

## **Projecto-Rama**

**Sponsored by Mark Baratta, CAUP Computing & Heather Seneff, Visual Resources Collection**

**April 23, 2007**

On Monday April 23, 2007, CAUP Computing and Visual Resources Collection hosted a digital image projection event -- *Projecto-Rama* -- in Gould Hall, room 007 (Digital Commons). The purpose of the event was to promote the use of digital projection by CAUP faculty and to compare the characteristics of old, existing, and new projection technologies. A slide show of sixteen images was simultaneously presented on multiple projectors for image quality comparison and discussion. *Projecto-Rama* was attended by nine CAUP faculty, as well as by representatives from Classroom Support Services and UWTV.

The Director of CAUP Computing, Mark Baratta, procured two new high-end digital projectors from vendors for trial use during the event; a Canon Realis SX6 and an Epson 7900. These projectors were compared with an existing Sharp XG—MB70X ceiling mounted in the event room and a circulating 35mm Kodak slide projector from the Visual Resources Collection. Two rounds of comparison were conducted. The first included the Canon Realis, Epson 7900, and the 35mm Kodak. The second comparison included the existing ceiling-mounted Sharp, the Epson 7900, and the 35mm Kodak. The attendees were given a scorecard to track the projector they thought best displayed each image.

The comparisons illuminated the many variables involved in digital projection. The projectors were run by three different computers and only the existing ceiling-mounted Sharp projector was color managed. The two high-end projectors were simply connected with little or no manipulation of their settings. The consensus results were:

- The digital projectors were considerably brighter than the 35mm slide projector. The event room had a moderate amount of ambient light which washed out the slide images but which did not seem to noticeably affect the brightness of the digital images. A darker room is optimal for projecting 35 mm slides.
- The participants made several comments about the Epson 7900's superior color quality over the Canon Realis. However true it was during the event, this conclusion can not be made definitively, as the two projectors were not optimized with color management. Color management for the college as a whole is soon to be adopted by CAUP Computing.
- The Canon Realis showed a wide color range that was at times too vibrant. However, the ability to show a wide range of colors is a beneficial trait and could be controlled with proper color management.
- The clarity of detail in the images projected by the Canon Realis was better than the Epson 7900. This was largely because the Canon had little to no screen-door effect, unlike the Epson. Also, it should be noted that the Canon Realis SX6 has a native resolution of 1400x1050, but during the event it scaled down to 1024x768 to reconcile with the computer connected to it.
- The ceiling-mounted Sharp projector did not perform well compared to the Epson 7900 in the second round. This was surprising because the projector was color managed during a preliminary trial and produced acceptable results.
- The Canon Realis SX6 was the consensus favorite among the Projecto-Rama organizers.

The scorecard results from attending faculty members, while not designed to provide scientific data, do demonstrate the wide range of factors that viewers use to evaluate image quality. Comments recorded for each selection revealed that color range, contrast, value, as well as clarity and sharpness were important criteria to the participants.

The percentages of votes cast were:

Round 1: Canon Realis: 48% -- Epson 7900: 36% -- 35mm Kodak: 16%

Round 2: 35mm Kodak: 55% -- Epson 7900: 39% -- CAUP Sharp: 6%

Several lessons were learned from this first attempt at image comparison. Many of the variables involved in examining multiple digital projectors could be equalized by using the same type of computer to run the test on each projector. These computers would have video cards that are compatible with each projector's native resolution. The screens could be of the same type and images could be displayed at the same size to better compare sharpness and clarity. Also, it would be ideal to use the same color management system across all digital projectors. This would require several more hours of preparation time before the event.

The event was well attended and received positive feedback from the many interested faculty. The high level of participation and rowdy debate by faculty demonstrate their interest in having high quality digital projection equipment in CAUP classrooms.

**Rainer Metzger**  
Graduate Staff Assistant, Visual Resources Collection

### The Projector Line-Up:



#### **CAUP Sharp**

1024x768 XGA  
3000 Lumens  
Purchased about  
two years ago.



#### **Canon Realis SX6**

1400x1050 SXGA+  
3500 Lumens  
Available for  
purchase.



#### **Epson 7900**

1024x768 XGA  
4000 Lumens  
Available for  
purchase.



#### **35mm Kodak Ektagaphic III AMT**

Trusty VRC  
portable projector.  
Long loved!