

Introducing *Libera* for Japanese: Language Learning for the Mobile Era

By Jack Halpern, The CJK Dictionary Institute

The CJK Dictionary Institute (CJKI) is proud to introduce **Libera**, an innovative bilingual text reading platform for the iPad, and its newest application, **Libera for Japanese**.

Libera combines the strengths of traditional parallel texts with the advanced capabilities of tablet technology, allowing language learners to quickly and enjoyably read authentic texts without the need for constant dictionary lookups. This cutting edge platform provides learners with an entirely new mode of accessing foreign language texts, making language-learning more effective and enjoyable than ever before.

The Benefits of Parallel Texts

“Parallel text” refers to a source text and its translation into another language aligned side by side, as shown below.

I remember him as if it were yesterday, as he came plodding to the inn door, his sea-chest following behind him in a hand-barrow; a tall, strong, heavy, nut-brown man; his tarry pigtail falling over the shoulders of his soiled blue coat; his hands ragged and scarred, with black, broken nails; and the sabre cut across one cheek, a dirty, livid white. I remember him looking round the cove and whistling to himself as he did so, and then breaking out in that old sea-song that he sang so often afterwards :

"Fifteen men on the dead man's chest—
Yo-ho-ho, and a bottle of rum!"

Todavía lo recuerdo como si aquello hubiera sucedido ayer: llegó á las puertas de la posada estudiando su aspecto, afanosa y atentamente, seguido por su maleta que alguien conducía tras él en una carretilla de mano. Era un hombre alto, fuerte, pesado, con un moreno pronunciado, color de avellana. Su trenza ó coleta alquitranada le caía sobre los hombros de su nada limpia blusa marina. Sus manos callosas, destrozadas y llenas de cicatrices enseñaban las extremidades de unas uñas rotas y negruzcas. Y su rostro moreno llevaha en una mejilla aquella gran cicatriz de sable, sucia y de un color blanquizzo, lívido y repugnante. Todavía lo recuerdo, paseando su mirada investigadora en torno del cobertizo, silbando mientras examinaba y prorrumpiendo, en seguida, en aquella antigua canción marina que tan á menudo le oí cantar después:

*"Son quince los que quieren el cofre de aque! muerto
Son quince iyo-ho-ho! son quince iviva el rom!"*

Parallel texts have long been recognized as a powerful tool for language learning because they eliminate many of the traditional obstacles encountered by second-language learners, thus facilitating rapid and effective language acquisition. The main advantages of parallel texts include:

- Freeing learners from tedious dictionary lookups
- Facilitating rapid vocabulary acquisition without rote memorization
- Presenting new vocabulary items in *authentic* contexts
- Exposing learners repeatedly to frequently used words
- Enabling learning through the pleasurable experience of *reading*

Voluntary Reading and Comprehensible Input

The last point, enjoying reading as a *pleasurable experience*, is critical to the success of parallel texts as a learning tool. Prominent language researcher Stephen Krashen contends that *free voluntary reading* is in fact “the most powerful tool we have in language education,” a conclusion based on years of research into foreign language acquisition (Krashen 1989, 2002, 2004). Krashen explains that if the learner is presented with large amounts of understandable reading material (*comprehensible input*) in an enjoyable and stress-free manner, he or she will be able to naturally absorb both vocabulary and grammar with greater efficiency than through traditional classroom learning or rote memorization. In addition, the input should ideally be composed of a topic inherently interesting to the learner and presented at a level slightly above the reader’s current language ability, or, as Krashen calls it, *i+1*.

Parallel texts offer an ideal way to access a huge amount of *i+1* level material that could otherwise be daunting. Numerous studies have shown that parallel texts allow pleasurable, self-motivated reading, greatly expanding the potential for knowledge acquisition. Indeed, where halting, laborious reading can discourage the learner, enjoyable reading can instead generate a self-reinforcing cycle of learning and enjoyment (Clark & Rumbold 2006, Guthrie & Wigfield 2000, Baumann & Duffy 1997, Coady 1997, Nuttall 1996). In this way, readers can avoid the frustration and lack of comprehension that have traditionally discouraged them from pursuing extensive reading in a foreign language.

