

The Routledge Handbook of Language and Health Communication

The Routledge Handbook of Language and Health Communication consists of forty chapters that provide a broad, comprehensive, and systematic overview of the role that linguistics plays within health communication research and its applications.

The *Handbook* is divided into three sections:

- Individuals' everyday health communication
- Health professionals' communicative practices
- Patient-provider communication in interaction

Special attention is given to cross-cutting themes, including the role of technology in health communication, narrative, and observations of authentic, naturally-occurring contexts. The chapters are written by international authorities representing a wide range of perspectives and approaches.

Building on established work with cutting-edge studies on the changing health communication landscape, this volume will be an essential reference for all those involved in health communication and applied linguistics research and practice.

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The Routledge Handbook of Language and Health Communication

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We dedicate this book to our parents

Claire and Jerry Ehernberger
Jen-Chang and Linna Chou

With love, gratitude, and respect for setting us on
strong, principled and joyful paths in life

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Introduction

Health communication as applied linguistics

Heidi E. Hamilton and Wen-ying Sylvia Chou

This *Handbook* is a reference work covering key topics at the intersection of health communication and applied linguistics. It builds on the strong foundation of seminal work by providing key contributions on the leading ideas, debates, topics, approaches, and methodologies by the field's top researchers, both established and up-and-coming. Each chapter provides an accessible overview and exemplary analyses to an area of the field. Our intended audience comprises several groups: undergraduate and graduate students in applied linguistics and social sciences broadly conceived; linguists who are interested in learning about their field as it relates to health contexts and issues; health communication scholars who are eager to engage with linguistic theories and methodologies; medical school educators; and practicing health professionals and medical researchers who would like to learn more about the role of language in their own areas of experience and expertise.

Background and motivation

Over the past decades, scholars have been applying linguistics in efforts to understand the myriad profound and complex interrelationships between language and health issues and contexts. As these undertakings have become more expansive, collaboration across disciplines and between research and practice has become increasingly common. The intricacies of the mutual effects between language and human health – how language use affects health as well as how health affects language – have encouraged linguists to reach across disciplinary boundaries in their examinations of public and private dimensions of health communication. Some of these projects have illuminated a variety of health-related issues (Gotti and Salager-Meyer 2006; Gwyn 2002; Ramanathan 2009; Sarangi and Roberts 1999), but most have focused attention on one context or type of communication. These areas of focus have included patient–provider interactions (Ainsworth-Vaughn 1998; Heritage and Maynard 2006; Roberts 1999); mental health and counseling (Capps and Ochs 1995; Ferrara 1994; Peräkylä 1995; Ribeiro 1994); narrative as related to cognition and illness experience (Hunter 1991; Mattingly 1998); the discourse of public health (Higgins and Norton 2009); and health and risk communication (Jones 2013).

Some of these scholars have focused their efforts primarily on furthering our understanding of language – illuminating, for example, how pronouns and questions are used in healthcare interactions; others have directed their work to individuals who are regularly involved in healthcare – for example, offering training materials to the physicians and patients who speak with each other in clinics. Still others have attempted to live in both worlds, shuttling between linguistics conferences and health and medical conferences, and working hard as part of interdisciplinary teams to translate one set of disciplinary assumptions and frameworks into another.

Concurrently, outside linguistics, communication and health services researchers have examined communication in clinical and public health contexts by applying theories and methods from diverse social science disciplines, most notably communication and psychology (Hornik 2002; Epstein and Street 2007). While language plays a central role in these investigations, it is commonly viewed as facilitating exchange of information or enabling researchers' content analysis, rather than being an object of study in its own right. Given the differing – but complementary – areas of focus, this diversity of disciplines illuminating health communication offers opportunities for fruitful discussions that transcend disciplinary and professional boundaries, one of the primary aims of this volume.

It is in pursuit of this transcendent conversation that we envisioned and carried out this *Handbook of Language and Health Communication*. In the selection of contributors, we sought out prominent scholars and practitioners whose work would facilitate the building of a multifaceted volume, one that would represent a breadth of fascinating perspectives and insights – rather than aiming for a coherent volume organized along theoretical or methodological lines. To that end, contributors represent diverse disciplinary backgrounds, including but not limited to: linguistics, anthropology, sociology, psychology, communication, and mixed methods approaches in health sciences. They carry out their work in a variety of institutional contexts, including academic departments in universities, medical centers and hospitals, government agencies, and private sectors. The paradigms associated with these varied disciplines and institutions necessarily shape decisions regarding what kinds of research questions are thought to be both answerable, useful and important, as well as how best to design studies to answer these questions. As a result, readers of this *Handbook* will find a variety of conceptual frameworks within its chapters, ranging from hypothesis-driven investigations, to fine-grained local examinations of turn-by-turn interactions, to grammatical analyses of written texts, to 'thick' ethnographic descriptions of communicative contexts.

