

APHASIA

AND OTHER ACQUIRED NEUROGENIC LANGUAGE DISORDERS

A Guide for Clinical Excellence

Third Edition

Brooke Hallowell, PhD, CCC-SLP





9177 Aero Drive, Suite B
San Diego, CA 92123

Email: information@pluralpublishing.com
Website: <http://www.pluralpublishing.com>

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Typeset in 10.5/13 Palatino by Flanagan's Publishing Services, Inc.
Printed in the United States of America by Thomson Reuters.

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Library of Congress Cataloging-in-Publication Data:

Names: Hallowell, Brooke author

Title: Aphasia and other acquired neurogenic language disorders : a guide
for clinical excellence / Brooke Hallowell, PhD, CCC-SLP.

Description: Third edition. | San Diego, CA : Plural Publishing, Inc,
[2027] | Includes bibliographical references and index.

Identifiers: LCCN 2026019832 (print) | LCCN 2026019833 (ebook) | ISBN
9781635508208 paperback | ISBN 1635508207 paperback | ISBN 9781635505412
ebook

Subjects: LCSH: Aphasia--Diagnosis | Aphasia--Treatment | Language
disorders--Diagnosis | Language disorders--Treatment

Classification: LCC RC425 .H338 2027 (print) | LCC RC425 (ebook)

LC record available at <https://lcn.loc.gov/2026019832>

LC ebook record available at <https://lcn.loc.gov/2026019833>

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What Is Special About This Book?

Readers of this book join in a transformative approach to addressing gaps between traditional methods of teaching and learning about acquired neurogenic disorders of language and cognition and what current and future clinicians need as empowered clinicians and leaders. Many books in this content area are replete with important information about neurological aspects and theoretical accounts of normal and disordered cognitive-linguistic processing. Many offer content on assessment and treatment. More and more have focused on biopsychosocial models of body structure and function, quality-of-life goals, multicultural matters, and evidence-based practice. The aim of this book is to do all of this, while cultivating critical reflection and purposeful action, empowering students to question entrenched assumptions, challenge existing structures, and ultimately reshape clinical practices and related systems.

An Emphasis on Person-Centered, Empowering Approaches to Life Participation

In many of the clinical contexts in which we work, there tends to be a greater focus on deficits than strengths, and a greater focus on specific areas of communicative challenge than on how people most want to participate in what is important to them. Throughout this book, we emphasize the Life Participation Approach to Aphasia (Chapey et al., 2000), including important foci on rebuilding identity and enriching mental health and wellness. We do this while recognizing the importance of helping people regain specific cognitive and linguistic abilities. Many adults with neurogenic disorders struggle to be recognized as fully human and competent. Readers are encouraged to commit to strength-based approaches that heighten the self-efficacy of the

people we serve. Throughout our work in assessment, treatment, advocacy, counseling, education, and research, we have ample opportunities—and a moral imperative—to foster empowering, affirmative means of considering and coping with chronic aspects of communication challenges.

A Focus on What It Takes to Become a Truly Exceptional Clinician

What does it take to become an excellent clinician? What can we do to become that person? What makes one clinician great and another not so great? It is not just knowledge and skill, although these are certainly crucial components of clinical excellence; it is also a host of other qualities. What are those qualities? How does one develop them? The intent is to motivate you, foster your learning, encourage you, lead you, and support you to gain not just all-important knowledge but to practice skills and challenge attitudes and values on your path to becoming the ultimate excellent clinician. Sometimes for efficiency, I will be directive: Do this. Do not do that. I offer an insider's view of what many experienced experts in this area think you need to know, what you should be able to do, and what you ought to appreciate and consider. In the end, each reader is the one best suited to define and become the ultimate best clinician.

