowledge claims the student employed were less effective for an academic context. In contrast, participants with a background in natural science and engineering were more disparaging of the student's responses and categorically asserted that such responses would be inappropriate to a science classroom or lecture. This could be due to the relative weight placed upon epistemic relations in science curricula and social science/humanities curricula which informs how participants from divergent fields view knowledge practices.

Overall, participants identified context an important determinate of when different forms of knowledge claims have legitimacy. This builds on the previous responses: the first part showed that the question of 'who' had the authority to claim knowledge was not reducible to social position as social position was read from features of the text. The second part showed that different knowledge claims conferred different forms of authority, but that this authority is context-dependent. While the social position of the teacher was recognized as conferring legitimacy to their knowledge claims, the participants' recognized technical language and

the strength of epistemic relations as a marker of legitimacy in the pedagogic context. The participant's responses support the social realist position that knowledge practices have organizing principles that determine the basis of legitimacy for different knowledge claims in a given context.

Conclusion.

This study explored how university students evaluate the legitimacy of knowledge claims, along the lines of who has the authority to claim what knowledge and where. Knowledge claims were operationalized by specialization codes and the forms of language used to communicate knowledge claims. Students recognized the different properties of language that underlay specialist knowledge (ER+, SR-) and everyday understandings (ER-, SR-/+), which were deemed to confer different levels of legitimacy relative to the context in which the knowledge claims were employed. The legitimacy of knowledge was not completely captured by specialization codes, as demonstrated by student responses to the argument scenario. This points sociologists to consider legitimacy both in terms of its epistemological and axiological dimensions. There was a divergence between students in science and engineering and arts, social science, and humanities degree-courses that suggests different specialization codes are operative in these fields of higher education and that this informs student perceptions of legitimate knowledge. On the whole, students viewed knowledge claims as irreducible to social power alone, demonstrating a prioritising principle by discerning what knowledge claims are powerful and when. Recognizing the organizing principles of knowledge practice, within education and beyond, can help extend access to powerful knowledge to those excluded from the knowledge of the powerful.

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