

Pearling seminar
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Language and legitimation:
Disciplinary differences in constructing space
for new knowledge.

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How does discipline impact on who gets to know what in the introduction to a research paper?

The problem...

There has been much recent discussion in studies of academic literacy around the need to address disciplinary differences.

An understanding of the ways in which disciplines use language differently, and hence mean differently, is fundamental to providing meaningful academic language support for students and researchers. It is also especially relevant in an evolving academic context in which inter-disciplinary or trans-disciplinary study and research are actively encouraged. Effective inter-disciplinary collaboration relies on a better understanding of disciplinary differences.

To date studies of disciplinary differences in applied linguistics have been dominated by two orientations:

- corpus-based quantitative studies of distributions of discrete linguistic features, and/or
- ethnographic studies that choose to largely ignore language in favour of observations of 'activity'.

Engaging with sociological theorisations of knowledge (Bernstein; Maton) has suggested a number of fruitful directions for the linguistic analysis and explanation of disciplinary difference.

From the field of the sociology of knowledge Disciplines as kinds of *knowledge structures*
(Bernstein 1999)

Bernstein draws our attention to differences in kinds of knowledge (what he calls *discourses*):

Horizontal discourse or commonsense knowledge

'local, segmentally organised, context-specific and dependent'

The kind of knowledge we acquire and use in the home and local community.

Vertical discourse or un-commonsense knowledge

'coherent, explicit and systematically principled structure'.

characteristic of formal schooling and of academic study where knowledge is abstracted from everyday and commonsense understandings.

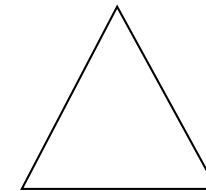
Then Bernstein differentiates **vertical discourse** into different kinds of **knowledge structures**:

Hierarchical knowledge structures

Horizontal knowledge structures.

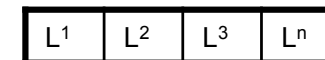
A hierarchical knowledge structure is one that builds on and integrates knowledge at lower levels in the attempt 'to create very general propositions and theories'. There is an integration of existing knowledge in the process of constructing new knowledge
- as in the natural sciences.

This orientation towards integration at lower levels in the building of generalised propositions is typically represented visually as a triangle:



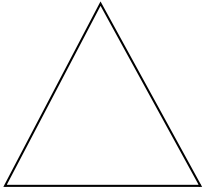
A horizontal knowledge structure is 'a series of specialised languages, each with its own specialised modes of interrogation and specialised criteria'
- as in the humanities.

A horizontal knowledge structure is represented diagrammatically as a series of discrete strongly bounded and so segmented languages



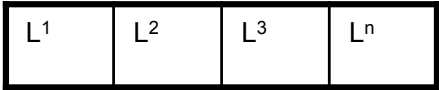
Knowledge structures (Bernstein 1996,1999, 2000)

Accumulating knowledge through integration



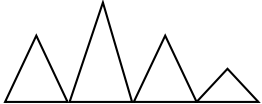
Hierarchical knowledge structure
the sciences

Accumulating knowledge segmentally



Horizontal knowledge structure
the humanities

Segmented languages some with with stronger verticality



the social sciences

On the basis of this theorisation from sociology of disciplines as different kinds of knowledge structures ...

we might expect to find differences in the ways in which research writers from different disciplines go about constructing a warrant for their research in the introductions to their research papers.

If they come from disciplinary homes that view knowledge differently and have different ways of accumulating knowledge then we might expect that they would engage differently with other sources of knowledge in the construction of their research warrants. We might expect to find evidence in their writing of differences in degrees of integration or of segmentation.

Disciplines as

Hierarchical* or *Horizontal knowledge structures

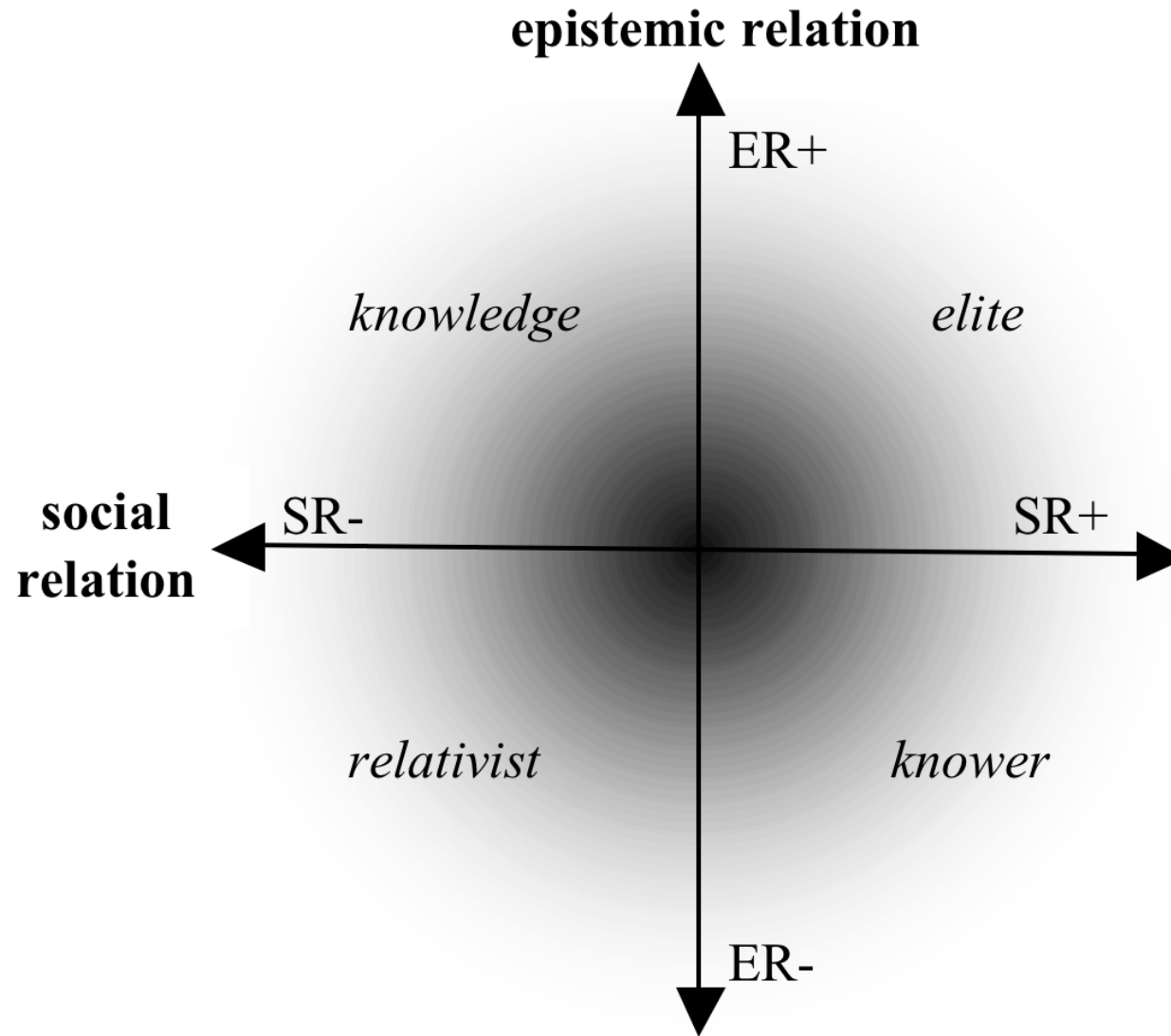
and

Hierarchical* or *Horizontal knower structures (Maton 2007, 2009)