Treatment of a Full Gamut of Acquired Neurogenic Cognitive-Linguistic Challenges

This book is meant for practicing clinicians as well as for students and others wishing to learn about clinical aphasiology. Students, faculty, and practicing clinicians we polled wholeheartedly requested a book

that cuts across specific etiologies and diagnostic categories. The majority of us who teach in this area must combine multiple topics within single courses or course sequences. Some texts in this arena address specific clinical syndromes, focusing exclusively, for example, on communication and aging, aphasia, right hemisphere syndrome, or traumatic brain injury (TBI). Those who have the luxury of more courses to cover content in this arena contributed ideas about how they divvy up content across courses. So, in this book, with intention, we consider theories, causes, and neurological underpinnings associated with diverse neurogenic cognitive-linguistic disorders in Section II. Then, in Section III, we delve further into each of the distinct categories of aphasia syndromes, cognitive-communicative challenges associated with TBI, cognitive-communicative challenges associated with right brain injury, primary progressive aphasia, and cognitive-communicative challenges associated with dementia. We continue to build on that content within and across each of those categories as we engage more deeply in service delivery (Section IV), assessment (Section V), and general and specific approaches to treatment (Sections VI and VII). This complements the cycling approach, which we consider further in a moment.

This approach also helps us appreciate how what has been done to advance work within each specialty area can be shared across other areas. Examples abound. Great work on supported communication for people with aphasia can be embodied in our work on communication challenges associated with right hemisphere injury, TBI, dementia, and so on. Much work in interprofessional practice, individualized approaches, coaching models, and environmental systems models for supporting TBI survivors can be further extended to people with aphasia. Wonderful progress in focusing on reminiscence strategies, functional memory enhancement, identity support, and recognition of strengths in people with dementia can be applied to all people with all other types of neurogenic disorders. Principles of critical thinking applied to assessment and diagnostic problem-solving in people with right hemisphere syndrome can be transferred to clinical challenges when working with people with any type of acquired neurogenic communication disorder. Many assessment tools and treatment methods can be applied across diagnostic categories. There can be great advantage

in treating each diagnostic group specifically and also strengthening synergies in our understanding of and work with people from diverse diagnostic groups.

Some courses do not include all of the content areas addressed within the book. Thus, instructors can choose to leave out certain chapters for a particular course, or to use the book across two or more courses.

Appreciation for and Integration of Diverse Frameworks and Theoretical Perspectives Related to Neurogenic Disorders of Language and Cognition

Excellent clinicians do not adhere to a single theoretical framework alone and stick to that at all costs. Rather, they learn a great deal about multiple approaches based on multiple frameworks and integrate multiple theories in making clinical decisions. They are open to revising their favored theoretical perspectives based on new information. They constantly reflect on the results of published studies with results observed clinically in an ongoing way with every individual with whom they work. To this end, readers are challenged to grasp and integrate multiple perspectives at once and to think critically about their own preferences, biases, and needs for further learning.

Thoughtful Attention to Culturally Responsive Practice

In recognition that there is systemic bias and discrimination that affects all of our social systems, we take seriously the role of clinicians as allies and accomplices in supporting the people we serve as well as our colleagues. Throughout the book, we promote means of addressing the many “-isms” (e.g., racism, ageism, ableism, sexism, heterosexism, cisgenderism, linguicism) that are inherent in the systems within which we work to promote access, diversity, equity, inclusion, and human rights for the people we serve. This includes careful attention to terminology we use.

Global Perspectives for a Global Readership

The content in this book is intended to be relevant globally. Worldwide resources are provided, for example, in terms of related professional associations and resources to support people with neurogenic communication disorders and the people who care about them. Where content is specific to particular regions, such as in sections addressing health care trends and cultural factors that affect clinical practice, this is noted, along with observations regarding general trends and national variations. Although content and resources are geared toward an English-speaking readership, numerous references point to further opportunities for clinical and research work and advocacy all over the world. Global and multicultural perspectives are infused throughout.

An Evidence-Based How-To Clinical Guide

Many of us who teach or supervise students and beginning clinicians are especially familiar with the disconnect between what clinical students learn in their academic programs and what they feel prepared to do when working as clinical professionals. Clear guidelines, along with references to theoretical principles and research-based suggestions, are provided for how to carry out more than 70 different general and specific approaches. The book's direct style and practical orientation will be useful to clinical students and professionals alike and will continue to be helpful to students long after they graduate from clinical programs.

