



EbookCentral: tu plataforma de libros electrónicos

Mayo 2025

Aina Giones Valls, Associate, Customer
Success & Training



Objetivos de la sesión

Buscar contenido de investigación y aprendizaje, utilizando el Asistente de Investigación de IA Generativa

Conocer la accesibilidad dentro de Academic Complete



Inteligencia artificial y generativa en ProQuest

Ampliar los límites de la investigación y la educación mediante la aplicación responsable de la IA

Comprometidos con:

Impulsar la integridad de la investigación

Avanzar en los resultados del aprendizaje

Aumento de la productividad



Ebook Central Research Assistant | Nuestros objetivos

Beneficios para estudiantes y bibliotecas



Ofrezcer información a nivel de capítulo combinando la IA generativa

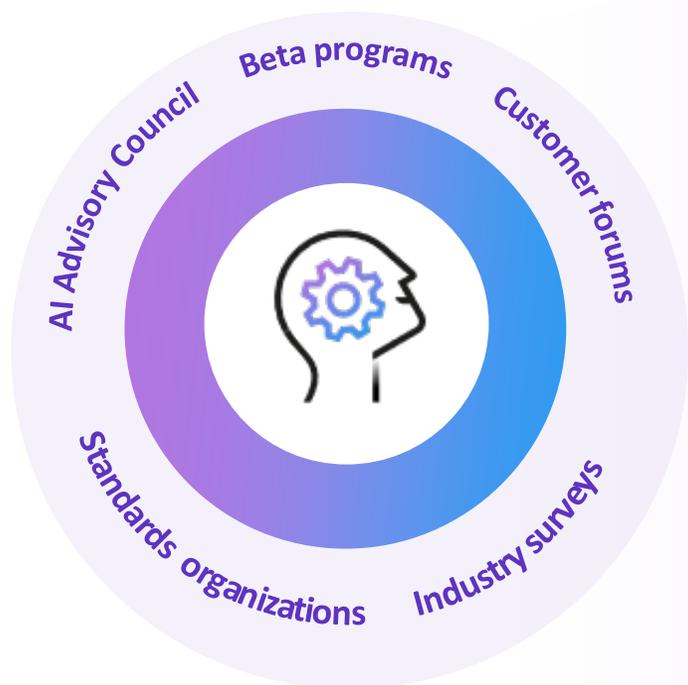


Mejorar el compromiso y la comprensión



Maximizar el valor

Principios de IA responsable



Oportunidades:

- Descubrimiento de contenido
- Información a partir de los datos
- Aprendizaje personalizado
- Productividad del personal

Preocupaciones:

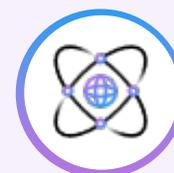
- Sesgos y alucinaciones
- Atajos de aprendizaje
- Malas praxis (por ejemplo, fábricas de papel)
- Plagio
- Impacto ambiental

Marco de IA



Transparente

- Información clara sobre las fuentes de contenido utilizadas
- Atribución adecuada y fácil acceso a las obras citadas



Ético

- Medidas para reducir la mala información
- Colaboración con los editores para garantizar derechos de uso claros
- Colaboración con organizaciones de la industria para implementaciones responsables de IA



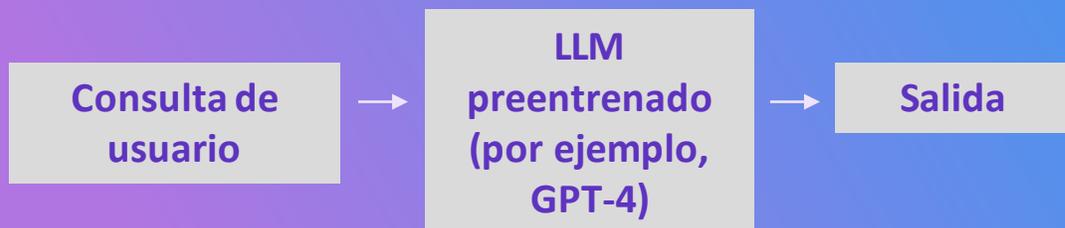
Seguro

- Humano en el bucle
- Mantener los estándares de privacidad y seguridad
- Cumplimiento de las regulaciones globales existentes

LLM de propósito general

Datos de entrenamiento: "La Web"

- Inespecífico, no transparente PERO, eficaz para capacitar al LLM para:
 - Comprender los patrones
 - Cree salidas de texto coherentes
 - Traducir