Indeed, generations of learners have discovered that parallel texts are among the most powerful tools for mastering a new language, a view supported by substantial research evidence (Nerbonne 2000, Barlow 1996). In sum, parallel texts truly *work*.

The Limits of Traditional Parallel Text

For all the advantages of parallel texts, the paper medium has presented challenges that – until now – have been difficult to overcome:

- Placing the source and target languages on facing pages allows only two texts to be displayed, whereas some languages require three or more texts (e.g. romanized Chinese)
- Notes on grammar and vocabulary, when provided, can be inconveniently located
- Learners often struggle to find word-level correspondences between languages, as in the case of non-adjacent words (e.g. *picked the baby up*)

These challenges are unavoidable in traditional parallel texts because they are simply inherent to the paper medium. While Computer-Assisted Language Learning (CALL) has improved the situation somewhat, desktops and laptops are unable to compete with the lightweight mobility of traditional paper-based parallel texts. The true solution for parallel texts is to be found in a new medium altogether.

A New Paradigm for Language Study

To overcome the limitations of paper-based parallel texts, CJKI has developed a new type of hypertext, referred to as **Interactive Parallel Texts** (IPT), designed specifically for second language acquisition. The advent of this new medium allows second-language learners to enjoy the benefits of parallel text outside the bounds of the physical page.

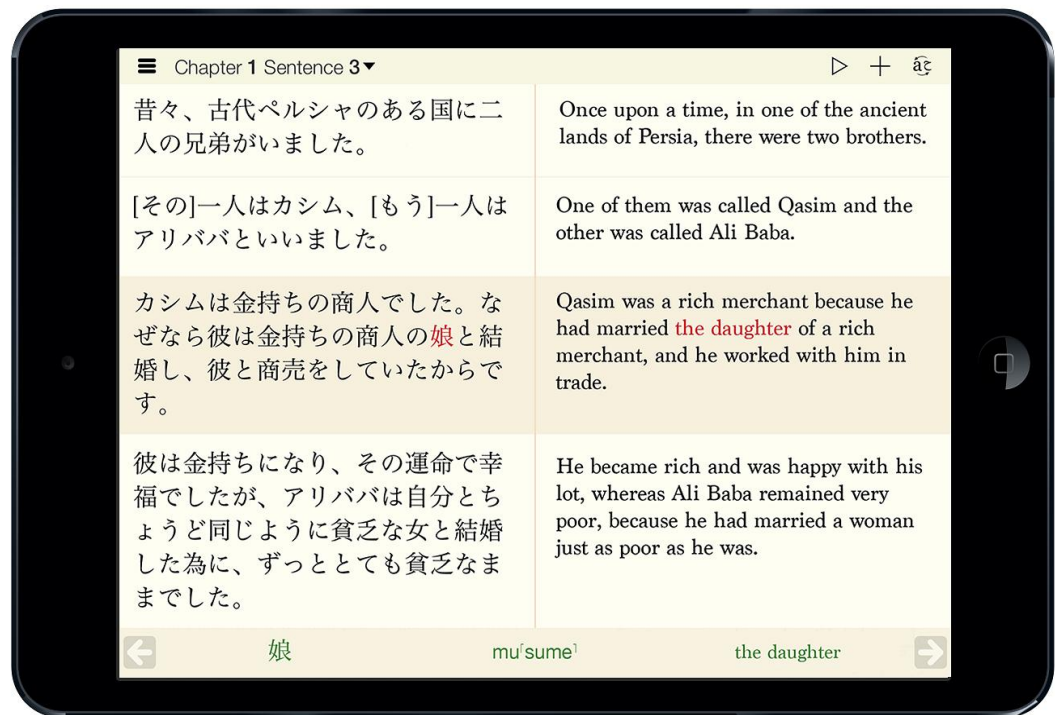
Unlike paper-based parallel texts, interactive parallel texts allow up to *four* texts – from alternate languages to other script forms (e.g. romanization) – to appear side by side for easy viewing. The texts are precisely linked to each other at the *segment* (word or phrase) level, so that tapping a segment in any one text (activating a *bitext link*) simultaneously highlights the linked segment in each of the other texts, even if the segment consists of non-adjacent words (like *pick the baby up*). Interactive parallel texts thus make cross-lingual correspondences linguistically unambiguous and visually clear. Furthermore, tapping a bitext link activates a variety of learning aids including vocabulary glosses, grammar notes, and voice recordings by native speakers.