Addressing What Instructors and Students Requested

A great deal of research on textbook needs was done before launching the writing of each edition of this book. Student interns in business administration joined forces with students and faculty in communication sciences and disorders, plus professionals at Plural, to help engage in multifaceted needs assessments. We polled hundreds of students in clinical

speech-language pathology programs, instructors at more than 100 different programs who teach in related areas, plus leaders of clinical programs serving adults with TBI, dementia, and aphasia. We studied curricular requirements of more than 200 academic programs to see what topic groupings are most commonly taught and in what combination. We reviewed existing textbooks and made lists of desired and undesired features from students' perspectives.

Here are additional requests from students and instructors that were considered in the development of this text:

- a useful clinical resource for years to come, not just for a course
- a strong theoretical foundations
- an academically rigorous orientation, conveyed with a friendly and personal voice
- coverage of the broad spectrum of the science and art of clinical practice
- recognition of the importance of interdisciplinary and interprofessional education, research, and clinical practice
- thorough coverage of diagnostic processes, including extensive resources on assessment
- a process analysis approach for analyzing communicative performance and strategically interpreting results of ongoing assessment processes infused throughout intervention
- an evidence-informed how-to guide to treatment with clear guidelines on how to carry out treatment approaches as prescribed, all with an appreciation for practice-based evidence
- functional and practical approaches
- key terms bolded within each chapter and listed in a cumulative glossary
- diagrams, charts, illustrations, summary tables, and a detailed index
- substantial up-to-date references
- inclusion of multicultural and multinational content as well as content on counseling, ethics, and legal aspects of working with people with neurogenic communication disorders
- use of gender-attuned and person-first language, embracing and inclusive of readers, colleagues, and the people we serve clinically

regardless of race, ethnicity, gender identity, gender expression, age, sexual orientation, and other attributes

- clear and concise clinical examples to ensure relevance of information based on realistic scenarios
- ancillary online materials with links to videos and other teaching and learning resources
- size and weight such that the book is not cumbersome to carry or impossible to fit in a backpack

In addition, many said that having multiple authors contribute to a single text, if it is to be used as a primary book for a course, can lead to inconsistencies in approach, rigor, and voice, such that a text by a single author who integrates the work of thousands of others has important advantages.

That's a tall order! We invite you to provide feedback on how we can do better in terms of any of these goals in future editions of this text.

Incorporation of Adult Learning Theory and Evidence-Based Pedagogy

Pedagogic approaches embraced in the design of this book consist of two broad categories: those directly implemented in the structure and content of the book and those recommended through learning activities, online resources, and suggestions to instructors. The book content incorporates means of guiding readers with intent, through levels of learning akin to the components of Bloom's Taxonomy (Bloom, 1956) and its more recent variations (e.g., L. W. Anderson, 1999; Laddha et al., 2021): conceptual development, synthesis, analysis, application to content already mastered, and fostering of broader understanding and perspectives on new applications. Here, the levels of learning are treated as interdependent, not linear and hierarchical, as if one must pass from one level to the next. A focus on the reader's own development as a clinician ("personal characteristics" within the adult learning framework; see Cross, 1981) is intertwined with potential "situational characteristics" for learning (e.g., independent study, online or in-person coursework, studies to complement clinical practicum).

Query-Based Approach and Enlivening of Learning Objectives

Any of us who study the complex relationships between cognitive-linguistic abilities and the brain, and between cognitive-linguistic challenges and quality of life, are aware that the more we learn, the more questions we generate for ourselves and others. There are few definitive or concrete answers to clinical questions in the world of aphasiology. Still, it is vitally important that we continue to ask questions and do our best to probe for answers. In this light, this book is organized around queries—probing questions that have varied levels of superficiality and profundity, of simplicity or complexity, and of definitiveness or open-endedness—with a vast array of possible answers. I hope that you will find it useful to pose these queries to yourself as an upcoming or established clinician. I hope you will find queries that tempt you further into an even deeper dive into this fascinating world.

