

chapter 1

Introducing Applied Linguistics

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Chapter Outline

- 1.1 What is Language and What is Linguistics?
- 1.2 Applied Linguistics as a Problem-solving Approach
- 1.3 Doing Applied Linguistics: Methodological Considerations
- 1.4 Structure and Content of this Volume

Learning Outcomes

After reading this chapter, you should

- have an understanding of the different approaches to language;
- be able to appreciate the connections between different branches of linguistics;
- be able to appreciate the scope of Applied Linguistics as a problem-solving approach to language;
- have an understanding of the process of doing Applied Linguistics research;
- have an understanding of the different research designs.

Key Terms

- Applied Linguistics
- Bilingualism
- Language
- Linguistics
- Methodology
- Research design
- Sociolinguistics

If you describe yourself as a linguist to other people outside the discipline, chances are that they will ask you, ‘How many languages do you speak?’ But if you describe yourself as an Applied Linguist, they may well go silent completely, wondering what they should say to you next. If you are lucky, you might get asked, ‘Is that how to teach languages?’ or ‘Is that translation?’ These questions are not entirely unreasonable, as Applied Linguistics can mean different things to different people, even among those who would describe themselves as Applied Linguists.

The International Association of Applied Linguistics (AILA) proclaims:

Applied Linguistics is an interdisciplinary field of research and practice dealing with practical problems of language and communication that can be identified, analysed or solved by applying available theories, methods or results of Linguistics or by developing new theoretical and methodological frameworks in linguistics to work on these problems

The AILA definition is both broad in including, potentially, many different areas such as child language acquisition, language and communication disorders, multilingualism, language testing, communication in the workplace, and so on, and narrow in relating Applied Linguistics to linguistics proper. The latter has caused a perpetual controversy, not least because linguistics has also been conceptualized in many different ways to produce a unified theory. In this introductory chapter, we begin with a discussion of what linguistics is, focusing, in particular, on the differences as well as the similarities between the different approaches to language. The main objective is to highlight the connections between the various branches and sub-branches of linguistics, as Applied Linguists may apply one specific approach or a combination of several different ones to the problems that they wish to solve. We then go on to describe Applied Linguistics as a problem-solving approach, outlining its key elements and characteristics. A substantial part of the chapter, Section 1.3, is on the methodological considerations in doing Applied Linguistics, covering all the main stages of doing a research project. The last section outlines the structure and content of the book.

1.1 What is Language and What is Linguistics?

All linguistics work, whatever specific perspective one may adopt, should ultimately have something to say about the question, ‘What is this thing called language?’ (Nunan, 2013). Ron Macaulay (2011) presents ‘Seven Ways of Looking at Language’:

- language as meaning
- language as sound
- language as form
- language as communication
- language as identity
- language as history
- language as symbol.

These can be summarized in three rather different conceptualizations of language:

- as a particular representational system based on the biologically rooted language faculty;
- as complex and historically evolved patterns of structures;
- as a social practice and a culturally loaded value system.

The different conceptualizations of language lead to very different methodological perspectives which together constitute the field of linguistics today. The following is a list of some of the commonly occurring terms for different branches of linguistics:

- theoretical linguistics
- formal linguistics
- descriptive linguistics
- historical linguistics
- sociolinguistics
- psycholinguistics
- neurolinguistics
- clinical linguistics
- cognitive linguistics
- forensic linguistics
- educational linguistics
- computational linguistics
- corpus linguistics
- geolinguistics.

To these we can add sub-branches:

- phonetics
- phonology
- morphology
- syntax
- semantics
- pragmatics
- dialectology
- Discourse Analysis
- Critical Discourse Analysis
- stylistics
- genre analysis
- second language acquisition
- language pathology.

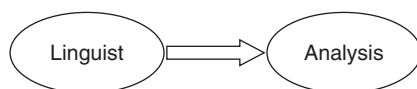


Figure 1.1 Approach to Linguistics 1.



Figure 1.2 Approach to Linguistics 2.

Indeed, the list can go on. It may be useful to look at the differences, but also similarities, between these different kinds of linguistics in terms of the relationship between the linguist who does the studying of language and the evidence he or she uses for the study, paying particular attention to how the evidence is gathered and used in the analysis.

In the first schematized approach (Figure 1.1), the linguist arrives at an analysis of the language being studied using his or her own intuition or intimate knowledge of it. The linguist may test the intuition and intimate knowledge on other speakers who are deemed to have similarly intimate knowledge of the target language. But other than that, no separately collected linguistic data would be used as evidence for the analysis the linguist undertakes. The focus of the analysis tends to be on general rules and principles. This approach characterizes much of formal and descriptive linguistics.

The second schematized approach (Figure 1.2) differs from the first in that it involves a separately collected body of data, rather than the linguist's own knowledge and intuition, for the analysis. The focus of the analysis may still be the general rules and principles, or specific patterns and features, but they are derived from the database. This characterizes corpus linguistics approaches, which have in turn been applied to various contexts including, for example, writing grammar books, compiling dictionaries, designing language tests and teaching material, doing genre analysis, contrastive analysis and comparative analysis. Sometimes, this approach can also be used to show that the linguist's own intuitions about a particular language may be 'wrong' in the sense that the majority of its users use it differently from the linguist's own intuition about the usage.

There are three other approaches, which are schematized in Figure 1.3, Figure 1.4 and Figure 1.5. Like the second approach, a separately collected database is used for the analysis in each of these. But here, particular attention is paid to the language users, who are carefully selected to provide the data in specific contexts. And the analytic focus is on the relationship between the language users and the linguistic evidence they provide. In the third approach, which characterizes that of pragmatics and Discourse Analysis, for instance, the focus is on how the language user produces context-dependent linguistic patterns. In the fourth approach, on the other hand, the focus is on the language users' internal state, personal characteristics and the cognitive process when producing the language data. For example, how does age impact on the language user's ability to discriminate sound differences in different languages; how does anxiety affect the retrieval of certain lexical items; or what level of cognitive control is needed when a bilingual language user changes from one language to another in the middle of an utterance as opposed

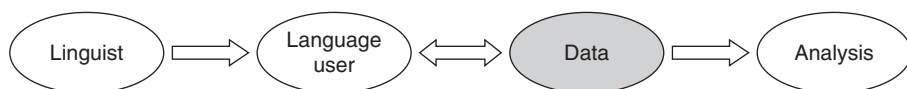


Figure 1.3 Approach to Linguistics 3.

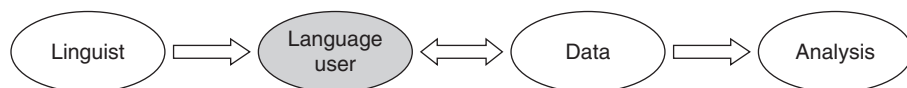


Figure 1.4 Approach to Linguistics 4.