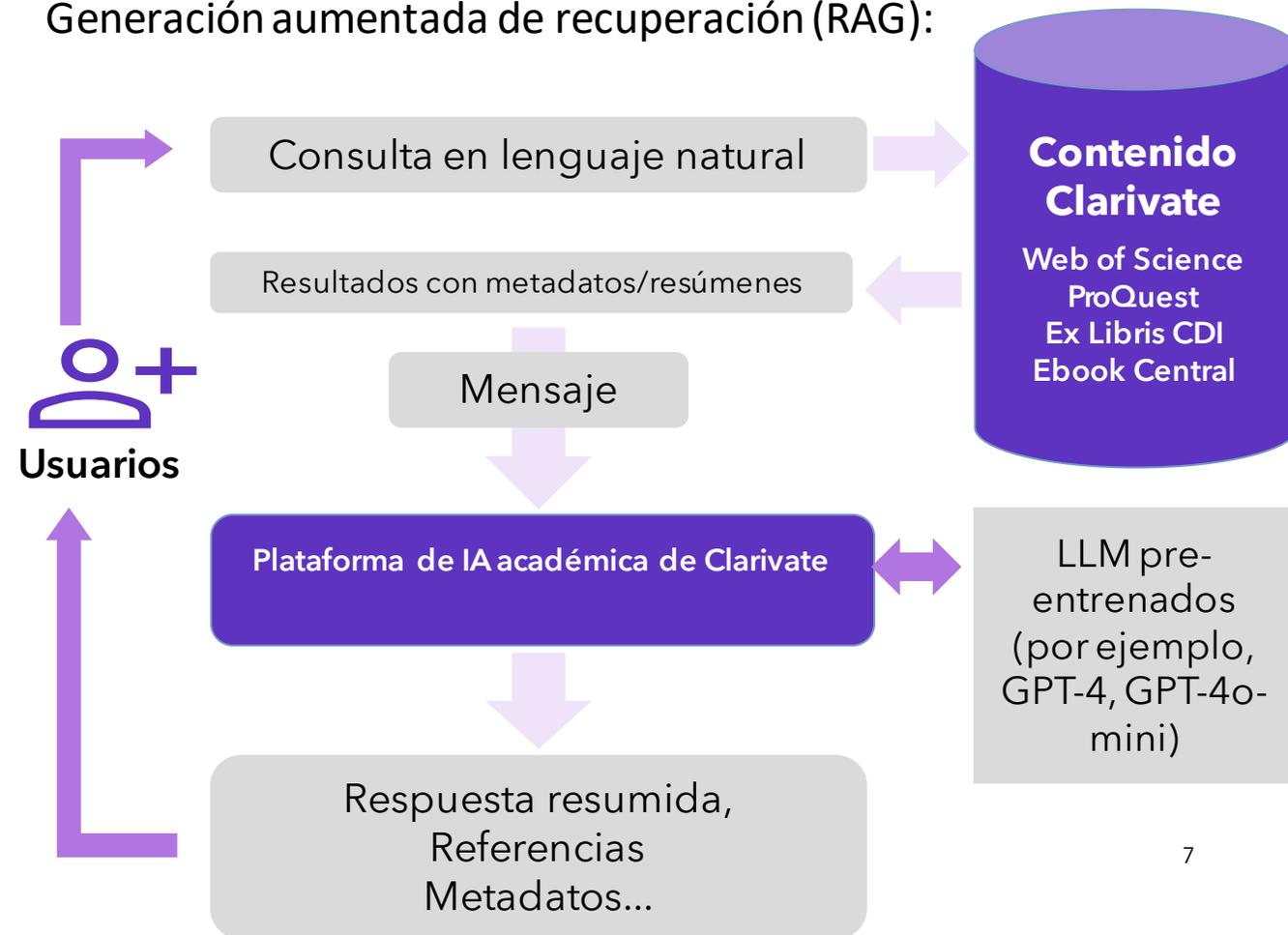


IA académica:

Conexión a tierra de la salida en contenido de confianza

- Los resultados se basan en hechos e información confiables
- Minimizar las alucinaciones y los prejuicios

Generación aumentada de recuperación (RAG):





Demo

Ebook Central

Ebook Central™ Research Assistant BETA

Key Features for Student Success - Overview

8 Insects That Use Plant Defenses for Their Own Protection

8.1 Introduction

Diverse chemical defenses in plants, with strong odors, bitter tastes, or toxic properties, deter many insects from eating the plants (see Chapter 4). Yet, there are numerous examples where insects have not only adapted to feed on such plants, in spite of the defensive compounds, but they have also developed mechanisms to store the ingested plant defenses in their bodies and use them for their own protection. Predators like birds that eat the insects become sick and learn to avoid them. Bright warning colors (*i.e.* the aposematic colors) frequently alert potential predators about the toxicity or poor taste of these insects. Examples of insects that store toxins and exhibit warning colors have appeared earlier in this book in various contexts, *e.g.* in Figure 1.3 in Chapter 1 and Figure 5.10 in Chapter 5. You will find more examples in this chapter.

A variety of mechanisms enable certain insects to store plant toxins. Some insects sequester the plant defenses in select, well-separated parts of their bodies. Other insects can reduce or eliminate the toxic properties of the compounds by modifying them to related, non-poisonous compounds. The defensive compounds may be converted back to the toxins in animals preying on the insects. Many monophagous and oligophagous insects, *i.e.* insects that specifically feed on one type of plant or a few related plants, are connected with host plants that feature distinct chemical defenses. The numerous sequences of short life cycles strongly support natural selection of those insects that can adapt to otherwise deterring plant compounds and that can even use them in their own defense.

Many types of butterflies and moths are known to acquire toxicity from plants because their larvae, the caterpillars, feed on poisonous plants. The emerging adults mostly sip flower nectars, but they still contain enough of the chemical defenses in their bodies to make predators that eat them ill. Aphids, members of the superfamily Aphidoidea, are widespread sap-sucking insects, and many of them are plant pests in agriculture.¹ Their numerous life cycles per year, especially in mild climates, allow them to quickly adjust not only to environmental conditions, but also to host plants and their chemistry. Many plants that contain toxins have specialized aphids that feed on them in spite of the defensive compounds. In the process these aphids ingest chemical protection for themselves.