The CJK Dictionary Institute is pleased to make these capabilities available to language learners through a brand new platform called the Learner's Interactive Bitext Electronic Reading Application, or **Libera**, a state-of-the-art multilingual

environment that promises to transform language learning into a truly enjoyable experience.

Libera and the iPad

Libera was born out of the natural pairing of parallel text with the iPad platform. The iPad is uniquely suited to mobile language education, providing a flexible environment for interface design and allowing for user-friendly, aesthetically pleasing applications with full multimedia capabilities. Moreover, iPad applications are dynamic in a way that desktop software is not – a major reason why the iPad was the natural platform choice. Finally, the iPad's lightweight, mobile design is ideal for today's language learner, who can use the application both at home and in a crowded train with equal ease. Libera thus finds a perfect home in the iPad, harnessing the flexibility of the platform to create an entirely new learning environment.



The Power of Libera

To ensure a seamless user experience, Libera was designed with several key concepts in mind.

First, Libera is **effective**. It naturally offers all the benefits of traditional parallel texts, building the reader's vocabulary and grammar skills in a natural and enjoyable way. In fact, Libera is an ideal application of Krashen's theories of language acquisition, immediately turning even difficult foreign language texts into *comprehensible* input. Users are thus no longer restricted to *i+1* level text,

because with Libera they can read at higher levels without loss of understanding.

Second, Libera is **efficient**. Like traditional parallel texts, Libera frees the learner from time-consuming consultation of dictionaries and grammar books. Furthermore, segment-level links save the learner substantial time and effort: rather than laboriously parsing “The mother picked the baby up in her arms” to find the main verb, touching either the word “picked” or “up” will simultaneously highlight both words in addition to their equivalents in the other versions of the text. Finally, customized dictionaries, supplemental vocabulary glosses, grammar notes, and recordings of native pronunciation are all available at the user’s fingertips, eliminating the nuisance of switching between several apps and references.

Finally, Libera is **intuitive**. A carefully designed user interface offers a host of features and capabilities without sacrificing the elegant simplicity of parallel texts. Special effort was made to ensure a clean, uncluttered screen, and gestures and buttons were carefully designed to be as user-friendly as possible. Furthermore, users can access nearly all supplemental features, such as glosses, voice recordings and grammar notes, simply by tapping on the text.

A Breakthrough in Japanese Learning

Libera for Japanese, the newest of over 60 mobile language learning applications from CJKI, represents a new generation of language learning technology. Joining CJKI’s first Libera title, Libera for Arabic, Libera for Japanese currently tells the classic fable of *Ali Baba and the Forty Thieves* from *One Thousand and One Nights*. Before long, the Libera series will expand to include a broad selection of native Japanese texts.

