Volume 1: Principles, Background, and Application

Simplified Signs

A Manual Sign-Communication System for Special Populations

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Preface and Acknowledgments

The inspiration for the development of the Simplified Sign System occurred some years ago, in the late 1980s. A former student and I had recently completed a research project that examined various factors associated with non-speaking children's success in learning signs to communicate (Bonvillian & Blackburn, 1991). Most of the participants in that study were students diagnosed with autism at the Grafton School in Virginia. Because these students had failed to make significant progress in learning to speak, they had been taught to communicate through American Sign Language (ASL) signs. ASL is the principal language of the Deaf community in the United States.

After the research project ended, I met with Gail Mayfield, the director of the autism program at Grafton, to discuss the results. One of the findings was that scores on tests of the students' motor abilities predicted their acquisition of ASL signs. Many of the students had also obtained quite low scores on these tests of motor abilities. Furthermore, those children with more impaired motor skills tended to acquire relatively few signs and rarely combined them into more complex utterances.

These results surprised me because previous investigators had consistently stated that motor skills in children with autism were largely unimpaired. These findings, however, did not surprise Gail. As the director of a program that had used signs with children with autism for over a decade, Gail had seen firsthand the difficulties that many of her students experienced with motor tasks and sign formation. Gail made a point of underlining what she perceived as a serious problem in her students' communication training: many of them clearly had problems accurately forming the signs that they were being taught. In her opinion, the combination of the students' motor difficulties and the formational complexity of many ASL signs made her students' sign learning only a limited success.

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Gail then made a fervent request: would it be possible to address the problems she witnessed daily by developing a simplified form of sign communication that would be easier for her students to learn? I told her that such an undertaking, properly conducted, would likely prove quite difficult and time-consuming. To accomplish such a task, I felt that more research needed to be conducted in several different areas. One such area was sign acquisition in developing children: how do young children without discernible motor or cognitive disabilities learn to form signs? At that time, very little was known about the early stages of sign acquisition in typically developing children. This was an important first step because it is difficult to distinguish atypical patterns of development without first knowing how development typically proceeds. A second research area that needed to be carefully examined was the type of sign production errors made by children with autism, in addition to the kinds of signs that they more easily acquired. A third area that needed to be systematically explored was the fine and gross motor problems that children with autism experienced. A sign-communication system developed for these children would need to avoid their areas of motor difficulty while emphasizing areas of relative strength. After the meeting with Gail, I agreed to make a determined effort to develop a simplified sign system, but not until much more had been learned about sign language acquisition, sign formation errors in children with autism, and the motor difficulties of children with autism.

The person most responsible for mapping out the course of young children's sign formation development was a then doctoral student, Theodore Siedlecki, Jr. Together, we investigated both the order of acquisition of sign phonemes (the individual formational parameters that make up a sign: handshape, location, and movement) as well as the types of sign formation errors made by the typically developing children of Deaf parents (Bonvillian & Siedlecki, 1996, 1998, 2000; Siedlecki & Bonvillian, 1993, 1997). These studies provided valuable background information on which formational parameters (or aspects) of signs were more easily learned and more accurately produced by young, typically developing children.

Another former University of Virginia doctoral student, Brenda C. Seal, investigated the sign formation errors made by children with

autism (Seal & Bonvillian, 1997).[1] The present Simplified Sign System largely avoids those sign formational elements that children with autism had difficulty producing.

In her doctoral dissertation, Georgina R. Slavoff examined the gross and fine motor problems of children with autism, as well as their gestural imitation abilities (Slavoff, 1998). Her research documented the serious motor functioning problems of many of these children. In particular, her studies of gestural imitation helped shape how we might create or modify signs for inclusion in our sign system by revealing that we needed to limit the number of movements in each sign. Several years later, Ashley Fitzgerald Logan provided additional valuable information about the gestural imitation and memory abilities of children with autism in her distinguished (undergraduate) major thesis at the University of Virginia (Fitzgerald, 2001).

Another critical step in the development of the Simplified Sign System occurred while I was spending a year at Gallaudet University on a University of Virginia Sesquicentennial Associateship.[2] Because I was trying to write up the findings of a number of previously conducted research studies during the year, I requested the use of a desk in a remote corner of Gallaudet's library to minimize the number of interruptions that would occur while I was writing. Gallaudet's staff graciously complied with my request, and I was provided the use of a desk at the far end of the bottom floor of the library. What I soon realized, however, was that my ability to focus on my writing was limited mostly by my own ability to concentrate — I needed a break or change of pace about every 45–50 minutes. For my writing breaks, I would typically wander among the bookcases located near my desk and examine the many different volumes on the shelves.