In addition, the chapters in the *Handbook* utilize various types of language evidence, including linguistic excerpts extracted from recorded and transcribed clinical encounters, interviews, focus groups, and other naturally occurring spoken discourses; excerpts of written online communication, scientific publications and other authentic written texts; personal experience narratives; quantitative findings from linguistic corpora and survey databases; and research field notes. Beyond diversity of approaches and evidence, this volume represents research and data from a wide range of geographical regions. From Hong Kong, Korea, Taiwan, Australia, New Zealand, the United Kingdom, Germany, the Netherlands, Norway, Switzerland, Brazil, and South Africa to a number of locations within the United States, we have aimed to demonstrate health discourse in the diverse, global context. Finally, readers will be able to engage with a wide variety of healthcare professions, contexts, diseases and conditions, patient populations, and critical issues that are explored within the volume.

Handbook organization

Following this introductory chapter, the remaining 40 chapters are organized into three major parts that provide a systematic overview of the role of language and linguistics in health communication research.

- Part I: Individuals' everyday health communication
- Part II: Health professionals' communicative practices
- Part III: Patient–provider communication in interaction

This progression allows us to begin with separate examinations of communication around health, starting with the perspectives of individuals going about their everyday lives far away from any healthcare institution and moving to the perspectives of healthcare professions as they interact with each other within institutional contexts. Following these separate explorations, we consider communication within interactions that involves both patients and professionals as they come together to discuss mutually important issues in healthcare.

This tripartite structure was inspired by foundational work in medical anthropology (Mishler 1984), institutional discourse analysis (Agar 1985; Heritage 1997), and interactional sociolinguistics (Gumperz 1982; Tannen 1984) which has convincingly shown in a wide variety of contexts that communicative problems can arise due to mismatches between speakers' intentions and listeners' inferences. Because listeners must 'go beyond surface meaning to fill in for what is left unsaid' (Gumperz 1999: 458) in assessing what is intended by speakers, differences in speakers' and listeners' backgrounds can get in the way of understanding, and can cause 'crosstalk'. A primary aim of interactional sociolinguistics is 'to show how [such] diversity affects interpretation' (Gumperz 1999: 459). In connection to this *Handbook's* domain, 'crosstalk' in health contexts can certainly be attributed to ethnic, cultural, or linguistic backgrounds (as was the case in Gumperz's studies), but it can also be rooted in differences in (1) professional perspectives (e.g., between physicians and nurses); (2) levels of familiarity with institutional goals or access to knowledge (see Agar 1985 and Heritage 1997); or (3) types of education, training, and experiences of patients and healthcare professionals, what Mishler (1984) characterizes as the distinction between the 'voice of the lifeworld' and the 'voice of medicine' (see Hamilton 2004 and Hamilton and Bartell 2011).

Given the importance of these divergent perspectives to understanding possible 'crosstalk' within patient–provider interactions, we decided to start the *Handbook* off with chapters that illuminate relevant aspects of each. In Part I, readers will find chapters that explore issues ranging from differences across laypersons in terms of how they perceive risk or deal with numeric information, to how they construct and represent health in written or spoken discourses, to how they interact with others in health contexts in-person or online, to how they 'consume' written health messages designed by providers or pharmaceutical companies. Part II contains chapters that introduce readers to ways in which health professionals are socialized into the ways of seeing, speaking, writing, and acting that go along with the acquisition of the relevant 'professional vision' (Goodwin 1994) as they gain the competence, activities, practices, and shared repertoires of experiences that are associated with their chosen professional community of practice (Lave and Wenger 1991). Following the focus on the professionalization process, chapters explore a range of communication issues that arise from inter-professional interactions within healthcare teams of various types. In Part III, the focus turns to interactions between healthcare providers and patients, beginning with fine-grained examinations of particularities, including prediagnostic statements, news disclosures,

hopeful moments, morality, and the impact of electronic medical records within the clinical encounter. Subsequent chapters explore a range of issues related to the management of cultural and linguistic diversity, including language interpreting, cultural health beliefs, and code-switching that have become both increasingly common and critical as migration and globalization impact the provision of healthcare. Part III closes with chapters that highlight ethics in action within a variety of contexts ranging from health disparities, clinical trial enrollment, end-of-life care, and solicitation of human tissue donations.

