# 2

# Quantitative, Qualitative, Mixed or Holistic Research? Combining Methods in Linguistic Research

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## Chapter outline

This chapter addresses the well-known qualitative/quantitative (QUAL/QUAN) versus mixed methods categorization focusing in particular on the latter. With the distance between QUAL and QUAN, allegedly, diminishing, mixed methods became the dominant paradigm and are typically seen to provide researchers with the best of both worlds. While there is an increasing body of research placing value in mixed methodologies, recent work has also indicated potential barriers and limitations in viewing the 'third paradigm' as a necessary alternative. Following Tashakkori and Creswell's (2007) overview of the conceptual and epistemological challenges in mixed methods research, one of the key issues I focus on here is the ongoing discussion on the *integration* or *mixing* of the quantitative and qualitative elements in research designs. I problematize this position and discuss the affordances and limitations of approaching research activity through those lenses. In this process, I use examples of studies from the field of Workplace Discourse that have employed tools

that are associated with, typically, the QUAL/QUAN spectrum. I align with those who argue that the mixed methods *language* often reinforces, instead of bridging, the divide between 'numbers' and 'words' and who make a case for holistic and critical research.

## Introduction

Projects in the field of linguistics typically subscribe to some form of combining tools that fall under either the quantitative or the qualitative paradigm. The benefits of combining the two paradigms have been repeatedly discussed in the social sciences/humanities research methodology literature. In fact, there is a lot of work in the (applied and socio) linguistic field on the value of combining either direct or indirect data-gathering methods (e.g. Harrington et al., 2008; Litosseliti, 2003) or applying diverse techniques for data analysis. In a seminal early work, Greene et al. (1989) reviewed studies taking a mixed methods approach and argued that combining the two paradigms is beneficial for constructing comprehensive accounts and providing answers to a wider range of research questions. In the same vein, Tashakkori and Teddlie (2003) suggest that mixed methods, often operationalized as almost a synonym for collecting different data sets or applying more than one method for the data analysis, provide 'ways to answer research questions that could not be answered in any other way' (2003: x). And research in sociolinguistics has shown that combined methodologies can shed light on 'different layers of meaning' (Holmes, 2007: 5), as seen in, for example, Stubbe et al.'s (2003) work, which applied a wide range of analytic approaches, traditionally with methodologically distinct boundaries, to workplace discourse. At the same time, there has been a shift towards multidisciplinary research (e.g. Brannen, 2005) as more and more researchers undertake joint projects bringing together diverse areas of study and subsequently methodologies that are established in their respective fields.

Despite this purported move away from methodological purism however, it is still quite commonplace for the two paradigms to be directly contrasted.

As Green and Preston argued in the editorial of a special issue devoted to mixed methods research, 'the image of the introverted statistician [...] or the hang-loose ethnographer are by no means eliminated' (2005: 167). These stereotypes draw on the residue of the *paradigm wars* of the 1970s and 1980s (Tashakkori and Teddlie, 2003 – see also end of this chapter) where the ontological and epistemological differences of the quantitative and qualitative approaches to research were foregrounded and sharply contrasted. Following a strong and long-held tradition of paradigm incompatibility, the turn to mixed methods, as the dominant approach, provided researchers with room to renegotiate their position on the QUAL/QUAN spectrum and combine or mix tools that were perceived as different in the past. It has also provided a language to talk about QUAL/QUAN in ways that are less linear and more multifaceted.

Against this backdrop, and in line with Dörnyei (2007), the stance I take here is that this juxtaposition of the paradigms may point to the researchers' (diverse styles and) world views rather than the mutual exclusiveness of the two approaches. Further, I adopt a *pragmatist's* stance, according to which methodologies represent a collection of techniques that can be meaningfully combined in order to address a set of research questions (Bryman, 2001/2016; Rossman and Wilson, 1985) as opposed to a *purist's* stance, which would see qualitative and quantitative methods as being incompatible. I do not aspire to exhaust the discussion on the merits and challenges of mixed methods here; rather, I aim to problematize a range of issues relevant to aligning a research project to a specific paradigm, and the practicalities that may affect research designs, the collection and interpretation of data and dissemination of findings keeping the field of Workplace Sociolinguistics as the main point of reference. I discuss the widely cited, but often-fused, notions of 'integrating' and 'mixing' both at the level of overarching paradigms (namely mixed methods, qualitative and quantitative) and at the level of specific methodologies associated with fields of study. I illustrate these issues drawing on studies in the field of Workplace Sociolinguistics.