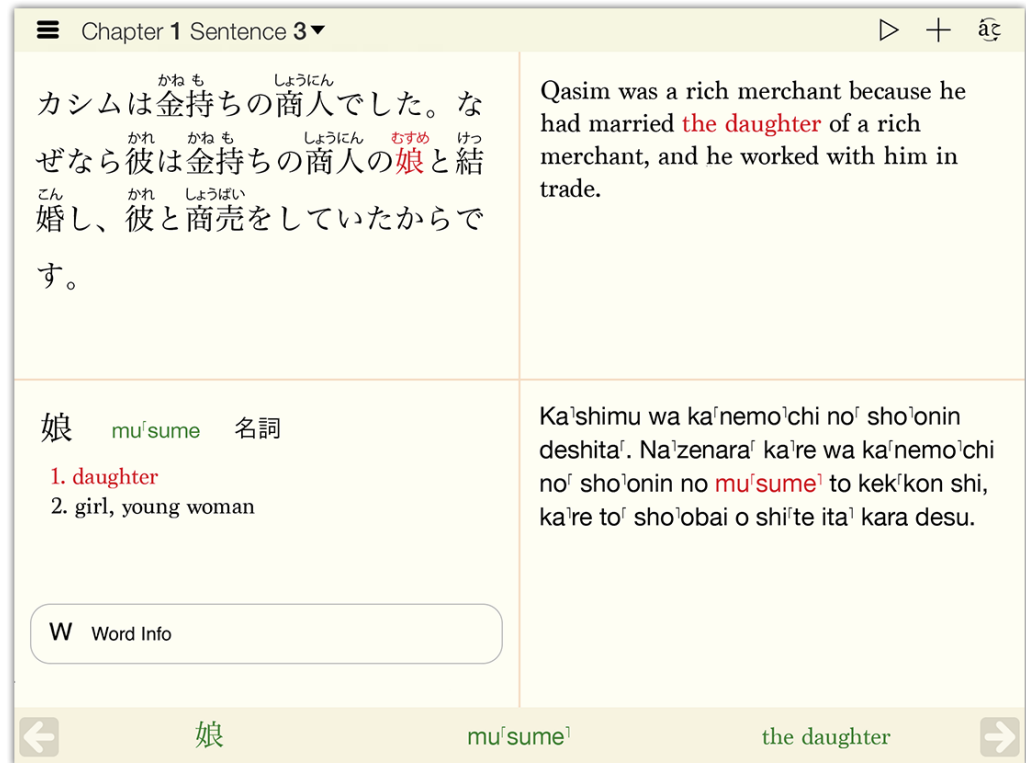
“*Libera for Arabic is a revolution in the field and should be well received by educators and students.*”

Miled Faiza,
Lecturer of Arabic, Brown University

With CJKI’s history of developing innovative study materials for learners of Japanese, extending Libera to the Japanese language was a natural choice. Indeed, Japanese is considered to be one of the most difficult languages to learn and presents a number of challenges that Libera is particularly well positioned

to solve. These include, for instance, the complex writing system with thousands of Chinese characters (*kanji*) and the marked differences between English and Japanese grammar, many of which prove extremely frustrating for learners. Libera allows readers of various levels to navigate kanji with ease, and unambiguous word and phrase correspondences help to elucidate difficult syntax. In short, Libera promises to make Japanese reading truly accessible.

Japanese Reading Made Easy



The screenshot shows the Libera app interface for a Japanese sentence. The top bar displays 'Chapter 1 Sentence 3' and navigation icons. The main content is divided into three sections:

- Top section:** A Japanese sentence with furigana: 'カシムは金持ちの商人でした。なぜなら彼は金持ちの商人の娘と結婚し、彼と商売をしていたからです。' The word '娘' (daughter) is highlighted in red.
- Middle section:** The English translation: 'Qasim was a rich merchant because he had married the daughter of a rich merchant, and he worked with him in trade.' The word 'daughter' is highlighted in red.
- Bottom section:** A word definition for '娘' (mu'sume), categorized as a noun (名詞). The definitions are: '1. daughter' and '2. girl, young woman'. Below this is a 'Word Info' button.

At the bottom of the screen, there is a navigation bar with arrows and the text: '娘 mu'sume the daughter'.

As many learners of Japanese well know, reading a native Japanese text unaided is no small feat. Word parsing and, of course, reading kanji are among the sizable difficulties presented by the Japanese language. Unfortunately, the parsing challenge has gone largely unacknowledged, and while some parallel texts attempt to respond to the kanji problem with *furigana*, this system encourages the use of the kana as a crutch, inhibiting the mastery of kanji.

Libera for Japanese addresses this second issue by offering multiple text options, with up to four texts displayed simultaneously. Users may choose to use the **native Japanese source text**, with or without furigana, or they may choose to view both versions at the same time. In addition, Libera for Japanese offers a **hiragana-only** version of the text, which eliminates the parsing problem by including spaces to indicate word breaks.