Despite the benefits underlying the logic of the *Handbook's* organization into the three parts just described, it is important to keep in mind that no sharp boundaries actually exist within and across these groups. Sarangi and Candlin (2011: 16) argue that individual professionals and clients should be understood as occupying different positions on a continuum rather than assuming that lay and expert systems in themselves are homogeneous entities, and Jones (2013: 5) suggests that increased accessibility of health information is leveling the playing field: 'No longer solely the property of experts, medical information circulates freely through the print and electronic media, public discourse, and the everyday conversations of laypeople, being constantly reinterpreted and repackaged as it moves from scientific journals to newspaper reports to online social networking sites to dinner-table conversations.' Recent discussions in public discourse of 'peer-to-peer healthcare', 'crowdsourcing', and 'participative medicine' all illustrate the increasingly blurry line between laypersons and the professionals as the health communication landscape continues to evolve. In spite of these important trends, it is our view that most laypersons still experience health in fundamentally different ways than professionals do – both inside and outside healthcare systems – and it can be instructive (not only convenient) to illuminate them separately before exploring their interaction.

Linguistics as applied to health communication

Because this volume is part of the *Routledge Handbooks in Applied Linguistics* series, we turn now to a brief discussion of the place of applied linguistics within the larger field of health communication.

We begin with Brumfit's (1995: 27) conceptualization of applied linguistics, arguably the most frequently used definition in the field: 'the theoretical and empirical investigation of real-world problems in which language is a central issue.' Although at first blush this definition seems to cover the wide range of work represented in this *Handbook*, our consideration of interdisciplinary discussions we have both had over the years with colleagues in health research and practice leads us to problematize Brumfit's characterization of the *centrality* of language issues in these investigations. Indeed it is our view that we as linguists may identify language or communication issues as being *central* to a particular problem or context, when our colleagues in disciplines outside of linguistics may not perceive the central problem in that way at all; they often will, for example, identify the problem as being one of individual attributes (such as personality, skill, or intelligence) or system-level factors (such as institutional constraints on time and resources or policy impact).

Of course, applied linguists can provide a valuable complementary perspective and associated analytical toolkit to shed new light on healthcare problems that have been identified by others as non-linguistic in nature, but arriving at a place where this contribution is actively embraced and integrated is a challenge of what Sarangi and Candlin (2003) have characterized as 'jointly inspired reflexive research'. As applied linguists, we need to be cautious as we work toward this 'joint problematisation' lest we be judged as acting in a parochial way by

assuming that others on the research team will quickly grasp the central importance of language to the project.

Following Cameron et al. (1992), linguists can conduct studies *on*, *for*, or *with* research subjects, as these scholars move along a continuum of doing ethical research (*on*) to advocacy research (*on* and *for*) to empowering research (*on*, *for*, and *with*) vis-à-vis their subjects. By extending this perspective on relationships with research subjects to relationships with other disciplines and professions (in the case of this *Handbook*, those related to health), we arrive at the influential recommendation by Sarangi and Candlin (2011: 36, 45) that we elevate ‘our research gaze beyond the immediacy of the text or the transcript’ and embody an applied linguistics perspective that

not only builds on the cumulative insights gained from discourse studies and the vast body of literature in the sociology of professions and the sociology of work, but also foregrounds problem-orientation, deeply embedded in methodological and analytical challenges, so that research outcomes are made practically relevant.

In order to be in a position to ‘make applied linguistics matter’, as Sarangi and Candlin (2011: 45) argue, applied linguists must prepare themselves to be successful members of interdisciplinary teams. Wasson (2004: 122) highlights this hard work in the following way: ‘Researchers who inhabit both academic and applied worlds not only need to become fluent in the codes of each context, they also need to develop the ability to translate each world’s logic to the other one.’