Maton takes the conceptualisation of different kinds of knowledge structures a step further. 'claims to knowledge are not just *of the world*, they are also made *by authors*'
'for every knowledge structure there is also a knower structure'

Just as we can speak of disciplines as representing **hierarchical or horizontal knowledge structures**, so we can also consider them as **hierarchical or horizontal knower structures**.

Science can be characterized as a *horizontal knower structure*, in which knowers are segmented by specialized modes of acting, and where the social profile of the scientist is irrelevant for scientific insight, while the humanities can be seen as a *hierarchical knower structure* where knowers are integrated hierarchically in the construction of an ideal knower.



Specialization codes of legitimation (Maton 2007)

Legitimation Code Theory (LCT) (Maton 2000)

two sets of relations: *epistemic relations* and *social relations*.

Epistemic relations are 'between educational knowledge and its proclaimed object of study (that part of the world of which knowledge is claimed)'.

What can be known and how?

Social relations are 'between educational knowledge and its author or subject (who is making the claim to knowledge)'.

Who can know?

Each of these sets of relations can be relatively stronger or weaker.

Stronger epistemic relations give emphasis to the possession of explicit principles, skills and procedures;

Stronger social relations and give emphasis to the attitudes and dispositions of knowers.

Legitimation Code Theory (LCT) proposes that intellectual fields or disciplines can be differentiated in terms of the relative strength or weakness of their epistemic relations and their social relations

We might expect the disciplinary home of the researcher to be evident in the ways writers legitimate their research in their research paper introductions.

As functional linguists we can ask how differences in knowledge-knower structures are instantiated in key academic genres of those intellectual fields.

One such 'genre' is the research article, and in particular the introduction to the article or the research warrant

- a site in which the writer constructs a legitimating platform from which they can proceed to report in detail on their study and its contribution to knowledge

LCT theory suggests questions that we might usefully ask in a social semiotic analysis of this writing from different intellectual fields.

But what do we look for amongst the multitude of variations in language from text to text that can generate patterns of difference that we can relate to differences in knowledge-knower structuring of intellectual fields?

A set of published articles from different intellectual fields (natural sciences, social sciences, and humanities)

A loose association with field of science

- from science journals
- from applied linguistics journal on science education
- from a cultural studies journal on science education

Aim to explore some means by which research writers represent differently knowledge and knowers in the process of legitimating their own research.

Systemic Functional Linguistic theory

discourse semantics

lexico-grammar

phonology/graphology

ideational meaning

textual meaning

interpersonal meaning

Appraisal

engagement

attitude

graduation

projection

counter-expectancy

modality & negation

Who gets to say what?

projection

Halliday (1993) argues // that science has developed a highly sophisticated way of representing ideas that makes writing science especially difficult for students.

Halliday (1993) argues // “science has developed a highly sophisticated way of representing ideas that makes writing science especially difficult for students.”

Halliday (1993) believes // that writing science is especially difficult for students because of the way ideas are represented.

It is generally understood that science has developed a highly sophisticated way of representing ideas.

The fact that writing science is especially difficult for students is widely appreciated.

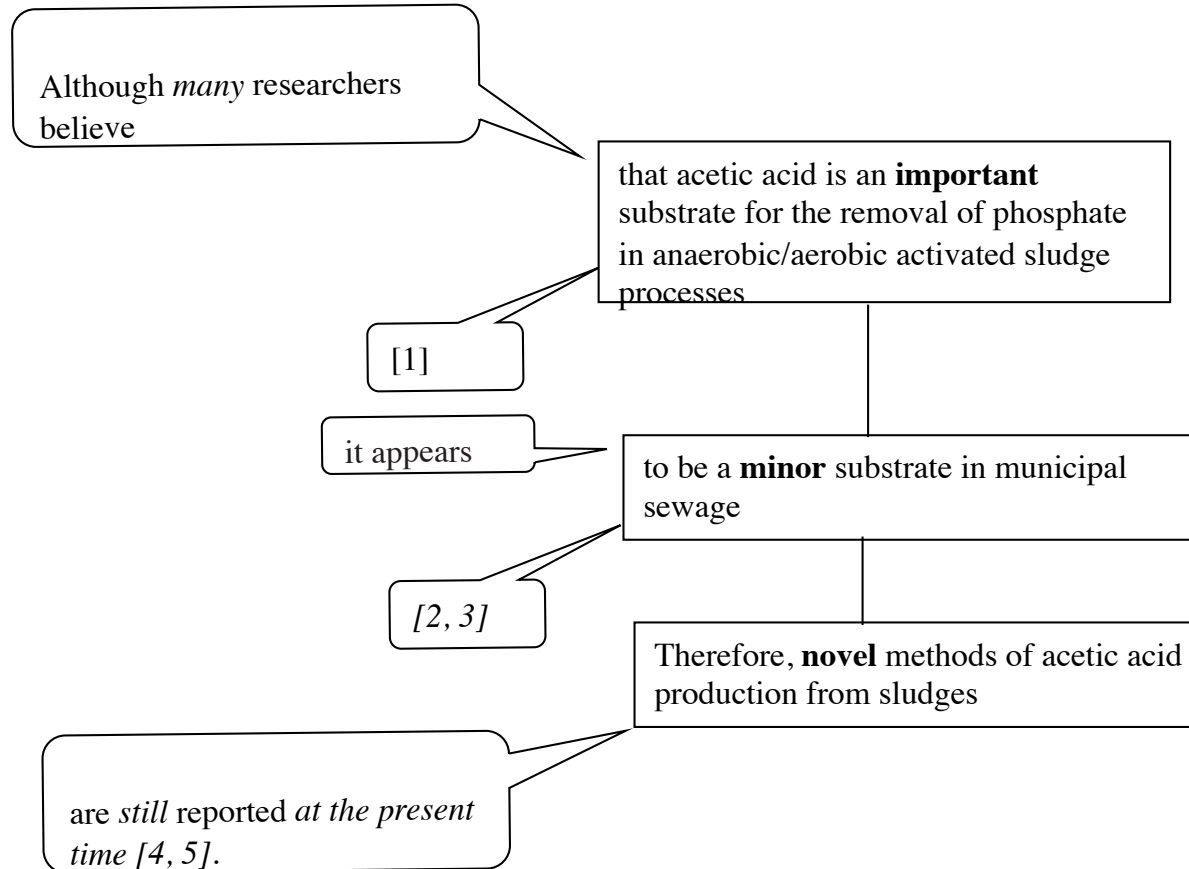
The many stories and ‘radical’ fragments within this work can be envisaged as a series of sites to which the reader is exposed.

