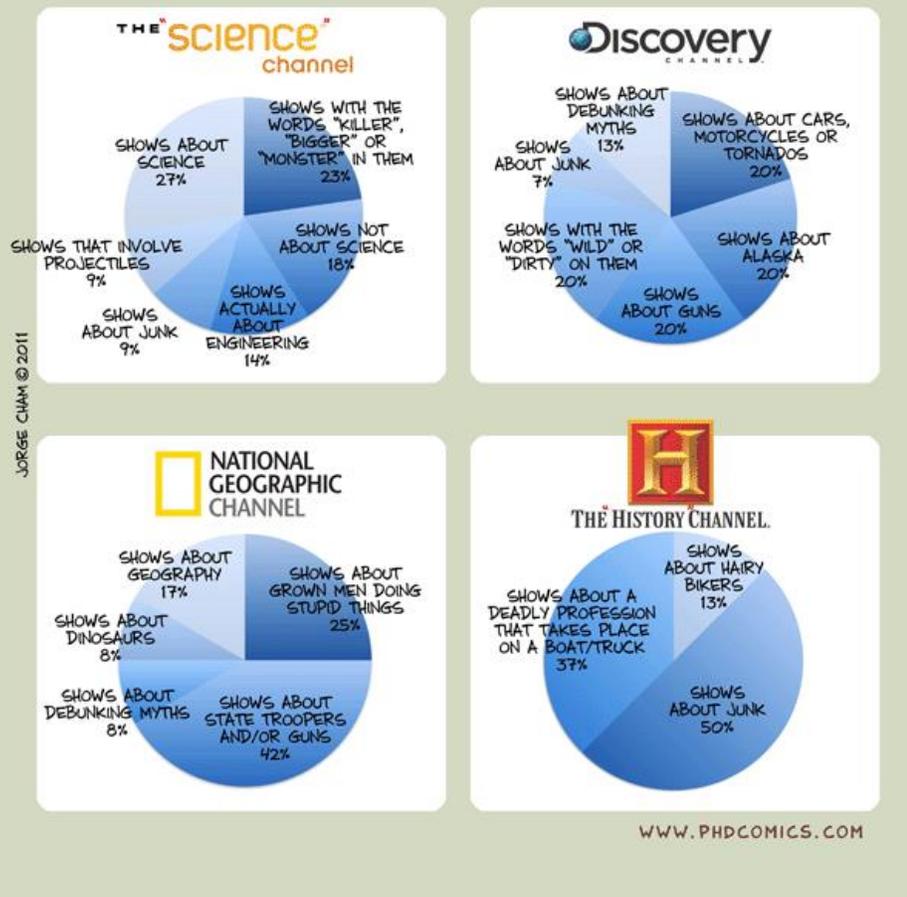


"SCIENCE" PROGRAMMING CABLE TV CHANNELS AND THEIR SHOWS



ABSTRACT

A term paper examining and evaluating various mediums that communicate the archaeological record.

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Archaeological Methods and Techniques

COMMUNICATING THE PAST

Photography, Video, and Television

Archaeology is a subject of intrigue to many members of the public. In my short, yet budding, career, many people have revealed to me that they wanted to be an archaeologist when they were a child; however, most of these individuals decided to pursue other careers and fed their archaeological interest by watching television programs or reading a book about ancient cultures and peoples. For this project, my aim was to closely examine three mediums in which the public receives information about archaeological research—photography, video, and television—and to figure out ways in which archaeology can improve public engagement.

