The Use of Picture Postcards in Disseminating Astronomy

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Picture postcards on astronomy are a good means of delivering information to the public. In this paper, the author – a professional astronomer, lecturer, science writer and postcard collector– reflects on the diverse use of picture postcards in bringing astronomy closer to the public.

Introduction

Collecting items is a popular hobby, and the range of collectibles is very wide – from butterflies to stamps, from beermats to postcards. I have been collecting postcards for sixty years.

Postcards are usually sent to loved ones or bought as souvenirs when travelling. An overwhelming majority of postcards have famous buildings, monuments or other places of interest from the country or city in question. You can also find postcards of paintings, sculptures and other art pieces in museums and galleries.

Just as a museum is a sanctuary of art, an astronomical observatory or a planetarium is a sanctuary of scientific knowledge. An important task of all of these institutions is to publicise their treasured collections. For an astronomy institution, this treasure may include rare books in their library collections, scientific results and spectacular photos of the Universe. These visual pieces of information can be easily captured and shared in the form of a postcard – a relatively inexpensive memento with a beautiful and meaningful photo on the face and a brief explanation of the image on the reverse.

Within and Beyond Astronomy

Astronomy-related images can be readily categorised into several (sometimes overlapping) thematic groups:

- History of astronomy;
- Observatories and telescopes;
- Planetariums;

- Celestial objects;
- Explanation of astronomical phenomena;
- Astronomy in the arts;
- Astronomical events;
- Advertisements using astronomy-related content.

History of Astronomy

Postcards related to the history of astronomy can depict any relevant object or document from ancient times to the recent past. Examples are megalithic observatories, old astronomical instruments, portraits or sculptures of famous astronomers, title pages or excerpts from classical astronomy books and obsolete instruments or historic observations from observatories that are still in service (Figure 1g).

Observatories and Telescopes

Postcards of observatories and telescopes can be divided into two main groups: ground based and space observatories/telescopes. An aerial view of a terrestrial astronomical observatory can be especially impressive. Beautiful colour postcards have been issued of the Hubble and Spitzer Space Telescopes and the Hipparcos astrometric satellite. Observatories detecting non-electromagnetic signals such as neutrino and gravity waves are also in this category. These postcards are often issued by major space agencies. NASA and ESA often publish series of postcards when a new space probe for carrying out astronomical research is launched (Figure 1e).

Planetariums

The main task of planetariums is to disseminate knowledge about astronomy and the Universe. Therefore, planetariums usually publish postcards not only of their own equipment and domes but also on various astronomical topics – from Solar System objects to deep-field images.

Celestial Objects

The largest group of astronomy-related postcards are probably those that depict celestial objects or phenomena. Astronomers are aware of the richness of the night sky, so there is no need to give a list here. Celestial objects and deep-sky phenomena can be visualised beyond the visible range of the electromagnetic spectrum. Impressive postcards exist, for example, of X-ray views of supernova remnants and infrared views of star-forming regions.

Explanation of Astronomical Phenomena

Some, very specific, postcards explain an astronomical phenomena or notion. Examples in my collection are the structure of the heliosphere issued by ESA when the Ulysses solar probe was launched and the visualisation of non-radial stellar pulsations on a postcard by the Instituto de Astrofísica de Canarias.

Astronomy and the Arts

Pure scientific content may not attract people completely unfamiliar with astrophysics. However, they may get closer to astronomy by staring at postcards of the 'interdisciplinary' field of astronomy in the arts. Painters sometimes draw inspiration from the night sky. The Starry Night and The Starry Night over the Rhône, famous paintings by Vincent van Gogh which are on display at the Museum of Modern Art, New York and Musée d'Orsay, Paris, respectively, have been reproduced on postcards. Another well-known example is The Astronomer painted by Jan Vermeer van Delft. The original painting can be seen in the Musée du



Louvre, Paris. Good quality reproductions of The Astronomer on postcards are available in many museum shops. The postcard reproduction of Jacopo Tintoretto's masterpiece, The Origin of the Milky Way, at The National Gallery, London, is also worth mentioning. Victor Vasarely's many works of art also have astronomical titles, such as, Vega-blue and Quasar-dia (which are on exhibit in Vasarely Museum, Pécs, in the native town of the Hungarian-born French master). These latter pieces do not resemble the star Vega or any quasar but the title itself may arouse the spectator's interest in the real Vega and quasars. Astronomyrelated sculptures also include statues of famous astronomers such as Copernicus, Galileo and Ulugh Beg. Reproductions of these sculptures are often available on postcards too.