Anderson (2004) offers a number of suggestions. First, Secondly, ... Finally,

Van de Kooi and Knorr (1973) [report that they] measured one office building and five small dwellings over a period from February 1967 to August 1967 in The Netherlands.

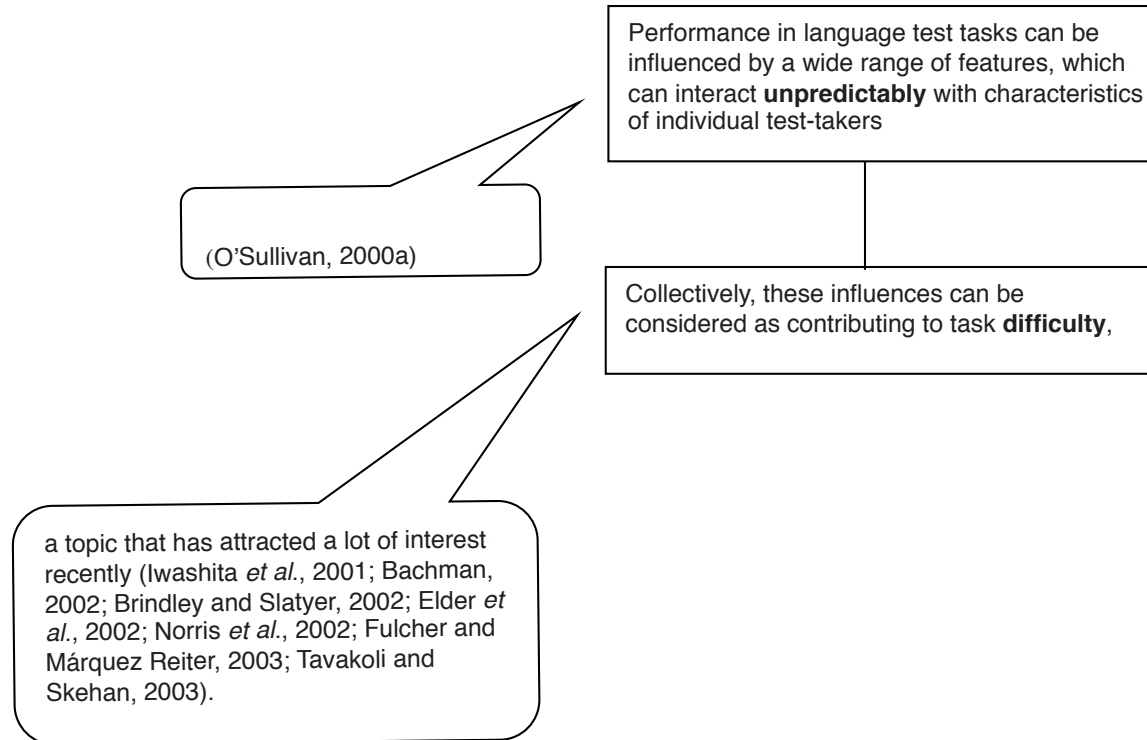
projection

Voices other than the writer projecting the object of study



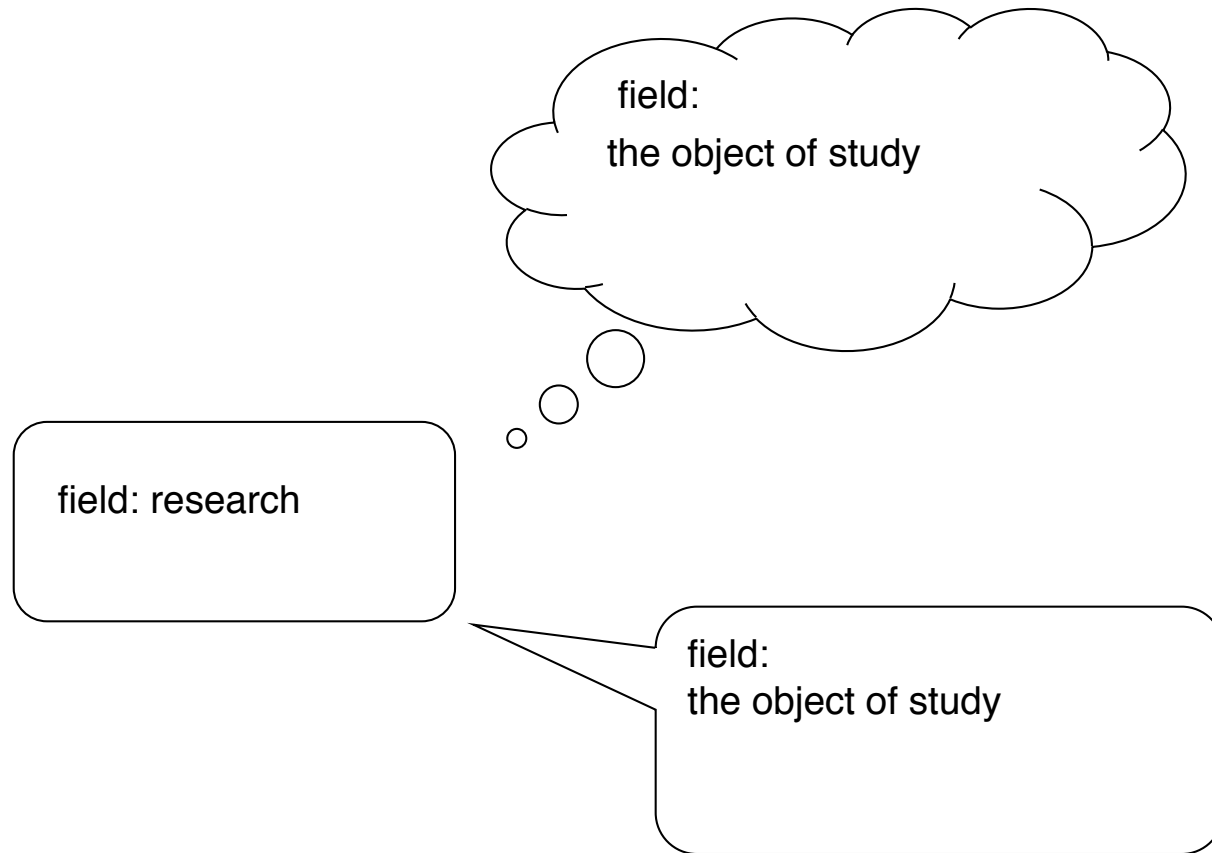
projection

Voices other than the writer projecting the object of study



abstracted projection

The field of research projecting the object of study



What do we know about projecting sources?