Medium 1: Photography

A single image often sparks the imagination of many archaeologists and archaeological enthusiasts. Every time I come back from a dig, the question that I get after, “Did you find anything interesting?” is “Do you have pictures?” Unfortunately, many archaeologists are not trained in photography and most photographic skills are picked up based on trial and error. While I enjoy taking pictures, I suffered the same affliction as most archaeologists, as I lacked formal training on the subject. In order to begin to remedy this issue, I met with Doug Campana, an archaeologist and experienced archaeological photographer, in order to learn the basics about photography. The following is a transcript of the concepts and lessons we went over on March 14th 2013:

Exposure

1. Diameter of lens = F-Stop
2. Shutter Speed
3. Sensitivity of the sensor

F-stop basics

- Ratio of the focal length of the lens/Ratio of the diameter of the lens opening
- Can be automated or controlled internally
- Examples: 35mm = wide angle; 100mm = short angle

Zoom Lens

- General site photography

F-stop logistics

- Examples of number range (F-steps) of F-stops
 - F1, 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22, 32
 - → → numbers double → → → light diffraction → →
→ → Hole is smaller, less light → →
 - To get the same exposure, double the shutter speed for each F-step you go up
- Thought F8 and F11 are consider F-stop sweet spots, they both have relatively long exposures (shutter speed)

ISO (International Organization of Standardization)

- Can choose this setting depending on the camera
- Higher ISO's = more electronic noise
- A fairly low ISO rating is ~100
- Why choose a high ISO? Good if the scene is really dark

Single Lens Reflex

- Lens reflects off of mirror
- Typical type of camera used by archaeologists

Image Quality

- Megapixels
 - For the internet, 2mp can work
- Publishing
 - 600 dpi (dots per inch)
 - Minimum ~10mp
 - No JPEG!
 - Useless compression
 - 8 bits per pixel and the compression is done internally
 - TIFF acceptable
 - RAW Format acceptable
 - True Form
 - 24 bits per pixel
 - Totally uncompressed
 - 35 MB per image (takes up space quickly)
 - Bayer Array
 - Red (x), Green (2x), Blue (x) → Eyes most sensitive to green light
 - Debayerization = recombined information
 - JPEG's & TIFF's debayerized
 - RAW = NOT debayerized (Can adjust color better on a computer)
 - RAW good for fine adjustment of color without losing data

Camera Setup

- AV = aperture priority → manipulation of f-stop
- TV = time priority
 - Controls the shutter speed
 - Allows for fast motion
 - If you have to take quick shots, like while a car is in motion, set the ISO higher (1600) and the TV will be 1/125th of a second
- Depth of field = distance between nearest and farthest objects in focus
 - Decrease aperture = increase depth of field
 - Ideal depth of field comes with an F-stop setting of 5.6 and 8
 - Depth of field is an issue in artifact photography and more of an issue in lab photography
 - Increase sensor = decrease depth of field (movies want this balance)
 - Depth of field = closing lens, longer exposure, or increase amount of light

Lighting

- Sun is the enemy
 - A sun shield is needed like a field tarp
 - Try to get a white sheet (diffuser), which provides soft light
 - Could use an external flash, but it is harder to use
 - Also, a reflector could be used, which is round and aluminum
- When photographing people, 3-point lighting is used:
 - Key light, fill light, and hair light
- When shooting artifacts there is not hair light
 - In order to compensate, you can reorient the lights and shoot straight down
 - Or, tent the whole thing and put in a diffuser

While brief, my meeting was eye-opening. In addition to learning some basic, but invaluable, camera skills, I saw that training is essential in archaeological photography. Archaeologists work on many different scales in a given field season, e.g. landscapes, artifacts, microscopic remains, etc., and the environment in which pictures change often depends on the time of day, weather, season, etc. All these details impact a photograph and a trained person is needed in order to get the best shot.

With the current economy and archaeology's dwindling access to funding, one might ask, "Why fund a skilled photographer?" or "Why pay thousands of dollars for a DSLR camera?" There are probably numerous viable answers to this question; however, for me, it is an ethical responsibility. The Society of American Archaeology outlines eight principles of archaeological

ethics—Stewardship, Accountability, Commercialization, Public Education and Outreach, Intellectual Property, Public Reporting and Publication, Records and Preservation, Training and Resources. Proper recording techniques, photography included, are necessary in observing many of these principles and ensuring that the record is preserved and available for interpretation. In addition, great photographs also captivate larger audiences. For example, the National Geographic Society is an institution devoted to “inspire people to care about the planet” and one of the ways they do this is by taking high quality photographs and rewarding others who do the same. Quality photographs can show people that there are sites worth preserving and learning more about and it is to the benefit of the field to invest in taking care of the kind of images we produce.