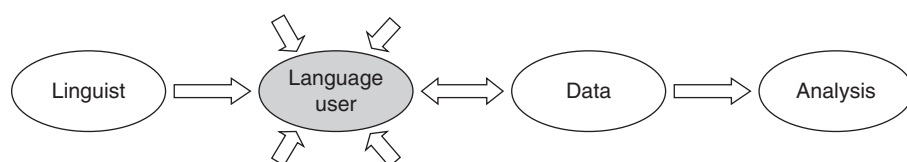


Figure 1.5 Approach to Linguistics 5.

to switching with different interlocutors. Such an approach is typical of psycholinguistic and clinical linguistic studies. The last schematized approach is characteristic of that of sociolinguistics, which focuses more on the influence of external factors on the language user – for example, audience, setting, topic and how the language user uses language strategically in response to the external factors.

The schematization of the various approaches helps to highlight the commonalities as well as differences between the various branches and sub-branches of linguistics. Applied Linguists may apply one specific approach from these to the problems they wish to solve, or be eclectic and use a combination of approaches. Moreover, Applied Linguists have applied theories and models from other disciplines beyond linguistics. Indeed, contemporary Applied Linguists feel free to draw on almost any field of human knowledge, and use ideas from philosophy, education, sociology, feminism, Marxism and media studies, to name a random few. They have, for example, explored psychological models such as declarative/procedural memory and emergentism, mathematical models such as dynamic systems theory or chaos theory, early Soviet theories of child development such as those of Vygotsky, French thinkers such as Foucault and Bourdieu, and so on. Ben Rampton (1997: 14) described Applied Linguistics as ‘an open field of interest in language’, while David Block (2009) called it ‘an amalgam of research interests’.

—— 1.2 Applied Linguistics as a Problem-solving Approach

While most Applied Linguists seem happy with the idea that their discipline is concerned, as AILA proclaims, with ‘practical problems of language and communication’, the term ‘problem’ does raise issues of its own. In one sense it means a research question posed in

a particular discipline; in another sense it is something that has gone wrong which can be solved. Some 30 years ago, when Hugo Baetens Beardsmore, a Belgian scholar in the field of bilingualism and language contact, asked his university in Brussels to allow him to teach a course on bilingualism, he was told that he could only do so if the course was called 'The Problem of Bilingualism'. Talking about the problem of bilingualism is ambiguous between defining it as a research area and claiming that it is in some way defective. Calling areas or topics problems fosters the attitude that there is something wrong with them. Bilingualism is no more intrinsically a problem to be solved than is monolingualism. Applied Linguists have to be clear that they are solving problems within an area of language use, not regarding the area itself as a problem except in the research question sense. Language teaching, for example, is not itself a problem to be solved; it may nevertheless raise problems that Applied Linguists can resolve.

So what problems does Applied Linguistics solve? If you are worried about your child's speech, you are more likely to go to a speech therapist than to an Applied Linguist. If your country is torn by civil war between people who use two scripts, you ask for a United Nations Peacekeeping Force. If you are drafting a new law, you go to a constitutional lawyer or a civil servant. The problem-solving successes of Applied Linguistics have included devising orthographies for languages that have no written form and inventing simplified languages for mariners; Applied Linguists have played a part in EU projects on translation and on linguistic diversity. Most successes have, however, had to do with language teaching, such as the syllabuses and methods that swept the world from the 1970s onwards, particularly associated with the Council of Europe.

At a general level we can draw three implications from this:

1. *The Applied Linguist is a Jack of all trades.* Real-world language problems can seldom be resolved by looking at a single aspect of language. Since Applied Linguistics is interdisciplinary, the Applied Linguist is expected to know a little about many areas, not only of language, but also of philosophy, sociology, computer programming, experimental design, and many more. In a sense, Applied Linguists are not only Jacks of all trades but also master of none as they do not require the in-depth knowledge of the specialist so much as the ability to filter out ideas relevant to their concerns. An Applied Linguist who only does syntax or Discourse Analysis is an applied syntactician or an applied discourse analyst, not a member of the multidisciplinary Applied Linguistics profession. In other words, multidisciplinary applies not just to the discipline as a whole but also to the individual practitioner.
2. *The Applied Linguist is a go-between, not an enforcer, a servant, not a master.* The problems that Applied Linguistics can deal with are complex and multi-faceted. As consultants to other people, Applied Linguists can contribute their own interpretation and advice. But that is all. The client has to weigh in the balance all the other factors and decide on the solution. Rather than saying, 'You should follow this way of language teaching', the Applied Linguist's advice is, 'You could try this way of language teaching and see whether it works for you'. Alternatively, the Applied Linguist should be responding to problems put forward by language teachers, not predetermining what the problems are; the Applied Linguist is there to serve teachers' needs – a garage mechanic interpreting the customer's vague idea of what is wrong with their car and putting it right, rather than a car designer.

3. *Sheer description of any area of language is not Applied Linguistics as such but descriptive linguistics.* Some areas concerned with the description of language are regarded as Applied Linguistics, others are not. Make a corpus analysis of an area or carry out a Conversation Analysis and you're doing Applied Linguistics; describe children's language or vocabulary and it is first language acquisition; make a description of grammar and you are doing syntax. Overall, making a description is not in itself solving a problem, even if it may contribute to the solution.

Outside language teaching, Applied Linguists have taken important roles behind the scenes as advisors to diverse governmental and inter-governmental bodies – for example, John Trim's work on the Common European Framework of Reference for languages. But on the whole, they have had little impact on public debate or decision-making for most language problems, the honourable exceptions being David Crystal and Deborah Cameron, who may not even consider themselves primarily as Applied Linguists. Problems are not solved by talking about them at Applied Linguistics conferences; the solutions have to be taken out into the world to the language users. Take the political correctness issue of avoiding certain terms for reasons of sexism, racism and so on. This is based on one interpretation of the relationship between language and thinking: not having a word means you can't have the concept, as George Orwell suggested with *Newspeak*. Yet Applied Linguists have been reluctant to contribute their expertise to this debate, despite the extensive research into linguistic relativity of the past decade. Public discussion of language issues is as ill-informed about language as it was 50 years ago at the dawn of Applied Linguistics.

A recent theatre piece, *Lipsynch*, by the Canadian director Robert Le Page, was crucially concerned with language. The dialogue took place in three languages with the aid of subtitling running along the front of the stage; it took for granted the multilingualism of the modern world. The heroine was attempting to recover the voice of her father who had died when she was young. All she had was a silent home movie. So she engaged a lip-reader to find out the words, then a lipsynch actor to read them in alternative voices till she recognized her father's. This didn't work until she herself uttered her father's words. In another scene an elderly aphasic patient delivered a monologue; judging by audience reaction this was the first time that most of them had encountered this kind of discourse. At a dinner party, film actors and agents attempted to converse simultaneously in three languages, to comic effect. *Lipsynch* movingly showed the importance of language to people's lives and the language problems they encountered.

As this reminds us, language is at the core of human activity. Applied Linguistics needs to take itself seriously as a central discipline in the language sciences, dealing with real problems. Applied Linguistics has the potential to make a difference. It seems important, therefore, to reassert the focus on language in Applied Linguistics. The unique selling point of Applied Linguistics that distinguishes it from the many domains and sub-domains of sociology, economics, politics, law, management and neuroscience is language. At its core it needs a coherent theory of language – whether this comes from a particular branch of linguistics or from some other discipline – a set of rigorous descriptive tools to handle language, and a body of research relevant to language practice.