In addition to these options, Libera for Japanese offers a **Phonemic Romanization System**, an important aid for elementary and intermediate learners. In addition to the traditional Hepburn romanization system, CJKI has developed a new, expanded Hepburn romanization (see lower right panel of the previous graphic). This system is one of the first to show *pitch accent*, or modulation in vocal pitch. Explicit indication of this essential but largely overlooked component of Japanese will help users to polish their pronunciation.

Finally, Libera for Japanese features a natural, highly readable **English version**. Taken together, this array of text options arms the Japanese learner with powerful tools for acquiring the language efficiently.

Key Features

In addition to offering multiple versions of the text, Libera for Japanese provides a full range of features designed to support and enrich the user's learning experience.

Segment-level Features

Customized dictionary. Specially created for Libera for Japanese, the customized Japanese-English dictionary displays the pronunciation and part of speech for each word in the text. As a feature unique to Libera, the dictionary indicates the meaning of the word *in context*. In this example, the red highlight indicates that in this sentence, “娘” is used in the sense of ‘daughter’ rather than in the sense of ‘girl, young woman’.

かねも しょうにん むすめ
金持ちの商人の娘と
娘 mu'sume 名詞
1. daughter
2. girl, young woman

Kanji dictionary. In order to help users to overcome one of Japanese's greatest linguistic hurdles, Libera for Japanese offers a specialized **kanji dictionary** based on the world-renowned **Kodansha Kanji Learner's Dictionary**, the best kanji learner's dictionary available today. This presents important information for each kanji used in the text, ultimately providing a richer understanding of the text itself.

Segment bar. The English language equivalents for each segment can also be shown in the **segment bar**, which displays at the bottom of the screen the

娘 mu'sume¹ the daughter

Japanese, English, and romanization of the highlighted segment. Tapping the segment bar brings up the Word Info page (see below) for that segment, providing the reader with more complete information on the selected word. The segment bar feature is particularly convenient for more advanced users who need occasional help in reading the Japanese text on its own without referring to the translation.

Word Info. For more in-depth information on specific words, the **Word Info** page offers both the dictionary entry and full example sentences for each word. This feature is well suited to concentrated vocabulary study, in which multiple example sentences provide a fuller picture of each word.

Words	Favorites	Word info	Close	
Selected words		<p>思い付く verb</p> <p>1. think of, hit on; occur to one 2. think of (what one had forgotten), remember</p> <hr/> <p>彼はふと、盗賊の首領が叫んだと同じように叫んでみようと思い付きました。</p> <p>Ka¹re wa fu¹to¹, to¹ozoku no¹ shu¹ryō ga¹ sa¹kenda¹ to o¹naji yo¹o ni sa¹kende miyo¹o to o¹moitsukima¹shita.</p> <p>It occurred to him to shout like the leader of the thieves had shouted.</p> <hr/> <p>それから彼女は恐ろしい企みを思い付いたのです。そして彼女は大きな銅の鍋を持って来て、その中に 2つの瓶から取った油を入れました。</p> <p>So¹re kara ka¹nojo wa o¹soroshi¹li ta¹kurami o¹ o¹moitsu¹lita no desu. So¹shite ka¹nojo wa ¹o¹oki na ¹do¹o no ¹na¹be o mot¹te ki¹te, so¹no na¹ka ni fu¹tatsu¹ no ka¹me¹ kara ¹tot¹ta a¹bura o¹ i¹rema¹shita.</p> <p>Then a cunning trick occurred to her, and she brought a large copper pot and filled it with oil from the two jars.</p>		
All words				
W	思い付く			
W	思い続ける			
W	思い詰める			
W	思い出			
W	思い出話			
W	思い通り			
W	思いとどまる			
W	思いとどむ			
W	思い直す			
W	思い直る			
W	思いなしか			
W	思い悩む			

Favorite words. As a further aid to vocabulary building, Libera enables learners to build a list of **favorite words** as they read. This list links directly to the Word Info page for each word, so learners can quickly see English equivalents and examples for unfamiliar words. By storing a list of favorite words, the learner can quickly and easily review key vocabulary items.