This chapter is organized into four parts. In order to place the discussion in context, a brief overview of current issues in mixed methodologies is provided. I next move on to the thorny issue of triangulation and the way it is frequently used by researchers. I then discuss studies in the broadly defined field of workplace discourse, paying special attention to the relationship between mixed methodologies and applicability of research. I finally turn to the implications and conclusions that can be drawn.

# Qualitative, quantitative, mixed and multi-method designs[1]

As Seliger and Shohamy (1989; DeVaus, 2002), among many others (including in this volume), suggest, the research methods and techniques adopted in any research project depend upon the questions and the focus of the researcher. This may suggest a rather instrumental stance, open to criticism that research methodology should not be reduced to a 'what works' approach. If one interprets 'what works' as 'anything goes', then the uneasiness is entirely justified. I would argue however that a systematic decision of 'what works' is in line with the philosophical and conceptual underpinning, as well as theoretical debates and complexities, of the 'approach' researchers choose in their work (Sunderland and Litosseliti, 2008; Tashakkori and Teddlie, 2003). What distinguishes, then, 'what works' from robust research, is the rationale for separating or bringing together methods at the level of each project, rather than abstract affiliations to research paradigms.

Specifically on mixed methods, over the last ten years an increasing volume of work has appeared (e.g. Bryman, 2006; Johnson et al., 2007) which illustrates (a) the conceptual decisions researchers make in choosing a particular design within this paradigm and (b) the robustness of the paradigm itself. In addition, there is great variety in mixed methods designs; Tashakkori and Teddlie (2003) have identified over forty types of designs within their recent handbook. Hence mixed methods is not to be mistaken for an 'anything goes disposition', (Dörnyei, 2007: 166).

The issue to probe further, however, is what exactly mixed methods has added to our conceptual inventory, with reference in particular to the way it is implemented in Workplace Sociolinguistics. I will unpack this by looking into the core concepts of compatibility and transferability of various paradigms and methodologies, as well as the notions of 'mixing' and 'integrating'.

While there is a growing consensus that combining approaches is not only feasible but also beneficial in revealing different aspects of 'reality' (Lazaraton, 2005: 219), there is an open question as to whether many methods and types of research would comfortably sit under the same design within and across different disciplinary and epistemological communities. 'The question, then, is not whether the two sorts of data and associated methods can be linked during study design, but whether it should be done, how it will be done, and for what purposes' (Miles and Huberman, 1994: 41).

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Within the linguistic field, Sunderland and Litosseliti (2008) provide clear examples of how 'affiliation' to certain epistemological approaches influences the approach taken and methodologies selected. In the case of discourse analysis, for instance, there are widely recognized approaches such as conversational analysis, interactional sociolinguistics, critical discourse analysis and others (see Baxter, this volume), each with a recognizable associated set of methodological tools. These different approaches often stay somewhat insulated within specific disciplinary boundaries, each working with distinctive conceptions of discourse, as well as distinctive tools and processes (e.g. regarding the operationalization of the context of interaction for the interpretation of discourse data). A discussion of how approaches (and researchers taking a certain stance) do not always sit comfortably under one design can be found in Harrington et al. (2008); also many a reader will be familiar with the debate that was published in *Discourse and Society* (e.g. Schegloff, 1997) around the different theoretical assumptions made by CA and CDA researchers. It is beyond the scope of this chapter to consider potential barriers in reconciling different theoretical assumptions (Angouri, 2018), however the question on the extent to which quantitative and qualitative methodologies are compatible is relevant. A growing number of researchers

> have consistently argued for, and indeed, adopted approaches which attempt to *integrate* [emphasis mine] quantitative and qualitative methods of analysis, using the patterns identified by the quantitative analysis as essential background to assist in the detailed qualitative interpretation of the discourse.
>
> (Holmes and Meyerhoff, 2003: 15)

The concept of integration is central in the mixed methods paradigm. Theorists have written time and again that mixed methods should not be seen as an unstructured 'fusion' of QUAL/QUAN research or as just the additive 'sum' of the two. In practice however, and especially outside research methodology literature, there is more conceptual 'fusion' than perhaps acknowledged.