Case Study 1.1: The Black English Trial in Ann Arbor (Labov, 1982)

The question of whether linguists could contribute to the debate about the educational failure of black children in the United States was sharply brought into focus by a case which arose in Ann Arbor, Michigan, in 1977. This has to be seen against a backdrop where psychologists had written that the language of black children did not provide the means for logical thought, that they spoke a 'restricted code' which did not allow them to access abstract discussion. In the 1960s, educational psychologists had assumed that any differences between black and white children were marks of black inferiority, which could be eliminated by compensatory education. However, if linguists were to intervene in this debate, it was first essential that they should agree among themselves about the linguistic facts. Labov shows in this article that it was through a happy conjunction of developments in the academic world that a consensus was reached just at the time when evidence was required in this case, and the linguists' testimony was therefore clear and relevant.

The Martin Luther King Elementary School in Ann Arbor had a racial balance of 80% white, 13% black and 7% Asian and Latino children. A minority of the black children, who came from a low-income housing estate which was situated within the catchment area of the school, were doing very badly. Their parents were not satisfied with the school's interpretation of these poor results, which was to brand the children as learning disabled, emotionally disturbed or having behaviour problems. They got in touch with a legal advisory service and then with a public-interest law firm on behalf of 15 of the children and brought a case against the school, the School District and the Michigan Board of Education for failing to diagnose the relevant cultural, social and economic factors which would have allowed them to help solve the problems. They claimed the children had been branded as learning disabled, mentally handicapped and even hard of hearing on the basis of tests which were inappropriate for them. For example the Wepman test included various oppositions which were non-existent in Black English Vernacular (BEV): *pin* vs. *pen*, *sheaf* vs. *sheath*, *clothe* vs. *clove*, and so on. This is despite the fact that this had been known, along with the problem of misreporting the hearing abilities of normal black children, for 12 years.

The judge threw out the motions, which claimed special services should be provided to overcome poor academic performance based on cultural, social or economic background, as no law secured any such right. However, he retained the action on the basis of a failure of the defendants to take appropriate action to overcome *linguistic* barriers (Title 20 of the US Code, Section 1703 (f)). The judge held that it was not necessary for the language barrier to be the fact of having a different mother tongue, and that such a barrier could result from the use of 'some type of non-standard English'. He therefore refused to pursue matters relating to the plaintiffs' cultural characteristics and asked for more evidence to be produced to show the nature of the linguistic barriers that the children faced. The important thing is that the lawyers, and all those involved, who had originally thought of the case in terms of social, political and economic issues, found themselves involved in the linguistic issue and the 'King School case' became the 'Black English case'. *Prima facie*, the children's English was characteristic of Black English Vernacular, as described in several northern US cities, with features including the zero form of the possessive ('*My Momma name is Annie*'), habitual *be* ('*When it be raining, I be taking it to school*'), absence of 3rd person singular *s* ('*It don't*

sound like me, do it?'), and so forth. A team of linguists including William Labov was therefore assembled to give evidence on the fact that the children spoke a distinct dialect of English used by about 20 million people in the US. An important part of the argument was that the language differences involved were the result of racial segregation, and it was therefore preferable to be able to show that BEV had Creole origins. This had been denied by certain white dialectologists who claimed that black people's speech was the same as that of white people from the same localities and social class, although they of course agreed that vernacular dialects were as logically consistent as standard ones. Some black scholars also rejected the hypothesis of Creole origins, fearing that the argument that 'Black English' was a separate dialect would lead to arguments for separate development and education and thereby prevent black children from reaching the top.

Labov then digresses briefly from the case to enunciate various principles which he believes scientists should follow in relation to social action. These include, among others,

- *a principle of error correction*: scientists should bring to the public's attention any aspect of their data with important consequences for social practices or widespread ideas;
- *a principle of obligation*: investigators should make knowledge of their data available to the community they have obtained it from, when the community needs it; this can be rephrased more actively to the effect that the knowledge based on the data obtained should be used for the community's benefit.

In order to fulfil these obligations it was essential for the linguists to present a united front at the trial, which seemed unlikely given the sort of disagreements outlined above. But in 1979, fortuitously, a consensus was finally reached by linguists on some of these contentious issues. Black linguists such as Beryl Bailey were able to demonstrate a consistent pattern for various linguistic features, notably copula deletion in BEV (*'He tired out'*), other dialects of English showing a different pattern of contraction and deletion. There were also phonological differences and aspectual differences involving *be*. For example, the sentence *'I'll be done killed that motherfucker if he tries to lay a hand on my kid again'*, uttered by an enraged black father, cannot be translated by the future perfect *'I will have killed...'*, which would suggest that the speaker will have killed the victim *before* he lays a hand on the kid, nor by any other one-to-one translation into another English dialect. The sense of the BEV future perfective is merely that the action will be completed without relating it to the state or event that follows. The linguists working on BEV at this time were also able to show the remarkable geographic unity of BEV across different parts of the US. The argument that whites of a similar social position shared the same dialect was shown to be flawed, despite the adoption by those whites of certain features from BEV.

When it came to the defence's turn to present their evidence, after several weeks of testimony by the plaintiffs, they did not call any witnesses and merely told the press that the plaintiffs' case was so weak that no defence was needed. The judge found for the plaintiffs and asked Ann Arbor School Board to submit a plan within 30 days defining the steps they would take to identify BEV-speaking pupils and to use that knowledge to teach them to read Standard English. The decision was not appealed,

and the plan submitted by the School Board included in-service training for teachers to identify BEV and strategies for helping children to switch to Standard English as required.

Labov adds that despite the remarkable consensus reached by the linguists, which allowed the case to be won, the national press managed to misreport the outcome and to cause indignation that the judge had supposedly told teachers they should learn BEV in order to teach it to the children.

Labov's conclusion highlights the difficulty of reconciling the 'objectivity' and the 'commitment' of the article's title. He points out what a rarity it is for such agreement to be reached by academics such that it can be put to the cause of a clear, socially relevant policy. Another lesson is the importance of the involvement of members of the community itself, in this case of black linguists, as true progress, he claims, only occurs when people take charge of their own affairs.

In citing this case, we are illustrating the kind of 'applied' work linguists can do beyond academia. It is unlikely that Labov would describe himself as an Applied Linguist – he is best known as a sociolinguist, though his official title simply has linguistics in it – and he uses a very specific kind of sociolinguistic method which he has developed, namely variationist sociolinguistics, in his analysis, represented in the schematized approach in Figure 1.5 above. Nevertheless, the concern for practical social issues that Labov shows in this particular case is shared by all Applied Linguists.

Questions for discussion

- What are the main issues and principles behind the Ann Arbor trial described above?
- To what extent was the school's categorization of the black children based on understandable mistakes and to what extent on other factors?
- Is it right that linguistic differences should be given the type of protection that was guaranteed by Title 20 of the US Code when being subject to social disadvantage is not considered in the same way? Why?
- Could a similar case have arisen in a school where the *majority* of pupils were black?
- The case was brought on the assumption that speaking BEV was tantamount to speaking another language. In what way were the measures proposed to help the black children similar to or different from those that could be applied to pupils of a different mother tongue – for example, Spanish?
- Do you agree with Labov that the involvement of black linguists was crucial here?
- How different does a dialect have to be from the standard, in your view, for its speakers to qualify for special treatment in this way?
- Is it realistic to insist on the sort of principles that Labov outlines for linguistic fieldworkers?
- The measures adopted by the school aim at making it easier for speakers of BEV to switch to Standard English at school. Is this the right educational objective to aim for? Can you see any alternatives?

