Introduction

What This Book is About

The continually evolving network of computers and telecommunications devices, called the Internet, now provides the context for communication across borders and across cultures. Organizations are using the Internet as a platform for global electronic commerce (e-commerce). Individuals can join forum groups, bulletin boards and chats on topics of interest, and thus communicate with people around the world. By participating in these interactions and creating a Web site or Web page, an individual or institution automatically establishes a visibility to an international public – an opportunity to reach anyone with access to the Internet from anywhere. In this way, the Internet is accelerating the process of globalization. Despite such visibility, however, language continues to be a principal obstacle to full globalization: if an individual or institution wishes to reach speakers of other languages, its contents must be translated or, in the case of voice communication, interpreted.

The process of recreating Web sites in specified language versions is known as Web localization, and it is the fastest-growing area in the translation sector today. The term ‘localization’ was originally applied to creating regional versions of computer software. The software localizer works directly with the computer language or code in which the software is written, and therefore must have sufficient knowledge to be able to communicate effectively with the client engineers, and to be involved in testing of the localized products. Similarly, with Web site localization, it is necessary to be able to work with HTML, XML and other kinds of formatting tags, including multimedia components such as JPEG images and RealAudio files.

The traditional forms of language support we have known as translation and interpretation are faced with new challenges that come from the new contexts for human communication and interactions afforded by technology. Furthermore, new modes of communication over the Internet are continuing to develop: from static text on computer screens, to short messages on cell phone displays and personal digital assistants, from e-mail to synchronous chat in text or voice. Some of these forms of commu-
Communication resemble those of the age of the typewriter and the fax machine, but many also incorporate animation, video and other forms of multimedia. The core difference lies in the shift to the digital world which affords all kinds of flexibility in electronic processing.

This multiplicity of types of electronic documents defines a new kind of literacy, variously called electronic or digital literacy. Electronic documents follow a digital life cycle, which is different from the process involved in paper-based contents. Certain contents such as multimedia or voice mail are created electronically from beginning to end, often in forms that would not be possible otherwise. Very large manuals for the operation of equipment such as aircraft, tractors and other heavy equipment, most of which are subject to regular updating, are now published in digital format, be it CD-ROM or online distribution. This in turn allows the use of computer-based translation tools such as translation memory (TM), which compares a new source text against its previous version and allows recycling of previous translations for the applicable portion. In this way, electronic documents have a great compatibility with language engineering.

At present, e-commerce companies express an urgent demand for accurate, appropriate, timely, high-volume translation to localize their Web sites in multiple languages. Similarly, people who use Web sites stumble into language barriers and seek language assistance, since not all Web pages are available in their language. In order to meet such demands, some have turned to engineering solutions: new applications have been developed to allow real-time browsing of Web pages with automatic translation of Web sites, e-mail messages or search engine results. However, many users have learned that machine translation (MT) will rarely satisfy all of their varying communication needs. Those who are heavily involved in MT development and utilization admit the necessity of preparing documents before they are translated (pre-editing) in order to guarantee reasonable results. In the same way, people who use these new modes of communication over the Internet are beginning to realize that they must control the kind of language that they use when they intend to communicate across languages. This is part of the internationalization process that facilitates the ensuing localization/translation process by eliminating, right at the start of the product development cycle, any factors that are likely to hinder globalization. Content management thus becomes a crucial issue in the preparation of documents that will have international visibility. This process may sometimes involve extensive culturalization of contents, including certain non-verbal elements such as icons and layouts, to make the presentation more suitable for the target culture. As a result, new
businesses/consultancies are emerging to provide information on cultural differences that can be used in preparing such communications.

All of this implies that translators need to acquire a new set of skills and new knowledge. The so-far text-centric Internet has not affected interpreters’ working mode in any significant manner. However, the development of voice-communication over the Internet with technologies such as VOIP (Voice Over Internet Protocol) as well as the convergence of mobile phones and the Internet suggest the need to prepare for remote interpreting where all communicating parties are geographically distributed. These emerging technologies, and the need for multilingual support for both text and voice to reach audiences beyond one’s own language and cultural boundaries, all work to redefine the translator and interpreter, both in terms of their roles in providing language support, and in the kinds of knowledge and skills that digital literacy requires.

We refer to this emerging field of multilingual support in digital environments as teletranslation and teleinterpretation. In this book we examine the new contexts of communicating, the new literacy, the new requirements for the teletranslator and teleinterpreter and the kinds of tools and training that can facilitate their work.

Origins of the Book and Authors’ Perspective

This book is a culmination of our joint thinking over the last few years. The first point of contact the two authors made was through a publication by O’Hagan in 1996 (The Coming Industry of Teletranslation). Since then we have collaborated in exchanging ideas and conducting experiments using a variety of new communication modes on the Internet. We are both fascinated by the impact of the new communications media on translation and interpretation. In addition to the extensive teaching experience on translation and language of David Ashworth, and the communication-research involvements with high-tech environments of Minako O’Hagan, who has a translator background, each author has been exposed to the forefront of language industry developments. David has been consulting for a budding Web localization company operating on the Internet, while Minako has close links with the Localization Industry Standards Association (LISA). In 1999 David developed and offered a Web-based online course for Japanese and Chinese translation and Minako attended the course as a student. David continues to give such courses from Hawaii.

