Professional Astronomy without a Librarian

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Abstract. Virtually every “serious” place where professional astronomy is done has a librarian, even if shared with the physics or math department. Since its creation in 1994 of Departamento de Astronomía (DA) of Universidad de Guanajuato (UG) it was neither provided with a librarian, nor with proper space for its holdings, nor with a budget allowing institutional journal subscriptions. I describe my experience of now five years as “amateur” librarian, and present information on other small astronomy institutions in Mexico in a similar situation.

1. The Place

Since 1997 the DA of UG (DAUG) is housed at 2200 m above sea level, overlooking the city of Guanajuato, close to the “geometrical center” of Mexico, and declared as “heritage of mankind” by UNESCO. The research staff of eight astronomers participates in undergraduate teaching within the Physics and other programs at UG, and hopes to offer a postgraduate program in astrophysics soon. The DA maintains the Observatorio La Luz with a 57-cm optical reflector, used for public outreach purposes and being prepared as a student laboratory.

2. Origins of our Library

The two founder-members of the DA had already collected (by donations) a few decades of ApJ, AJ, and MNRAS, but other major journals (like A&A) had been subscribed only since 1994. Since my arrival, in late 1996, I volunteered as “provisional” librarian, given the lack of a professional Department librarian hired by UG. The central library of UG was too far away to manage efficiently the library of the DA. As a matter of fact this situation continues until now.

After preparing the first inventory of our holdings in early 1997, I posted an inquiry to ASTROLIB for donations to fill the holes of our journal coverage. This caused a wave of offers from professional librarians all over the world. Hundreds of kilos of journals were received over the following months. In June 1997 the DA moved to its present building with only 6 offices for 10 people, and no library room. However, our neighbor, the Maths Research Center “CIMAT”, maintained by the Mexican science foundation CONACyT, generously offered ∼60 m² of their library “provisionally” for the DA. CIMAT is ∼200 m away (∼40 m vertical!), but it closes during nights and weekends which never made it attractive for a “leisure visit”. After five years nothing has changed!
3. Our Present Library

As it was not practical to store all our holdings “up there” at CIMAT, we decided to use all possibly available space in the offices and corridors for the most recent journals (≈1 year back) and modern books (for teaching and research). Until now our hopes to obtain a dedicated library were not fulfilled, despite a written promise and money allocation by UG in spring 2001. Thus the journals have grown hopelessly beyond their initially assigned growth space. Maintaining the alphabetic order of journals would now imply a full rearrangement of our holdings which is beyond our available manpower. Moreover, in the meantime most of our journal holdings have become available freely from ADS, making a visit to the physical library each time less attractive to our staff. However, downloading of articles is often limited to weekends given our slow internet line.

In the absence of a librarian, or other suitable personnel, I only seal the books with a DA stamp but do not afford to assign them a catalog number, so they have no “reproducible” shelf location yet. Moreover, in mid-1999 a heavy rain and a leaky window affected part of our shelves at CIMAT, and about 15% of our book holdings, many of them of historic interest, were waterlogged. Most of the book holdings had to be removed in a hurry (in my absence) and since then only very limited “order” was re-established. I visit the library at most once a month to accommodate what does not fit any more in our office building.

4. Subscriptions

Since its foundation the DA received the six major astronomy journals by personal subscription. The idea was that we would gradually be able to pay institutional rates, but with a 2002 budget of USD 3000 we still cannot afford a single journal at the institutional rate. Thanks to the generous permit by some publishers to continue with the personal rate, we manage to subscribe to ApJ, ApJS, AJ, MNRAS, A&A, Nature, PASA, PASJ, PASP, BAAS, 66T, and Mercury. These regular funds also allow us to buy very few conference proceedings (mainly from the rather economic ASP Conf. Series) and IAU Symposia. The budget for books and other proceedings depends on the allocation of special funds from the Federal Secretary of Public Education (SEP) and on personal research projects (usually from CONACyT), and fluctuates between 0 and 8000 USD/yr. Delays in either the invoices of journal publishers, or in the payment by our central library, usually cause an interruption of our subscriptions during the first few months of each year (Does this sound familiar to you...?). Altogether, we are far from the ideal situation described in my earlier wishlist (Andernach 1998).