Astronomy Events

A completely different kind of astronomy-related postcard aims to advertise certain events, either celestial or terrestrial. For **Figure 1.** Part of the author's postcard collections. (from top to bottom, left to right) (a) A collage of postcards; (b) Astronomical Museum postcard, (c) Comet Halley 1910 approach postcard, (d) Cassini mission postcard, (e) Ulysses mission postcard, (f) Total Solar Eclipse 1999 postcard with solar filter embedded, (g) Lick Observatory postcard, (h) American Astronomical Society (AAS) Division for Planetary Sciences (DPS) Meeting postcard. Credit: László Szabados.









instance, postcards have been issued to commemorate the XIXth General Assembly of the IAU in New Delhi in 1985, the 1998 annual meeting of The Division for Planetary Sciences of the American Astronomical Society (Figure 1h), on the occasion of the International Year of Astronomy in 2009





(Figure 2) and for advertising total solar eclipses in certain geographical regions over time (Figure 1f). The diversity of the events is a key element here.

Advertising

Marketing based on astronomy is extensive. Various postcards carry an astronomy-related photo or graphics for advertising a product or service. The products and services may be completely unrelated



Figure 2. Postcards issued during the International Year of Astronomy 2009. Credit: László Szabados.

Figure 3. The back of postcards usually contains information explaining the subject, therefore useful to disseminate astronomy. Credit: László Szabados.

to astronomy or may be issued by astronomical institutions to popularise their own products and services. Examples for this kind of postcard are the online edition of the Barnard Atlas by the Georgia Institute of Technology and a series of postcards by the SIMBAD in Strasbourg, France, to popularise their Aladin Lite service.

Personal Experience Using Postcards to Disseminate Astronomy

The beauty of astronomy-related postcards is only one part of their value. They are also very useful for disseminating astronomical knowledge in various forms.

During public lectures, I can pass around postcards with topics related to the title of the talk. This requires careful selection of about a dozen postcards.

When I am to appear on television, some of my postcards always accompany me. Editors usually agree to show close-ups of the postcards during our conversation to illustrate certain points. On the occasion of the Cassini Grand Finale, I was able to present a set of postcards issued by the NASA Cassini Team and other picture postcards on Saturn and its satellite system (Figure 1d).

In written dissemination, using postcards for figures gives a special flavour to the article. In May 2018, I published a paper about the history of astronomy from antiquity to the Extremely Large Telescope in the monthly, Természet Világa (World of Nature), in Hungary (Szabados, 2018). All twenty figures were reproductions from genuine postcards.

Another possibility is to arrange an exhibition of postcards. I mention two examples: one from the past and one yet to take place. In 1992, I presented a poster during the IAU/ICSU/UNESCO Meeting Adverse Environmental Impacts on Astronomy in the UNESCO Headquarters in Paris. In this poster about a dozen picture postcards were used for visualising how pollution destroys the night sky.

A plan for the near future is to organise an astronomy postcard exhibition on the occasion of the centenary of the International Astronomical Union. This event will take place in the headquarters of the Hungarian Academy of Sciences in the second half of 2019.

Conclusion

With this brief article, my intention was to draw attention to the usefulness of postcards as tools for communicating astronomy with public. In addition to leaflets, brochures and booklets, astronomical institutions must publish postcards to showcase their own activity, history, scientific results and the beauty of the Universe. I am grateful to my colleagues for gifting me numerous picture postcards and thus contributing to the enrichment of this unique collection.

Reference

Szabados, L., "Rendhagyó szemléltetés," Természet Világa, 2018, p. 217-222.

Biography

László Szabados research professor emeritus has been a staff member of the Konkoly Observatory, Hungary, since 1971. His main field of interest is astrophysics of variable stars, especially Cepheid variables. In addition to 170 research papers, he has published 285 popular articles and edited ten conference proceedings. He has been the co-editor of the IAU Information Bulletin on Variable Stars and a natural science editor of Magyar Tudomány, the monthly periodical of the Hungarian Academy of Sciences, for decades.