Medium 2: Video

In addition to photography, video is another visual medium in which archaeologists can communicate their work. Like photography, video recording is not as simple as pushing down a button to create an image or series of images. In order to learn more about video production, I met with Cheryl Furjanic, NYU Anthropology's Media Technician on March 27th. The following is a transcript of the key points discussed during our meeting:

Equipment

- Given the array of choices regarding recording, Cheryl suggested a dedicated video camera, as opposed to a camera with recording capabilities, if possible.
- Tripod = Necessary in order for shots to be still.

Laundry List of Shots

- When creating a video, there are certain shots that should always be captures:
 1. Establishing Shot: This is a wide shot that gives viewers an idea of the setting
 2. Interactions: Make sure to record each part of the interaction. This will lend itself to the story component.
 3. 180° Line: This line is key in screen direction and it is important to maintain so the viewer does not get confused. Not maintaining this line would be like watching a soccer match in which the sides of the teams constantly changed and the viewer would be confused which team was trying to score in which goal.
 4. Cut Away Scenes: These shots help with the 180° line

Other Helpful Tips

- Sound
 - Check if there is a microphone input on the device
 - If not, a zoom recorder can record sound separately and sound and video can be synced later
 - Do not be verbally affirmative, especially if there is a microphone input on your recording device. Learn to nod instead
- When recording a scene or still object, record for an extra 10 seconds to ensure you captured the shot and enough of it
- When zooming, try to use feet and arms instead of a digitally zooming in order to retain image and video quality.
- Practice before heading to the field and watch good examples of effective video.
- Software: FinalCut Pro for MacOS

Meeting with Cheryl provided a glimpse into a whole new world. I quickly realized that the primary aims of most archaeologists and videographers are completely different. While archaeologists usually want to relay the facts and show the process of various aspects of research, videographers want to convey a compelling story. Neither is a more noble cause and both can be merged effectively; however, it is important to be aware of the initial mindset of the two fields.

Cheryl also provided useful insight on the program 'Gigapan', which can be merged with GIS (Geographic Information System) files in order to create detailed high resolution imagery. This allows for the user to zoom into key features of a site or object without comprising the resolution and quality of the image. Speaking with media specialists not only provides much needed expertise on technologies, but also allows archaeologists to be updated on new programs that could be useful for a project.

Medium 3: Television

Television is a medium in which many people access their knowledge of the world, including the field of archaeology. More often than not, archaeologists are frustrated by the misrepresentation of archaeological research and knowledge, which range from oversimplifying an issue, overemphasizing one interpretation of a site or object, or just disseminating incorrect information based on no evidence. One alleged perpetrator of the aforementioned grievances is The History

Channel. In order to understand the ongoings and rationale behind historical and archaeological programming, I met with Jillian Rosen, a Programming Coordinator in Development and Programming for the History Channel on April 17th 2013. The following is a transcript of the main issues discussed at our meeting:

About the History Channel

- Part of bigger network that includes Lifetime, AE, and H2 (History Channel 2)
- Programming is selected by hearing pitches from production companies. If successful, there are usually two options:
 1. Money is given for a micro-pilot, which can be about 10 minutes in length. This is typical for unscripted programming.
 2. Money is given for a full-pilot and this is typical for scripted programming.
- The two basic types of programming are scripted (e.g. sitcoms, dramas, soap operas, etc.) and unscripted (e.g. reality, interviews, talk shows, etc.). Each type of programming has different aims:
 1. Unscripted: It is more important to have interesting characters than a good concept.
 2. Scripted: The most important thing is good script.
- All shows must fit within the 'brand' of the History Channel, which is as follows:
 - Revolves around genre of 'American Hero'
 - Also invented the following two successful genres
 1. 'Great American Originals' –Man, Machine, and Nature
 2. Transactional –Think about shows like Pawn Stars
 - The current trend of the network is to focus on 'Americana' pieces
 - Demographics
 - 70% male, ages 25-54
 - Audience largely originally from Middle America

Characters are Key

- A character, no matter the type of programming, is key. Characters are easier to follow and the network feels that it must dumb down content for viewers. Everything must be easy to follow.
- Survey pieces like 'Mankind' did not rate well, but a series entitled, 'Men Who Built America', which focused on specific people, rated very well.