(Summarized by Penelope Gardner-Chloros.)

This is not to say that the language element has to dominate or that a particular linguistics theory or model has to feature, but it does not count as Applied Linguistics

1. *if there is no language element.* Many of the concerns Applied Linguists have are, equally, concerns of sociologists, neuroscientists and other professional researchers. Crucially, however, Applied Linguists focus on the role of language in the broad issues of sociological or neurological concern. Why call it Applied Linguistics if it has no language connection?
2. *if the language elements are handled without any theory of language.* The theory of language does not need to come from linguistics but might be from philosophy, history, social theory or literary theory. Yet Applied Linguistics cannot treat language as if there were no traditions of language study whatsoever. Nor can the language elements be based solely on folk ideas from the school tradition of grammar or the practical EFL teaching tradition, which would be rather like basing physics on folk beliefs or alchemy. Indeed, one of the responsibilities of the Applied Linguist should be to challenge both the folk notions of language and grammar and the theoretical linguists' models of how language works.
3. *if the research base is neither directly concerned with language issues nor related to them in a demonstrable way.* That is to say, a theory from other disciplines cannot be applied without a clear chain showing how and why it is relevant. An idea from mathematical theory, computer simulation or neural networks needs to show its credentials by providing practical solutions to real-life language problems (e.g. how bilingual speakers with aphasia process sentences), not imposing itself by fiat, by analogy, or by sheer computer modelling. This is an area where there is huge potential for further development, as more and more Applied Linguists become attracted by theories and ideas from other disciplines.

STUDY ACTIVITY 1.1

1. Pick a recent newspaper or magazine and find one article that talks about a language or about a language-related problem. What is the problem? To whom is it a problem? How can descriptive linguistics help? To what extent is the problem also related to historical, political, cultural and policy issues?
 2. Reflecting on your own language learning or teaching experience, how much did linguistics help you? Were there any issues for which you had to go to other disciplines, such as psychology, sociology or cultural studies, to find possible solutions or ideas and inspirations? What are these disciplines?
 3. Keep a diary for a week and see how many events you have experienced that are related to language and communication issues. What are the issues? Are there practical solutions to any of them? What research questions can be formulated about the issues for further investigation?
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CAREERS FOR APPLIED LINGUISTS

While specific employers seek individuals with specific skills for specific jobs, all employers want those with the ability to express themselves clearly, to solve novel problems and to present their solutions in a clear and accessible form. These skills are central to the study of Applied Linguistics. Applied Linguistics training prepares students well for employment in government agencies, non-profit organizations, educational institutions and businesses. In a globalizing world today there is a growing demand for people equipped to analyse language and language practice.

Graduates with a background in Applied Linguistics also gain an enhanced understanding of how people learn first, second and foreign languages and of how language is used in the community. This knowledge will be relevant to those who are interested in preparing for careers as language teachers, language education and assessment experts, speech pathologists, interpreters and translators, and a variety of jobs in industry where language and communication are issues of concern.

The following list of job titles comes from various databases of recent graduates who did an Applied Linguistics degree or had Applied Linguistics as a major in their degree. There are, of course, many other professions that are concerned with language and communication that Applied Linguistic graduates can enter.

Advertising Executive
Administrative Assistant
Bilingual Assistant
Campaign Coordinator
Careers Advisor
Communication Advisor
Community Project Manager
Customer Relations Manager
Data Analyst
Dialect Coach
Document Processing Specialist
Documentation Training Manager
Editor
Educational Consultant
Electronic Lexicographer
Event Manager
Fund Raiser
Grants Manager
Human Resources Administrator
Lab Manager
Marketing Consultant
News Reporter
Policy Analyst
Publisher
Research Associate

Resources Manager
Student Advisor
Teacher of English as a Foreign Language
Teaching Assistant
Technical Copy Editor
Technical Writer
Test Designer
Training and Development Manager
Translator/Interpreter
Volunteer Services Coordinator
Web Developer
Youth Project Manager

1.3 Doing Applied Linguistics: Methodological Considerations

If the Applied Linguist is a Jack of all trades, or a go-between across different disciplines and approaches, does Applied Linguistics have a coherent methodology? Does it need one? How would an Applied Linguistics methodology be different from that of, say, formal linguistics, or sociolinguistics and psycholinguistics? To try to answer questions such as these, which often exercise those new to the field, let us, first of all, remind ourselves of the distinction between method and methodology. There is quite a lot of confusion about the meanings of these two terms. *Methods* refer to specific techniques of collecting and analysing data. For example, a survey questionnaire is a method, and ethnographic fieldwork is another. Sometimes people use 'methods' to refer to tools or instruments, for instance, computer software for analysing data, or multiple choice questions (MCQs). Students are often very concerned about choosing the right method for their research project, and they want to learn how to do it, be it doing an interview or using a data bank. But the method chosen for a particular research project depends on the methodology, which is the underlying logic of methods. More precisely, *methodology* is the principle or principles that determine how specific methods or tools are deployed and interpreted. In one sense, Applied Linguistics is a methodology in itself, because it is concerned with real-world problems in which language plays a central role. Such a problem-solving approach distinguishes Applied Linguistics from other methodologies where the main concern may be hypothesis testing or theorization. In the meantime, Applied Linguists can employ a wide range of methods in collecting and analysing data, many of which are commonly used by sociolinguists, psycholinguists, clinical linguists, educational linguists and others.

There are various ways of characterizing different research methodologies. People often think of research methodology in terms of a quantitative versus qualitative dichotomy. In general terms, *quantitative methodology* aims to uncover facts and truths in an objective way by delineating patterns or structures, whereas *qualitative methodology* attempts to interpret meanings of and relationships between objects in context. For instance, a language class could be regarded as an object for investigation. A quantitative

Table 1.1 Four worldviews used in research

Postpositivism	Constructivism	Advocacy and Participatory	Pragmatism
Determination	Understanding	Political	Consequences of actions
Reductionism	Multiple participant meanings	Empowerment and issue oriented	Problem centred
Empirical observation and measurement	Social and historical construction	Collaborative	Pluralistic
Theory verification	Theory generation	Change oriented	Real-world practice oriented

approach might focus on how the class is structured, what the key components of the class are, and what role each component plays in the structuring of the class in terms of frequency and regularity. A qualitative perspective, on the other hand, would be most likely to ask what the definition of a class is in comparison with some other event, how the different components of a class (e.g. participants, topic, setting) are related to each other, and why a particular language class takes place in the way it does. Quantitative methodology is used a great deal in science disciplines, while qualitative methodology is more common in the humanities and arts. The social sciences often use both: there are social scientists who are more interested in the ‘what’ and ‘how’ questions and adopt a quantitative perspective, while others are more concerned with the ‘how’ and ‘why’ questions and lean towards a qualitative methodology. Applied Linguistics as a problem-solving approach does, on the surface, seem to lean towards the qualitative perspective, although there are also plenty of Applied Linguists who are interested in facts and figures and therefore adopt a quantitative methodology.