Fortuitously, the section of the library near my desk at that time housed numerous volumes on sign languages from different countries around the world. (Most countries have their own distinct sign language.) I soon found myself taking several sign language dictionaries at a time to my desk and examining them before returning to my writing.

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1 This research was supported by Social and Behavioral Sciences Research Grants from the March of Dimes Birth Defects Foundation.

2 Gallaudet University, located in Washington, DC, was the world's first institution of higher learning for deaf students.

I soon became interested in how the same concept might be expressed by a sign in different sign languages. What I quickly realized was that I could not accurately guess the meanings of the large majority of the signs I saw depicted through drawings or photographs in the different dictionaries. Nevertheless, periodically I would find a drawing of a sign for a particular concept in one sign language dictionary whose meaning was readily apparent to me, whereas, in other sign language dictionaries that I examined, I often could not discern a clear relationship between the signs for that very same concept and how the signs for that concept were formed. That is, in some sign languages, the meaning of a sign for a particular concept was quite apparent to me, but in most sign languages, the sign-to-meaning relationship for the same concept was not at all clear to me.

Over time, as I examined more and more dictionaries of sign languages and sign systems, it occurred to me that it might be possible to assemble a large collection of signs with readily apparent meanings (highly iconic signs) if one were to review enough sign language dictionaries from around the world. This seemed to me an important insight, since previous investigators (Konstantareas, Oxman, & Webster, 1978) had reported that sign-learning children with autism (and other children with intellectual disabilities) typically learned and remembered highly iconic signs better than they did signs with less transparent meanings. In other words, if one were to develop a sign-communication system that was more easily learned by non-speaking children with autism, then it would be a good strategy to try to include as many highly iconic signs as possible.

With this background information on sign learning and motor functioning established, I felt that the development of a simplified form of signing could begin in earnest. The actual onset of the Simplified Sign System project also occurred, in part, by chance. Nicole Kissane, a then first-year undergraduate pre-medical student at the University of Virginia, was taking my Introduction to Child Psychology class in the fall semester of 1997. The lectures on childhood deafness, sign language acquisition, and the use of signs and other (non-oral) augmentative and alternative communication systems with various non-speaking populations had intrigued her. At the end of the term, Nicole spoke with me about her interest in sign-communication training for hearing, but

non-speaking, individuals. She explained that the topic was of particular interest to her because one of her grandfathers had suffered a series of strokes that had adversely affected his speech skills. Although much of his speech slowly returned during the remaining years of his life, he often struggled to communicate, occasionally using gestures to convey his needs. Nicole stated that if a research project involving the use of signs with non-speaking populations were to be undertaken, then she would very much like to assist. I told Nicole that such a project would probably take at least several years to complete, but that I would happily supervise her efforts. With the onset of the spring semester in January 1998, the development of the Simplified Sign System began. For the next three and a half years, Nicole would lead the way in this project.

We began the project by searching for signs that would be good candidates for inclusion in the Simplified Sign System lexicon. Because different countries usually have their own distinct sign languages, an initial step was to secure a collection of sign language dictionaries from around the world. This appeared to be a logical first step because it seemed easier to locate potentially useful signs for the Simplified Sign System from already existing sign languages than to try to create hundreds of new ones. (If, however, the dictionaries failed to yield a viable sign for a needed word or concept, then we would need to create that sign.) The acquisition of sign language dictionaries was ably assisted by the staffs of two libraries: the Gallaudet University Library and the University of Virginia Library. Gallaudet University generously allowed me to examine much of its extensive collection of sign language dictionaries. Aside from examining numerous dictionaries at Gallaudet, this accessibility enabled me to determine which dictionaries would most likely be helpful to the project. The University of Virginia library staff then helped us borrow copies of these dictionaries from libraries around the world through the interlibrary loan program. Over the years, Vicky L. Ingram, Sandra B. Dulaney, Dagmawi Abebe, Edward Abse, Heidi L. Dodson, Hang Dong, Ian T. Hickox, Jung W. Hong, Jing Lu, Rebecca Martin, Whitley Morton, and Rebecca A. Pappert proved especially helpful to the project in all aspects of library assistance. Vicky Ingram also provided many valuable suggestions for improvement on early drafts of this manuscript.