Archaeological Programming

- Many archaeological programs use a 'talking heads' documentary approach, which is not as popular; however, the programming is still tightly focused, e.g. 7 Wonders of the Ancient World. Other programs, e.g. Ancient Aliens, which continuously use the 'talking heads' approach have seen ratings decreases, thus, they have been moved to H2, a secondary network of the History Channel.

- The newest type of ‘archaeological’ programming that is doing well is a scripted show titled, ‘Vikings’.
 - It is 100% scripted (think Game of Thrones)
 - Involves numerous components of well rated dramas (e.g. sex, drugs, illegitimate children, etc.)
 - Centered around the real-life Viking, Wagner Lockboth
 - Most of the story line is made up; however the larger story is based on the historical record.
 - Some details, e.g. clothing, technology, foodstuffs, are also based on known facts of the time.
 - A key to the show’s current success was the publicity and promotion surrounding the series, which included posters, trailers, and portrayal of this series as an epic story.

Final Remarks

- What do you do if you want to convey a largely accurate representation of the archaeological record?
 - Go to PBS
- What is needed for a well-received show about archaeology?
 - Interesting characters
 - Drama is needed and that can be taken from the lifestyle of the people portrayed
 - Make sure to appeal to the audience. Do not make things too hard are too complicated. The audience does not and will not work for it.

Meeting with Jillian was another eye opening encounter. At first it seemed quite unfortunate that that the mental state of the general American public was the way Jillian mentioned; however, television is often an outlet for most people. When I come home in the evening and I watch a sitcom, I appreciate clever and witty programming, but it is also nice that I do not have to think that hard. This does not mean that archaeological content has to sacrifice integrity in order to appear on television; however, we need to find a way to make aspects of what we do easier to understand.

After speaking with Jillian, it seemed like scripted television would be a happy medium for both the archaeologists and the general public. While documentaries might seem like the best initial video medium, the present numerous issues. On the outset, this type of program exudes authority on a subject, which leads the viewer to conclude that everything they are viewing is factually accurate; however, in trying to appeal to a wide audience the documentary might insert various

components that could hinder that integrity of the material presented—e.g. over dramatization, well-spoken, but ill-informed ‘experts’, blatant inaccuracies, etc.

Scripted television puts up an initial barrier to the audience and suggests that not everything being viewed is not accurate. Unfortunately, it is not easy to delineate what is fact versus fiction. In dramas, the line is very hazy; however, I think that comedy would be the ideal medium in this scenario. With comedies, the audience is less inclined to believe that most story components are true; however, this genre allows for the opportunity to provide accurate details about the lives of everyday people, technologies that they used, foods that they ate, etc. If we allow compelling fictional characters to be a proxy for specific archaeological concepts, finds, and sites, we might have a fun and interesting way to relay certain archaeological information to a wider audience. In the past we have enjoyed tangential mentions of archaeological research in comics like the Far Side and Calvin and Hobbes and I believe that translating this type of humor on a television program would be an agreeable and enjoyable medium for both archaeologists and the general public.

Discussion

Communicating the past to the general public is a difficult task. While many of us can and do speak to small audiences, coming up with consistent forms of communication for very large audiences is demanding and often does not happen given the other responsibilities that many archaeologists must balance. Nonetheless, this is an important task, not only ethically, but for the survival of the field. As archaeology, along with many other fields in the humanities and social sciences face funding setbacks, reduction in department sizes, and limited enrollment, many people have questioned the future of archaeology.