Perhaps a better way to understand the differences in the various methodologies is to look at the objectives of the research. Creswell (2003: 6) proposed the classifications listed in Table 1.1, which he terms ‘worldviews in research’. Such a classification helps us to think of research methodologies in more practical ways and avoids the quantitative versus qualitative dichotomy and the potential confusions between methodology and methods. One can use specific quantitative or qualitative methods and techniques, or a combination of the two, within each of these methodological perspectives.

Whatever methodology you choose to adopt, there are certain steps you need to take in conducting a research project. These typically include

1. defining the research question or questions;
2. collecting evidence;
3. analysing and presenting findings.

1.3.1 *Defining the Research Question*

Defining the research question is a crucial first step. The question has to be researchable, which means that

1. there are potentially different answers to it;
2. there is evidence available for you with which to answer the question.

The most common ways of finding research questions are through personal experience or reading other people's work. These two ways also often go hand in hand with each other. Many Applied Linguists come into the field because of professional and personal interests. Some may have taught languages in different parts of the world, to different groups of learners, at different levels, and they are interested in researching questions that are directly related to their work experience. Others may themselves be multilingual, have raised children in diverse linguistic and cultural environments, worked in a particular institution, for example multinational corporates, the media, translation and interpreting services, and would like to gain knowledge and understanding of the key issues in these domains. Most of the people entering Applied Linguistics with professional or personal interests tend to have a better idea of the broad area or topic they want to research into than of a specific, researchable question. For example, they may say that they are interested in researching heritage language schools, or intergenerational communication in multilingual families, or attitudes towards certain languages in a particular community. To make the journey from such broad areas of interests to specific research(able) questions is not always an easy or straightforward process. This is where critical reading of the literature comes in.

A good literature review serves two closely related purposes:

1. to make the reader understand why you are doing what you are doing in the way you are doing it; and
2. to prepare your own argument.

It should cover the following questions:

- What has been done on the topic or area of interest? Are you interested in exactly the same topic or area, or in something that is similar but different?
- What are the questions asked by the other researchers? Can you ask the questions in a different way? Do you have other questions to ask?
- From what methodological perspective did they ask the questions: postpositivism, constructivism, advocacy and participatory, or pragmatism? What methodology would you use?
- What methods and data did they use in answering the questions? Can you improve on the research design and method? Is there other evidence that you can provide to address the questions?
- How did the researchers interpret their results and what argument did they put forward on the basis of their data analysis? Do you agree with their analysis? Are there other ways of interpreting the data?

In other words, a good, critical review should show that not only have you read extensively the existing work in the field but you have also understood the methodology and arguments, by pointing out the strengths and weaknesses, by comparing the results of different studies and by evaluating them with reference to your own interests. Once you have answered the above questions, you are likely to have a research question or even a set of questions for your own project.

1.3.2 *Research Design*

It is often said that a research project only really begins when one starts to collect evidence or data. Many students are anxious about the amount of data they collect and whether the

data they have collected is 'good enough'. To ensure that the data you have is of sufficient quantity and quality, you need to consider carefully a number of design issues. The first and foremost is: 'given this research question (or theory), what type of evidence is needed to answer the question (or test the theory) *in a convincing way?*' (de Vaus, 2001: 9, original emphasis). Using an analogy, de Vaus compares the role and purpose of research design in a project to knowing what sort of building one is planning (such as an office building, a factory for manufacturing machinery, a school, etc.). You can normally get a sense of what kind of evidence or data is appropriate for the research question by reviewing existing studies – what evidence did other researchers use to support their arguments? More specifically, you can ask the following questions:

1. Is the primary aim of the study to compare two or more individuals, situations, behaviours, or to focus on just one? (*etic* vs. *emic*)
2. Is the data collected and analysed in numerical form or not? (quantitative vs. qualitative)
3. Is the data collected under controlled conditions or not? (experimental vs. non-experimental)
4. Is the study conducted over a period of time or at one point in time? (longitudinal vs. non-longitudinal)
5. Does the study involve one single participant, a small group of participants or a large number of participants? (case study vs. group study)

The terms in brackets after each of the above questions are different types of research design. An *etic* study is often known as a comparative study, which involves comparing one individual, or situation, or behaviour, with another. An *emic* study, on the other hand, is one in which researchers try to explore and discover patterns and meanings *in situ*. The use of numerical data lies behind the difference between *quantitative* and *qualitative* research design. A quantitative study is essentially about explaining phenomena and identifying trends and patterns by collecting and analysing data numerically, while a qualitative design is an umbrella term that covers a variety of methods which focus on the meaning of the phenomenon being investigated and do not involve numerical data. *Experimental* studies collect data under controlled conditions. The purpose of the 'control' is to keep everything, except for the variables under investigation, as similar or comparable as possible so that the experimental results can be reliably attributed to the changes in variables. In a *non-experimental* design, researchers do not manipulate the conditions. This design is suitable for research questions that aim to explore the phenomena in a more natural manner, such as spontaneous interaction, to find out opinions, attitudes or facts or to assess current conditions or practice. *Longitudinal* design refers to studies in which data are collected from a small number of subjects over a period of time, and is suitable for answering research questions that aim to explore changes and development over time or to evaluate the effectiveness of a training programme or the impact of an experience. *Cross-sectional* design, on the other hand, refers to the type of studies in which data is collected at one point in time from a large number of subjects grouped together according either to age or to other variables such as length of stay in a new country. It can be used to explore the relationship between various variables, for example, the correlation between the degree of appropriateness in use of the speech act by an English-as-a-foreign-language learner and the length of stay in an English-speaking country; or to describe the developmental pattern of a particular feature or skill such as the development of Intercultural

Communicative Competence. *Case study* design is an in-depth investigation of, usually, a single subject. It can be used to describe the linguistic or communicative behaviour of an individual member of a group, to refute a claim by providing counter-evidence, or alternatively to show what is possible as positive evidence. *Group study* involves a group of individuals instead of one subject. Single case study and group study are very often combined with longitudinal and cross-sectional designs. For example, a case study can be conducted longitudinally, and a group study can be done cross-sectionally.

There are two further types of research that are increasingly popular in Applied Linguistics, namely, *action research* and *critical research*. Action research belongs to the pragmatist and the advocacy and participatory methodological perspectives in Creswell's framework. It is a reflective process of problem solving. Some people think of action research as case studies. It is true that most often action research is done on a case-by-case basis. But the key to action research is that it is aimed at improving the way the individuals involved in the research process address issues and solve problems. Action research can also be undertaken by larger organizations or institutions, assisted or guided by researchers, with the aim of improving their strategies, practices, and knowledge of the environments within which they practise. Kurt Lewin, who is believed to have coined the term *action research*, described it as 'a comparative research on the conditions and effects of various forms of social action and research leading to social action' that uses 'a spiral of steps, each of which is composed of a circle of planning, action, and fact-finding about the result of the action' (1946). Action research has been particularly popular among language teaching professionals who wish to improve their own as well as their organization's professional practice through the reflective research process.