Contributors to this *Handbook* represent the full spectrum in terms of research engagement *on*, *for*, and *with* the health communication subject matter; some contributors are members of interdisciplinary teams whose work exemplifies the kind of ‘joint problematisation’; others work as linguists within health institutions who are responsible for translating what they know about communication into training curriculum and education materials; still others work as collaborators or consultants on a case-by-case basis to identify solutions to specific health communication challenges; and, finally, some individual scholars within linguistics departments apply relevant tools from their toolkit to analyze selected texts and transcripts in efforts to illuminate the goings-on within motivated healthcare contexts. In so doing, their analyses shed light on language in social interactions more broadly.

It is our hope that readers will seek out and engage with those chapters that fit their needs and interests most closely – and will take steps towards attaining this ‘fluency’ (Wasson 2004: 122) by connecting ideas across disciplines, professions, health conditions, healthcare settings, and geographic regions. Perhaps a spark of recognition or a new idea as to how to proceed will lead to greater understanding of a problem under consideration – whether or not anyone thought at first bluish that language or communication was actually centrally involved.

Finally, it is important to consider the contribution of health communication to linguistics; i.e., health communication as applied *to* linguistics. As in most ‘applied’ disciplines, most effort is spent applying, translating, and transferring knowledge and approaches to a new context – in our case, applying linguistic knowledge and analytic tools to health. However, such applied research can also contribute to basic inquiries, theories, and frameworks related to language and interaction. As we carry out our applied work, our emerging in-depth understandings of health communication interactions (e.g., from media messages, to clinical encounters, to social media discussions about health) can inform and enrich our knowledge of linguistic structures and functions, as well as of the social interaction of which this language is a part and works to create. We encourage applied linguists to realize

(in both senses of the word) the enormous potential in using health discourse data and interdisciplinary health communication approaches to shed new light on language and social interaction.

Towards complementary perspectives on language and health communication

Given the myriad ways in which applied linguistics can be understood and in which linguists can engage across disciplines, we offer brief descriptions of our own work to make transparent the personal experiences and professional visions we bring to this *Handbook*. We then follow with key considerations in moving towards cross-disciplinary dialogue in language and health communication research.

Personal and professional journeys in health communication

Our disciplinary training at the doctoral level was nearly identical although 15 years apart (we both studied discourse analysis from an interactional sociolinguistic perspective at Georgetown University's Department of Linguistics); since then our paths in health communication have diverged. These commonalities and differences in our academic backgrounds and professional experiences have not only shaped the kinds of linguists we have become, but have also influenced the kinds of contacts we have made at professional meetings and in collaborations on projects. In short, the communities of practice (Lave and Wenger 1991) in which we each feel comfortable have become somewhat different from each other. We consider this expanded worldview to be a key benefit in our work in health communication in general, and on this volume in particular.

Since her early longitudinal explorations of conversational language and Alzheimer's disease, Hamilton has straddled both worlds of linguistics and healthcare from her position as faculty member in Georgetown University's Department of Linguistics. She has participated as a linguist expert in interdisciplinary projects surrounding a variety of health concerns, including head injury, inter-professional communication, genetic counseling discourse, health literacy and chronic disease self-management, and the impact of the presenting concern on the shape of physician-patient discourse. Most recently, Hamilton has begun to uncover the role of linguistic discourse analysis in illuminating the therapeutic effects of community-based arts programs for individuals with early Alzheimer's disease.

While trained as a sociolinguist with a dissertation on end-of-life discourse, Chou gained additional training in behavioral science methods as a postdoctoral fellow. As the lone linguist at the National Cancer Institute (to her knowledge!), her research in the areas of social media and health, patient-provider communication, health literacy and cancer disparities has utilized quantitative (e.g., analysis of cross-sectional data), qualitative (e.g., discourse analysis), and mixed methods and she publishes in diverse venues in the health sciences. As a National Institutes of Health (NIH) Program Director, she guides investigators on proposal development and grantsmanship; this professional role has allowed for fertile cross-disciplinary interactions about study aims and methods towards the goal of improving health.

Cross-disciplinary dialogue in language and health communication

Our numerous conversations with linguist and non-linguist colleagues during the development of this volume have bolstered our conviction that the field of health communication could

benefit from more rigorous collaboration across disciplinary and professional boundaries. This collaboration can be accomplished by bringing new perspectives into an existing paradigm (such as a linguist to a Cancer Center team) or by training individuals to become, in essence, multilingual, speaking multiple disciplinary languages to accommodate various audiences, including collaborators, journal reviewers, or study section reviewers. We believe that our complementary research experiences have contributed to a partial achievement of this goal. We hope that this *Handbook* will facilitate even more of these critical cross-disciplinary dialogues.