It seems that this questioning is partly attributed to the communication between archaeologists and the general public. In 1970, John Fritz and Fred Plog wrote, “We suggest that unless archaeologist find ways to make their research relevant to the modern world, the modern

world will find itself increasingly capable of getting along without archaeologists (Fritz and Plog 1970: 412).” While the term ‘relevance’ can be debated, it brings to light the issue of relatability. If we, as a field, continue to not reach out to the public, then we will continue to face this ongoing going existential crisis. Other archaeologists have taken note of this issue and have urged for better public engagement.

In the early days of archaeology, the field was able to relate to the public in a variety of ways. In the United States, *American Antiquity* was originally created to provide a forum for both professionals and amateurs to engage in mutually beneficial discussions (Sabloff 1998: 870); however, with the increased professionalization of the field, the journal exclusively publishes works from scholars and it is one of the journals many scholars aspire to publish in. Nonetheless, archaeologists in the 19th and early 20th century published works, outside journals, that were accessible to a larger audiences. For example, Alfred Kidder’s *An Introduction to the Study of Southwestern Archaeology* (Kidder 1924), was hailed by many as a scholarly read that was accessible to a general audience (Sabloff 1998: 870).

In the United Kingdom, early 20th century archaeologists frequently communicated with the public. Many of Vere Gordon Childe’s publications, including one of his most famous pieces, *Man Makes Himself*, is completely accessible to a wider audience. Another British archaeologist, Mortimer Wheeler, was a popular figure in the media and believed that public support was vital for the continued existence of the discipline. In the 1950’s and 1960’s, he appeared on numerous television shows and he was even named ‘TV Personality of the Year’ in 1954 (Ray 2008: 61). He also published books that were digestible to broader audiences, such as his auto-biography, *Still Digging*.

All of the aforementioned scholars have made significant contributions to field; however, as archaeology became increasingly professionalized and specialized, public engagement dwindled. In

1996, Jeremy Sabloff gave the Distinguished Lecture in Archaeology at the 95th Annual Meeting of the American Anthropological Association (Sabloff 1998). His talk was entitled, 'Communication and the Future of Anthropology'. Though this speech was given during a time when archaeology was not facing the significant financial disadvantages it is now, the main points about public engagement are still very salient today.

One of the key points that Sabloff discusses is the devaluation and stigmatization of popular writings and popular writers in the field. Sabloff attributes these negative attitudes towards public engagement to a number of factors like the need to promote research as rigorous, jealousy, and lack of recognition from university administration regarding popular works (Sabloff 1998: 870-874). Unfortunately these issues are not easily remedied; however, the root of these issues rest in the scholarly community itself and it gives the field a definitive starting point in which to resolve the issue. While jealousy might be the hardest to fix, recognizing popular writing as a worthwhile scholarly pursuit will alleviate scholars from feeling that their work would be viewed as less rigorous and it would reward researchers for public engagement if the university also factored such works for job hiring, tenure cases, and pay increases.

Popular writing should not replace peer-reviewed mediums, but it should complement them. One of my former professors attempted to write one popular text for every scholarly text he wrote. While this might be difficult, the sentiment is admirable. Peer-review is a process that benefits the field; however, once the field has had a say on a paper or number of papers, the author should find a way to relay that information to the public.

This project aimed at looking at ways in which we can effectively communicate the past. While we first must come to terms with the fact that we must engage the public, I wanted to start looking at the next question, which to me was, "What are the most effective and appealing ways to disseminate archaeological content?" While I might not be a full-time archaeological photographer

or videographer, the conversations I had with Doug and Cheryl gave me a foundational set of knowledge in which I could properly communicate my expectations for a given product, i.e. photographs and videos, to media experts. My meeting with Jillian has influenced how I might organize and frame future undergraduate classes and popular writing. While many topics might be complicated, it is worth spending time to figure out how to make such concepts digestible without sacrificing integrity. Many of us do this in a classroom setting; however, we should push this a little further and find a way in which many people can engage with the knowledge we have spent so much time amassing. While public engagement is an ethical responsibility, it is also vital for the success and growth of the field. This starts with finding effective and engaging ways to communicate the past.

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