This chapter presents classic examples of *coevolution* between insects and plants. Through evolution many plants developed chemical defenses as a protection against herbivorous insects. In response, many phytophagous insects have counteradapted to the plant defenses and sometimes even use them for their own defense. Compare these mutual adaptations with those that evolved – and that keep evolving – between plants and their insect pollinators (Chapter 2).

The following chapter sections describe specific examples of insects that obtain chemical protection from plants. The descriptions also point out the chemical characteristics of the defensive compounds involved.

8.2 Monarchs, Milkweeds, and Cardiac Glycosides

Monarch butterflies (*Danaus plexippus*) have long fascinated people because of their far-reaching seasonal migrations, but also because of their toxicity to birds that try to eat them. The connection between milkweeds (*Asclepias* sp.) serving as food plants for the monarch caterpillars and the toxicity of the adult butterflies was suggested by E. B. Poulton as early as 1914.² This work presents a famous case of the intersection of biology and chemistry and illustrates a classic example of insects specializing on toxic host plants and using the poisons for their own protection. Milkweed plants (*Asclepias* sp., Family Apocynaceae) are native to North and Central America. Their common name alludes to the white latex in all parts of the plants (compare Chapter 4.8). Their systematic name, *Asclepias*, was assigned by the botanist Carl Linnaeus. It is related to Asclepius, the Greek god of healing, because of the heart-active properties of milkweed plants. Ongoing studies on how insects are able to detoxify and thus tolerate the chemical defenses demonstrate continued interest in these insect–plant interactions.³

Figure 8.1 shows various stages of the monarch's life cycle: a caterpillar eating milkweed leaves (Figure 8.1(a)), the fully developed butterfly feeding on flower nectar (Figure 8.1(b)), and a cluster of overwintering monarch butterflies (Figure 8.1(c)), a phenomenon that is part of the annual migration of the butterflies. Note the warning colors of the insects. The mechanisms that enable monarch butterflies and their caterpillars to store the toxic defenses are still under investigation.

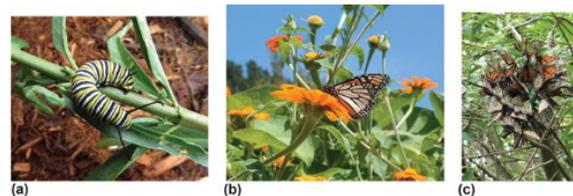


Figure 8.1 Life stages of the monarch butterfly (*Danaus plexippus*). (a) Monarch caterpillar feeding on milkweed (*Asclepias* sp.). (b) Adult monarch butterfly feeding on nectar of *Zinnia* flowers. (c) Cluster of overwintering monarch butterflies.

Aside from the monarch butterflies there is a suite of other insects that also feed on *Asclepias* species. Milkweed beetles (*Tetraopas tetrophthalma*, Figure 1.3(b)), milkweed bugs (*Oncopeltus fasciatus*, Figure 1.6(c)), and milkweed (or oleander) aphids (*Aphis nerii*, Figure 4.17(b)) all ingest the plants' toxins without harm and use them for their own defense. Note that all these insects display bright warning colors. Leaves and stems of milkweeds contain a particularly high concentration of the toxins in their "milk" or latex, with the highest pressure of the latex in the veins of the leaves (compare Chapter 4.8). These insects have adapted to ingest small portions of the leaves, often cutting plant veins first to release the pressure. Thus the dose of the ingested toxins is low and tolerable for the insects. As a further benefit, the food plants survive.

The toxicity of the plants' latex is mainly due to cardiac glycosides. As the name 'cardiac' implies, these compounds affect (and inhibit) the proper functioning of the heart muscle. The determination of the structures of these compounds – with thoughts of potential medicinal applications – was the topic of intense research in the 1960's.⁴ The chemical structures of cardiac glycosides consist of three general components: a steroid backbone structure (shown with conventional numbering and labeling in 8.1 in Figure 8.2), a sugar moiety attached to C3 of the steroid ring system, and a characteristic ring attached to C17. Check each of the structures shown in Figure 8.2 for these three components.

Research Assistant BETA

Chemistry of Plants and Insects: PL...

Here is the **overview** about this book

Have you ever wondered how plants attract certain insects, or how insects communicate with each other? This book explains the natural chemical compounds that determine the fascinating interactions between plants and insects providing a gentle and absorbing introduction to organic chemistry that is highly relevant to everyday life and to the natural world. Specific organic compounds and intriguing chemistry determine whether insects are keen on feeding on plants or avoid certain plants altogether. Some insects have learned to use plant compounds as their own defences, and some plants use digestive processes to use insects as nutritional supplements. Plant-insect interactions are vital for our food supply, for pollination of orchards or detrimentally in insect infestations of crops, as well as in applications like silk production. By the author of the popular book, *The Chemistry of Plants: Perfumes, Pigments, and Poisons*, this book benefits from Margareta Séquin's vast experience leading field trips and seminars to botanical gardens and

8 Insects That Use Plant Defenses for Their ...

Show key takeaway from this chapter.