Critical research cuts across the constructivist, the advocacy and participatory as well as the pragmatist methodological perspectives. Critical research has two rather different origins and histories, one originating in literary criticism and the other in sociology. This has led to the rather literal use of 'critical theory' as an umbrella term to describe theoretical critique. Starting in the 1960s, literary scholars, reacting against the literary criticism in the previous decades which tried to analyse literary texts purely internally, began to incorporate into their analyses and interpretations of literary works semiotic, linguistic and interpretive theory, structuralism, post-structuralism, deconstruction, psychoanalysis, phenomenology and hermeneutics, as well as feminist theory, critical social theory and various forms of neo-Marxist theory. With the expansion of the mass media and popular culture in the 1960s and 70s, social and cultural criticism and literary criticism began to be intertwined in the analysis of popular cultural phenomena, giving rise to the field of Cultural Studies. Critical research in the sociological context, on the other hand, arose from a trajectory extending from the non-positivist sociology of Weber, the neo-Marxist theory of Lukács, to the so-called Frankfurt School of social theorists, most notably Horkheimer and Habermas. It is underpinned by a social theory that is oriented toward critiquing and changing society in its totality, in contrast to traditional theories oriented only to understanding or explaining it. It was intended to be a radical, emancipatory form of social research and concerned itself with 'forms of authority and injustice that accompanied the evolution of industrial and corporate capitalism as a political-economic system' (Lindlof and Taylor, 2002: 52). A newer, postmodern version of the critical social theory focuses on what has been called the 'crisis of representation' and rejects the idea that a researcher's work is considered an 'objective depiction of a stable

other'; instead, it tries to politicize social problems 'by situating them in historical and cultural contexts, to implicate themselves in the process of collecting and analyzing data, and to relativize their findings' (Lindlof and Taylor, 2002: 53). Meaning itself is seen as unstable because of the rapid transformation in social structures and as a result the focus of the research is centred on local manifestations rather than broad generalizations.

Critical research has been particularly appealing to some Applied Linguists because of the shared interests in language, symbolism, text and meaning. In the 1970s and 1980s, Jürgen Habermas redefined critical social theory as a theory of communication, that is, communicative competence and communicative rationality on the one hand, distorted communication on the other. Applied Linguists who adopt the critical research perspective have focused on the processes of synthesis, production or construction by which the phenomena and objects of human communication, culture and political consciousness come about. This is reflected in much of the discussion on language ecology, language rights and linguistic imperialism, as well as on gender and ethnicity in language learning and language use (e.g. Pennycook, 2001; Sealey and Carter, 2004). Sociolinguistics, once focused on linguistic variation and change in relation to societal structures and speaker identities, has also taken a critical turn in the last two decades, leading to further blurring of boundaries with Applied Linguistics and other adjacent approaches such as Critical Discourse Analysis. Nowadays, it is common to find in sociolinguistics journals studies that are concerned with topics such as linguistic ideology, media representation of minority language users or equality and discrimination in workplace communication.

1.3.3 Data Collection

The data that Applied Linguists are interested in can be broadly identified in two categories: interactional and non-interactional data. As has been discussed in Section 1.2, Applied Linguistics research should have language as its main object. This does not mean, however, that it has to be language in interaction; it could be language attitude, language awareness, motivations and strategies for language learning, language policy, language assessment, and so on. In fact, interactional data only constitutes the database for a small proportion of Applied Linguistics.

Interactional data consist of a continuum with elicited conversation and naturally occurring conversation at each end, according to the degree of naturalness. Conversation can be elicited through a range of methods and techniques such as discourse completion tasks, recall protocols, or role play. The key issue for the interaction obtained through elicitation is its comparability to naturally occurring interaction. For naturally occurring conversation, the key issue is how to capture it (using observation sheet vs. audio-visual recording, for example) and how to strike the balance between details and analytical approach (Interactional or Conversation Analysis). In addition to elicited and recorded conversation, conversation data are also available in a number of other sources such as data banks, the Internet and other mass and social media.

The so-called *non-interactional data* are data about language practices rather than samples of language practices themselves. Surveys, questionnaires, interviews, self-reports, standard assessments and laboratory experiments can all be used to collect

non-interactional data. They are often used to collect large amounts of information from sizeable populations. With the exception of self-reports, the researcher normally has an expectation of what the responses (i.e. data, findings) will be. They are therefore more often used to test hypotheses or verify existing findings and claims. Some Applied Linguists are also interested in critical analysis of public discourse or media language.

Ethnography is sometimes used as a data collection technique when the researcher is particularly interested in exploring the meaning of a phenomenon. Ethnography is in fact more of a methodology than a method; it is a holistic approach to social phenomena and social practices, including linguistic practices, with specific references to both historical and present contexts. Ethnography requires rich data, often collected through a combination of different means including recordings, interviews and questionnaires. But the key data collection method for ethnography is *in situ* observation. Observation enables the investigator to describe events, actions, behaviours, language use, and so on, in detail and to interpret what has happened in context. During observation, researchers make field notes of what they see in as much detail as possible. There are different types of observations, depending on the researcher's role and visibility in the event under study. Researchers can either actively take part in observation and have maximum contact with the people being studied or remain as unobtrusive as possible. The main advantages of ethnographic observation are that it allows the researcher to uncover information previously unknown, to gain an in-depth description, and to capture a series of events and processes over time. The challenges are several: researchers may have biases in selecting what to note down; it is difficult to differentiate describing from interpreting what has happened; documenting an event while observing and participating in activities can be a demanding task.

There is a huge amount of published literature on specific techniques and tools for collecting data. Some of the key references and useful guides are given at the end of the chapter, and in the Resources List at the end of this book.

1.3.4 *Analysing and Presentation Findings*

Data analysis follows closely from research design. It is advisable to consider how you intend to analyse and present the findings during the design stage of the research process, before you start collecting data.

Quantitative data are most often analysed through statistics and presented in various figures, tables, graphs and diagrams. There are ample guide books for students on how to do quantitative and statistical data analysis. Qualitative data, on the other hand, are usually presented in discursive accounts, with quotations and samples of actual data. For both quantitative and qualitative data analysis, accuracy and accountability are paramount. We are talking about accountability to the participants, to the situation that has been investigated, to the researcher himself or herself, as well as to the wider audience. The researcher should be truthful and honest not only in describing what they have observed but also in explaining what their ideological stance may be, what they expected to find, and how their identity and relationship with the people they studied impacted on the findings.

If you have collected interactional data, transcription is the key first step towards analysis. There are different techniques of transcribing language in interaction; for

example, Conversation Analysis (CA) specifies a set of conventions for sequential analysis. There are also computer software and other new technologies to assist you in transcribing interactional data, including nonverbal communication and multimodality data. However, most people do not follow a specific set of transcription conventions tightly. And most people do not transcribe everything that has been recorded. It could be argued that one cannot transcribe everything after the event has taken place anyway. There are, therefore, certain decisions one has to make in transcribing interactional data: what is to be transcribed and what is to be left out; what gets highlighted or emphasized and how; what should be done to ambiguous elements, for example, when it is not clear who the speaker was, or what was being referred to. As Ochs (1979) remarked over 30 years ago, such decisions in transcription are also theoretical decisions that would affect the way data is interpreted.