5. Donations

Thanks to frequent offers of duplicate items from professional astronomy librarians (e.g. via ASTROLIB) we acquired an impressive amount of (mostly older) journals and monographs. Naturally many of these items are of interest to either the bibliophile or historians of astronomy and physics. While filling me with pride, it is a shame to store these books some 200 m away from our offices where hardly any of us finds the leisure to go and browse the shelves.
6. Inventory

I maintain the inventory as a single ASCII file (of \(\sim 300\) kb), readable by all members of the DA. It saves me to learn dedicated library software and allows an easy search of items using Unix's `grep` command. For journals I use `bibcode`-style, and free format for the “rest” (monographs, theses, manuals, etc., currently \(\sim 700\) items). A small excerpt follows:

1834MmRAS 7 + | 1879MNRAS 39 - #2 Suppl. (p.489-560)
1843MmRAS 13 + | 1891MNRAS 52 - #2 Suppl. (p. 67-121)
1843MmRAS 14 + | 1933MNRAS 93 - 4-6,8,9
1847MmRAS 17 + | 1942MNRAS 101 - 8 only
1849MmRAS 19 + | 1942MNRAS 102 +

... 1879MNRAS 39 - no. 2 Suppl. (p.489-560)
1891MNRAS 52 - no. 2 Suppl. (p. 67-121)

Annals of the Cape Observatory VI, Darling & Son, 1897.
P.S. Barrera, E. Castro, J.R. Garza, J.J. Martinez, R. Aguirre: Memorias del Gran Eclipse del Sol, Montemorelos, Nuevo León, 28 mayo 1900, Universidad Autónoma de Nuevo León, 114 pp.
M. de Broglie: X-rays, Transl. by J.R. Clarke, E.P. Dutton & Co. Publishers, 1922, 204 pp.
D.S. DeYoung: The physics of extragalactic radio sources, Univ. Chicago Press, 2002, 558 pp.

7. Other Places in Mexico

There are now eight places in Mexico where professional astronomers work (Phillips et al., 2002). A rough map of their location is shown in Fig. 1. Only IA-UNAM, INAOE, and OAN (#1–3) have long histories and stable budgets for library and librarian. All others (#4–8) were established during the last decade. The following table gives an overview of the library situation at these five “new” places. The last column gives a comparison with the OAN library at Ensenada, maintained by UNAM. Numbers in brackets are either uncertain or very variable. The budget is listed for journals + books.

| Location and ID # in Fig. 1 | Morelia (4) | DAUG (5) | IAM-UDG (6) | U. Sonora (7) | Monterrey (8) | Ensenada (3) |
|-----------------------------|-------------|----------|-------------|---------------|--------------|-------------|
| Research Staff              | 19          | 8        | 5           | 4             | 1            | 25          |
| Librarian(s) available      | -           | -        | (2)         | -             | (1)          | 1           |
| Library Space exists?       | yes (yes)   | no (yes) | no          | no            | yes          |             |
| # journals subscribed       | 7           | 10       | 7           | 8             | 62           |             |
| Subscription rate           | inst.       | pers.    | inst.       | -             | pers.        | inst.       |
| # back years available      | ~20         | ~50      | 2.5         | (2)           | 6–20         | ~20         |
| budget/year [IK USD]        | 10+4        | 3+(2)    | 3.5+?       | \(\leq 1\)    | 33+15        |             |
| Inventory exists?           | no          | yes      | no          | (yes)         | (yes)        | yes         |

Astronomy acquisitions for IAM-UDG and Monterrey are made by their central libraries, causing a lack of transparency and communication between these and
the astronomers. At DAUG we have no budget for binding journals. However, in 2001 we used some left-over monies for binding a few years of $ApJ$ to find out that it was $\sim 3$ times cheaper to bind them in Mexico City than in Guanajuato.

8. Conclusion

The changes in the job market and the Internet have affected radically not only the way astronomers work, but also how an astronomy library is run, especially at small and "poor" places. Today small groups of astronomers are established independently of favorable sky conditions and rely mainly on an adequate Internet connection, but often have to work without a professional librarian. While this may work "well", i.e. with little effect on research output as in our case, it certainly relies heavily on the services provided by a few professional librarians thinking far beyond their own institution. I see a dangerous trend for a future 2-class system of astronomy institutions: those with professional librarians working almost “behind the scenes” and those which have to survive without a local librarian altogether.

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References

Andernach, H. 1998, in ASP Conf. Ser. Vol. 153, Library & Information Services in Astronomy – III, eds. U. Grothkopf, et al. (San Francisco: ASP), 35
Phillips, J. P., Curiel, S., Moreno, M., Rodríguez, L. F., Carramiñana, A., Andernach, H., Sánchez-Ibarra, A., & Valdés Sada, P. 2002, AAS Newsl. 110, 24
Figure 1. Current centres of professional astronomy in Mexico.