Researcher voice:

Roychoudhury et al (1995) argue // that “classroom interactions sanction male dominance as a norm”.

Participant voice:

After 40 min, Cindy suggested we end the meeting so a group of them could study for an exam together.

Researcher as participant observer voice:

I noticed how the desks were arranged into a circle, (...) I recognized most of the students as biology majors who had at one time or another stopped by my office.

Projecting sources in the [natural sciences](#) and the [humanities](#)

[1]

Incorporation of organic molecules such as dyes inside solid matrices is an attractive topic of research because of the photostability and fluorescence quantum yield ¹⁻³ of the modified materials. An approach in this regard is to incorporate molecules inside silica spheres ⁴⁻⁵, the advantage of this kind of nanoscopic containers is that they can be used to control the environment of the molecule.

[source: Rosemary et al 2006]

[2]

As I looked around the room, I recognized most of the students as biology majors who had at one time or another stopped by my office. Of the twenty students gathered, most were women; a group of four young men sauntered in together just as the meeting began. As it turned out, many of the attendees had chemistry and biology classes together. Several women mentioned how they wanted to find some old exams, and one person asked if there were class notes from last week's lecture that she missed. After 40 min, Cindy suggested we end the meeting so a group of them could study for an exam together. "Let's feed our brains!" she yelled. Everyone joined her in laughter.

Projecting sources in the natural sciences and the humanities

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Projecting sources in the natural sciences

semiotic entities can also be projecting sources

[hypotheses](#) explain

a [proposal](#) hypothesises

the [hypothesis](#) in turn posits that

[studies](#) suggest

[4]

Many [hypotheses](#) have been advanced to explain the chemical composition of infectious prions and the mechanism of their formation in the neurons of infected hosts, but none has yet been proven. Perhaps the most provocative [proposal](#) has been the "protein-only" [hypothesis](#), which posits that the infectious agent is composed exclusively of a misfolded, host-encoded protein called the prion protein (PrP). However, three decades of investigation have yielded no direct experimental proof for this stringent hypothesis. Moreover, various biochemical [studies](#) have suggested that nonproteinaceous cofactors may be required to produce infectious prions, possibly by forming physical complexes with PrP (11–4).

Projecting sources in the natural sciences

There are also instances where human voices are projected into the flow of text, as underlined in the opening clause in [5], although here it is a generic reference only.

[5]

Although many researchers believe that acetic acid is an important substrate for the removal of phosphate in anaerobic/aerobic activated sludge (AS) processes [1], it appears to be a minor substrate in municipal sewage [2, 3]. Therefore, novel methods of acetic acid production from sludges are still reported at the present time [4, 5].

And integral citations that reference the source as researcher + publication (as year) are also found, as in [6] from an applied physics journal.

[6]

Luikov (1975) developed a set of coupled partial differential equations to describe the heat and mass transport in capillary porous media. It was assumed that the transfer of moisture is similar to heat transfer.

Projecting sources in the natural sciences

Committing more or less meaning potential around knowers: degrees of visibility

In the science articles

- a continuum of degrees of visibility of projecting sources.
- a strong preference for super-/sub-script notation which means that
- what is projected is given greater prominence in the discourse than the source of the projection.

Where projecting authors themselves are introduced into the discourse, these are always voices from the field of research; they are named as such (*researchers*), or referenced as research publications, eg (*Luikov 1975*).

....¹⁻³

hypotheses explain

researchers believe

Luikov (1975) developed

Projecting sources in the humanities

[2]

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[7]

Aileen, an eighth grade African-American student in a district with school choice at the high-school level, was having a conversation about the process of applying to high schools with several of her peers and me. She said that it was unfair that they did not admit her to the performing arts school because of her low grades in science and math: "Why do they care about math and science if the school is supposed to teach art? I won't even need science since I am going to be an artist." Her statements on the issue cohered with others she had made over the course of the school year expressing frustration that she was required to learn science, as she did not feel that it was going to be useful to here in her chosen life path.

Projecting sources in the humanities

Other excerpts from cultural studies texts draw on researcher voices in a way similar to that observed in the science extracts - projecting voices are named as specific authors associated with publications. However there are differences...

[8]

Recently, [American Indian women](#) have written autobiographies of their experiences in the academy, providing a look at how they incorporate their vision of themselves as Indigenous women into their framework of academic discourse. [Lowrey \(1997\), from Laguna Pueblo](#), writes a self-study of her passage through a PhD program in sociology at the University of Washington. In her search for a sense of place in higher education, she hungered for stories of Indigenous people who struggled with the same issues of identity. [McKinney \(1998\), a member of the Potawatomi tribe](#), uses “multivocality” or a crosscultural approach in her academic research and writing to represent her “self.”

More information is instantiated around projecting sources in terms of heritage/location - their particular ‘social gaze’ (Maton 2010).

This makes the source more ‘visible’, and implies that the additional information is relevant to the status of what is known. The kind of knower is made relevant in the process of legitimation.

Projecting sources in the humanities

Here the writers' dispositions are presented as relevant to the process of legitimation.

[9]

In this story I position myself as a white Western woman and my values, beliefs, prejudices and aspirations form a complex lens through which I have come to understand myself in a particular social context that was at once strange and familiar over time.

[10]

As a feminist researcher, I want to understand and describe this significant transformation of self where one's identities and the doing of science are complexly intertwined.

Projecting sources in the humanities

Representations of hierarchy of knowers....

[11]

By now a large and heterogeneous body of work, disability studies have traced the normalizing efforts of medical practices, health care professions and institutions, and the politics of administrative categories.¹ More recently, it has investigated the enactment of disability in a diversity of cultural and representational practices.² Many of these studies owe much to **the work of Michel Foucault** and genealogical approaches focusing on the descent, regulation and generative power of discourse. ...

Projecting sources in the humanities

Representations of hierarchy of knowers....

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[Moser 2005]

The different representations of projecting sources evident across both sets of extracts (from the science and from the humanities) can be plotted along a continuum.

The visibility of projecting sources in natural sciences and humanities.



....¹⁻³
hypotheses explain
researchers believe
Luikov (1975) developed

Cindy suggested ...
As a feminist researcher, I want to ...
American Indian women look at...
McKinney (1998), a member of the Potawatomi
tribe writes ...
postcolonial discourse provide a framework for
understanding

Projecting sources in the **social sciences**: degrees of visibility

An account of an observation of students in a science classroom.

A move towards a less subjective representation of the writer , ie assumed to be co-present although no explicit reference to such.