Queries tend to make us contemplate and make associations related to our possible responses before we actually start to answer them; they foster reflection. "It is in the interstices between the questions and the answer that minds turn," observed Weimer (2014, p. 1). Any query ideally leads to new reader-generated queries, encouraging self-directed study so vital to adult learning and critical thinking (Brookfield, 2012; Knowles, 1984). A secondary benefit of the query structure is that it clarifies the learning objectives related to each content area. Readers can use the queries as opportunities for self-assessment as they study, reflect, and answer the queries in their own words. And for instructors who tailor assessments to the contents, this structure helps address the age-old question from students, "What will be on the test?"

Engaged Learning

Many of the exercises in the Learning and Reflection Activities sections are offered in a learn-by-doing rather than just a learn-by-reading mode. Although students certainly can learn through lectures and readings, means of ensuring active engagement with

what they are learning helps to ensure better retention and likelihood of application (L. D. Fink, 2003; Kember et al., 2008). As readers attach personal relevance to what they are learning, they are more likely to take ownership of the corresponding content.

Cycling Approach

Engaging in a cycling approach to adult learning, we recognize the importance of presenting content with redundancy, not such that it is presented the same way over and over again, but such that one aspect of coverage of a topic complements another. One example of the cycling approach is the way that we continuously build on knowledge related to specific diagnostic categories, extending that knowledge across varied acquired neurogenic conditions (as discussed earlier). Another example is that we start out exploring the life participation approach as an especially valuable framework for considering our work, not only with people who have aphasia but with anyone coping with a communication disorder; then, we revisit it from varied perspectives throughout the book. We consider its relevance to advocacy and to education of people with language disorders and the people who care about them. We also think about it as a model to use in contextualizing specific theoretical and evidence-based approaches to assessment and treatment.

Adaptability for Multiple Pedagogic Methods for Classroom-Based Courses, Independent Study, and Online Coursework

The book is organized to be adaptable for varied teaching and learning methods. A flipped classroom approach (Hoepner & Hemmerich, 2018; Keengwe et al., 2014) might be ideal for content that students need to study primarily on their own, such as terminology, basics of neurophysiology, and the blood supply to the brain, prior to integrating the related knowledge into in-class activities and discussions. It can also be optimal when students study about assessment and treatment methods before related hands-on activities and discussion. Using the learn-

ing activities sections in each chapter to prepare ahead of class sessions can also be effective in this regard and can be combined with collaborative learning methods.

Team-based and collaborative learning (Abdelkhalek et al., 2010; E. F. Barkley et al., 2014; Hoepner et al., 2021; John-Steiner, 2006; D. W. Johnson & Johnson, 2009; Michaelsen et al., 2008; Millis & Cottell, 1998; Strijbos & Fischer, 2007), case-based learning (Chabon & Cohn, 2011), and problem-based learning (Jin & Bridges, 2014; Lawlor et al., 2015; Prosser & Sze, 2014) are all directly amenable to teaching and learning related to the contents of this book. Service-learning approaches (Corless et al., 2009; Doherty & Lay, 2019; Kosky & Schlisselberg, 2013; Sabo et al., 2015; Stevens, 2009) are ideal for much of the practical content in this book. Examples of related projects include providing in-services at a health care agency, assisting with a caregiver support group, developing reminiscence projects for residents of a long-term-care facility, or developing a respite volunteer program for adults with neurological disorders in your local community. Such activities are also amenable to study-abroad global health projects, if carefully designed with clear ethical principles in mind (Hal-lowell, Combiths, et al., 2021).

Additionally, students engaged in interprofessional learning opportunities (Interprofessional Education Collaborative Expert Panel, 2011; World Health Organization, 2010; Zraick et al., 2014) may make use of several aspects of this book. For example, basic content will ideally lead to an appreciation for the types of interdisciplinary and interprofessional teams and collaborations through which much work in aphasiology is accomplished. Additionally, suggestions for outreach, advocacy, counseling, and global health experiences can be carried forth in planning interprofessional activities among students, academic and clinical faculty members, and community groups or agencies.

Online Materials

Supplemental materials include PowerPoints to guide discussions pertaining to content in each chapter, additional discussion points and learning activities, ample links to video examples and helpful

online resources, and a test bank that includes multiple-choice, fill-in-the blank, matching, true–false, short-answer, and essay items, all cross-referenced to the content areas addressed. Visit the companion website and explore: <http://www.pluralpublishing.com/publication/aoanld3e>

If you have ideas you would like to share for the website or for the next edition of this book, please be in touch. Also feel free to invite me to drop in for a video call with your class or professional group; I love the chance to interact with readers invested in their clinical excellence.

