

## Systems Integration - Create Anarres Librarians' Federation

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*This is an imaginary library system that might be found on Anarres, the anarcho-syndicalist society of Ursula K. Leguin's 1974 science fiction novel The Dispossessed. Anarres is a harsh, arid moon, and its people, the Odonians, have a peaceful, radically non-hierarchical culture that rejects all forms of government and property.*

The Anarres Librarians' Federation is not a representative model of all libraries on Anarres; every library's systems exhibit their own local variations, reflective of local sensibilities and the preferences of their most frequent users. But nearly any library or archival syndicate you are likely to find associates with and models itself after the Librarians' Federation in some capacity, as a matter of convenience and best practice; the Librarians' Federation is an institution with over a century of history stretching all the way back to the first migration and the development of the Pravic language.

Generally, Librarians' Federation catalogue systems do not use a linear classification system, despite the fact that the majority of collection materials are physically arranged. When returning a book to the library, a good Odonian places it back on any shelf that is convenient, noting the six-digit position number marked there and entering it into the computer on their way out. Though no book has a consistent position in the catalogue, its current position is always retrievable, and over time books of related relevance tend to cluster together. Odonian librarians might be puzzled if you told them that sorting books is one of the main responsibilities of librarians on Earth; everyone knows that books sort themselves. Browsing the stacks on Anarres is either particularly tedious or uniquely rewarding, depending on your view.

To ease the difficulty of physical search, the computer database also contains an extensive and fluid subject headings system, similar to tagging, to assist with digital relevance-based searching. Tags are submitted by authors, publishers, and readers, with the responsibility of librarians to assess the aboutness

of undertagged books. Librarians also undertake the work of organizing and tidying tags into something more akin to a subject heading system, arbitrating preferred terms and subject relationships (never hierarchical BT/NT relationships - always related terms.) This system is somewhat controversial for privileging the expertise of Federation members; disparities between these two sets of topics will often suggest differences in priority or interpretation between librarians and non-librarians.

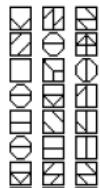
When materials are added to a library's collection, most library's content schemas will make note of the title, the type of media (book, letter, data cassette, etc.) physical dimensions and weight, author(s), author's syndicate or federative affiliations (if any), printing syndicate (if any), current tags, and approved subject headings.

**Title:** Principles of Simultaneity  
**Type:** Book – Manuscript  
**Dimensions:** 9"x6"x.2"  
**Weight:** 112g  
**Authors:** Sabul; Shevek  
**Printer:** Abbernay Printers' Syndicate  
**Publication Year:** 164  
**Tags:** Physics, Astrophysics, Spacetime, Simultaneity, Sequency, General Field Theory of Time  
**Subjects:** Odonian Science, Physics, Astrophysics, Spacetime, Simultaneity  
**Current Shelf Position:** 754452

*Example of a catalogue entry*

The data format of the system is Contingency Stenograph (Steno). Similar to our MARC, Steno is an encoding system based on the limitations of low-power, low-speed digital infrastructures; however, unlike MARC, a system built to migrate information from analog card catalogs to digital encoding, Steno is the reverse: a system designed to make digital information practical to store in an analog format using the minimum amount of paper

(as paper production is a resource-demanding and labor-intensive process on Anarres.) Using a set of 65 glyphs (used to represent a base-64 numerical system that directly models computer hardware, with one additional “sequence break” glyph), Steno is an extremely information-dense writing system; were you to convert a Dewey Decimal card catalog into Steno, your new catalogue would be not even a tenth as thick, and significantly more informative. For transcription of text, common words and syllables represented as single glyphs, allowing for text to be substantially compressed.



*Example of Steno encoding*

It is a stretch to call Steno “human-readable,” but these catalogues are not intended for everyday use - they are printed as a physical backup. In the event of computer failure, librarians could, given time, fully and perfectly reconstruct a library’s database from a physical Steno log.

The necessity of Steno is a divisive subject. As infrastructure has developed significantly over the past century, blackouts and magnetic storms are less of a concern, and collective fluency in a seldom-used language is difficult to maintain; librarians are reluctant to invest the effort in learning the glyphs when the odds of needing to know them are so low. While it is sometimes proposed that the library materials themselves be converted into Steno, this is not possible - Steno’s glyph alphabet is only able to achieve its spatial efficiency due to its narrow scope.

As mentioned, all of these practices are subject to change at the prerogative of local syndicates, many of whom regard the Librarians’ Federation as a stagnant bureaucracy that exerts too much soft power. Some libraries omit authors from their books, regarding the concept of authorship as egoism; others divide their collections into Odonian and offworld literature.

Some implement elaborate algorithmic sorting methods, while others systematically poll their patrons to form consensus on subjects. All the while, books keep finding people.

### **Revisions**

- Added more detail to how Steno functions.
- Noted the contentious nature of the bifurcated topic systems