Nicole and several other University of Virginia undergraduate students, Erin McDaniel Catlett, Kathryn Thomas, and Kelly Tyree, carefully reviewed these dictionaries during the next few years looking for highly iconic signs. (Highly iconic signs are signs that bear a close resemblance to the actions, objects, or characteristics that they represent.) As they examined the dictionaries, Nicole and the other research assistants selected signs from the dictionaries whose meanings they were able to guess from looking only at the drawings. They then conducted much of the testing of these signs with University of Virginia undergraduate students to determine which individual signs were more easily remembered, recognized, and formed.

Filip Loncke joined the Simplified Sign project in the fall of 2000. At that time, he became one of the faculty advisors for Nicole's distinguished (undergraduate) major thesis. Filip also developed some of the signs that were incorporated into the Simplified Sign lexicon, supervised some field testing, and wrote an important section of this book's introduction (Chapter 1) and much of the chapter on how to use the signs with non-speaking individuals (Chapter 9). His involvement with sign language programs for non-speaking persons, however, has a much longer history than just the past decade and a half. He began using signs to foster communication in children with autism, cerebral palsy, and Down syndrome in his native Belgium over thirty years ago. By the early 1990s, he had become convinced that many signs used by most prelingually deaf persons in Belgium were too complicated for many non-speaking children to acquire. In light of this concern, he prepared a volume of signs for these children based on his efforts to modify Belgian Sign Language signs in order to make them easier to produce (Loncke & Bos, 1997).[3] Finally, it should be noted that during the period 2002–2004, Filip served as President of the International Society for Augmentative and Alternative Communication (ISAAC).

In May of 2001, Nicole submitted her distinguished major thesis, "Memory and Recall of Signs: The Development of a Simplified Sign System," to the University of Virginia. She also established a website that included the full text of her thesis, as well as copies of the

3 It should be noted that, in recent years, some researchers have asserted that there are two separate sign languages in Belgium: Flemish Sign Language (Vlaamse Gebarentaal or VGT) and French Belgian Sign Language (Langue des Signes Belge Francophone or LSFB).

approximately 500 signs that had been developed up to that point. Nicole's parents, William and Antoinette Kissane, should be recognized for their considerable support on this aspect of the project. Her mother helped primarily by drawing some of the initial illustrations of how the signs were formed. Her father was invaluable for his contribution to many of the technical aspects of the project. He devoted many hours to the development of the website, scanning and inputting the initial sign images, cleaning up those images, as well as copying and merging documents.

With the submission of Nicole's thesis and the establishment of a website, the project began to receive local, national, and even international media attention. Newspaper stories, magazine articles, and television shows covered the project. The website received many thousands of visitors and we were inundated with enthusiastic emails from parents, caregivers, and professionals who encouraged the completion of the Simplified Sign System. These individuals also requested that we expand the scope of our research to include other populations with communication disorders or difficulties.

In light of the outpouring of interest in the Simplified Sign System and the many requests to expand its scope, we elected to make a determined effort to add or develop new signs. At this time, undergraduate students Meaghan D. Hewitt and Sylvia A. Jasiurkowski joined the project. New signs were selected from additional dictionaries of sign languages and sign systems. However, because highly iconic signs often could not be found for needed concepts, we embarked on a program of creating signs for those perceived needs. This approach of creating or inventing new signs and then testing them to determine whether they were easily learned and remembered has continued until recently.

Shortly after her graduation from the University of Virginia, Nicole entered medical school at the Medical College of Virginia at Virginia Commonwealth University. This new educational and training focus necessitated that she somewhat curtail her involvement in the project, although she still managed to stay actively engaged, devoting many hours during vacations, weekends, and evenings to the project. After receiving her medical degree, Nicole did her residency in General Surgery at the University of Florida College of Medicine. In 2013, she earned a Master of Education degree from Harvard University in

Cambridge, Massachusetts. Nicole, now Nicole Kissane Lee, is currently Assistant Professor of Surgery in the Department of Surgery at Indiana University School of Medicine located in Indianapolis, IN. She is also the Director of the Surgical Skills Center there.