[12]

In a middle school science classroom in the suburbs of Washington, DC in 2003, an ethnically and linguistically diverse group of 8th grade students, Philip, Natalie, Gloria, and Sean, discuss the answer to a written question about a scientific phenomenon they are observing at their table. Prompted by a new set of curriculum materials, the students repeatedly refer to, point to, and even make pictures of, the objects of their discussion as these things lie on the table before them.

So in this instance more like the humanities than the sciences

Projecting sources in the [social sciences](#): degrees of visibility

In other social science texts elaborating information is given about a source as a product rather than a person. In extract [13], the authors are backgrounded in relation to a reference to the product of their research: *Latour and Woolgar's (1986) seminal study*.

[13]

Latour and Woolgar's (1986) seminal study provides an ethnographic account of the scientific writing cycle in a professional laboratory. They document how scientists transform raw data by putting them into charts and graphs, and subsequently use them along with articles, books, and grant proposals to produce new articles. In turn, the articles are circulated to colleagues, submitted for publication, and, when published, often become part of the received body of knowledge.

Projecting sources in the **social sciences**: degrees of visibility

A similar strategy is evident in the social science text in [14].

What is given thematic prominence is a semiotic entity (*Recent work in science studies*). It is the semiotic entity that projects (*highlighted, drawn attention to*) the knowledge claims (*the social nature of knowledge production in science; the important role played by the scientific community*). This semiotic source then projects another source, this time a generalized group of knowers (*the scientific community*) that in turn projects (*coming to agreement about*) a decision (*what should count as a discovery, or a new fact, in a given field*).

[14]

Recent work in science studies has highlighted the social nature of knowledge production in science and has drawn attention to the important role played by the scientific community, acting in the Literature, in coming to agreement about what should count as a discovery, or a new fact, in a given field (Jasanoff, Markle, Petersen, & Pinch, 1995; Latour, 1987).

So this instance is more like the sciences than the humanities

Projecting sources in the **social sciences**: degrees of visibility

The social science texts can be positioned in the middle ground.

As with the voices from the humanities texts, they are made visible in the flow of the discourse. However, where there is elaboration it is more like that from the science texts, representing the sources as researcher voices rather than participant voices, or as depersonalised semiotic entities (*science studies, seminal study*).

- visibility

+ visibility



(natural sciences)

(social sciences)

(humanities)

What is projected in the natural sciences?

projecting sources (super-scripts) project analytical procedures that underlie observations of the scientific world

[15]

Incorporation of organic molecules such as dyes inside solid matrices is an attractive topic of research because of the photostability and fluorescence quantum yield¹⁻³ of the modified materials. **An approach** in this regard is **to incorporate** molecules inside silica spheres,⁴⁻⁵

Analytical procedures are represented here as a process (*to incorporate*) and as nominalised processes (*Incorporation; An approach*).

What is projected in the natural sciences?

analytical procedures contributing to observations of the scientific world.

[16]

A number of researchers (Fhyr and Rasmuson, 1997; Johanson et al., 1997) solved the equations describing the drying process separately for each phase (gas, liquid and solid). These equations contain various thermophysical properties for each phase. More **experimental work** is necessary for the determination of these properties. In addition, it is very difficult to identify exactly the boundaries among the phases. Younsi et al. (2006) **studied experimentally and numerically** the high temperature treatment of wood. The authors **used the Luikov's approach** for the mathematical formulation. The **numerical solution** is, however, complicated (Liu and Cheng, 1991). Lewis et al. (1996) and Malan and Lewis (2003) solved the highly non-linear equations describing drying systems **using** the finite element **method**. Sanga et al. (2002) solved the diffusion model for transient heat and mass transfer processes to **analyse** the drying of a shrinking solid surrounding a nonshrinking material **using** microwave energy. In literature, the **models** describing the water migration in wood are usually 1D or 2D, which neglect the real variation of thermophysical properties in 3D. Most of the **models** are developed to **simulate** conventional drying, and there are few reported studies on the **modeling** of high temperature treatment of wood.

[source: Younsi et al 2006]

What is projected in the [natural sciences](#)

In these discourses of science, the writer and other sources project observations of the world (in these instances the technical world of the laboratory), observations that are reported as arrived at through explicitly articulated processes of analysis, sometimes captured in a nominalised reference to a model or method.

We can refer to such discourse as [analytical observations](#).

What is projected in the [humanities](#)?

Observations of the object of study are not confined to the discourses of science.

From a cultural studies take on science education...

[17]

Aileen, an eighth grade African-American student in a district with school choice at the high-school level, was having a conversation about the process of applying to high schools with several of her peers and me. She said that it was unfair that they did not admit her to the performing arts school because of her low grades in science and math: “Why do they care about math and science if the school is supposed to teach art? I won’t even need science since I am going to be an artist.” Her statements on the issue cohered with others she had made over the course of the school year expressing frustration that she was required to learn science, as she did not feel that it was going to be useful to her in her chosen life path.

What is projected in the [humanities](#)?

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Here the observations are represented as statements of direct witness without any reference to analytical procedures other than a commonsense interpretation of a first hand encounter with the world.

We can refer to such discourse as [ethno-spective observations](#).

What is projected in the [humanities](#)?

In the humanities we find a wider range of genres being recontextualised into the macro-genre of the research warrant.

As in the example we have just looked at observations of the world may be constructed as a kind of stories – in what I refer to as an ‘ethno-spective observation’ (the focus of a talk at PolyU on 18th Nov.)

What is projected in the **humanities**?

We might interpret the following underlined instances in the cultural studies texts in this study as a minimal step towards technicalisation of a procedure for observation. However, the underlined wordings refer more to the object of study rather to a process of analysis.

... To self-identify, then, can become a narrative of one's location.

.. American Indian women have written autobiographies

... Lowrey (1997), from Laguna Pueblo, writes a self-study of her passage through a PhD program ...

What is projected?

