

Anthropomorphic astronomy in the IYA2009

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Abstract

For the International Year of Astronomy to be deemed a success, astronomy must reach a significantly larger fraction of the general population than ever before. New and exciting pathways through outreach and education are already being developed. However, astronomers and communicators should also be looking at new pathways, ones in which entertainment, not education, is the imperative. These new pathways need to be found through the dark lands of mass popular culture, primarily through television.

Introduction

Anthropomorphism is a word derived from Greek roots — *anthropos* and *morphi* — and may be defined as “assigning human characteristics to an inanimate object or a concept”. Thus, anthropomorphic astronomy is used here as an attempt to assign human characteristics such as friendliness and welcoming to the concept of astronomy.

Although public trust in scientists is generally good, public interest has been falling. In European Community (2005), a comparison was made between public opinion in 2005 and the previous Eurobarometer survey of 1992. Across the three science categories (environmental pollution, new medical discoveries and new inventions and technologies) there was a definite shift away from “very interested” toward “moderately interested” and “not interested”. 43% of UK respondents agreed that young people are less interested in science than the corresponding age groups 20 years ago.

A possible knock-on effect has been seen in scientists’ view of their public face. Hughes (2001) highlighted a surprising level of transference of mistrust and elitism that scientists put on the public, despite evidence to the contrary in, for example, Whitmarsh and Kean (2005). This results in a strong desire to improve communication, but historically this has depended on education-based programmes. If scientists (and by extension, science itself) continue to be seen solely in the context of education, the public will continue to view their relationship with science as one between educator and student.

This is not a good omen for the activities of the International Year of Astronomy in 2009. In order to communicate with the public at large, not just those already interested in astronomy, we need to break this perceived educator-student dialogue and use the tools of mass communication, specifically television.

The television audience

The appeal of the educator-student relationship can be simply seen by looking at television ratings over any given week. In the UK there are five terrestrial free-to-air channels (i.e. that only require a standard aerial for reception). A list was made of the top 30 rated programmes on each of these channels by audited viewing figures (BARB, 2007). For each programme, its viewing figure was multiplied by its duration to obtain its number of viewer-hours, and each was categorised for content. The total is 359.2 million viewer hours. The result of this analysis is seen in Figure 1 below.

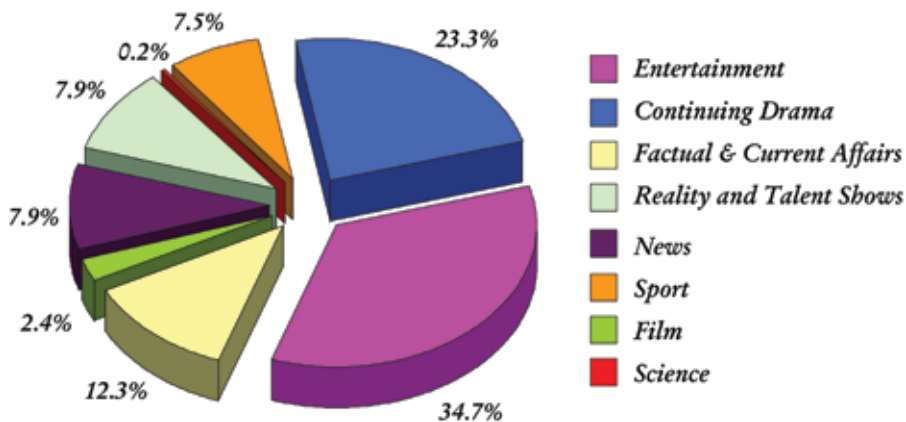


Figure 1 – Proportion of viewer hours by category of free-to-air terrestrial programming for the week ending 26 August 2007.

Credit: Gary Evans

The contribution of science programming was a single half hour show called “The Cosmos: A Beginner’s Guide” broadcast on BBC2 to an audience of 1.49 million. The author’s contention is that we should be investigating ways of talking to the 58% of the viewer hours devoted to entertainment and continuing drama (“soaps”).

There is an apparent gulf between the culture of science and popular culture, yet to maximise the visibility of IYA2009 this gulf has to be closed. We must engineer a great collision between these two cultures, and to do this we must encourage crossover between them, and the perfect medium with which to achieve this is television. Through television we have a choice, either to plant astronomy directly into existing TV shows, or to create programmes in which the public is welcomed into the experience of astronomy on camera.

The public embraces astronomy

Exploiting existing TV formats may take one of two routes:

- Astronomy-themed programming.
- Astronomy specials of format shows.

Astronomy-themed programmes are those in which a basic idea is taken over by overt astronomical themes. Some suggestions of the type of existing programmes that could be approached would include:

American Chopper — made by The Learning Channel (part of Discovery Channel), the show follows the work of the Teutul family of Orange County, NY who make custom-built motorcycles. The somewhat dysfunctional father and son business is commissioned by some very high-profile clients, including Jay Leno and Bill Murray, Hollywood studios and even NASA to celebrate the return to flight after the Columbia disaster. The family could visit Mauna Kea for some design ideas, be filmed getting out of breath at altitude, and so on before making the bike. Perhaps there will be a suitable IYA event in Hawaii or the continental USA at which this could be unveiled.