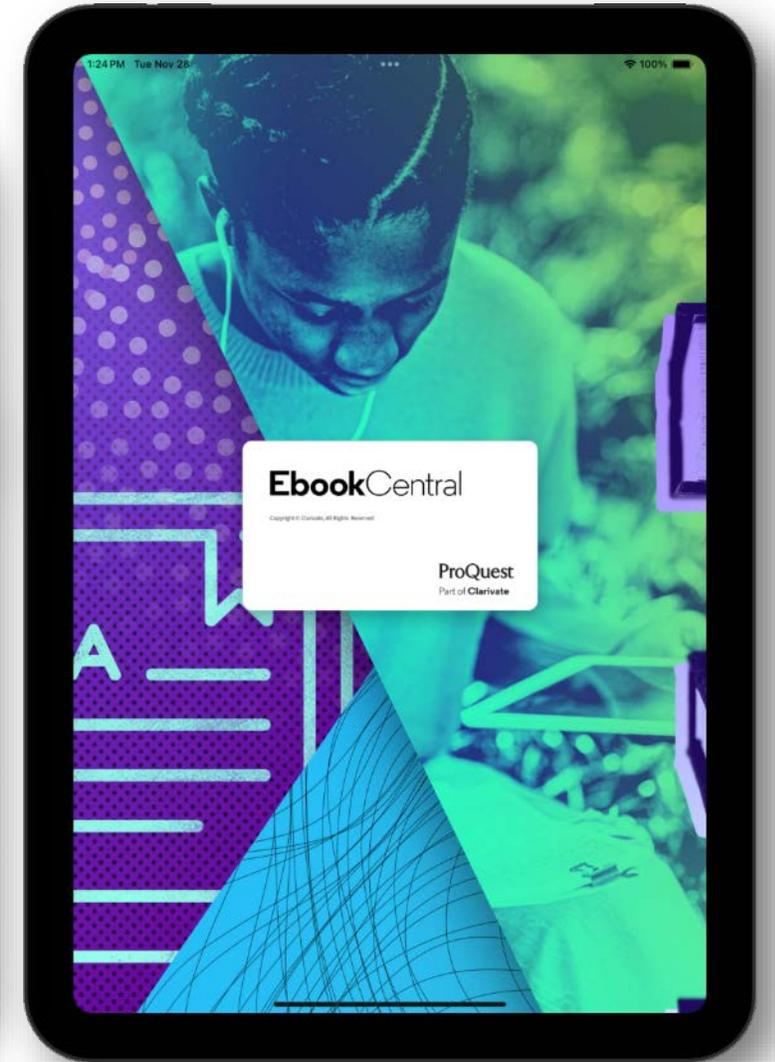
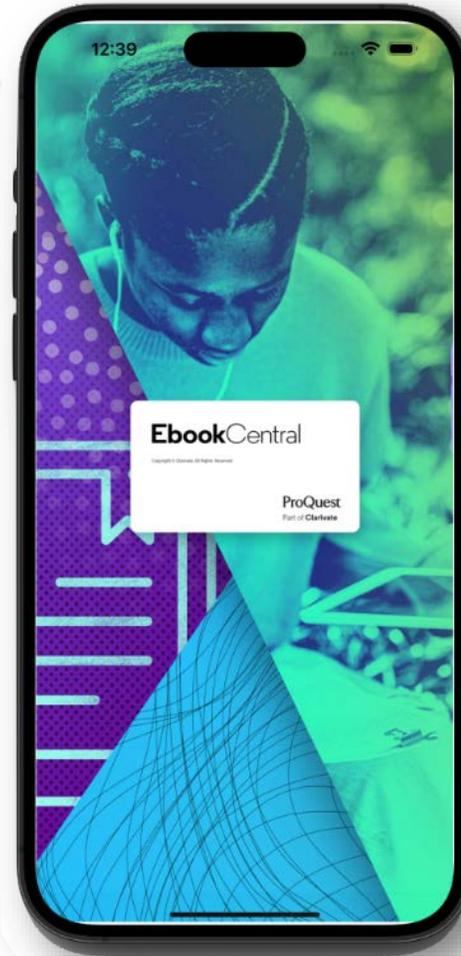
Show concepts discussed this chapter.



