



SEN

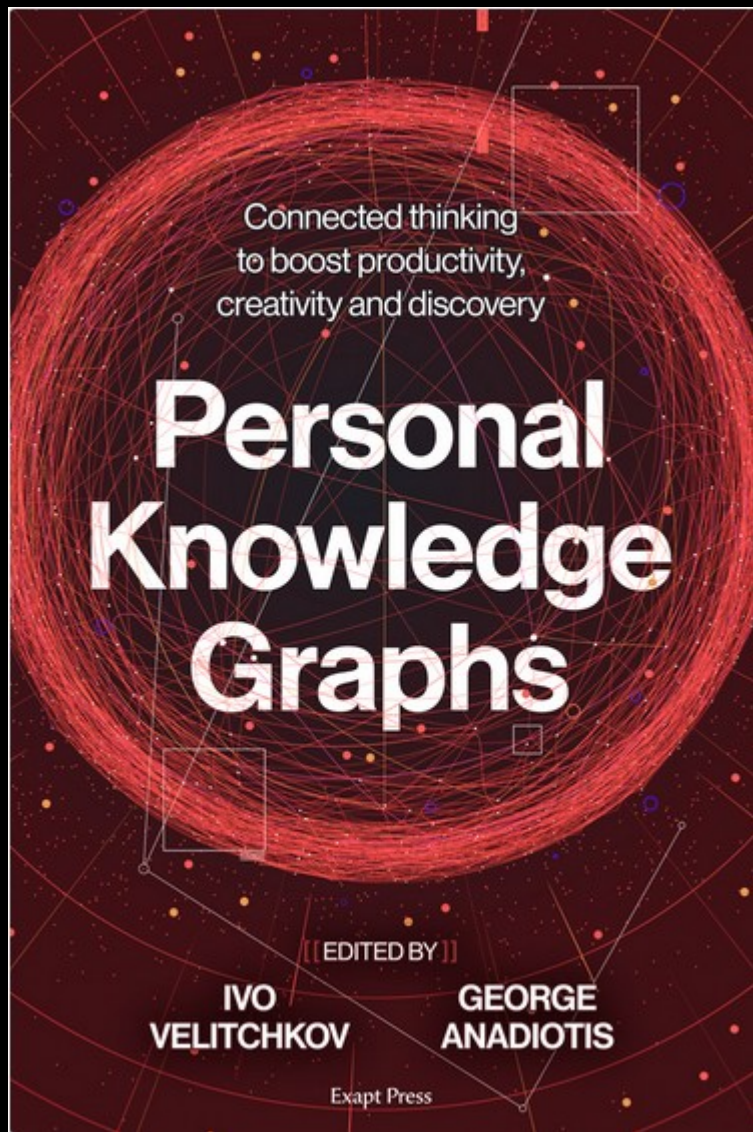
a /home for your thoughts

A semantic desktop project by Gregor B. Rosenauer

About



Father
Founder (incubation)
Computer Scientist
Humanist
Tinkerer
Engineer
Book Nerd



About

- * contributed chapter on SEN
- * introduction and technical overview
- * prototype in development
- * concept proven

- fighting the information overload in your local files
- current desktop systems not designed for this
 - tools getting more complex and cause friction
- ▣ With every new piece, you're back to chaos



- * current systems limit you to Markdown files
- * you see only shadows of the real world
- * not everything is a text
- * you loose semantics



One Tool to bind them all?

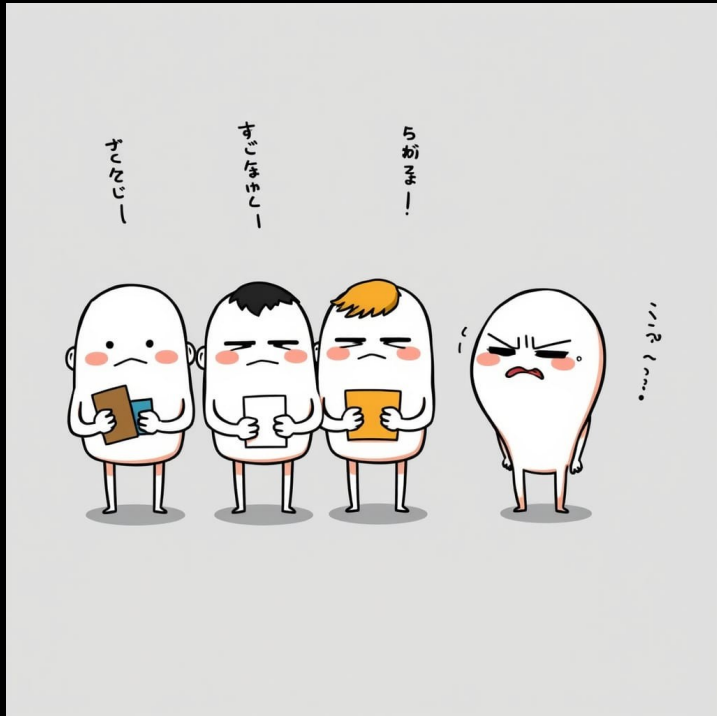
Complexity



It's a Web, not a Stack!