In the fall of 2002, Adrianne Walvoord and Heather Emmons joined the project. Adrianne was a fourth-year undergraduate student at the University of Virginia who had become deeply interested in the language and communication development of exceptional children. She also worked part-time for a family who lived nearby, helping to care for their two sons with autism. Heather was a graduate student at the University of Virginia in the Linguistics and Psychology programs with a principal research interest in children's sign language acquisition. In her senior year as an undergraduate at Grinnell College, she had taught the nine-year-old autistic son of an English professor to communicate for the first time by teaching him ASL signs. After first making progress in learning to communicate through signs, this boy subsequently acquired considerable proficiency in spoken English.

The primary intent of Adrianne's and Heather's research efforts was to assess systematically whether Simplified Signs were more easily learned and accurately formed than ASL signs by fully functioning young adults. If Simplified Signs were not more easily learned and accurately formed than ASL signs, then there would be little justification for recommending their use instead of ASL signs. To accomplish this task, Heather and Adrianne presented lists composed of ASL signs and Simplified Signs to undergraduate students. These students were then tested on their ability to recall signs immediately after a list was presented. The results of this research showed that Simplified Sign System signs were recalled significantly more often and accurately than ASL signs.

In the 2003–2006 academic years, we continued our program of systematic assessments of the relative ease of learning and remembering ASL signs and Simplified Sign System signs, as well as the creation of new signs. The focus of our new comparisons was the ability of undergraduate students to remember signs after a twenty-four-hour delay; again, the results showed greater recognition and recall of Simplified Signs. Assisting Heather Emmons in this project were undergraduate students Jessie Kora Wiley Hagger, Laura J. Moore,

and Suellen Woodcock Robinson. Laura Moore, together with fellow undergraduates Alicia M. Dean, Ashley N. Paré, and Laura E. West, also helped during this period in the creation of new signs and in trying them out on other students.

In the summer of 2003, Tracy Dooley joined the project. To some extent, this was a reunion. During the early 1990s, Tracy had been a part of our laboratory group; she had studied the emergence of hand preference in young sign-learning children (Bonvillian, Richards, & Dooley, 1997). After graduating from the University of Virginia, Tracy went on to earn a Master of Divinity degree from Emory University's Candler School of Theology. While in Atlanta, Tracy also pursued training in sign language interpreting and worked with a deaf child with an intellectual disability.[4] Since returning to Virginia, Tracy completely recast the descriptions of the signs and thoroughly edited each of the book's chapters. Indeed, she helped to write or rewrite substantial portions of several key chapters. Tracy also assisted in the formation of new signs, the revision of existing signs, and was heavily involved in the review and approval of each of the sign illustrations. She also created a sign index with synonyms (see Volume 2), compiled the subject and name indices, and developed a glossary of terms for the benefit of readers. In more recent years, Tracy was very actively involved in the expansion of the lexicon of the Simplified Sign System.

In March 2005, the Simplified Sign System project took another turn in its development. Filip Loncke, Amanda M. England (a graduate student), and I made up the University of Virginia contingent at a conference on simplified signing for non-speaking persons held in Pforzheim, Germany. The conference convener, Klaus-Peter Böhringer, urged the participants to expand the scope of their sign systems so that the resulting system could be used worldwide. From his perspective, a sign-communication system that would transcend national borders and facilitate communication across spoken language barriers would be an important contribution as well. The German hosts were most gracious in their hospitality and generously shared with us many of the signs they were using.

During 2006 and 2007, the focus of the Simplified Sign System project shifted in response to requests for an expanded sign vocabulary. The

4 On the term *intellectual disability*, see Chapter 4, Footnote 1.

new emphasis was on the development of signs that would facilitate communication in medical settings and international travel, as well as prove of assistance to older individuals with impaired hearing. This effort was led by Ashleigh Holeman DeFries; her work was supported by a Harrison Award for Undergraduate Research. Two other undergraduate students, Alicia M. Dean and Rachel L. Yates, helped in the development and evaluation of these signs. Gregory M. Propp, the Director of the American Sign Language Program at the University of Virginia, provided valuable assistance in the development of signs for medical terms.