Updates in the Third Edition

Updates in this third edition include the following:

- fresh updates highlighting evidence-informed person-first approaches to clinical practice and research, including findings of more than 500 new studies
- heightened foci on engaged, transformational learning methods woven into the composition of each chapter, with colorful images integrated throughout
- many more images to support learning
- vital updates on primary progressive aphasia, dementia, TBI, and right brain injury, apraxism, aging, mental health, counseling, group treatment, telepractice, and more

- highlights on new technologies and artificial intelligence (AI)
- added content by and about people with lived experiences of neurogenic communication challenges, bringing academic content to light
- updated attention to culturally responsive terminology and content to promote diversity, equity, inclusion, and advocacy
- expanded resources for global practices
- inclusion of numerous videos and new online study supports
- new online materials for instructors, including syllabus design suggestions and an easy guide for translating course objectives to the new edition, while maintaining the order of chapters for ease of transition for instructors who have used the second edition

About the Book Cover

The phoenix rising from a changed brain represents the human spirit moving onward and upward from neurological challenges. It is a symbol of honor and affirmation for people with neurogenic communication disorders and the people who care about them—all of whom ideally continuously heal and re-create themselves with the strengths they still have, even discovering new strengths along the way. The cover image is derived from original artwork by Taylor Reeves.

CHAPTER

1

Welcome to the Fantastic World of Research and Clinical Practice in Acquired Neurogenic Communication Disorders

I could not imagine any academic or professional pursuit more rewarding than diving into the amazing world of adult neurogenic disorders of cognition and language. I took my first dive as an undergraduate student, having no idea of the fabulous adventures and opportunities to which that would lead. Whether you are a certified speech-language pathologist (SLP), a clinician in a related field, a neuroscientist with clinical interests, a student, or an otherwise engaged reader, and whether you are immersing yourself or just getting your toes wet in this clinical arena, I hope that you find your experience with this book and with this topic informative, inspiring, and challenging.

After reading and reflecting on the content in this chapter, you will ideally be able to answer, in your own words, the following queries:

1. What are acquired cognitive-linguistic disorders?
2. Which neurogenic communication disorders are not acquired cognitive-linguistic disorders?
3. What is clinical aphasiology?
4. What is so fantastic about the world of neurogenic communication disorders?
5. What disciplines are relevant to aphasiology?
6. What is known about the incidence and prevalence of acquired neurogenic language disorders?
7. Where do aphasiologists work?
8. What is the career outlook for professionals specializing in this area?

What Are Acquired Cognitive-Linguistic Disorders?

When we talk about “aphasia and related disorders,” we are typically referring to *acquired neurogenic language disorders* and *acquired cognitive-linguistic disorders*. These are any of a wide array of disorders of language formulation, comprehension, and cognitive processing caused by problems in the brain of a person who had previously acquired language. They are part of a larger category of acquired neurogenic *communication disorders*, which also includes neurogenic *speech disorders*, most commonly referred to as *motor speech disorders*.

The definitions, etiologies, and descriptions of specific types of acquired neurogenic language disorders are discussed in detail in subsequent chapters. As a means of introduction here, let’s briefly consider which types of disorders constitute acquired neurogenic language and cognitive-linguistic disorders versus other types of communication disorders. **Aphasia** is by definition an acquired *language disorder*. Ever since the term *aphasia* was first coined in 1864 by Armand Trousseau (Tesak & Code, 2008), it has been defined in many different ways. Aphasia has also been examined from a multitude of perspectives or frameworks, each of which may lead people studying aphasia to focus on specific aspects of how it is defined. The wide array of perspectives from which we might consider, study, and theorize about aphasia need not distract us from clarity in defining just what it is and is not. If you plan to work with

people who have aphasia in any context, it is vitally important that you be able to clearly and succinctly define what aphasia is. A simple way to do this is to make sure that, however you define it, you include four elements in your definition:

1. It is acquired.
2. It has a neurological cause.
3. It affects reception and expression of language across modalities.
4. It is not a sensory, psychiatric, or intellectual disorder.