Nueva aplicación

Ebook Central Reader App | Próximamente

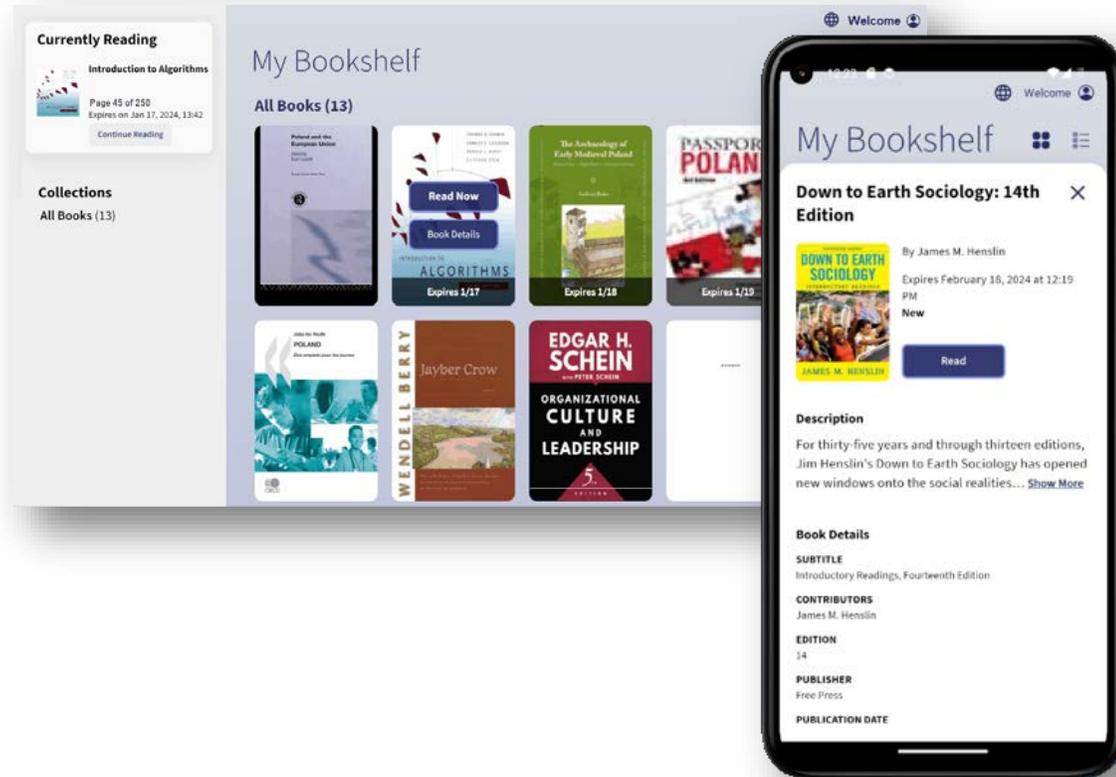
- La aplicación EBC Reader sustituye a Adobe Digital Editions (ADE) para los principales sistemas operativos (Windows, Apple, iOS, Android)
- Autenticación optimizada
- Experiencia de usuario mejorada con una interfaz de usuario nueva
- Una plataforma más segura, que protege el contenido de la piratería o el uso indebido
- Mejoras continuas de funciones para seguir llegando a nuestros usuarios donde estén



Ebook Central Reader App | Coming soon

Improving Student Outcomes

My Bookshelf View



Reader View



Aplicación Ebook Central Reader| Pronto



Experiencia de usuario

- **Integración perfecta:** Integración sencilla con la web de Ebook Central sin necesidad de credenciales adicionales
- **Gestión de dispositivos:** Control total sobre la gestión de dispositivos directamente dentro de Ebook Central Web
- **Compatibilidad con los principales sistemas operativos:** Windows, Mac, Android e iOS
- **Soporte multilingüe:** Interfaz de usuario mejorada que admite varios idiomas
- **Accesibilidad:** Desarrollado teniendo en cuenta la accesibilidad



Experiencia de lectura

- **Detalles detallados del libro:** Un panel detallado de detalles del libro con metadatos, tabla de contenido y descripciones de libros
- **Experiencia de lectura unificada:** Compatibilidad con la lectura y navegación tanto de EPUB como de PDF
- **Ajustes de lectura ajustables:** Opciones para modificar el tamaño de la fuente y el nivel de zoom para una comodidad de lectura óptima
- **Navegación sencilla:** Saltar directamente a una página específica o usar la Tabla de contenido



Gestión de libros

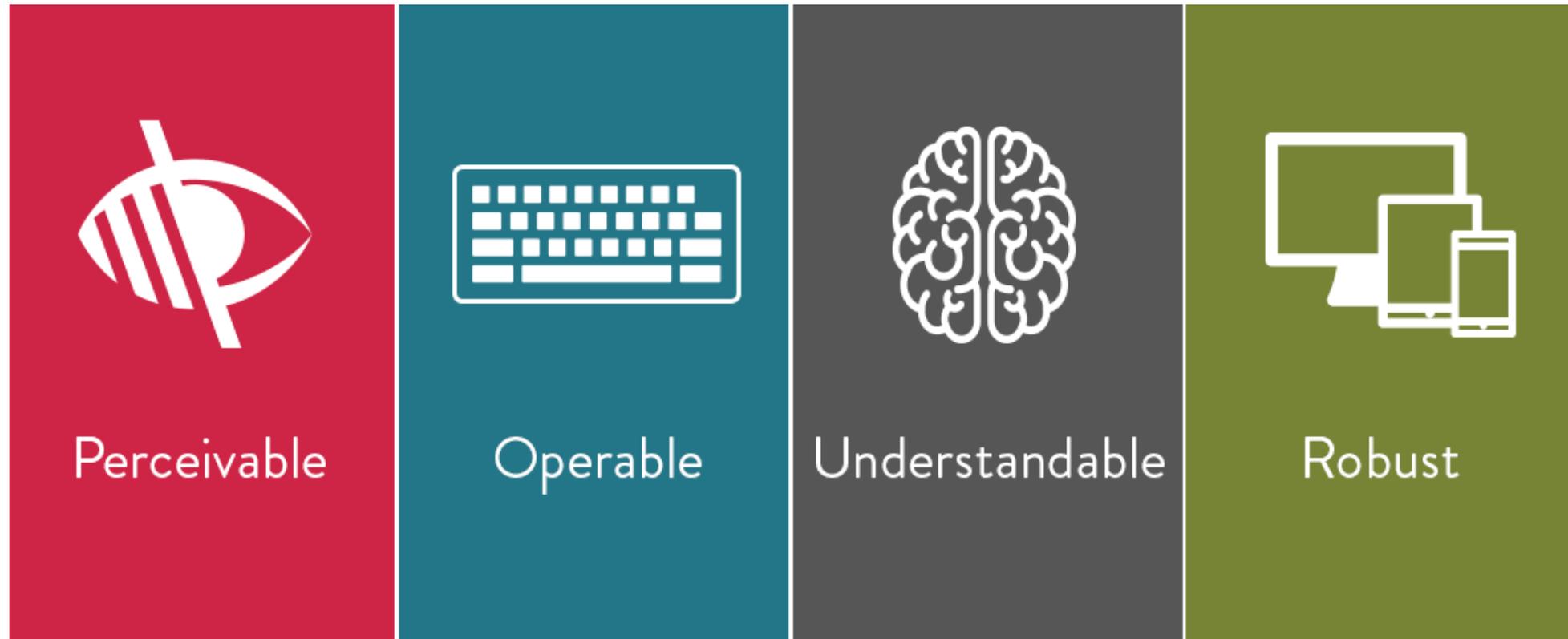
- **Descargar y eliminar:** Descargue libros para leer en el dispositivo y luego elimínelos cuando ya no los necesite
- **Widget de lectura actual:** Widget de acceso rápido en la pantalla "Mi estantería" para reanudar la lectura al instante
- **Seguridad del contenido:** Mayor protección en torno al contenido disponible dentro de la aplicación; protege la propiedad intelectual, etc.