analytical
observations

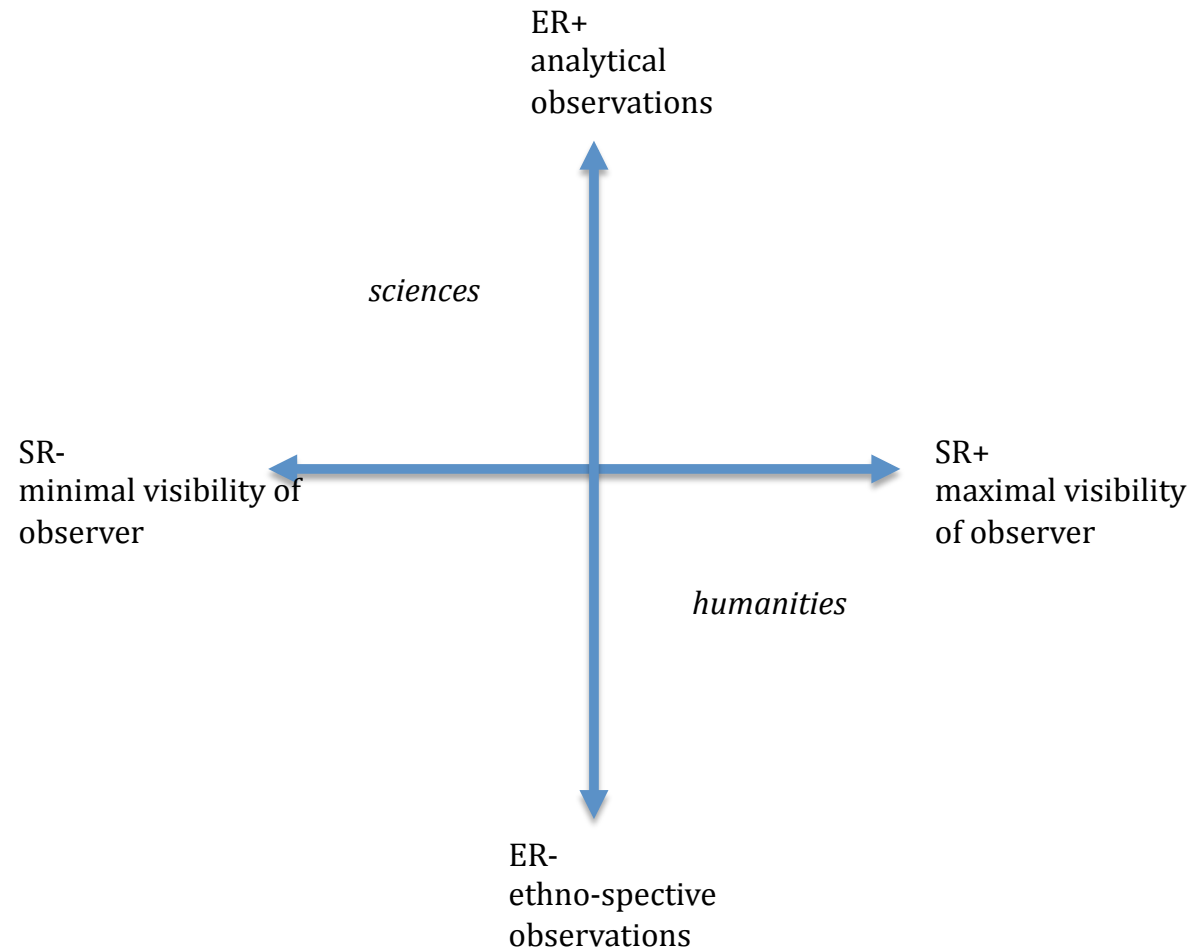
ethno-spective
observations



(natural sciences)

(humanities)

What do sources project?



What do sources project in the **social sciences**

An analysis of the projections in the social science texts reveals a position in the middle ground between those from the natural sciences and those from the humanities, this time along the vertical axis.

While there may be less explicit reference to a method of analysis as was frequently the case in the science texts, the social science writers often imply a degree of rigour in analytical procedures that is less evident in the humanities texts. They typically do so through the lexis they choose to encode the process of doing research.

So, for example, it means differently if the writer chooses *explore* or *examine* rather than *look at* to describe the activities of the researchers.

Halliday and Martin (1993) also set out to explore ...

Martin (1993) examines ...

Or they may articulate procedures over a longer phase of text

In order to illustrate how [...] I first examine [...] Next, I trace [...] Specifically, I focus on [...] I analyze [...] Finally, [...] I explore [...] I highlight [...]. Through my analysis I argue that [...]

What do sources project in the social sciences

Compare these texts:

From a humanities (cultural studies) journal....

[17]

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From a social science (applied linguistics) journal...

[18]

In a middle school science classroom in the suburbs of Washington, DC in 2003, an ethnically and linguistically diverse group of 8th grade students, Philip, Natalie, Gloria, and Sean, discuss the answer to a written question about a scientific phenomenon they are observing at their table. Prompted by a new set of curriculum materials, the students repeatedly refer to, point to, and even make pictures of, the objects of their discussion as these things lie on the table before them.

What do sources project in the [social sciences](#)

At a glance, extract [18] appears to be an ethno-spective observation of the same kind as the cultural studies text in [17]. But there is a small degree of difference. In [17] the events were represented in the past tense, whereas in [18] they are in the present tense. The universal present tense functions to shift the representation from a specific instance to an instance that symbolizes a *type* interaction, suggesting a level of *generalization*, perhaps implying the observation referred to as one of a set of observations.

[18]

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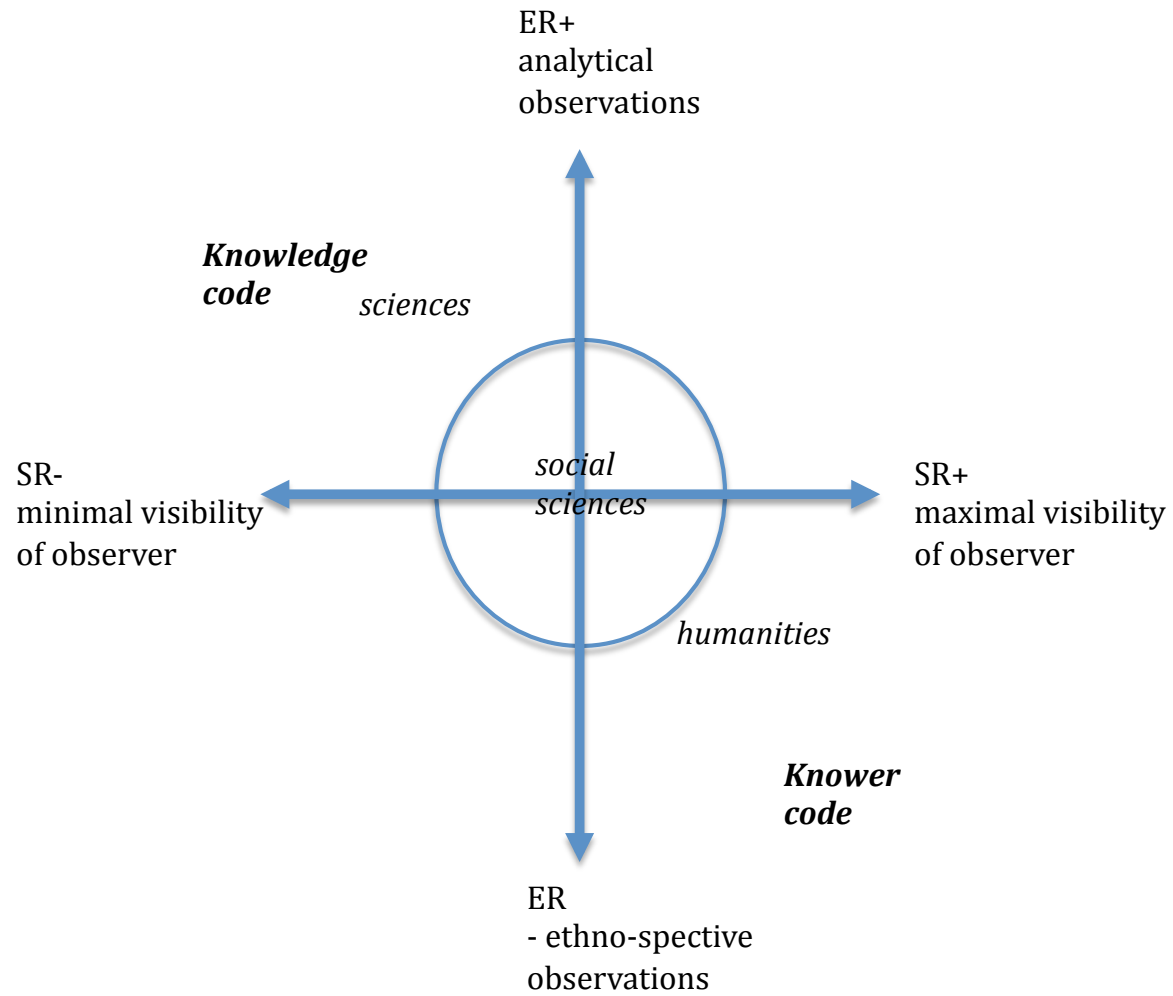
What do sources project in the [social sciences](#)