Grammar Notes. In addition to information at the word and segment level, **Grammar Notes** help learners make sense of challenging syntax. These notes are indicated by color coding and can be viewed with a simple touch, offering quick access to a deeper understanding of word usage and sentence structure.

なぜなら nazenara

because, as

The conjunction なぜなら forms a subordinate clause indicating cause or reason for an event described in the main clause. It is usually followed by such combinations as noun/stem of an adjectival noun plus だから, predicative form of a verbal stem plus から, and noun/stem of an adjectival noun plus なので. For example, (私は)心配なので meaning 'since I am worried about...'.

カシムは金持ちの商人でした。なぜなら彼は金持ちの商人の娘と結婚し、彼と商売をしていたからです。

Qasim was a rich merchant because he had married the daughter of a rich merchant, and he worked with him in trade.

彼は集めたものを袋に入れて、それらを急いでロバに積みました。なぜなら、彼は時間が刻々と過ぎて行くのを感じて、盗賊が洞窟に戻って来たら、殺されてしまうのではないかと恐れたからです。

He put what he gathered into sacks and hurriedly carried them to

Full Audio Functionality

In addition to the rich set of text-based features above, various audio features allow learners to sharpen their listening and pronunciation abilities:

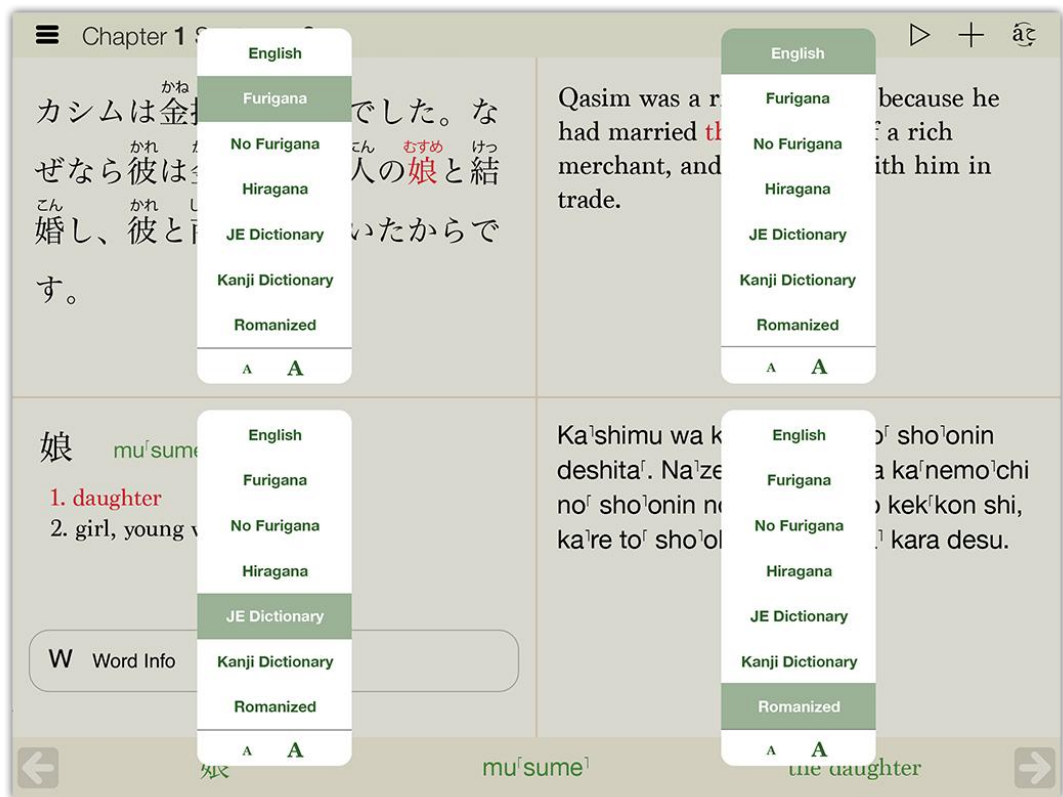
- **Full, native recordings** of the text, with multiple voice options, offer a clear and pleasing listening experience
- Recordings of both **full sentences** and **individual words** help readers discern subtle differences between pronunciations of isolated words and continuous speech
- **Adjustable audio speed** allows users to listen to the native pronunciation at a comfortable pace
- Optional **background music** provides a more immersive experience in the world of the story

By tapping into the iPad's unique multimedia potential, Libera offers an all-around Japanese-learning platform well beyond the scope of a simple reading aid.