Data-Centric vs File-Centric

Data is Text but Tool specific



Data is at the center and shared



Flexibility

SEN is based on Data Centricity

- * information is set free, Entities as first-class citizens
not owned by any single app, metadata exposed
- * simple, readable, object based (simple types)
can be inspected without apps
- * apps as Visitors
apps for advanced data handling
- * <http://datacentricmanifesto.org/>
- * FAIR principles
(Findability, Accessibility, Interoperability, and Reuse)

SEN – The PKM Environment

- * combine the best of both worlds:
 - native types + local-first + files&folders (with a twist;)
- * basic knowledge management without custom tools
 - search, manipulate and navigate metadata+relations
- * integrate into familiar desktop environment
 - intuitive handling without learning a new tool
- * extensible and open to other use cases
 - extract metadata, relations, retrieve info, integrate AI
- * SEN = Simple, Extensible and Native ;-)

Global and Connected

- * fully user controlled
- * Enrich
- * Extract
- * Exchange



Local and Protected

- * private and secure
- * self-contained (USB drive)
- * sensitive environments
- * journalists, activists
- * researchers, writers



With SEN, you CAN

Custom Apps Now!

Easily build simple custom applications for personal use based on semantic data views.



**“We build our computer systems
like we build our cities -
over time, without a plan, on top of ruins”**

— Ellen Ullman



Haiku is an open source operating system under constant development. Specifically targeting personal computing, Haiku is a fast, efficient, simple to use, easy to learn, and yet very powerful system for computer users of all levels.

<https://www.haiku-os.org/about/>

- * Specific focus on personal computing
- * very responsive and open source
- * Database-like file system (BFS) with support for *indexed metadata*

<https://www.haiku-os.org/about/>

Books (Search)