In the editorial of the *Journal of Mixed Methods Research*, Tashakkori and Creswell (2007) provide a useful overview of the conceptual and epistemological challenges in 'bridging' quantitative and qualitative research designs. While recently the mixed methods paradigm was defined as 'the class of research where the researcher mixes *or* [emphasis mine] combines' (Johnson and Onwuegbuzie, 2004: 17) quantitative and qualitative elements, according to Bryman (2007) the key issue to be considered is the amount of

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'integration' of the two paradigms. For instance, Geluykens (2008) suggests that most studies in his subfields of cross-cultural pragmatics combine rather than integrate research methods. A growing number of works distinguish between combination/integration. I follow Tashakkori and Creswell's (2007) approach and the studies I discuss later combine or integrate the qualitative/quantitative element in one of the following ways:

– two types of research questions (with qualitative and quantitative approaches)
– the manner in which the research questions are developed (participatory vs. pre-planned)
– two types of sampling procedures (e.g. probability and purposive)
– two types of data collection procedures (e.g. focus groups and surveys)
– two types of data (e.g. numerical and textual)
– two types of data analysis (statistical and thematic) and
– two types of conclusions (emic and etic,[2] 'objective' and 'subjective,' etc.).

Tashakkori and Creswell (2007: 4)

Typically the discussion on integration refers to the sequence and importance (or dominance) of the qualitative/quantitative component. Brannen (2005) usefully provides exemplar studies showing how the second (either qualitative or quantitative) component can be introduced at (a) the design, (b) the fieldwork and/or (c) the interpretation and contextualization phase of any research project.[3] As Greene suggests 'it is the mixing that is distinctive to a mixed methods methodology' (Greene, 2008: 18). Typically the process of mixing or integrating is transcribed by the use of symbols, particularly: +; → (or >), which represent the sequence while capitalization indicates the weight. One well-known system is the one suggested by Johnson and Onwuegbuzie (2004) as per below.
Mixing however does not mean that the original QUAN/QUAL elements are lost or invisible. To the contrary, researchers have argued that the very mixing metaphor reinforces the separation of the original ingredients and their categorization in QUAL/QUAN terms (see Figure 2.1, for instance). Giddings and Grant (2007: 52) provocatively refer to a 'Trojan Horse for positivism' suggesting that the methods and data analysis processes typically used under the mixed methods paradigm perpetuate a positivist epistemology while other methodological tools risk becoming marginalized. Symonds and Gorard (2008: 15 and in 2010) also make a case for 'paradigmatic separatism' and 'a world of limitation' superimposed through the QUAL/QUAN conceptual divide. Evidently, this does not mean that mixing methods, as such, is not conducive to better results. As Gorard argued, 'mixing methods

| Paradigm Emphasis Decision | | Time Order Decision: Concurrent | Time Order Decision: Sequential |
|---|---|---|---|
| | Equal Status | QUAL + QUAN | QUAL → QUAN<br>QUAN → QUAL |
| | Dominant Status | QUAL + quan<br>QUAN + qual | QUAL → quan<br>qual → QUAN<br>QUAN → qual<br>quan → QUAL |

**Figure 2.1** Common representation of research designs (from Johnson and Onwuegbuzie, 2004: 22).

is a bad idea, not because methods should be kept separate but because they should not have been divided at the outset' (2007: 1).