Acesibilidad en eBook Central



Principios de accesibilidad



Principios de accesibilidad

- ProQuest se compromete a proporcionar una experiencia totalmente accesible para la investigación, la enseñanza y el aprendizaje.
- Ebook Central ha sido verificado por ASPIRE con una puntuación del 100%.
- Ebook Central se diseña y desarrolla continuamente para cumplir con el Nivel AA de las Pautas de Accesibilidad al Contenido Web del W3C (WCAG 2.2)
- Sección 508 de la Ley de Rehabilitación de EE. UU. para características y funciones.
- Más detalles sobre la Declaración de Accesibilidad de Ebook Central y el Informe de Cumplimiento de Accesibilidad



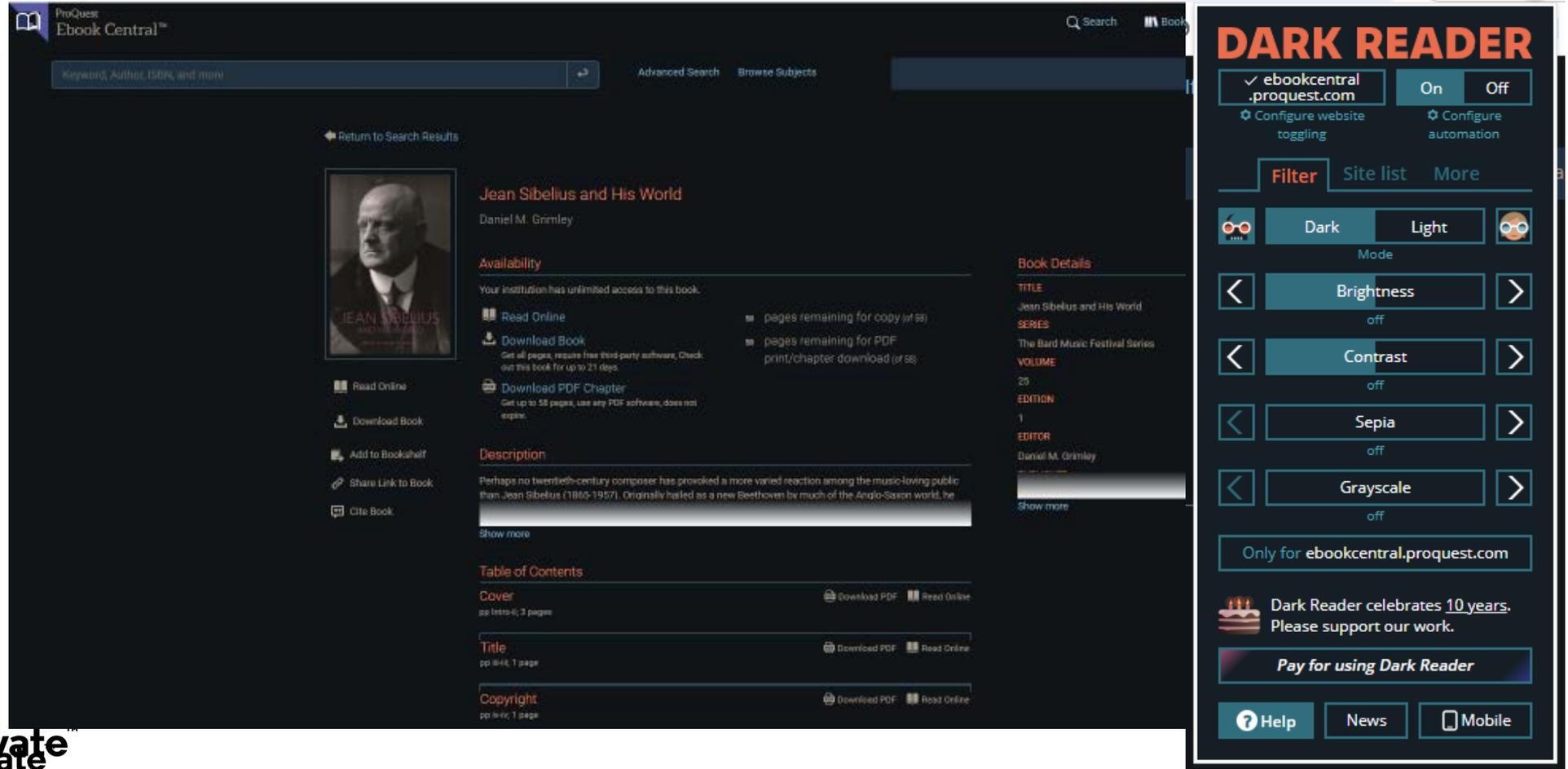


Ebook Central Accessibility Statement

- ProQuest se compromete a proporcionar una experiencia totalmente accesible para la investigación, la enseñanza y el aprendizaje.
- Ebook Central ha sido verificado por ASPIRE con una puntuación del 100%.
- Ebook Central se diseña y desarrolla continuamente para cumplir con el Nivel AA de las Pautas de Accesibilidad al Contenido Web del W3C (WCAG 2.2)