To those linguists interested in setting off on this journey by participating in endeavors that involve representatives of other disciplines, we offer the following modest cautionary tale. Whether your involvement will be in research on health disparities, health literacy, or clinical decision-making, to name a few possibilities, it will be in your best interest to consider thoughtfully at the outset of the project the ways in which language is defined, considered, and characterized within your own and your partners' disciplines – and to engage in explicit discussions centered on authentic language data with these fellow researchers. The time spent bringing underlying assumptions to the surface and working through resulting differences will help to reduce subsequent confusion and frustration.

While running the risk of overgeneralization, it has been our experience that researchers trained in fields outside what Bucholtz and Hall (2005) call 'sociocultural linguistics'¹ tend to consider language in a more static way than do scholars who were trained with this sociocultural approach to language. And since many health research teams comprise individuals who have disciplinary backgrounds in medicine, nursing, public health, psychology, and social work, it is likely that, as a linguist, your perspective on language (while arguably a key motivation as to your inclusion on the team) will be in the minority. Illustrations of this non-linguistic understanding of language include the identification of stable lexical meanings that are understood to reflect the world (including its events and interlocutor's attitudes and perceptions); the connection of single functions to individual grammatical structures (such as pronouns or adverbs); and a focus on standard language use (sometimes in a prescriptivist way, although not always) to the exclusion of regional, social, and stylistic variation.² These practices are in stark contrast to sociocultural language scholars' dynamic notions of lexical and utterance meaning with the accompanying theoretical interest in socially meaningful variation³ and the conceptualization of discourse as being interactively co-constructed. In the dynamic view, language does not merely *reflect* the world but works to *create* it as well, along with its myriad meanings, social dynamics, relationships, and institutions.

These contrasting understandings of language, not surprisingly, are associated with different research paradigms. One finds, for example, that the more static understanding of language works most expediently with quantitative and positivist approaches to research, whereas the dynamic understanding of language is more philosophically aligned with qualitative research methods. Specifically, in hypothesis-driven scientific endeavors, replicability as well as internal and external validity characterize methodological rigor; in studies of this type, it is preferable to work with an understanding of language that has less 'wobble room' in its definitions, so that language data can be coded and counted with a high degree of inter-rater reliability. Given the tighter operational definitions, such approaches can handle vastly larger datasets much more efficiently (see Chou et al. 2012).

The dynamic understanding of language, on the other hand, tends to work more smoothly with qualitative studies that seek to understand situated interpretation; i.e., how 'hearers infer speakers' underlying strategies and intentions by interpreting the linguistic cues which

contextualize their messages’ (Schiffrin 1987: 21). Because such researchers seek to understand ‘joint efforts from interactants to integrate knowing, meaning, speaking, and doing’ (Schiffrin 1987: 29) in interactional discourse, the datasets tend to be much smaller (to allow for such fine-grained and nuanced analyses) with ecological validity a primary aim. These differences in approach can be mind-boggling and highly challenging at times – thus the cautionary tale. But our experiences have also shown that a significant investment in time and effort to discuss relative values of each type of approach can lead to the desired outcome of moving beyond differences in assumptions toward a joint solution. Our collective efforts can then be focused on the important enterprise of improving health communication and the concomitant resolution of health-related issues (see also Hamilton 1993 and Robins et al. 2008 for practical solutions to this type of research challenge).

Cross-cutting themes in the volume

We are very grateful that our 68 authors readily and enthusiastically agreed to be part of this collection. Our work with them has provided us with a sustained and wonderful learning experience, one that has helped us to understand old questions more completely and has also opened our eyes to new ones. As we consider issues at the intersection of linguistics and health that are likely to continue to gain in importance, three key themes emerge, each of which has been explored by multiple contributors to this *Handbook*.

Impact and implications of changes in technology-mediated communication

As Web 2.0 and mobile platforms continue to facilitate rapid and interactive exchanges online, communication about health has become ubiquitous and health promotion efforts are increasingly leveraging social media (Chou et al. 2013). Adoption of technology-mediated communication in and outside of the clinical care context has many implications for research at the intersection of linguistics and health, as reflected in this volume.