The generalised representation of observations is also evident in the social science extracts in [19], once again implying the claims are arrived at through multiple observations, in other words somewhat more *analytical* procedures.

[19]

For example, Millar (2004) suggests that students' experience with natural phenomena in laboratory activities can be messier or more ambiguous than other forms of instruction such as lectures and textbooks and because of this, they may present particular challenges for students trying to learn science.

What do sources project?



[20]

A number of researchers (Fhyr and Rasmuson, 1997; Johanson et al., 1997) solved the equations describing the drying process separately for each phase (gas, liquid and solid). These equations contain various thermophysical properties for each phase. More experimental work is necessary for the determination of these properties. In addition, it is very difficult to identify exactly the boundaries among the phases. Younsi et al. (2006) studied experimentally and numerically the high temperature treatment of wood. The authors used the Luikov's approach for the mathematical formulation. The numerical solution is, however, complicated (Liu and Cheng, 1991). Lewis et al. (1996) and Malan and Lewis (2003) solved the highly non-linear equations describing drying systems using the finite element method. Sanga et al. (2002) solved the diffusion model for transient heat and mass transfer processes to analyze the drying of a shrinking solid surrounding a nonshrinking material using microwave energy. In literature, the models describing the water migration in wood are usually 1D or 2D, which neglect the real variation of thermophysical properties in 3D. Most of the models are developed to simulate conventional drying, and there are few reported studies on the modeling of high temperature treatment of wood.

Integrating knowledge... summarised

[20]

A: An initial closure is established:

A number of researchers (Fhyr and Rasmuson, 1997; Johanson et al., 1997) solved the equations describing the drying process separately for each phase (gas, liquid and solid).

B: New fronts for knowledge are opened up in that process:

- 1) *More experimental work is necessary for the determination of these properties*
- 2) *very difficult to identify exactly the boundaries among the phases*

C: Researchers attempt to address those gaps:

Younsi et al. (2006) ... used the Luikov's approach for the mathematical formulation.

D: A problem arises in that attempt:

The numerical solution is, however, complicated

E: Studies result in partial successes

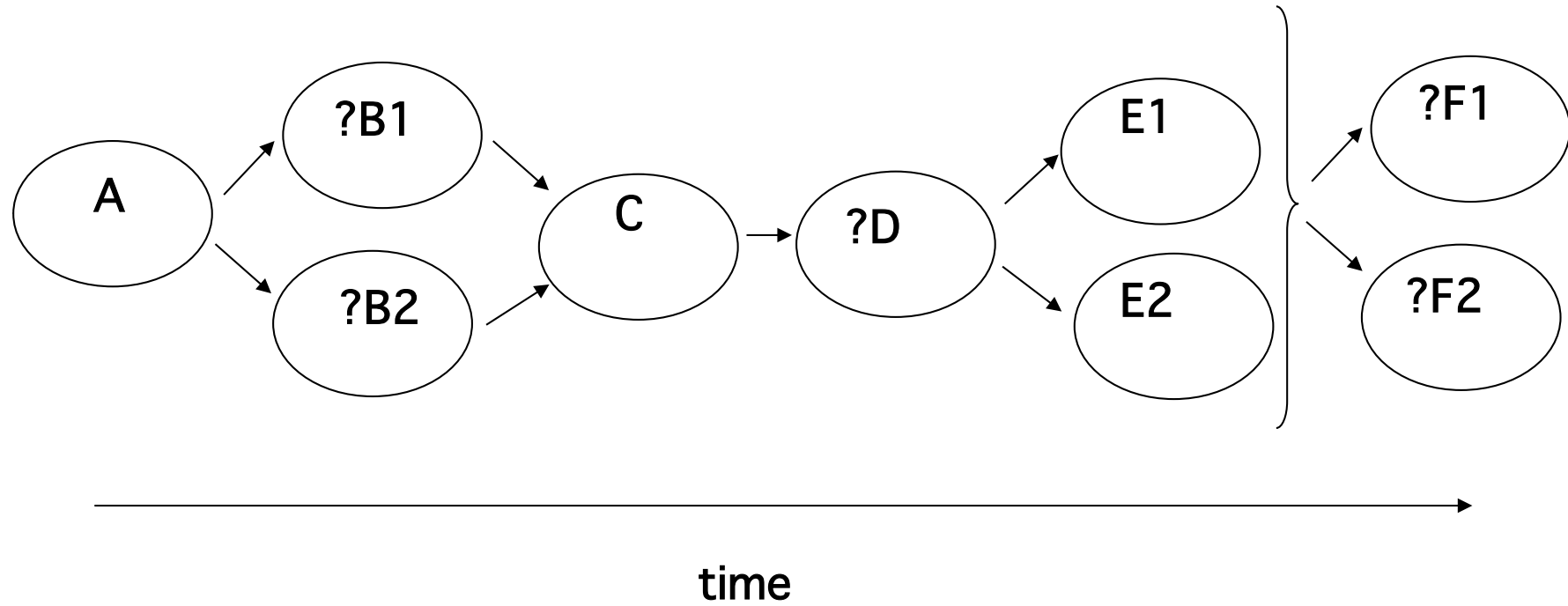
- 1) *Lewis et al. (1996) and Malan and Lewis (2003) solved the*
- 2) *Sanga et al. (2002) solved the ...*

F: Two remaining problems emerge to be addressed by the writer.