- Sección 508 de la Ley de Rehabilitación de EE. UU. para características y funciones.
- Más detalles sobre la Declaración de Accesibilidad de Ebook Central y el Informe de Cumplimiento de Accesibilidad

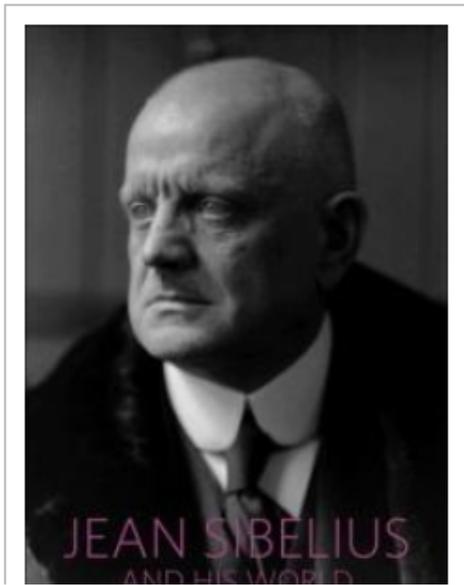
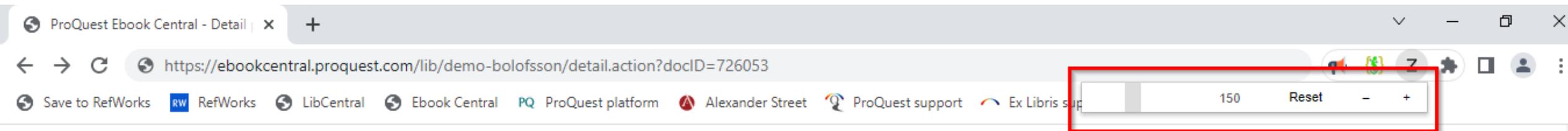
Contrast

Las extensiones del navegador están disponibles para cambiar las opciones de color y contraste. Ejemplos: Dark Reader para Chrome y Color Changer para Firefox.



Ampliación de página

Ejemplos de complementos para navegadores: ofertas de Firefox NoSquint, Los usuarios de Chrome pueden habilitar Zoom para la ampliación de la página web.



Jean Sibelius and His World

Daniel M. Grimley and Daniel M. M. Grimley

Availability

Your institution has unlimited access to this book.

 Read Online

51 pages remaining for copy (of 51)



Conversión de texto a voz

No hay una herramienta integrada de texto a voz en Ebook Central. La conversión de texto a voz está integrada en:

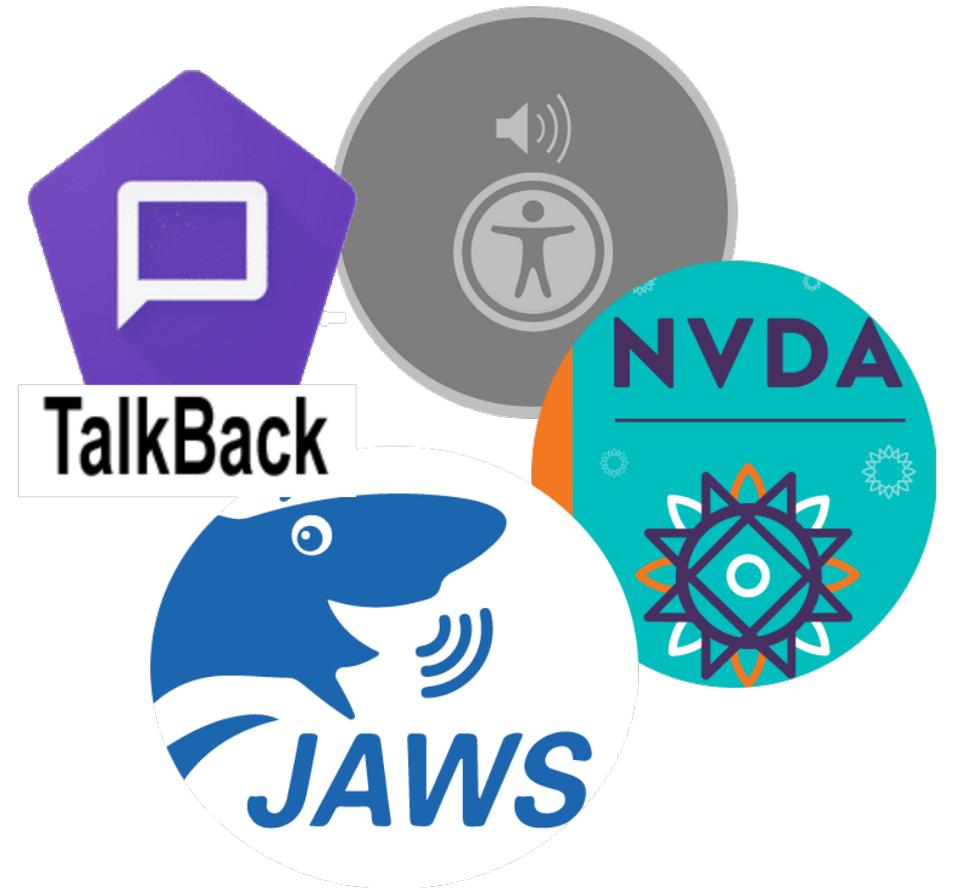
- El navegador Edge
- Complementos de navegador para Chrome, FireFox y Opera
- La mayoría de los dispositivos digitales