First, online interactions such as blogs, listservs, and social media have afforded researchers new sources of health communication data through which to better understand perceptions, attitudes, and behaviors related to health. Indeed, linguists have been able to take advantage of publically accessible social media discourse in their investigations, whether using corpus-based, Natural Language Process (NLP)-assisted analyses, or qualitative discourse analyses. Extending beyond the understanding of these interactions in their own right, linguists can offer insights into the type of conversations, content, and structures of online communication to assist ‘communication surveillance’ endeavors such as tracking of conversations about disease outbreaks, drug side effects, or attitudes about certain health recommendations (e.g., mammography screening tests or human papilloma virus (HPV) vaccine). Second, these new and emerging accessible media have notable impact on healthcare and decision-making, as informational and social support is afforded through digital platforms (e.g., WebMD for medical information, mobile reminder systems for appointments and medications, micromedia and support groups for particular health concerns). Finally, communication technologies that are used during clinical care, such as laptop computers and electronic medical records, necessarily influence patient–provider interactions and present a subject of inquiry in efforts to characterize and improve clinical encounters.

Moving forward, we anticipate that social media will become even more relevant over time. Extending beyond the use of social media as data in observational studies and surveillance efforts, health communication interventions are beginning to utilize social

networking sites and mobile platforms to promote health. Such efforts include the prevention of underage drinking and risky sexual behavior, weight management, tobacco cessation, and support for cancer survivors, just to name a few.

The narrative turn in health communication

As multiple chapters in all three parts of this volume demonstrate, narrative insights have been increasingly integrated into a variety of health communication research and practice endeavors; we see no signs that this productive integration will wane in coming years. Some of these enterprises follow Rita Charon's pioneering work in narrative medicine, highlighting the importance of 'medicine practiced with the narrative competence to recognize, absorb, interpret, and be moved by the stories of illness' (Charon 2006: vii) within medical and nursing school education and professional practice. Others examine textual and discursive details of personal experience narratives and the storyworlds they create as a way to gain closer understanding of narrators' perceptions, experiences, and evolving senses of self (Schiffrin 1996) – of both patients and health professionals. Through nuanced examinations of the discursive construction of these storyworlds, researchers can learn, for example, about the emotional toll on health professionals who work in intensive care units; how healthcare professionals position their work within multidisciplinary health teams; how individuals are coping with their diagnosis or connecting decisions regarding their treatment plan to their health beliefs.

Still others have focused on the activity of storytelling itself, seeing it as a 'social practice that both shapes and is shaped by institutional contexts' (De Fina and Georgakopoulou 2012: ix). The recognition of this mutual influence is an important step towards enhanced management of care within institutional encounters. Awareness of this two-way street can help healthcare professionals facilitate the emergence of storytelling within the four walls of the physician's office and within support group sessions, leading to enhanced attunement of interlocutors' perspectives. Discursive characteristics of the narratives that are subsequently told within these institutional settings can then serve as a barometer of the quality of the institutional setting and the relationships that are negotiated within it. Finally, personal narratives are increasingly being incorporated into health promotion interventions (e.g., storytelling videos to increase mammography screening test utilization) and their positive effect on behaviors and attitudes are being documented in the literature (see, e.g., McQueen et al. 2011).

Observation of health communication within authentic contexts

While linguists who work on real-life problems have had an ongoing concern with naturally occurring language in interaction, many studies in the area of health research have construed communication more abstractly and have relied on indirect approaches, including interviews, focus groups, and cross-sectional survey data, to understand the quality of communication. Recently, there has been increasing interest in examining authentic, real-life health communication contexts to shed light on critical issues in clinical care and public health. For example, key concepts and theories in health behavior research, such as risk perception and communication, health literacy, and bioethics, can be further explored within particular communicative contexts involving particular individuals, in contrast to being considered more generically. Applied linguistics and medical anthropology are particularly apt disciplines to offer insights into how people use language in everyday situations to assess their risks,

display and enact their health literacy or health beliefs, and make ethical decisions within specific sets of circumstances. Such investigations, as illustrated in this volume, can be expected to enhance the ecological validity of our understanding of abstract constructs, even as the accompanying details may complicate our view.

Closing thoughts

Whether you are approaching this volume as a linguist, a social scientist, a communications expert, a medical educator, or a practicing healthcare provider, we anticipate that you will find chapters that pique your interest, surprise you with a new perspective, or even lead you in new directions. In cases where you would like to pursue specific topics in greater depth, each chapter ends with suggestions for further reading. We also welcome you to explore the wealth of publications contained within the reference sections of all our chapters. In closing, it is our hope that this *Handbook* will contribute significantly to the ‘opening [of] the circumference’⁴ (Scollon and Scollon 2004) of the field of applied linguistics as it intersects in myriad ways with the dynamic and critically important domains of health communication.