Our most recent joint project was a pilot course on teletranslation and teleinterpretation run by courtesy of the Global Virtual University (GVU). The GVU, developed by Professor Emeritus Tiffin of Victoria University of
Wellington, New Zealand, hosted our ten-week course between September and November 2000 with a weekly live voice session based on a VOIP platform. This allowed us to explore our ideas relating to teletranslation and teleinterpretation with an international group of students and in an emerging technological environment for pedagogical purposes. The pilot course pointed us to the areas of our own weaknesses and also those of the technology. For example, at the time of writing, VOIP platforms are not sufficiently reliable for conducting classes that depend solely on the voice channel. For the same reason, simultaneous teleinterpretation in this environment is not yet feasible. However, the course also helped us to crystallize a number of concepts that we consider are significant for translators and interpreters to survive and thrive in the Internet era. For example, while teletranslation is already in operation, with translators receiving and delivering work on the Net, the full implications of digital communication are not well understood. As for teleinterpretation over the Internet, it is yet to develop into a commercial service owing to the unstable technology. And yet, after conducting classes using a VOIP application, we could clearly see its potential. With the convergence of voice and Web progressing with the third generation (3G) mobile technology, we believe that remote interpreting in one form or another will become a necessity in the near future. Our conviction is that both translators and interpreters who are trained in and accustomed to the analog/atomic environment need to raise awareness for the emerging digital/virtual environment, which changes a number of basic assumptions for their work.

Several textbooks and references, plus numerous Internet documents, have appeared on the areas of localization and language engineering. In particular, they cover issues in software localization with some addressing Web localization (see, for example http://www.multilingualwebmaster.com). The press and online literature on MT is abundant, and goes back almost fifty years. In this book, we wish to stay close to the present and emerging developments in electronic communication across languages, but avoid covering the same ground as others. We expect to provide a fresh perspective on the future of translation and interpretation in light of the new context in which these professions need to operate. We also note a certain lack of Asian perspective in the area of writing on recent developments in translation and interpretation. For example, publications on localization seem to be dominated by Western perspectives (although they may discuss the processes involved in localizing into Asian languages). Both of us being Japanese speakers and thoroughly familiar with the cultural aspects, we hope to add an Eastern perspective to the treatment of the topic,
which may be useful in maintaining the balance of the globalization equation seen from ‘the other’ side.

As we write, technologies are constantly changing. This is the unfortunate mismatch between the static print media we employ and the dynamic technology that this book talks about. This dilemma has been expressed by Negroponte (1995) who published *Being Digital* on paper. To deal with this conflict, our approach is to indicate the areas of ignorance and offer our suggestions for filling in the gap rather than to provide fast and set knowledge to well-defined problems. In doing so, we hope that readers are able to retain awareness of their ignorance as new developments take place and will formulate their own strategies to cope with them. In today’s technological environment, we have to be prepared to accept that we are aiming at moving targets. If this book can provide a framework to effectively deal with future challenges for the parties who are involved in the field of language support, we have succeeded in conveying our message.

**Our Approach and the Scope of the Book**

Our main hypothesis is that technological changes affecting communication modes are going to profoundly impact on the professions of translators and interpreters to such an extent that new professions will result. Our assumption is that new modes of communication employed across languages will both drive and enable new types of language support. But this book is not about technological predictions. Particularly under the current pace of technological innovations, it is almost impossible to predict precisely into what form today’s Web will develop in five years’ time, or to know the exact shape into which mobile communication technology will advance in interaction with the Internet. In full recognition of such unpredictability, we will take the approach of futures research, which accepts uncertainties but facilitates cognisance of factors relevant to future developments of the subject under study. In our case, the relevant factors are the newly-emerging communications contexts in which translation and interpretation need to function.

New domains such as localization are only just beginning to be included in translation programmes by educational institutions despite the fact that localization is becoming an indispensable language support function. In our attempt to explore the nature of the change taking place in translation and interpretation, we have found that localization provides an excellent case for theorizing the emerging paradigm. Localization, particularly in the light of globalization, encompasses a wider range of aspects than merely the message itself, which is subject to language support. Instead of focusing
on the translating and interpreting process in isolation, we have therefore
endeavoured to examine the entire context of communication involved in
the transaction of translation and interpretation. To allow this perspective,
we have taken communicative approaches by applying communication
models of translation such as those developed by Nida and Taber (1969)
and Gile (1995). Communication models have enabled us to take into
account the sender and the receiver of the message subject to translation or
interpretation. Further, we have introduced a framework which we call
‘Translation-mediated Communication’ (TMC) in association with CMC
(Computer-mediated Communication). This approach seems to us to be
particularly suitable for our treatment of translation and interpretation that
are involved in multilingual CMC over the Internet.