Overall, whether combining or integrating quantitative/qualitative elements, mixed methods designs arguably can contribute to a better understanding of the various phenomena under investigation compared to their exclusively QUAL/QUAN counterparts; while quantitative research is useful towards generalizing research findings (see Rasinger and others, this volume), qualitative approaches are particularly valuable in providing in-depth, rich data. However, mixed methods research designs do not indicate 'necessarily better research' (Brannen, 2005: 183) nor should they be seen as *deus ex machina*. The data (as in all paradigms) need to be analysed and interpreted systematically and following rigorous theoretical grounding. It is however the case that, when consistent, the practice of mixed methods research allows for 'diversity of views' and 'stronger inferences' (Tashakkori and Teddlie, 2003: 674). As such it is often associated with the concept of triangulation, the focus of the next section.

# Triangulation and mixed methods research – an inseparable bond or a troubled relationship?

Triangulation is often one of the key reasons for undertaking mixed methods research.

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Triangulation as a central methodological concept comes high on the list of key features of good research designs (Cohen and Manion, 1994: 233). The way the term is conceptualized by scholars is however epistemologically varied. Denzin's (1970: 472) early work indicated that there is more than one type of triangulation:

- Data triangulation (the application of more than one sampling method for data collection)
- Investigator triangulation (the involvement of more than one researcher)
- Theoretical triangulation (the use of more than one theoretical stance)
- Methodological triangulation (the use of more than one methodology)

Data triangulation and Methodological triangulation are arguably the most common operationalizations of the term – the former refers to data-gathering methods, while the latter is broader and refers to the use of more than one methodology in a research design. Denzin also drew an interesting distinction between inter-method and intra-method triangulation – the former referring to the use of facets of the same method and the latter referring to the use of two (often contrasting) methods (see Schryer, 1993, for an example).

According to the typology of mixed methods designs suggested by Greene et al. (1989) – but also by others (e.g. Bryman, 2006) – the *term* stands for *convergence* of findings and *corroboration* of research results. According to this view, the expectation is that different data sets or different methodologies will lead to similar results and hence allow for 'confident interpretation' (e.g. Lyons, 2000: 280) of the findings and strengthen the researcher's conclusions. An obvious limitation associated with this approach is the assumption that there is such thing as a single 'objective reality or truth' and that data collected using different methods can necessarily be compared and/or contrasted in order to answer the same set of research questions; in fact, as argued by Harden and Thomas (2005: 267), data from different sources can and do often reveal conflicting realities.

Triangulation (as defined above) is not the *only* purpose of mixed methods research. In their early work Greene et al. (1989) suggested an influential typology of mixed methods designs and their purposes (apart from triangulation); namely *initiation* – aiming at discovering meaningful contradictions, *complementarity* – aiming at shedding light on different aspects of the same phenomenon, *development* – aiming at using findings elicited by the use of one method for the design of the second, or subsequent,

*expansion* – aiming at broadening the scope and objective of the research (see Tashakkori and Teddlie, 2003, for further discussions of the model, and Bryman, 2006). And Bryman (2006) recently showed that a large number of scholars undertake mixed methods research in order to further *elaborate* their findings.

Despite this however, 'triangulation' is the term most commonly used and often as a generic term to refer to *all* purposes of mixed methods research. As Tashakkori and Teddlie argue, it has become, a 'veritable "magical" word' (2003: 674), with the concept being criticized for being too broad to have analytical value. They encourage 'mixed methodologists to refrain from using it unless they specify how it was specifically defined in their research context' (2003: 674).

To push beyond the, certainly not new, triangulating inferences and interpretations of data, a significant question has been raised in the turning of the century: what did mixed methods actually add, from the 1980s onwards, that researchers were not doing as a matter of course already - at least in parts of the sociolinguistic spectrum which is my broad disciplinary affiliation?