Notes

- 1 ‘By *sociocultural linguistics*, we mean the broad interdisciplinary field concerned with the intersection of language, culture, and society. This term encompasses the disciplinary subfields of sociolinguistics, linguistic anthropology, socially oriented forms of discourse analysis (such as conversation analysis and critical discourse analysis), and linguistically oriented social psychology, among others’ (Bucholtz and Hall 2005: 586).
- 2 At this juncture, it is important to point out that this non-linguistic approach has been used very effectively by prominent scholars from outside the fields associated with sociocultural linguistics; see, for example, two of the most far-reaching frameworks in health behavior research, psychologist James Pennebaker’s Linguistic Inquiry and Word Count (LIWC) for text analysis and health behavior scientist Debra Roter’s Interaction Analysis System (RIAS). In these validated analytic schemes, words and utterances are categorized, coded, and quantitatively analyzed to shed light on issues in health and healthcare. Both frameworks have been very successful in uncovering important patterns in very large corpora of written texts and spoken language interactions.
- 3 ‘If structure is at the heart of language, then variation defines its soul.’ See Wolfram (2006) for a concise discussion of important aspects of language variation.
- 4 We are grateful to Rodney Jones for reminding us of the Scollons’ skillful metaphor and for connecting it first to his own provocative work on health and risk communication (Jones 2013).

References

- Agar, M. (1985) ‘Institutional discourse’, *Text*, 5: 147–168.
- Ainsworth-Vaughn, N. (1998) *Claiming Power in Doctor–Patient Talk*, Oxford: Oxford University Press.
- Brumfit, C. (1995) ‘Teacher professionalism and research’, in G. Cook and B. Seidlhofer (eds) *Principles and Practice in Applied Linguistics*, Oxford: Oxford University Press.
- Bucholtz, M. and Hall, K. (2005) ‘Identity and interaction: a sociocultural linguistic approach’, *Discourse Studies*, 7(4–5): 585–614.
- Cameron, D., Frazer, E., Harvey, P., Rampton, M. B. H. and Richardson, K. (1992) *Researching Language: issues of power and method*, London and New York: Routledge.
- Capps, L. and Ochs, E. (1995) *Constructing Panic: the discourse of agoraphobia*, Cambridge, MA: Harvard University Press.
- Charon, R. (2006) *Narrative Medicine: honoring the stories of illness*, Oxford: Oxford University Press.

