I did a data crosswalk between Marc 21, EBU Core and Dublin Core and in the process got to know each of the metadata systems a lot better. In my analysis of the three systems individual strengths and weaknesses particularly in regards to moving images I will start with my favorite. MARC 21 Format for Bibliographic Data is designed to be a carrier for bibliographic information about printed and manuscript textual materials, computer files, maps, music, continuing resources, visual materials, and mixed materials. Bibliographic data commonly includes titles, names, subjects, notes, publication data, and information about the physical description of an item. Marc 21 is the one I most enjoyed simply because it is the most detailed and has all of the information that I was looking for at a granular level and larger level. This is the systems greatest strength, detailed fields for all types of data and situations within a library or archive regarding any format of work; the 3xx sections allows for physical description in general and also specific fields for video, projection characters, digital file characteristics, etc. which is useful for a moving image specialist. The fact that it has fields that give a specific location within an in house organization and holdings in additional organizations makes it easier to track down the resource. The other two systems have identifiers or call numbers to locate, but this one specifically has holding listings as a separate field. Marc 21 is the most detailed of the three and can be extremely user friendly with a little adjustment period. It also is compatible for moving images that are in circulation and published most of all as supposed to works in development.

The weaknesses for Marc 21 is manual input can be time and labor intensive and it is not as moving image production friendly as other systems. There are upwards of a thousand fields with many subfields that can be entered in the system. If the Marc 21 record arrives already filled completed, it is incredible collection of data about a resource. If one has to input all of the fields it can take a lot of time and decisions regarding if there are multiple entries that one piece of information can have. For production its weakness is the fact that it does not have the information regarding parts, for instance edit masters and parts, readily linked to the resource; its strength is for published materials. There are many instances where a work will be changed whether its format migration or editing and the Marc system will have them under separate records not as easily linked as other systems.

EBUCore is one of the systems that is designed for the completed and in progress audiovisual material in particular. It is the European Broadcast Unions metadata scheme for its materials and institutions. EBUCore addresses the creation, management and preservation of material that can be used as originally produced, or contribute to the generation of new programs. This specification also facilitates program exchanges between broadcasters or between production facilities in a distributed environment. EBUCore can be used to describe content for description. Its strengths for moving image material are many and it allows for many parts, many formats and many parts of an audiovisual works lifespan. Looking at two of their core elements, date and format, will illustrate this. Date, which is defined as events occurring during the life of the resource, has the subelements of date issued, date created, date modified, date digitized, date alternative and date alternative type. This way disputed release dates, edit dates and

excels the most for moving image material. Format is a core element with very specific subelements; this is the most granular that EBUCore gets under any element. It has individual subelements for video format, video encoding, audio format, audio encoding, audio track, track configuration, audio track id, audio track name, audio track, and audio track language among many others. This allows for tracking and the specific cataloging for all of the production pieces that make up the whole of an audiovisual work. There are other elements that take in account audiovisual works lifespan, such as source, but those two exemplify understand of the nature moving image works themselves and their production cycles. The other big strength is its interoperability and linked data across systems.

Unlike Dublin Core the creator and contributor elements in EBUCore are designed for moving image works. Creator is for people behind the camera and contributor are for people in front of the camera; it is a more a clear delineation. The other thing that I really liked about EBUCore is its rights elements, it is granular and has subelements that specifically allow for a controlled vocabulary or numerical listing of rights in rightsID and others that have more general description in rights type and exploitation issues.

The weaknesses for moving image collections are not that many in EBUCore.

The big weakness for me is the lack of a location and action elements. The actual physical location is under the identifier and can specifically show where something is, but for ease of use location should be its own element with subelements; this way a researcher or producer could locate the specific part or whole concretely. EBUCore also

does not have a good place to list preservation actions for the work. On both the production and information science sectors interested in the work, preservation should be a major concern. It would fit under format or description, with format being the better place for that information. Format would describe preservation concerns and actions associated with the formats associated with the work and description would describe to the whole work, but for actions needed there should be more emphasis and a better place to put that information.

The third and final metadata system used in the crosswalk was Dublin Core.

EBUCore is based off the Dublin Core, but specifically designed for moving image work.

Their mission and purpose according to <a href="http://www.dublincore.org/metadata-basics/">http://www.dublincore.org/metadata-basics/</a> is

Early <u>Dublin Core workshops</u> popularized the idea of "core metadata" for simple and generic resource descriptions. The fifteen-element <u>"Dublin Core"</u> achieved wide dissemination as part of the <u>Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)</u> and has been ratified as <u>IETF RFC 5013</u>, ANSI/NISO Standard Z39.85-2007, and ISO Standard 15836:2009.

Starting in 2000, the Dublin Core community focused on "application profiles" -- the idea that metadata records would use Dublin Core together with other specialized vocabularies to meet particular implementation requirements. During that time, the World Wide Web Consortium's work on a generic data model for metadata, the Resource Description Framework (RDF), was maturing. As part of an extended set of DCMI Metadata Terms, Dublin Core became one of most popular vocabularies for use with RDF, more recently in the context of the Linked Data movement.

The basic idea is core metadata, controlled vocabularies and linked data would provide interoperability and an easier way to input and provide metadata. It is not nearly as granular as Marc 21 or as moving image based as EBUCore, but still is useful for moving image works. Dublin Core has its strength for moving image works in its simplicity. The core fifteen elements will give enough information for any work. The time necessary to input information into the system is greatly reduced than in the Marc format. I particularly thought the streamlined element type for genre, publisher for the releasing agent, dates for multiple dates associated with the life of the work and format for all the

physical and such things as run time were particularly useful for moving image works.

The specific rights element also is useful in the fact it is easily located. The fifteen elements versus the thousand fields of Marc 21 is Dublin Core's strength. Various parts of a work that have separate records are also easy to link.

The streamlining also means that Dublin Core left some more granular information off of its record. Like EBUCore the identifier works for location of a work in a given institution for Dublin Core. The record gives a call number as well as something similar to the international book number for any work, but not its specific location. The creator versus contributor value designations also means that important people involved in the creation of the work would be given a lesser credit. Creator is for people who are the primary creative force behind the work, while contributors are individuals who helped but were not as instrumental in its creation. I prefer the EBUCore designation of creator being those who worked behind the camera and contributors those who worked in front of it. These distinctions of more or less valuable do not necessarily need to be made by a cataloger who does not know the moving image work that well. Preservation actions do not have a good place in Dublin Core. They will be put in description and format with abstracts and physical characteristics of the work itself. A separate action field would be more useful for the organization so they know what to do with the item specifically.