We consider each of these elements in more detail in Chapter 4. We also explore how, as individual scholars and clinicians, we might choose different words to define aphasia based on our preferred theoretical perspectives regarding aphasia.

Dyslexia is a reading disorder that may or may not be an actual *language* disorder per se. Deep dyslexia is a language disorder. This form of dyslexia and its varied manifestations entail problems of actual linguistic processing of written material, as opposed to more superficial visual processing of the physical characteristics of graphemes (any written representation, such as letters, words, and punctuation marks, and characters in non-Western scripts).

Dysgraphia is a writing disorder. Like dyslexia, it has deep and superficial forms; the deeper forms, which entail converting semantic content to graphemes, are those that qualify as true language disorders. Both dyslexia and dysgraphia may be congenital (present from birth or at the earliest stages when associated abilities are typically manifested during development) or acquired. Dyslexia and dysgraphia occur as symptoms of aphasia but may also occur as distinct acquired neurogenic language disorders in people without aphasia.

We consider the notion of literal, conventional, and recommended uses of the *a-* and *dys-* prefixes further in Chapter 3. For now, note that although the term *aphasia* is most often used instead of *dysphasia*, the term *dyslexia* tends to be used instead of *alexia* (the latter literally meaning the complete loss of reading ability).

Several other types of acquired cognitive-linguistic problems result from injuries to the brain that affect behavior, information processing, emotional regulation, perception, and other important aspects

of everyday functioning in our information-rich and social world. Cases in which a language problem is secondary to a cognitive problem are broadly categorized as cognitive-linguistic disorders, not simply language disorders. Some categories of neurogenic cognitive-linguistic disorders are referred to according to symptom constellations; they have labels that are based on one or more impairments (e.g., dyslexia, dysgraphia). Others are referred to according to the associated cause. For example, one might refer to **cognitive-linguistic disorders associated with traumatic brain injury (TBI)** to capture any of a constellation of symptoms related to language and information processing that could occur due to TBI. Some have labels associated with an underlying cause, even though the etiology is not incorporated into the label. For example, a favored term for language problems resulting from dementia is **language of generalized intellectual impairment**. A favored term for language problems associated with transient confusional states is **language of confusion**. Still other categories of neurogenic cognitive-linguistic disorders are referred to according to the location of the injury to the brain that caused the loss (e.g., **right hemisphere syndrome [RHS]**, also called **right brain syndrome [RBS]**).

Which Neurogenic Communication Disorders Are Not Acquired Language Disorders?

Once you are clear about what acquired neurogenic cognitive-linguistic disorders are, you can distinguish them from other disorders that do not fit into this category. By general convention, any problem that a person is born with is not an *acquired* disorder. Neurological syndromes present from birth, including developmental language disorders associated with cognitive and learning disabilities or delays, are not acquired. Thus, we do not consider them within the scope of this book. This distinction is important. The result of losing a previously acquired cognitive or linguistic ability is remarkably different from never having developed such an ability in the first place. The result is different in terms of actual brain structure and function. It is also different in terms of the ways that people (and their care team and others who are important to them) cope with their disabili-

ties, the specific types of intervention that may be helpful, and the ways in which diagnostic and treatment services might be made available. Of course, people who have congenital disorders may also at some point have a stroke or TBI and may develop dementia.

In light of the crucial differences between congenital and acquired disorders, most experts agree that the term *child aphasia*, as used in the past to capture the notion of a congenital language disorder, is a misnomer. Aphasia, by definition, is acquired. The preferred term for a condition characterized by language deficits in the face of relatively age-appropriate cognitive abilities in children is **specific language impairment**. Certainly, a child could experience a stroke or TBI resulting in a true aphasia; in such cases, it is appropriate to classify the condition as an acquired language disorder. Still, the course of recovery and the means of intervention for children with aphasia tend to be different in significant ways compared to people with adult-onset aphasia.