Holmes argues in 2006:

> The major proponents insist that what they have developed is a new way of doing research – an alternative to qualitative and quantitative research, but what's new about that? … ethnographers and other social researchers have been gathering data using mixed methods at least since the 1920s, and case study researchers and anyone using triangulation have also been using mixed methods. (p. 2)

Other, more recent, work (e.g. Creswell, 2013, and in Denzin and Lincoln, 2013) also acknowledges the contribution of early work and that mixing methods is not the new idea per se. Indeed, Creswell (2013) provides a useful discussion of pioneering work that brought qualitative research more prominently into the dominant, at the time, quantitative paradigm and triangulated its findings.

The issue for critics of the mixed methods paradigm remains that QUAL often takes a secondary position in QUAN designs and, more broadly, the relationship between the two is enacted in a rather linear way perpetuating the (post)positivist tradition. Giddings (2006: 202) argues that 'the positivist scientific tradition continues to be privileged as a way to know; its dominance is strengthened, rather than challenged, by mixed-methods research'. And it is the case that in research I review, supervise or read, mixed methods rarely

draws on methods associated with post-structuralism, critical discourse or critical feminist methodologies and also rarely challenges the ideals of robustness and generalizability/representability. This points to the way the paradigm is adopted and used and certainly indicates the need for a wider discussion on the use of labels in our research practice.

Having said this, we need not question the value of triangulation per se but we need to differentiate between *the technical term, the practice behind it* and *the concept* of mixed methods designs as a whole. Even though neither is a *panacea* for any research design, when applied in relation to a robust conceptual framework, triangulation (in any of the above senses) does lead to a better understanding of complex research questions and environments. For example, Dornyei (2007: 165) suggests that a better understanding of phenomena can emerge from triangulated findings (whether convergent *or* divergent). And in the same work Dornyei (2007: 186–189) reports on the value of mixed methods designs for classroom research where challenges (such as the diversity of student/teacher body) may be addressed through versatile designs (I return to the issue of versatility in relation to mixed methods later in this chapter).

A final point about triangulation emerges from Bryman's (2006) analysis of 232 articles in the social sciences; Bryman suggested that it is often an outcome of mixed methods research despite the fact that the desire to triangulate was not the original motivation for opting for this type of research. As put by Holmes and Meyerhoff (2003: 12), 'researchers fruitfully combine aspects of different methodologies to answer the questions that arise in the course of their research' and often they are not concerned with the surrounding epistemological debates (or they take what Teddlie and Tashakkori (2003) describe as the *a-paradigmatic* stance). In other words, researchers undertake mixed methods research in order to answer their specific research questions without positioning themselves to either qualitative, quantitative or mixed methods paradigms (Harden and Thomas, 2005). I return to this important point at the end of the chapter.

Bryman (2006) further usefully distinguishes between rationale (where explicitly stated) and practice: in 27 percent of all articles he analysed, the researchers did not explicitly state the purpose for undertaking mixed methods research, and out of the 80 articles that applied a triangulation design, only 19 set this as an explicit rationale – interestingly surveys (quantitative) and interviews (qualitative) seem to be the most dominant methods used by researchers.

Whether explicitly mentioned or not it remains the case that multilayered designs are often preferred to one-dimensional ones in eliciting and interpreting rich findings (see Northey, 1990, for an example). To further illustrate this I now turn to studies that have used a wide range of methodologies in the field of workplace discourse.

## Applying mixed methodologies in research on workplace discourse[4]

Given the multifaceted nature of research on discourse, it has been argued that collecting data from different sources in an iterative way is an appropriate way to address research questions in this area (Beaufort, 2000). While discourse studies are often seen as 'by nature' qualitative, being largely based on naturally occurring 'real life' data, recent work (e.g. Holmes and Marra, 2002) has shown how quantitative and qualitative paradigms can be combined for a better understanding of the interactants' norms and practices in discourse.

To illustrate the issues addressed in the chapter so far around bringing together QUAL/QUAN methods, I now discuss examples of (socio and applied) linguistic studies of spoken and written discourse in the workplace. As suggested by Bargiela-Chiappini and colleagues, 'one of the defining features of business discourse research is that it has not relied on any one approach or methodology' (2007: 15). As such, it is a particularly apt area on which to focus for the purposes of our discussion here.