☐ Find

Recent queries

Book

by attribute

On All disks


ISBN

is

9780262047036

Remove

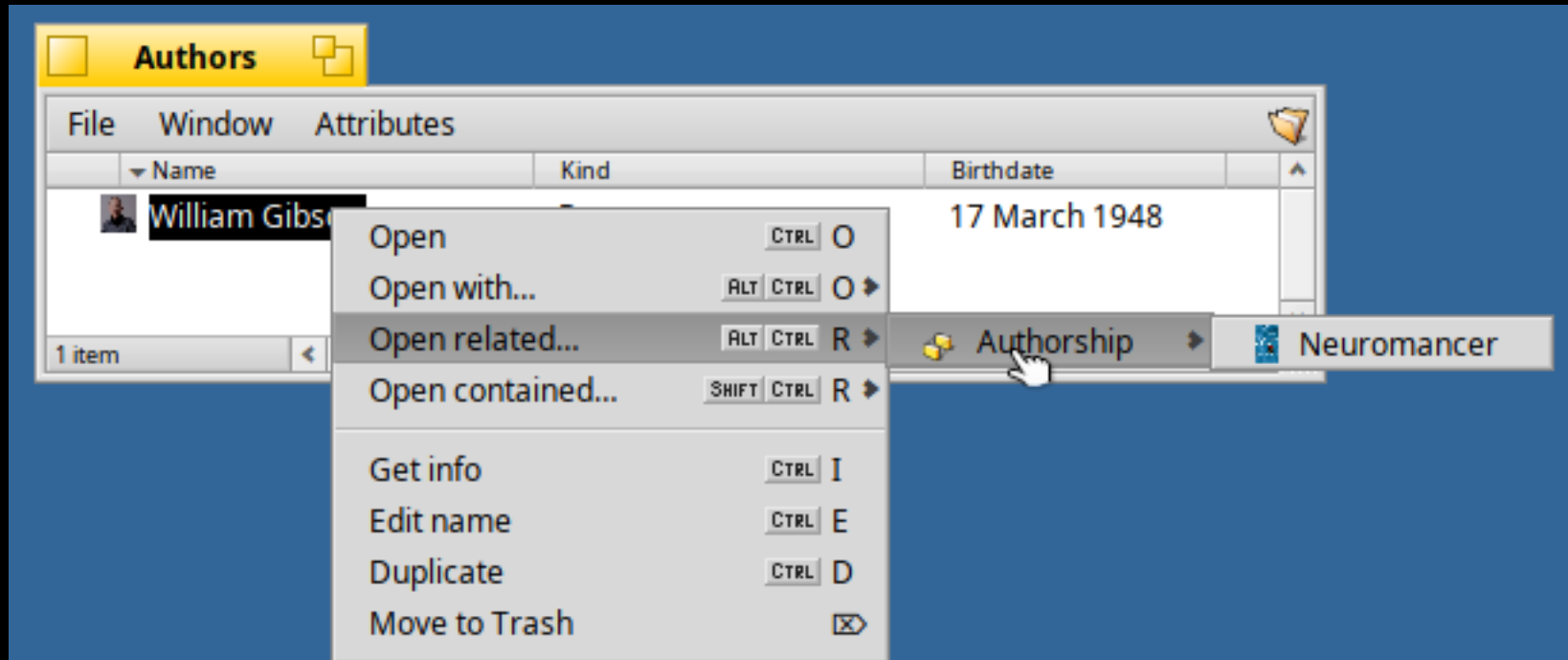
Add

 Query name: find book by ISBN

☐ Include trash ☒ Temporary

Search

Relation View



Book use case

FileWindowAttributes

Name	Size	Modified	Kind
Authors	-	14. March 2025 um 23:15	Folder
Book Notes	-	12. March 2025 um 13:21	Folder
Library	-	15. March 2025 um 12:10	Folder
Books about Information	-	15. March 2025 um 01:03	Query

Library

FileWindowAttributes

Title	Publisher	ISBN	Subjects
Cybernetics and the Origin of Information	Rowman & Littlefie...ers, Incorporated	9781786614995;1786614995	-
Giordano Bruno and the Hermetic Tradition	Routledge;Taylor & Francis Group	1136864121;9781138...49X;9781136864124	Bruno, giordano, 1548-1600;Herr
Neuromancer	WSOY;Aleph;Ae;ji...inotaup;W. Heyne	9788842907466;9783...6638364;978044100	Information superhighway;Comp
Count Zero	-	-	-
Mona lisa overdrive	-	-	-
The exegesis of Philip K. Dick	Brilliance Audio;Or...erence Publishers	150122126...9781455...334;9780575132...50	Notebooks, sketchbooks;Philosop
Confessions of two brothe...ys [and] Llewellyn Powys	Sinclair Browne;Ro...ed;Scholarly Press	9780863000041,0403...045;9780863000058	Authors, English;Biography;Englis
American Prometheus	Random House Es...stone Audio;Knopf	9780375726262	physics;Manhattan Project;atomic
Things I don't want to know	Notting Hill Edition...uin Books, Limited	9781907903632;1907...57224X;0241983088	Writing;English literature (collecti
Tiny Experiments	Penguin Publishing...file Books Limited	0593715136,9780593...153,9781800819153	-
Jerry Todd and the Rose-Colored Cat	Wildside Press;Gro...ndently Published	9798580581958,1434...490988,1434491927	Children's fiction;Cats, fiction;Mys

11 items

Book: Subjects contains Autobiography - Mar 18, 05:36:28 PM

FileWindowAttributes

Name	Location
Philip K Dick, Ubik	/boot/home/Deskto...k use case/Library/
Prometheus	/boot/home/Deskto...k use case/Library/
Things I don't...ant to know	/boot/home/Deskto...k use case/Library/

3 items






Authors

FileWindowAttributes

Name	Kind	Birthdate
William Gibson	Person	17 March 1948

1 item

Example – Movie Notes

Casablanca						
File	Window	Attributes				
	Name	Timecode Start	Timecode End	Comment	Kind	Chapter
	Closing Scene	16.05.23	-	Look into my eyes...	relation/movie-reference	13
	Darling I love you	-	-	-	Audio file	-
	Invasion of Casablanca	-	-	-	iCalendar	-
	Casablanca the Movie	-	-	-	Video file	-
	Movie Poster	-	-	-	Image file	-

Current Status

- * prototype with working core concepts
- * use cases done:
 - PDF self-relations
 - semantic relations between files
 - source code dependency relations
 - Book use case
 - PDF Bookmark deep links and relations
 - Book and Author enrichment with metadata from OpenLibrary (Internet Archive)

Outreach/Reach out

- * presented at PKM Summit 2025
- * info@sen-labs.org
- * Twitter/X: @labs_sen
- * <https://senlabs.substack.com>
- * <https://www.sen-labs.org>
- * all free and open source at
<https://github.com/sen-laboratories>