- 1) *the models are usually 1D or 2D,*
- 2) *few ... modeling of high temperature treatment of wood*

Establishing space for new knowledge integratively in the sciences

[20]



[21]

The disadvantage experienced by scholars who use English as an Additional Language (EAL) in writing for publication has been well documented both in the field of applied linguistics (e.g., Ammon, 2000, 2001; Belcher, 2007; Burrough-Boenisch, 2003; Flowerdew, 1999a, 1999b; Gosden, 1995; Kaplan & Baldauf, 2005; St. John, 1987) and that of science (e.g., Benfield & Feak, 2006; Benfield & Howard, 2000; Coates, Sturgeon, Bohannan, & Pasini, 2002; Kirkman, 1996). As well as needing more time to write (e.g., Curry & Lillis, 2004; Flowerdew, 1999a, 1999b; Lillis & Curry, 2006), EAL writers may encounter difficulties with reviewers and editors if their use of English is “non-standard.” While there is some evidence of journal editors’ and reviewers’ tolerance of non-native features in EAL authors’ submissions (Flowerdew, 2001), there are also reports of such gatekeepers criticizing these features. Ammon (2000, p. 113), for example, as a German editor of a book published in English, reports on criticisms of his work on the grounds of its “near unintelligibility [because] the grammatical mistakes are so severe.” Similarly, Curry and Lillis (2004, p. 678) report on a Hungarian psychologist who made the following remarks: “if the style or the form of the paper is not native or not current, reviewers think that ‘this is a stupid man, this is not acceptable material’.

Integrating knowledge... in summary

[21]

- The most general spatial category is established:

The disadvantage experienced by scholars who use English as an Additional Language (EAL) in writing for publication

- This is narrowed in metaphorical space to two specific disciplinary areas:

applied linguistics
science

- Then narrowed further to one specific issue:

time to write

- And to another:

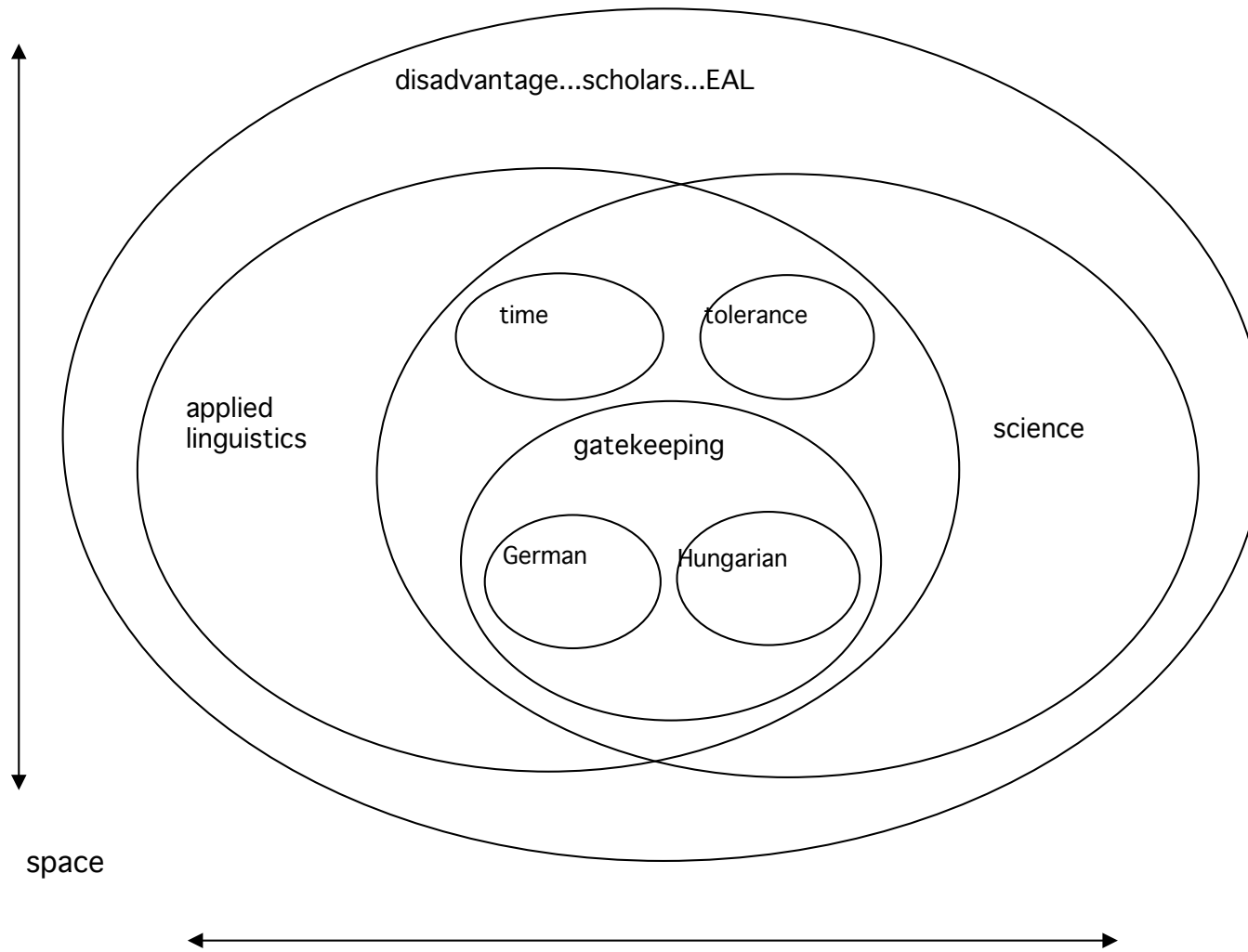
tolerance (and) gatekeepers

- Then narrowed further to located instances:

German writers of English
Hungarian writers of English

Establishing space for new knowledge segmentally in the social sciences

[21]



In conclusion

What has emerged in the analyses in this study is a syndrome of features that reflect differences in the ways in which writers in different disciplines engage with knowers and knowledge in the context of constructing the warrant for their own research. Importantly these differences are represented along clines that represent degrees of difference.

It is hoped that the explication of some of the ways in which different disciplines legitimate research from a linguistic perspective can assist to clarify what may be at stake in debates around trans-disciplinary or inter-disciplinary studies.

If disciplines with different underlying legitimation codes are brought together, there may be a 'code clash', an inability to agree on the grounds of debate that debilitates collaboration and knowledge-building. However, there is a need for more substantial studies of how the dimensions of difference studied here factor out in a wider range of disciplines, how they vary across different academic genres, how they shift over time, and importantly what kind of knowledge-knower structures emerge in interdisciplinary studies of various kinds.

There is a need for more substantial studies of

- how some of these strategies factor out in specific disciplines,
- how they vary across different academic genres,
- how they shift over time, and
- just what kind of knowledge-knower structures emerge in interdisciplinary studies of various kinds.

Some of these strategies may well be readily searchable in large corpus based studies, but others are less so with the tools currently available. There is still a need for continued careful, systematic and rich analyses of meanings in the logogenesis of individual texts.

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