The workplace is an area of study for researchers from a number of disciplines (such as linguistics but also management, sociology and psychology), from different perspectives and with different foci. Within linguistics, the overarching foci of workplace-related research are (a) the identification of patterns of language use and/or development of the skills employees need in order to be competent users of the language(s) for work-related purposes and (b) the study and/or description of the spoken/written language – or rather the discourse – workplace participants engage in. Hence the former often has a pedagogic concern, while the latter is focused on understanding and describing how people communicate, say, in a business/corporate context, and often aspires to make the findings relevant to real-life concerns of employees or practitioners. Put simply, the two areas currently correspond to two broad fields of linguistic research, namely

LSP (Language for Specific Purposes) and (applied) sociolinguistics (see Bargiela-Chiappini et al. (2007) for a succinct overview of the development of the field).

These two overarching areas often have different aims and adopt different techniques for data collection and analysis (with the latter often being qualitative rather than quantitative in its aims and objectives). It is not unusual for researchers from one field to be sceptical towards the outputs of the other. Often LSP is criticized for not capturing the diversity and complexity of workplace interactions, by taking a static view of language and by separating the study of spoken and written professional language (Gunnarsson, 1995: 115; see also Holmes and Stubbe, 2003, and Sarangi and Roberts, 1999). In fact, any studies (quantitative or qualitative) which rely only on one set of sources, be it interviews with personnel, observations or questionnaires, can and have been criticized for failing to capture the dynamic nature of interactions (Holmes and Stubbe, 2003; Stubbe, 2001). This has prompted a large number of studies in workplace discourse which incorporate or are based on naturally occurring discourse data (e.g. Holmes and Marra, 2002; Sarangi and Roberts, 1999). In the light of such debates, in a project on intra-company variation in written processes and products (Angouri and Harwood, 2008), a case was made for more multifaceted, multi-method research on workplace discourse. Questionnaires, face-to-face interviews and participant observations were used and a corpus of real-life data was collected. In this particular study (which is part of a large project on language use in multinational companies), quantitative and qualitative methods were integrated at different stages of the research (in line with Brannen's 2005 work, discussed earlier in this chapter): in the *design, fieldwork* and *analysis* phases. These methods yielded different types of results. The analysis of the naturally occurring data indicated markedly different practices in the various communities of practice[5] studied, while the quantitative data revealed a pattern as to the genres (such as business letters, faxes and emails) the employees had to handle more frequently. I argued then that variation in practices could not be understood without a closer analysis of ethnographic data and a discourse corpus. At the same time, the analysis of the quantitative data showed inter- and intra- company macro-variation according to the informants' posts.[6] Hence it was through the use of mixed methods that conclusions were drawn on discourse practices in the communities of practice studied. The dialectic relationship between the quantitative and qualitative elements is clear here, as the instruments used to collect quantitative data were designed on the basis of ethnographic

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observations, and the patterns revealed were studied further through a corpus of discourse data.

A case for integrating the two paradigms is also made by Holmes and Marra (2002) in a study on the functions of humour in communities of practice within different New Zealand workplaces – a research topic that many would associate solely with qualitative research. The quantitative data in this study reveal different frequencies of humour instances, as well as humour types. The researchers distinguish between supportive and contestive humour and also classify humour instances according to style (collaborative or competitive). At the same time the closer qualitative analysis of discourse data shows how 'humour is used' in the workplaces they study and the way the employees 'do humour' (2007: 1702) to achieve their interactional goals.

More recently Workplace Discourse analysts also combined corpus linguistics and discourse analysis in large-scale studies (see, e.g., Friginal 2009 on call centres) and there is a clear tendency in bringing together different discourse traditions (see Vine, 2017). The work briefly discussed above has shown how data from indirect sources and quantitative analysis can complement the findings of work focused on the micro-level of naturally occurring interactions and that there are 'insights to be gained by applying a range of different theoretical and methodological approaches to the same piece of discourse' (Stubbe et al., 2003: 380).