Scrapheap Challenge/Junkyard Wars — a show in which two teams compete to make something working out of junk, although a few specialist pieces of equipment are usually planted in the yard. One previous special had three teams competing to make piloted, powered aircraft to celebrate the centenary of flight. Perhaps they can be challenged to make a working telescope with powered drive, and have to image Jupiter and its moons as the final test.

Travel shows — several channels have shows dedicated to suggesting great places for your next vacation. Most also have a weekly slot for special reports. How about the intrepid reporter visiting a series of astronomical sites, both current and historical? The benefit here is that, not only does the viewer find out that the site exists, the show tells the viewer how to get there. With many major observatories not far from popular resort destinations this is an ideal way to boost visitor center numbers.

Astronomy specials are programmes in which the inclusion of astronomy is more incidental. Examples would be:

Format shows — the three biggest franchise format shows in the world are *Who Wants to be a Millionaire?*, *The Weakest Link* and the *Idol* series. In the first two, the idea is to have astronomers as contestants, although the questions would be the same general knowledge as ever. Let us be honest, who wouldn't like to see their professor told "You are the Weakest Link, goodbye?" Money won by contestants could be donated to the effort to distribute Galileoscopes. Is *Astronomy Idol* a step too far? Not with university common rooms full of students adept at karaoke.

Continuing drama — also known as "soaps". The viewership for these programmes is astounding. In the UK, the top-rated shows regularly attract audiences of 7-10 million viewers, this from a total population of about 60 million. Each week, soaps account for 83.8 million viewer hours (BARB, 2007). In 2002, the Commonwealth Games were held in Manchester, England, the setting for the highest-rated soap in the UK, *Coronation Street*. One of the characters volunteered as a steward for the event. This meant that the organisers could feed bits of information about the Games to the programme for the character to present as if talking to his friends. Thus the Games' organisers had access to up to 10 million viewers, four times a week, in the run-up to the Games. Jodrell Bank is not far from Manchester. *Eastenders*, the second-highest rated programme, is based in east London, not far from Greenwich. Similar coincidences of location must exist in

other countries. Now is the time to start talking to producers about the possibility of including this kind of thread into their storylines.

Astronomy embraces the public

When presenting ideas to TV production companies, the following three rules should be considered:

- Keep it simple.
- Make it competitive.
- Add a celebrity or two.

If the format isn't simple, many people will simply switch channels. Making a programme competitive in some way adds an extra hook of excitement. It also helps define how much astronomy to teach — just enough that the viewer can understand why it is a competition is a good guide. Finally, it is crucial to add celebrities to the mix. It entices viewers, helps with trailing the shows, and boosts event publicity. Many celebrities claim to be interested in astronomy to a greater or lesser extent. This is the time at which they should be invited to “walk the walk” and contribute their name and their time to the effort.

A few ideas include:

The Naked Astronomer — a TV show called *The Naked Chef* revolutionised home cooking, presented as it was by a camera-friendly, endlessly enthusiastic chef, Jamie Oliver. IYA needs a similar ambassador for astronomy, someone with the camera presence and endless enthusiasm of the late, great Steve Irwin, someone prepared to go literally from the streets of a big city to the ends of the Earth to show how astronomy is done and what it produces. In an ideal world, this presenter will be female in order to support the *She is an Astronomer* Cornerstone. Surely somewhere, in all the astronomy departments of the world, there must be someone suitable.

The Messier Marathon — perhaps as part of the *24 Hours of Astronomy* Cornerstone. Schools, amateur astronomy groups and professional observatories compete to observe or image as many Messier objects as possible in one night. One possibility is to use the Griffith Observatory at Los Angeles. Teams could comprise school children from local public (state) schools, each with a Galileoscope, a professional astronomer and a celebrity guest from the local soccer team, the LA Galaxy. Their star player, David Beckham, is keen to help disadvantaged children and Major League Soccer would like the exposure. Most of all, the children get to meet the players and see amazing things through telescopes which they are given to take home. Everyone wins.

The Galileo Challenge — to recreate historic observations using a Galileoscope. This also has the benefit of showing people what is possible to be viewed through a Galileoscope, and how to find objects such as Jupiter.

Total Eclipse Watch — the total solar eclipse of 22 July 2009 will pass over India, Bhutan and China before crossing south of Japan over the Pacific. The path of partial eclipse encompasses around half the population of the entire planet. What will be needed are cheap viewing glasses — cardboard frames with Mylar filters — that can be distributed in bulk, preferably in front of TV cameras by celebrities.

Conclusion

There are many opportunities to take astronomy to the widest audience we have ever known. What we must do is maintain the core educational effort, but accompany this with wider-ranging entertainment-based broadcasting. We need to think outside the traditional box, and encompass the world of popular culture if we are to spread the word of IYA in a truly global fashion. Most importantly, we must start doing it now.

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