Another important path that we follow in this book is an ignorance-
based and learner-oriented approach whereby awareness of the problem is
raised and each learner is able eventually to arrive at a solution on his or her
own accord, depending on the context in which problems need to be dealt
with. Instructors using this book as a text book may find that this approach
drives an instructional methodology that is exploratory and collaborative
rather than pre-determined and teacher-dependent. Such characteristics
seem to fit in with positive dimensions that virtual learning environments
are embracing, as identified by a number of experts (e.g. Kiraly, 2000b;
Warschauer, 1999).

To the extent that we deal with emerging technological environments,
we accept that the scope of this book is limited. Many of the observations
we make may be considered intuitive and subjective. Nevertheless, we
hope they may illuminate the nature of changes taking place in the field of
translation and interpretation, and allow readers to draw their own conclu-
sions in their search for new paradigms of translation and interpretation. In
the spirit of coming to grips with an emerging and constantly evolving
field, we append questions and research ideas at the end of each chapter.

Readership of the Book

This book is written with three main groups of readers in mind. The first
group are practising translators who are increasingly concerned with the
rapidly developing communications media and their implications for their
work, and who want to take advantage of the global marketplace opening
up on the Internet. The book will address such concerns by focusing on key
questions to lead readers into the paradigm of teletranslation. Similarly, the
book is intended for practising interpreters who may be conversant in
using the Internet to do background research for their assignments but
have not experienced remote interpretation, particularly on the Internet with its increasing number of voice platforms.

The second group includes entrepreneurs who wish to provide a language service on the Internet, but are not entirely familiar with the language business, as well as translation managers who are employed from outside the translation sector per se but are nevertheless engaged in multifaceted language solutions in the global communication environment.

Educators comprise the third category of readership. Teachers of translation and interpretation who wish to address emerging issues concerning the immediate and longer-term future direction of the professions may be alerted to key issues. Given recent attempts to narrow the gap between theory and practice in the training of translators and interpreters, it seems appropriate to face up to the changes taking place and to bring these traditional and well-established professional domains into the future.

Organization of Contents

Given that this book is intended for a mixed audience, we offer here brief guidance on the relevance of chapters to different groups of readers. The book is divided into four main parts under which the emerging context for teletranslation and teleinterpretation is explored.

Part One provides the big picture, highlighting the major changes taking place in translation and interpretation (which we refer to as Translation to include both) with the advent of the Internet. We introduce a new framework Translation-mediated Communication (TMC). Chapter 1 describes the traditional function of Translation on the basis of TMC, and highlights issues arising from a newly emerging context in which Translation has to function. Chapter 2 concentrates on a number of specific attributes of the emerging context in the shift to teletranslation and teleinterpretation. The new context includes key concepts such as digital literacy, particularly in light of translation and translator competence. Changes are also considered by describing Translation as a communication system.

Part Two concentrates on technologies, which are both driving and enabling new forms of Translation, together with wider implications of globalization and localization. Chapter 3 looks into natural language processing technologies that have become particularly relevant to the digital communications environment on the Internet. It discusses the developments of language support automation, and tools for translators and interpreters. Chapter 4 turns to technological developments that are driving an underlying change in communications modes, notably Computer-mediated Communication (CMC) modes. On the basis of
specific characteristics of the CMC mode, we introduce a potential hybrid language support called transinterpreting. Chapter 5 examines how the globalization process is fundamentally affecting Translation, in particular with the need for localization. Building on Gile’s (1995) concept of the message consisting of ‘Content’ and ‘Package,’ we highlight a new dimension of Translation: culturalization of the message. The chapter discusses the importance of language management in globalization.

Part Three moves to the coalface of Translation practice by focusing particularly on teletranslation and teleinterpretation. Chapter 6 observes how teletranslation is operating and advancing. It highlights key emerging trends towards mature teletranslation. Chapter 7 turns to remote modes of interpretation such as telephone interpreting in relation to the future development of teleinterpretation. A number of critical issues are discussed in the path towards teleinterpretation. Chapter 8 is an examination of the Internet as a platform for professional developments for translators and interpreters in response to new skill and knowledge requirements. It discusses Web-based courses for translators with reference to case studies, and touches on future prospects for such courses for interpreters.

Part Four changes from the present into the future tense. Chapter 9 envisages the role Translation may play in the future information society based on extensive digital communications networks. It examines the emergence of a new paradigm of language support, and provides a number of future scenarios. Chapter 10, the concluding chapter, draws our argument into a vision of teletranslation and teleinterpretation as the future of translation and interpretation and highlights key issues for Translation-mediated Communication.

Notes

1. The traditional forms of translation and interpretation are aptly symbolized by the name of a publisher established more than two decades ago called Pen and Booth, which published books on translation and interpretation, especially education in this field. Perhaps now it would be ‘Word Processor and Computer.’