However apart from contributing to more in-depth analyses of research questions, mixed methods research also has an important part to play in reaching diverse audiences and overcoming challenges associated with certain research settings. Mullany (2008) shows how mixing methods (in this case recordings, interviews, observations and written documents) contributed to a wider dissemination of the findings in the form of written reports for the companies involved. Similarly, in my earlier research with multinational companies (Angouri, 2007), by using quantitative methods, I was able to identify patterns of foreign language use and the viability of existing language policies, which were major concerns for HR managers. By also drawing on my ethnographic observations and interviews, I produced written reports which turned out to be useful for the companies to assess current strengths and potential areas for further development. Even though my main focus was to examine the role of discourse in 'how people do' meeting talk in multilingual settings, I soon found out that adding another dimension to my design, namely analysing, from a macro-perspective/quantitatively (foreign) language use in different departments of the

companies, was not only informative but also the best (and possibly the only) way for me to gain access to this very particular workplace setting. Adding this dimension, which was relevant and important for the HR managers themselves, meant that they in turn were willing to further collaborate and in effect I was able to carry out the rest of the study.

Mixed methods have, undoubtedly, a role to play in overcoming some of the challenges of the workplace as a site of research that is notoriously difficult in terms of gaining access and collecting data. The 'setting […] shap[es] the methods that a researcher is able to employ' (Mullany, 2008: 46; see also Stubbe, 2001), especially when HR managers are to be convinced of the value of a research project, and research designs need to be adapted to accommodate the exigencies of specific research settings (Angouri, 2018). While mono-dimensional studies can and do also result in rich data sets, mixed methods designs are versatile and can arguably address, from a more holistic perspective, issues the participants themselves relate to. As such they provide a powerful tool for research findings to feed back into research settings 'in order to draw attention to and challenge unquestioned practices' (Holmes and Meyerhoff, 2003: 14) such as gender and power hierarchies in workplace settings. If research is to produce findings that will be relevant and useful to those being studied, this then needs to be reflected in research designs and methodologies and mono-dimensional studies do not necessarily provide the means to meet this need. This is important, in the light of voices urging linguists and practitioners to work closely together in researching workplace discourse from different angles (see Sarangi and Candlin, 2003), and to draw on the real-life concerns or the 'habitus' (Bourdieu, 1993) of both research participants and practitioners (also reflected in the emphasis placed on knowledge exchange by the research councils in the UK).

Before closing this chapter, I would like to consider some of the implications of the issues discussed. *First*, labels such as QUAL/QUAN or mixed (and relevant terminology) can be limiting and limited in their ability to capture the complexity of research activity. A holistic research is necessary to capture the complexity of the questions in social sciences in general and Workplace Sociolinguistics in particular. I discuss this in detail elsewhere (Angouri, 2018), but I referred earlier to the work of methods theorists who have shown that researchers, often, avoid positioning themselves on the tri-paradigm continuum taking an *a-paradigmatic* stance. Symonds and Gorard (2010) make a convincing case towards an ecological perspective, a metaphor I have also used in my recent writing. At the same time, these issues are known but not always debated. As the field has come of age, it is good time

to turn our gaze to our own research practices and the way we 'talk research into being', as well as to engage with wider social sciences debates.

A *second* important point is that research practice of any type is a political activity. Power issues, local and global hierarchies and imbalances are at the heart of practices that have existential consequences for researchers. Further on this, factors outside each research project, such as the disposition of academic departments, journals, graduate programmes, funding agencies, policy-making bodies (Brannen, 2005), peer pressure (Denscombe, 2008) and the preference and background training of researchers (Bryman, 2007) affect research designs – most obviously, in the choice of research topics, but also methodologies and methods. Tashakkori and Teddlie (2003) also discuss what they call the 'residue of the paradigm wars' (2003: 699), arguing that it has an impact on both research designs and students, whereby young researchers often find themselves in programmes or organizations that align their work with either the qualitative or quantitative paradigm and 'proclaim the inferiority of the other group's orientation and methods' (2003: 699).