Multi-panel Interface

Libera's text- and audio-based features come together in the innovative multi-panel interface. The user has a choice of three different reading modes: the one-panel **Single Text Mode**, the two-panel **Bitext Mode**, and the four-panel **Sentence Mode**. In addition, there is an audio-only Listen Mode for practicing listening comprehension. The user is free to choose the contents of each panel from the following:

- English
- Japanese without furigana
- Japanese with furigana
- Hiragana only
- Japanese-English dictionary
- Kanji dictionary
- Hepburn romanization
- Extended Hepburn romanization



Each panel view offers different learning strategies, with several possible examples outlined below:

Single Text Mode. This **one-panel** mode is best suited for advanced learners who wish to test their ability by reading the text mostly unaided. The segment bar is particularly useful here for segment-level help.

Bitext Mode. Perhaps the most natural mode for those accustomed to paper parallel texts, the **two-panel** Bitext Mode allows side-by-side study of English and Japanese. Depending on their level, users may choose to display Japanese with furigana, without furigana, or with hiragana only.

Sentence Mode. This **four-panel** mode is ideal for in-depth study of the text, as it allows careful, sentence-level analysis. A typical use of this mode would include Japanese, English, Japanese romanization, and the dictionary, allowing the reader to carefully step through even difficult sentences with ease.

Listen Mode. For students who wish to test their listening comprehension, Listen Mode offers the option to listen to the voice recording of the story without seeing the text. Customizable audio speed makes this mode accessible to both intermediate and advanced learners.

Libera for Japanese **SUMMARY OF FEATURES**

- Customized Japanese-English dictionary
- Kanji dictionary
- Segment bar
- Hiragana-only text
- Optional furigana
- Multiple romanizations
- Word Info screen
- Favorite word list
- Grammar Notes
- Full audio recordings

In short, **Libera** offers a complete, multimedia language-learning environment for students of Japanese, putting all the tools necessary for rapid learning at the user's fingertips. By making the learning experience effective and enjoyable, Libera promises to transform the face of computer-aided language learning.

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Jack Halpern

Jack Halpern (春遍雀來), CEO of **The CJK Dictionary Institute**, is a lexicographer by profession. For sixteen years was engaged in the compilation of the *New Japanese-English Character Dictionary*, and as a research fellow at Showa Women's University (Tokyo), he was editor-in-chief of several kanji dictionaries for learners, which have become standard reference works.



Jack Halpern, who has lived in Japan over 40 years, was born in Germany and has lived in six countries including France, Brazil, Japan and the United States. An avid polyglot who specializes in Japanese and Chinese lexicography, he has studied 15 languages (speaks nine fluently) and has devoted several decades to the study of linguistics and lexicography.

Jack Halpern has published over twenty books and dozens of articles and academic papers, mostly on the Japanese writing system and CJK information processing, has given over 600 public lectures on Japanese language and culture, and has presented several dozen papers at international conferences.

On a lighter note, Jack Halpern loves the sport of unicycling. Founder and long-time president of the International Unicycling Federation, he has promoted the sport worldwide and is a director of the Japan Unicycling Association. Currently, his passion is playing the quena and improving his Chinese, Esperanto and Arabic.

The CJK Dictionary Institute



The CJK Dictionary Institute, Inc. specializes in Chinese, Japanese and Korean lexicography. CJKI is headed by Jack Halpern, editor-in-chief of the *New Japanese-English Character Dictionary* and various other dictionaries that have become standard reference works for studying Japanese. CJKI is one of the world's prime sources for CJK and Arabic dictionary data, and is contributing to CJK information processing technology with its high-quality lexical resources.

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