The illustrations depicting each of the handshapes (see Appendix B), the palm, finger, and knuckle orientations (see Appendix C), and the initial lexicon of 1000 Simplified Signs (see Volume 2) were adeptly drawn by Valerie Nelson-Metlay. Val showed incredible patience responding to the authors' requests for revisions to her drawings. To facilitate Val's drawings of the signs, the authors made videotapes of how the signs were formed. Assisting the authors in the videotaping of the 1000 signs from the initial lexicon and their subsequent editing were University of Virginia students Elizabeth A. Elder, Amanda R. Hulsey, Alexandria K. Moore, Heather J. Parrott, and Leigh E. Spoden.

In more recent years, we have continued to develop the Simplified Sign System in two principal areas. One on-going project has focused on creating new or revising existing Simplified Signs for use with persons who have paralysis of or serious difficulty using one of their arms and/or hands. This project was inspired in part by feedback we received about our signs by family members or professionals who worked with individuals who had the use of only a single arm or hand.

The other principal on-going project has been to increase the size of the Simplified Sign lexicon. The reason for this push to expand the size of the lexicon was the realization that the signs might be effectively used as vehicles of instruction in students' learning of foreign language vocabulary items. The initial impetus for this project came from an observation by Filip Loncke in response to a query from me as to why Europeans often were better foreign language learners than Americans. Filip observed that Europeans often tried to acquire a new language by living the language rather than trying to learn the language through classroom drills frequently stressing vocal repetition. As I reflected on

Filip's comment, it occurred to me that many of our Simplified Signs consisted of the sensorimotor actions one would produce if one were "living a language" while immersed in another language and culture. Perhaps there was something about producing a motor action related to or congruent with a word and its underlying concept that helped a person to learn and retain that word.

Not long after Filip's observation about "living a language," a then undergraduate psychology student, Talia S. Coney, came to see me in my university office in need of a research project for her upcoming alternative spring break trip. I soon learned that Talia was headed to Central America for spring break and would be working with a dozen orphan boys ranging in age from ten to twelve years. Because Talia was proficient in Spanish and had a background in ASL, we designed a project that would examine two different ways of teaching English vocabulary items to the boys. Half the boys would receive daily vocabulary lessons that included pictures of the to-be-learned words, and the other half would learn the same English words together with their sign language equivalents (typically iconic ASL signs). At the end of the week, Talia tested each boy individually on his ability to produce the appropriate English words after she uttered the Spanish translation equivalents for the words. The teaching approach that combined the use of manual signs with English words resulted in significantly greater English-word learning by the boys than the approach using pictures of the to-be-learned words.

With the results of this preliminary investigation in mind, we elected to increase the size of the Simplified Sign System lexicon. A number of University of Virginia undergraduate students provided invaluable assistance in this endeavor. Their efforts included reviewing dozens of different sign language dictionaries to help identify potential new signs for the system, making suggestions as to how some signs might be formed to make them easier to produce, testing many dozens of research participants to determine which potential new signs were more readily learned and recalled, and helping in the resulting data tabulation and analyses. The names of the current and former University of Virginia students who assisted in this phase of Simplified Sign vocabulary expansion are: Laila Y. Abbas, Jordan B. Adams, Katherine A. Becker, Kira R. Bolton, Katherine F. Bracaglia, Karsten Coates, Meghan M.

Cotton, Anna Cronin, Jessica A. Davis, Tayler E. Engelhardt, Hollis B. Erickson, Kelly E. Flynn, Chandler M. Hubbard, Amanda R. Hulsey, Ian M. Lamb, Henry T. Matthews, Alexandria K. Moore, Zenobia S. Morrill, Jacob S. Pittman, Benjamin Rost, Celeste R. Rovito, Ka Eun Song, Brigitte I. Sujik, Alexis A. Tew, Justin Bradley Torrence, and Nicole M. Waitzman.

Furthermore, I would like to extend special thanks to Kira R. Bolton, Jessica A. Davis, Alexandria K. Moore, and Zenobia S. Morrill who most adeptly managed my laboratory during this period. Without their dedication, interpersonal skills, and attention to detail the laboratory would not have functioned nearly as effectively as it did. With their invaluable assistance, we added approximately 850 new signs to the Simplified Sign System. In July of 2015, Karsten Coates ably assisted the authors in digitally recording the formations of these new signs that had reached criterion over the previous three to four years. (These signs will be included in a future expanded edition of the Simplified Sign System.)