The most common acquired neurogenic motor speech disorders are **apraxia of speech** (a problem of motor programming for speech articulation) and **dysarthria** (a problem of innervation of the speech mechanism for articulation). Although many people with neurogenic language disorders also have motor speech disorders, knowing how to distinguish these general categories of disorders is vital to clinical excellence. Although motor speech disorders are addressed in this book in terms of clinical problem-solving and differential diagnosis in people who also have language disorders, they are not a primary focus of this book.

What Is Clinical Aphasiology?

Because of the overlapping areas of scientific and clinical knowledge and skill involved, and because of the contexts in which we tend to work, many professionals who specialize in research or clinical practice in aphasia (**aphasiologists** in the literal sense) are also expert in related neurogenic cognitive-linguistic, speech, and swallowing disorders in adults. When we use the term **aphasiology**, we tend to incorporate topics related to the vast clinical and

scientific aspects of these varied areas, even though the literal sense of the term is more restricted. For example, if you were to attend the Clinical Aphasiology Conference or a conference of the Academy of Aphasia (annual international meetings for research aphasiologists) or read the journal *Aphasiology*, you would be exposed to numerous topics reaching beyond the specific syndrome of *aphasia* per se. Keep this in mind as you continue to read this book, as the term *aphasiologist* (erring on the side of being too specialized) is sometimes used interchangeably with the term *SLP* (erring on the side of being too general, as not all SLPs are truly expert in working with people who have neurogenic cognitive-linguistic disorders).

What Is So Fantastic About the World of Neurogenic Communication Disorders?

There are many enticing aspects of working and studying in the realm of clinical aphasiology. I will describe a few of my favorites in this list of things that we clinical aphasiologists get to do.

We Work With Wonderful People and Become Part of Their Rich Life Stories

People with acquired neurogenic cognitive-linguistic disorders and the people who care about them are diverse in every aspect: age, ethnicity, race, language, education, sexual orientation, gender identity, gender expression, life experience, personality, preferences . . . you name it. As we discuss in more detail later in this book, when people acquire aphasia or related disorders, all aspects of their lives may be affected, not just their cognitive-linguistic abilities. Thus, all aspects of a person's life are relevant to our work. Clinical aphasiologists do not simply learn about a medical diagnosis, treat it in some prescriptive way, and then discharge a person from treatment. We get to learn about people's values, interests, beliefs, relationships, and life goals, and how language use is relevant to what is most important in their lives. We often become part of the fabric of life change and adjustment, helping clients consider alternatives and possibilities, listening to life stories, and nurturing fresh perspectives. We get to

assist in their career and educational considerations and help family members, friends, and professionals learn to best support them.

We Are Catalysts for Positive Change

A problem with communication affects every aspect of our lives and the lives of those around us. The fact that there is much that can be done to make a difference in people's everyday activities and interactions makes it especially gratifying to work in this arena.

We Enjoy Empowerment of Others Through Advocacy and Leadership

Beyond our direct clinical work, we also work to raise awareness of the importance of communication as a basic human right and of the need to support people with communication challenges in protecting that right. Many of us become leaders in our professional contexts as well as in local, national, and international professional organizations. Our roles as leaders can help us become powerful catalysts not only for awareness but also for social reform and policy changes.

We Enjoy a Great Deal of Humor and Fascination

The variety in the types of errors associated with linguistic structure and social language use in people with aphasia is vast. Some of the linguistic errors and communication mishaps we observe are not only fascinating; they can also be charming, quirky, and downright funny.

In some clinical situations, there is a fine line between enjoying humor about something a person has said or done and respecting their dignity as a person with a serious disability. In general, though, enjoyment of fun and laughter throughout rehabilitation and recovery is shared among all involved, especially people with communication challenges themselves. One of the delightful aspects of working with a primarily adult population is that there is much more tolerance for humor at a metalinguistic level than there can be when working with children. People with aphasia, for example, often have a wonderful sense of humor about their own unintended utterances—and about consequences of unintended aspects of communication—in their daily lives.

We Enjoy Fantastic Local and Worldwide Networks

In light of the vastness of life consequences associated with acquired neurogenic communication disorders and the interdisciplinary nature of the work of aphasiologists, we depend on teamwork with a host of professionals in our local clinical and research work environments. Additionally, there are wonderful local, state, regional, national, and international organizations and networks that bring together and foster continuing education of aphasiologists and others who care about aphasia. Information about some key organizations and how to get involved is given later in this chapter.