1.3.5 *Ethical Considerations*

As Applied Linguistics research often involves human subjects, ethical considerations are crucial. These include

- Justification: the proposed research will achieve worthwhile objectives and the time and resources needed for the research are justifiable. Participants' welfare and public responsibility are paramount. Where the project may potentially put the participants at risk, either physically or psychologically, care must be taken to ensure that the benefits of the project outweigh the risks. Appropriate support mechanisms need to be provided to minimize any potential risk. Where there is a possible conflict of interest (e.g. the work is to be carried out in the same organization or sponsored by an organization), again a case must be made.
- Access to participant(s): this includes issues of participants' privacy, the need to reduce invasiveness of the presence of researchers, issues of confidentiality and anonymity, and so on.
- Informed consent: when seeking consent, participants need to be fully informed about the aim and nature of the project and any potential risks. They should be made aware of their rights in the project, such as the right to withdraw at any time, the right to refuse to answer any question, the right to ask any question, and so on. With young and school-age children and vulnerable populations such as patients, consent must be sought from their parents, guardians, carers or schools (if the research is carried out on the school premises or with assistance from the school).

Other ethical concerns relevant to studies in Applied Linguistics include

- Participants' language ability: whether participants' language ability is sufficient for them to understand the informed consent form.
- Cross-cultural differences in ethics: there may be differences in the ethical considerations between the culture in which the research is carried out and the culture from which participants come. This issue is particularly relevant to studies on Study Abroad and intercultural interactions. It is important to anticipate any potential differences and clarify any misunderstandings.

STUDY ACTIVITY 1.2

1. Choose two recently published studies on a topic in Applied Linguistics. Compare the way the researchers ask the questions and design the studies. Is there any difference? How do they justify the questions and the designs?
 2. Choose a study that has used a mixed design, for example, longitudinal and cross-sectional, quantitative and qualitative. What is the added value of the mixed design, that is, what are the things that a single design is unable to reveal? Are there any contradictions in the findings by different research designs? If yes, how does the researcher interpret them?
 3. Carry out an observational study in an everyday situation. How does your own identity affect the relationship with the people you are observing, your perspective on what you observe and how you interpret what you observe? What ethical issues do you need to consider for the study?
-

Most educational institutes have an ethics committee which oversees the ethical approval and a set of ethical approval procedures. Students must check the procedure and seek approval before carrying out data collection. In addition, ethical guidelines are provided by some professional bodies or research journals. For example:

- TESOL Quarterly Research Guidelines are available at: www.tesol.org/.
- British Association for Applied Linguistics (BAAL) has a set of recommendations for good practice in Applied Linguistics student projects at: www.baal.org.uk/.
- American Association for Applied Linguistics (AAAL) has passed a range of resolutions that affirm the commitment to promoting diversity, oppose discrimination on the basis of accented speech, support the use of language analysis in relation to questions of national origin in refugee cases, oppose the labelling of English as the national language in the US, and so on: www.aaal.org/.

Wray and Bloomer (2006) also provides useful information on the differences between confidentiality and anonymity and on data protection laws.

1.4 Structure and Content of this Volume

This volume is an attempt to introduce the field of Applied Linguistics as a broad, multidisciplinary approach to language and language-related issues. It aims to provide a comprehensive survey of the theories, methods and key findings within Applied Linguistics, covering a wide range of topics. As such, we decided to have a team-authored text, against the tradition of single-authored introductory textbooks, because we want to highlight the multiple voices that characterize contemporary Applied Linguistics research.

It reflects our conviction in pluralism and our belief that no one person can singularly provide the authoritative account of a field as diverse as Applied Linguistics.

Nevertheless, the volume is tightly structured. It is divided into four main parts, each consisting of three chapters. Part I covers three areas of language development: first language development, second and additional language learning and teaching, and language impairment and loss. Part II is entitled Language in Use and includes chapters on language in interaction, Intercultural Communication, and literacy and multimodality. The three chapters in Part III of the volume are on language in society, covering language diversity and contact, language, identity and power, and language policy and planning. Part IV consists of three chapters on language in public life, including language assessment, language in professional contexts, especially in media, health and law, and translation and interpreting.

All the chapters take a problem-solving approach, introducing the reader to key research questions and guiding them through various ways of tackling these. Each chapter features a number of additional study aids, including chapter outline, learning objectives, key terms, case studies, study activities, study questions and recommended reading. The case studies and the study activities embedded in the chapters are aimed at enabling the user of the textbook to relate everyday language and communication issues to the Applied Linguistics research agenda, and to draw on their own personal experiences in addressing such issues. The study questions at the end of each chapter are aimed at reflecting on what is discussed in the chapter. There is a glossary of the key terms that have occurred in the chapters at the end of the volume, as well as a comprehensive Resources List including key references, handbooks, book series, journals, corpora, professional associations and websites.

Study Questions

1. What are the different conceptualizations of language?
2. How do the different conceptualizations of language affect the way linguists research issues of language?
3. What are the different relationships between the linguist and the linguistic evidence, or data, he/she uses for the analysis?
4. What other disciplines have Applied Linguists drawn on in terms of theory and methods?
5. Why should language be the core element of Applied Linguistics?
6. What are the key methodological perspectives according to Creswell's 'worldview' classification?
7. What are the main advantages and disadvantages of the different research designs – etic vs. emic, quantitative vs. qualitative, experimental vs. non-experimental, longitudinal vs. cross-sectional, single case study vs. group study?
8. What is *action research*? What is *critical research*?
9. How does the identity of the research affect data collection and data analysis?
10. What are the key ethical considerations in Applied Linguistics research?