The cost of the illustrations in the present volumes was covered in part by two generous contributions. The first was from the University of Virginia Research Support in the Arts, Humanities, and Social Sciences. The second was from my very dear friend Edward H. Rice. Not only did he most magnanimously help with the book's publication costs, but Ed and his family also generously hosted me on trips to Washington, DC and Gallaudet University during the preparation of this book.

During the preparation of this manuscript, I was supported by a pair of Sesquicentennial Associateships from the University of Virginia. These awards enabled me to devote the majority of my time during two academic years to the development of the Simplified Sign System and the writing of Volumes 1 and 2.

Finally, over the years, many students, colleagues, and friends gave their time, thoughts, and advice to assist in the development and refinement of the Simplified Sign System. Without their enthusiastic effort, this project would not have been successfully completed. I would like to acknowledge the many helpful comments and suggestions for the conduct of the project and for revision of these volumes made by David F. Armstrong, Elizabeth B. Bonvillian, Marjorie A. Boone, Virginia L. Casanova, Steven L. Converse, Eve Danziger, Alicia M. Dean, Chad S. Dodson, Alev Erisir, Neal P. Fox, Allison E. Jack, Vikram K. Jaswal, Linda A. Meyer, Eleni M. Papageorge, Brenda C. Seal, and Janis A. Sposato.

Virginia Casanova, Allison Jack, and Eleni Papageorge, in particular, made numerous suggestions that improved the text.

Unfortunately, there is one sad note to this research endeavor that should be mentioned. Gail Mayfield, the director of the Grafton School's autism program and the person who helped inspire this project, passed away from cancer before the project was completed. I like to think that she has continued to monitor our progress.

John D. Bonvillian
University of Virginia
2018

Postscript

In May of 2015, my brother, Dr. John D. Bonvillian, retired from his professorship in the Department of Psychology at the University of Virginia and was named emeritus. During his thirty-seven years at the University, John advised and taught thousands of students in classes on general psychology, child psychology, and developmental psycholinguistics. He also directed the linguistics program. The Simplified Sign project was the capstone project of his career. Although formal testing related to the Simplified Sign System ended with his retirement, John maintained an office at the University and continued to work on the Simplified Sign project.

Sadly, in early 2018, John was diagnosed with pancreatic cancer. He spent the next several weeks composing and editing a chapter on sign acquisition development in hearing children with autism, which was subsequently published in *Manual Sign Acquisition in Children with Developmental Disabilities* (a 2019 NOVA publication edited by Nicola Grove and Kaisa Launonen, who dedicated their book to John). After honoring his commitment to contribute to this wonderful new work, John started a course of chemotherapy while completing his work on these volumes. Although this treatment ultimately was not successful (John passed away on May 8, 2018), John was able to spend the last few months of his life communing with many friends, colleagues, students, family members, and loved ones, who visited him in the hospital and

rehabilitation facility where he spent the last two months of his life. I think it is safe to say that we all greatly miss him.

In addition to the many people whom John thanked for their contributions to the Simplified Sign project, I want to single out for special recognition Tracy T. Dooley, one of the co-authors of this book. She worked for years with John preparing the signing lexicon, making major contributions. When John died, Tracy stepped into the breach and took responsibility for the manuscript preparation and editing that was essential to bringing the Simplified Sign project to publication. It was no small effort, and without Tracy's dedication, energy, and professionalism, we would not have been able to fulfill John's dying wish to have the Simplified Sign System published and available to the world.

I also would like to thank the two professional reviewers, Chloë Marshall and an anonymous reviewer, who offered many helpful and informative comments that allowed Tracy to update and polish the text as it neared completion. Finally, I would like to acknowledge all of the work done by the wonderful people at Open Book Publishers, including Dr. Alessandra Tosi, our editor Adèle Kreager, Luca Baffa for digital enhancement, Laura Rodriguez for marketing and online distribution, Javier Arias for data collection and management, and Anna Gatti for her beautiful cover design.

Much as John believed that Gail Mayfield continued to monitor our progress after her passing, I believe that John's spirit remains a strong and positive force that still infuses and gives energy to the Simplified Sign project. May the memory of John's infectious enthusiasm continue to guide our path forward, and may this publication have a positive impact on the lives of all those for whom John had so much love and respect.

William Boone Bonvillian
Great Falls, Virginia
2020