- Chou, W-y. S., Han, P., Pilsner, A., Coa, K., Greenberg, L. and Blatt, B. (2012) 'Interdisciplinary research on patient-provider communication: a cross-method comparison', *Communication and Medicine*, 8: 29–40.
- Chou, W-y. S., Prestin, A., Lyons, C. and Wen, K. (2013) 'Web 2.0 for health communication: reviewing the current evidence', *American Journal of Public Health*, 103: 9–18.
- De Fina, A. and Georgakopoulou, A. (2012) *Analyzing Narrative: discourse and sociolinguistic perspectives*, Cambridge: Cambridge University Press.
- Epstein, R. M. and Street, R. (2007) *Patient-centered Communication in Cancer Care: promoting healing and reducing suffering*, Bethesda, MD: National Institutes of Health Publication.
- Ferrara, K. W. (1994) *Therapeutic Ways with Words*, Oxford: Oxford University Press.
- Goodwin, C. (1994) 'Professional vision', *American Anthropologist*, 96: 606–633.
- Gotti, M. and Salager-Meyer, F. (eds) (2006) *Advances in Medical Discourse Analysis: oral and written contexts*, Bern: Peter Lang.
- Gumperz, J. (1982) *Discourse Strategies*, Cambridge: Cambridge University Press.
- (1999) 'On interactional sociolinguistic method', in S. Sarangi and C. Roberts (eds) *Talk, Work and Institutional Order*, Berlin: Mouton de Gruyter.
- Gwyn, R. (2002) *Communicating Health and Illness*, London: Sage.
- Hamilton, H. E. (1993) 'Ethical issues for applying linguistics to clinical contexts: the case of speech-language pathology', *Issues in Applied Linguistics*, 4: 207–223.
- (2004) 'Symptoms and signs in particular: the influence of the medical concern on the shape of physician-patient talk', *Communication and Medicine*, 1: 59–70.
- Hamilton, H. E. and Bartell, A. (2011) 'Peering inside the black box: lay and professional reasoning surrounding patient claims of adverse drug effects', in C. Candlin and S. Sarangi (eds) *Handbook of Communication in Organisations and Professions*, vol. 3 of *Handbooks of Applied Linguistics*, Berlin: Mouton de Gruyter.
- Heritage, J. (1997) 'Conversation analysis and institutional talk', in D. Silverman (ed.) *Qualitative Research: theory, method, and practice*, London: Sage.
- Heritage, J. and Maynard, D. W. (eds) (2006) *Communication in Medical Care: interaction between primary care physicians and patients*, Cambridge: Cambridge University Press.
- Higgins, C. and Norton, B. (eds) (2009) *Language and HIV/AIDS*, Bristol: Multilingual Matters.
- Hornik, R. (2002) *Public Health Communication: evidence for behavioral change*, Mahwah, NJ: Lawrence Erlbaum.
- Hunter, K. M. (1991) *Doctors' Stories: the narrative structure of medical knowledge*, Princeton, NJ: Princeton University Press.
- Jones, R. H. (2013) *Health and Risk Communication: an applied linguistic perspective*, London and New York: Routledge.
- Lave, J. and Wenger, E. (1991) *Situated Learning: legitimate peripheral participation*, Cambridge: Cambridge University Press.
- McQueen, A., Kreuter, M. W., Kalesan, B. and Alcaraz, K. I. (2011) 'Understanding narrative effects: the impact of breast cancer survivor stories on message processing, attitudes, and beliefs among African American women', *Health Psychology*, 30 (6): 674–82.
- Mattingly, C. (1998) *Healing Dramas and Clinical Plots: the narrative structure of experience*, Cambridge: Cambridge University Press.
- Mishler, E. (1984) *The Discourse of Medicine: dialectics of medical interviews*, Norwood, NJ: Ablex.
- Peräkylä, A. (1995) *AIDS Counseling: institutional interaction and clinical practice*, Cambridge: Cambridge University Press.
- Ramanathan, V. (2009) *Bodies and Language: health, ailments, disabilities*, Bristol: Multilingual Matters.
- Ribeiro, B. T. (1994) *Coherence in Psychotic Discourse*, Oxford: Oxford University Press.
- Roberts, F. (1999) *Talking about Treatment: recommendations for breast cancer adjuvant therapy*, Oxford: Oxford University Press.
- Robins, C. S., Ware, N. C., dosReis, S., Willging, C. E., Chung, J.Y. and Lewis-Fernández, R. (2008) 'Dialogues on mixed methods and mental health services research: anticipating challenges, building solutions', *Psychiatric Services*, 59: 727–731.
- Sarangi, S. and Candlin, C. N. (2003) 'Introduction: trading between reflexivity and relevance: new challenges for applied linguistics', *Applied Linguistics*, 24: 271–285.

- (2011) 'Professional and organizational practice: a discourse/communication perspective', in S. Sarangi and C. N. Candlin (eds) *The Handbook of Communication in Organisations and Professions*, Berlin: Mouton de Gruyter.
- Sarangi, S. and Roberts, C. (eds) (1999) *Talk, Work and Institutional Order: discourse in Medical, Mediation and Management Settings*, Berlin: Mouton de Gruyter.
- Schiffrin, D. (1987) *Discourse Markers*, Cambridge: Cambridge University Press.
- (1996) 'Narrative as self-portrait: sociolinguistic constructions of identity', *Language in Society*, 25: 167–203.
- Scollon, R. and Scollon, S. B. K. (2004) *Nexus Analysis: discourse and the emerging internet*, London: Routledge.
- Tannen, D. (1984) *Conversational Style*, Norwood, NJ: Ablex.
- Wasson, C. (2004) 'Review of *Linguistics, language and the professions: education, journalism, law, medicine, and technology*, J.E. Alatis, H.E. Hamilton, and A-H. Tan (eds)', *Language in Society*, 33: 121–124.
- Wolfram, W. (2006) 'Language and variation: an overview', in K. Brown (ed.) *Encyclopedia of Language and Linguistics II*, Oxford: Elsevier.