*Mixed methods* has gained momentum and the 'third' paradigm has found its place in graduate programmes and research methods curricula. It is time now to take a critical look and engage with the practice of applying it in order to further elaborate its affordances and to critique the language we use to construct it in our own circles. This would involve not only creating the context where issues of researchers' inclinations, affiliations and accountability are discussed, but also equipping novice researchers with the necessary knowledge and skills for undertaking critical mixed methods research. At the same time, mixed methods is not and should not be seen as a *necessary* alternative; the individual preferences and research strengths of researchers should not be overlooked (Dörnyei, 2007: 174). Similarly, the needs of a research project and the questions each researcher decides to address are and should be beyond loyalties to abstract method theory. In this vein Green and Preston (2005: 171) suggest caution towards the 'omni-competent professional research, the generic paragon of knowledge production'.

Overall, mixed methods research, as *practice* rather than *label*, can and does cross-disciplinary boundaries and overcome limitations associated with narrow, purist and 'potentially damaging to the spirit of enquiry' (Holmes and Meyerhoff, 2003: 15) approaches to the study of complex phenomena and research sites (such as the workplace).

This chapter argues that using a wide range of tools for data collection and combining quantitative and qualitative paradigms can provide rich data sets, make research relevant to wider audiences and enhance our understanding

of complexities in most research areas, in sociolinguistics in general (and workplace talk in particular). I have aligned here with those who have problematized the rise and language of mixed methods research and the often unquestioned assumptions that come with it. But I have also argued that a holistic, 'multi' instead of 'mono' enquiry is the way to go particularly in relation to the study of complex ecosystems such as the modern workplace.

## Further reading

**Denzin N. (2009)**
This volume provides a thought-provoking critique of qualitative research as it is often operationalized in social science research. Although not on mixed methods per se, the discussion on social justice and the complexities of interpretation are directly relevant to the stance taken in the chapter.

**Heller, Pietikäinen and Pujolar (2017)**
This co-authored volume provides a timely and useful reading to critical research practices that go beyond a linear understanding of the QUAL/QUAN or mixed methods research design.

**Tashakkori A. and Teddlie C. (eds.) (2003)**
This edited volume presents a thorough discussion of mixed methods or 'the third paradigm'. Even though it is not aimed specifically at linguists, students and researchers will find it very useful for its overview of recent developments in this area and its comprehensive collection of sampling techniques for mixed methods designs.

## Online resources

https://www.ncrm.ac.uk/resources/video/#
The National Centre for Research Methods provides a wealth of online material on research methodology in general and mixed methods in particular.
https://blog.esrc.ac.uk/
A general but useful resource for looking into ways of operationalizing methodology from the ESRC.

## Discussion questions

1. Why do we need 'mixed methods' in sociolinguistic research?
2. What are the most common methods in mixed methods designs? Why do you think this is the case?

Develop two research designs for the same topic area. Decide on which methods you need to include in each and provide a clear rationale. Can you distinguish between integration and mixing of methods at either the fieldwork or the conceptual stage of the project?

# Notes

1. Design here refers to 'a procedure for collecting, analysing and reporting research', as defined by Creswell et al. (2003: 210).
2. The terms emic and etic are widely used in social sciences to refer to accounts that are either particular to a certain group or system (emic) or observations about a group or system from the standpoint of an outsider (etic).
3. See also Creswell et al. (2003) for a discussion on generic types of concurrent and sequential designs (referring to the quantitative/qualitative components).
4. Capturing the dynamics of 'workplace discourse' as a field of study is not one of the aims of this paper. I will not distinguish between professional/ organizational/ institutional discourse and organizational discourse studies (but see Grant and Iedema (2005) for a discussion and Bargiela-Chiappini (2009)).
5. The concept of communities of practice is frequently adopted in research on workplace discourse. Eckert and McConnell-Ginet (1992: 464) define a community of practice as 'an aggregate of people who come together around mutual engagement in an endeavor [and] is defined simultaneously by its membership and by the practice in which that membership engages'.
6. The sample in the study is stratified according to their post and level of responsibility. Three strata are identified; namely post holders, line managers and senior managers.