Our Work Is Multicultural and Multilingual

If you love working across languages and cultures, there are ample opportunities to work in the area of neurogenic communication disorders with diverse people throughout the world. There is a dire need for aphasiologists who are multicultural and speak more than one language or dialect to assist in furthering the development of assessment and intervention materials across languages and cultures. In many countries, the field of aphasiology is just now developing; there is a need for culturally and linguistically sensitive consultants and volunteers to assist in building new academic and clinical programs. Opportunities for cross-cultural learning and transnational collaborative adventures abound.

We Are Lifelong Learners

Given the vast scope of our work and the fact that our expertise crosses many disciplinary boundaries daily (as we discuss further in this chapter), there is no way for us to really master all that would be ideal for us to master as excellent aphasiologists. If you enjoy studying, reading, and learning, you can find intriguing challenges to do this in your everyday life as an aphasiologist.

We Tap Into Our Most Scientific and Our Most Creative Selves at the Same Time

In our work to help foster recovery, we must be strong scientists. For example, we must be knowledgeable about neurophysiology and theories

behind fostering brain changes as well as about neuroimaging, statistics, information processing, and psycholinguistic and neurolinguistic modeling. At the same time, we must be passionately creative artists, appreciating things that sometimes surpass scientific description and logical explanation. Our investment in supporting rehabilitation reflects wonder, creative listening, and incorporation of aesthetics, art, and music in our work.

We Have Rich Career Opportunities

There are ample career opportunities for clinical aphasiologists in terms of the availability of professional positions, as well as the number and diversity of employment contexts in which they may work. We explore these in an introductory way later in this chapter and then delve further into varied aspects of clinical practice settings in Section IV.

What Disciplines Are Relevant to Aphasia and Related Disorders?

There is no single field of study that “owns” aphasiology. The expertise of clinical aphasiologists depends on the integration of content across numerous disciplines. Examples of relevant fields are listed in Box 1–1. It is important that we respect the scope of practice of the professional disciplines in which we hold academic degrees, certification, and/or licensure. Still, recognizing the relevance of a multitude of disciplines to what any one aphasiologist has to offer is vital to our career-long development of expertise.

What Is Known About the Incidence and Prevalence of Acquired Neurogenic Language Disorders?

In the chapters addressing specific categories of neurogenic language disorders, introductory information is provided about the **incidence** (the likely number of newly diagnosed cases per specified unit of time) and **prevalence** (the proportion of specified populations that had or have the disorder at a particular time). Many such statistics are biased in terms

Box 1–1

Examples of Disciplinary Areas Relevant to Acquired Neurogenic Cognitive-Linguistic Disorders

- Actuarial sciences
- Anthropology
- Art
- Art therapy
- Audiology
- Bilingualism and multilingualism
- Biology
- Biomechanics
- Biomedical engineering
- Business and management
- Cognitive science
- Communication
- Computer science
- Counseling
- Education
- Electrophysiology
- Engineering
- Foreign languages
- Gender studies
- Gerontology
- Global health
- Health care administration
- Hospice and palliative care
- Law
- Linguistics
- Mathematics
- Multiculturalism
- Music therapy
- Neurology
- Neuroscience
- Occupational therapy
- Otolaryngology
- Pet therapy
- Pharmacology
- Philosophy
- Physiatry
- Physical therapy
- Physics
- Political science
- Public health
- Psychology
- Rehabilitation
- Social work
- Social justice
- Sociology
- Software development
- Speech-language pathology
- Statistics

of over-representing the United States and **majority-world** countries and regions because such statistics pertaining to much of the rest of the world’s populations are lacking. For some regions, no data are available, and for others, the validity of the data is questionable. Overall, the validity of reported data about the worldwide incidence and prevalence of disabilities in general and of communication disorders specifically is suspect. There are five primary reasons for this:

- Health survey sampling methods as practiced in much of the world are often inadequate, most commonly due to transportation challenges, a lack of thorough staff training,