Recommended Reading

- Cook, Guy. 2003. *Applied Linguistics*. Oxford: Oxford University Press. A concise but comprehensive overview of the central issues in Applied Linguistics.
- Cook, Vivian J. and Li Wei (eds.). 2009. *Contemporary Applied Linguistics, vol. 1: Language Teaching and Learning; vol. 2: Linguistics for the Real World*. London: Continuum. These consist of 24 introductory chapters, showcasing cutting-edge research in Applied Linguistics. The contributors in the first volume present current research in areas such as multilingualism, language education, teacher–learner relationships and assessment. Chapters in the second volume present an overview of new and interdisciplinary fields such as language and economics, language and the law, language and religion, language and tourism, language and the media, and language and health.
- Cooke, Melanie and James Simpson. 2008. *ESL: A Critical Guide*. Oxford: Oxford University Press. This is aimed at English language teachers and teacher-educators who wish to extend their understanding of the issues and debates surrounding English for speakers of other languages (ESOL) in an age of globalization and mass migration.
- Davies, Alan. 1999. *An Introduction to Applied Linguistics: From Practice to Theory*. Edinburgh: Edinburgh University Press. This surveys the history and definitions of the field and discusses issues such as Applied Linguistics and language learning and teaching, Applied Linguistics and language use and the professionalizing of Applied Linguistics.
- Hunston, Susan and David Oakey. 2009. *Introducing Applied Linguistics: Concepts and Skills*. Abingdon: Routledge. This is a short, introductory text that introduces students to the key concepts faced when studying Applied Linguistics, as well as the study skills needed for academic reading and writing.
- Li Wei. 2011. *The Routledge Applied Linguistics Reader*. London: Routledge. This contains 26 selected readings and focuses on the topics and issues to which Applied Linguistics research has made a significant contribution, including, for example, reconceptualizing the native speaker, the language learner and the language in language learning and practice, critical issues in Applied Linguistics and Applied Linguistics in a changing world. It also has an extended introduction to Applied Linguistics, a critical discussion of methodological issues in Applied Linguistics research, as well as study questions, recommended further reading and a comprehensive resource list.
- McCarthy, Michael. 2001. *Issues in Applied Linguistics*. Cambridge: Cambridge University Press. This outlines the historical roots of the field and its major developments over the years. It also examines issues such as language modelling and the analysis of discourse.
- Pennycook, Alastair. 2001. *Critical Applied Linguistics: A Critical Introduction*. Mahwah, NJ: Lawrence Erlbaum Associates. This discusses an alternative approach to critical questions in language education, literacy, Discourse Analysis and language in the workplace, translation and other language-related domains.
- Schmitt, Norbert (ed.). 2010. *An Introduction to Applied Linguistics*, 2nd edn. London: Hodder Education. This provides a comprehensive survey of the key topics in Applied Linguistics. It contains three parts, focusing on the description of language and language use, essential areas of enquiry in Applied Linguistics and language skills and assessment.
- Sealey, Alison and Bob Carter. 2004. *Applied Linguistics as Social Science*. London: Continuum. This shows how social theory and Applied Linguistics share common concerns and argues that a social scientific account of Applied Linguistics is needed to explain the interaction between social structures, human agents and language.
- Seidlhofer, Barbara (ed.). 2003. *Controversies in Applied Linguistics*. Oxford: Oxford University Press. This reprints the exchanges between some of the leading Applied Linguists on controversial issues, such as the global spread of English, corpus linguistics and language teaching, Critical Discourse Analysis, second language acquisition and the nature of Applied Linguistics.

Two handbooks provide comprehensive and in-depth surveys of the field:

- Davies, A. and C. Elder (eds.). 2004. *Handbook of Applied Linguistics*. Oxford: Blackwell.
 Kaplan, Robert. 2005. *The Oxford Handbook of Applied Linguistics*. Oxford: Oxford University Press.

Two popular introductory texts on language generally that are mentioned in this chapter are:

- Macaulay, Ronald K.S. 2011. *Seven Ways of Looking at Language*. Basingstoke: Palgrave.
 Nunan, David. 2013. *What is This Thing Called Language?* 2nd edn. Basingstoke: Palgrave.

Other useful references include:

- Davies, Alan. 2005. *A Glossary of Applied Linguistics*. Edinburgh: Edinburgh University Press.
 Johnson, Keith and Helen Johnson (eds.). 1999. *Encyclopedic Dictionary of Applied Linguistics*. Oxford: Blackwell.
 Richards, Jack and Richard Schmidt (eds.). 2010. *Longman Dictionary of Language Teaching and Applied Linguistics*, 4th edn. Harlow: Longman.
 Spolsky, Bernard and Francis M. Hult. 2007. *Handbook of Educational Linguistics*. Oxford: Wiley-Blackwell.

There are literally hundreds of books on research methodology, research design and methods of data collection and analysis. Publishers such as SAGE and Palgrave specialize in books on research methods:

- Creswell, John. 2003. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. London: SAGE. This book, which has been referred to in this chapter, provides a useful overview of different methodological perspectives in research design.
 Dörnyei, Zoltán. 2007. *Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies*. Oxford: Oxford University Press. This offers a practical guide to different designs and methods in Applied Linguistics.
 Gorard, Stephen. 2013. *Research Design: Creating Robust Approaches for the Social Sciences*. London: SAGE. This offers a fresh look at the nature of research design, and presents a range of standard design models, as well as tips for real-life problems and compromises.
 Paltridge, Brian and Aek Phakiti. 2010. *Continuum Companion to Research Methods in Applied Linguistics*. London: Continuum. This is a useful one-volume guide for students. The book includes: qualitative and quantitative methods; research techniques and approaches; ethical considerations; sample studies; a glossary of key terms; and resources for students. It also looks at various topics in Applied Linguistics in depth, including gender and language, language and identity, pragmatics, vocabulary and grammar.
 Perry, Fred Lehman. 2005. *Research in Applied Linguistics: Becoming a Discerning Consumer*. Abingdon: Routledge. This is an introduction to the foundations of research methods, with the goal of enabling students and professionals in the field of Applied Linguistics to become not just casual consumers of research who passively read bits and pieces of a research article, but discerning consumers able to use published research effectively for practical purposes in educational settings.

Other introductory texts on research methods in Applied Linguistics include:

- Brown, James Dean and Theodore Rodgers. 2003. *Doing Second Language Research*. Oxford: Oxford University Press.
 Larsen-Freeman, Diane and Michael Long. 1991. *An Introduction to Second Language Acquisition Research*. London: Longman.

- Mackey, Alison and Susan Gass. 2005. *Second Language Research: Methodology and Design*. Abingdon: Routledge.
- Nunan, David. 1992. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

Practical guides to specific methods include:

- Burns, Anne. 2009. *Doing Action Research in English Language Teaching*. Abingdon: Routledge.
- Dörnyei, Zoltán. 2002. *Questionnaires in Second Language Research: Construction, Administration and Processing*. Hove: Psychology Press.
- Duff, Patricia. 2008. *Case Study Research in Applied Linguistics*. Mahwah, NJ: Lawrence Erlbaum Associates.

Guides on quantitative and statistical methods in Applied Linguistics include:

- Baayen, R. Harald. 2008. *Analyzing Linguistic Data: A Practical Introduction to Statistics using R*. Cambridge: Cambridge University Press.
- Bitchener, John. 2009. *Writing an Applied Linguistics Thesis or Dissertation: A Guide to Presenting Empirical Research*. Basingstoke: Palgrave. This introduces first-time thesis writers to the process of writing up empirical research.
- Hatch, Evelyn and Anne Lazaraton. 1991. *The Research Manual: Design and Statistics for Applied Linguistics*. Boston: Heinle & Heinle.
- Larson-Hall, Jenifer. 2009. *A Guide to Doing Statistics in Second Language Research Using SPSS*. Abingdon: Routledge.
- Li Wei and Melissa Moyer (eds.). 2008. *The Blackwell Guide to Research Methods in Bilingualism and Multilingualism*. Oxford: Wiley-Blackwell. This has comprehensive coverage of research designs and methods ranging from sampling, recording and transcription to laboratory experiments and brain imaging techniques. The examples are drawn from studies of bilingualism and multilingualism.
- Wray, Alison and Aileen Bloomer. 2006. *Projects in Linguistics: A Practical Guide to Researching Language*, 2nd edn. London: Hodder Arnold. This provides advice on research projects in different areas of linguistics and useful information on the differences between confidentiality and anonymity and on data protection laws.

Wiley-Blackwell publishes a book series on Research Methods in Language and Linguistics. Already published are volumes on second language acquisition, child language, clinical linguistics and phonetics, and sociolinguistics.