Lectores de pantalla

Ebook Central se prueba utilizando las siguientes combinaciones de lector de pantalla y navegador:

- Escritorio:
 - Chrome o Microsoft Edge + JAWS
 - Firefox + NVDA
 - Safari + Voiceover
- Móvil
 - Móvil de Apple: Safari + Voiceover
 - Móvil Android: Chrome + Talkback



Configuración: Tu perfil personal

Inicie sesión en su cuenta personal de la estantería. Seleccionar perfil.

ProQuest Ebook Central™

Search Bookshelf Profile Language ? Sign Out

Authoritative ebooks at your fingertips.

Search ebooks Search

Advanced Search Browse Subjects

PQCS Internal - Heather Mitchell-Botts Library

PQCS Internal - Heather Mitchell-Botts Library has selected ProQuest Ebook Central as a key ebook provider.

Have questions about ebooks?

[View Ebook Central LibGuide](#)
[View help FAQs](#)

Commitment to accessibility

In the continuing effort to provide all users with a fully accessible experience, Ebook Central has achieved a 100% Gold rating from ASPIRE. To learn more, read our [Accessibility Statement](#).



Trusted content.



You need credible content from authoritative, scholarly sources. Ebook Central delivers with a breadth and depth of ebooks from scholarly sources, including university presses and other top publishers.

Recently Viewed



Principios de accesibilidad

ACCESSIBILITY SETTINGS

TEXT ONLY MODE

Text Only Mode is **ON**.

With Text Only Mode, PDF books are presented as plain text instead of images, which can result in accessibility limitations like headings, images, and charts being omitted from the book. Other functions are optimized for screen reader users, such as creating notes or searching within the book, but highlights are not supported in Text Only Mode.

Enable Text Only Mode

Disable Text Only Mode

OPENDYSLEXIC TYPEFACE

OpenDyslexic is a typeface that helps to alleviate some of the symptoms of dyslexia. When enabled, OpenDyslexic typeface is applied to all pages of Ebook Central.

Enable OpenDyslexic typeface

For more information about accessibility on Ebook Central, [read our Accessibility Statement](#).

I agree to ProQuest's [Privacy Policy](#) and [Terms of Service](#).

Cancel

Save Changes



Lectura en voz alta: texto a voz para Google Chrome



Lectura en voz alta: texto a voz

chrome web store

Home > Extensions > Read Aloud: A Text to Speech Voice Reader

 **Read Aloud: A Text to Speech Voice Reader**

 [Isdsoftware.com](#)  **Featured**

★★★★★ 2,526 ⓘ | [Accessibility](#) | 4,000,000+ users

Window control buttons: minimize, maximize, close

Taskbar icons: share, star, , puzzle pieces, mobile view, user profile



Lectura en voz alta: teclas

 **Read Aloud: A Text to Speech Voice Reader**

Activate the extension	Not set 	In Chrome 
forward	Alt + Period 	In Chrome 
play/pause	Alt + P 	In Chrome 
rewind	Alt + Comma 	In Chrome 
stop	Alt + O 	In Chrome 



Enlaces

Ebook Central

- LibGuide Ebook Central (+ elearning modules)
<https://proquest.libguides.com/ebookcentral>

Acesibilidad:

- [Declaración de Accesibilidad en Ebook Central](#)
- [Webinar sobre accesibilidad en EbookCentral \(inglés\)](#)



Gracias!

¿Alguna pregunta?

training@proquest.com

About Clarivate

Clarivate is the leading global information services provider. We connect people and organizations to intelligence they can trust to transform their perspective, their work and our world. Our subscription and technology-based solutions are coupled with deep domain expertise and cover the areas of Academia & Government, Life Sciences & Healthcare and Intellectual Property. For more information, please visit clarivate.com

© 2023 Clarivate

Clarivate and its logo, as well as all other trademarks used herein are trademarks of their respective owners and used under license.