

Objects of Human Desire: The Organization of Pornographic Videos on Free Websites

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Abstract: Pornographic content is pervasive on the Internet; nevertheless, our knowledge concerning how this content is organized, described, and accessed by individuals is limited. Human sexuality has been a problematic topic within the field of library and information science (LIS). Thus, this study investigates the terminology used to describe pornographic videos. More specifically, this study explores the categories available to access

the videos and formulates a framework within which we can begin to address materials of a sexual nature. For the study presented below data was extracted from 20 free websites to explore the categories used for access, the search mechanisms provided by the sites, and the organizational patterns used for the pornographic video content. This project contributes to an area of research that remains relatively unexplored, and provides useful insights into the organization and terminology surrounding what is inarguably one of the most controversial, and yet ubiquitous, types of material accessible via the Internet.

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1.0 Introduction

Over the course of the past 60 years the availability of, and access to, pornographic materials has seen a near revolution. Although several health and photography re-

lated serial publications published images of nude bodies prior to the 1950s in North America, the number of individuals reached through these titles was limited. This situation changed with the founding of Hugh Hefner's American men's lifestyle magazine *Playboy* in 1953. This

magazine's combination of shrewd writing and nude imagery became an instant success, and several additional journal titles followed its dual natured lead in providing pornographic content alongside news and general interest stories to a growing audience. Nevertheless, access to pornographic content continued to be limited to a handful of journals that many readers ashamedly purchased. While these journals provided interviews with influential individuals, news reporting, and other thought pieces, as a means to make their non-textual content more palatable, their revealing imagery continued to be controversial, especially when seen through the eyes of conservative communities.

In addition to print-based adult magazines, pornographic content available during this same time-frame could be found in a variety of formats. This included books, postcards, photographs, film, and more recently, video. To access pornographic material, individuals could purchase items through mail-order services, and the more adventurous among them could visit specialized stores, or sex shops in-person to peruse and select content.¹

With the development of the Internet, personal computers, and mobile devices, freely available pornographic content online has revolutionized the way individuals access materials of this nature. As a result, interest in printed adult magazines has waned (Pisani and Piotet 2008). Similarly, the adult film industry has experienced a shift in their market share thanks to the availability of consumer-based video technologies, and the ability of content producers to easily distribute their pornographic content via the Internet.

The transmission of content via the Internet has meant that pornographic material can be accessed at home, thus limiting the need for individuals to make public their pornographic viewing habits. Obviously, this change has alleviated the public embarrassment many associated with viewing pornography. Moreover, beyond being accessible from the comforts of one's home, pornographic content on the Internet can be accessed through both free and commercial sites. Tancer (2008) notes the average visitor to a pornographic website spends 6.5 minutes per visit, and that the site being visited is likely to offer free content. The prevalence of free content is supported by Doran's (2008) finding that approximately 80-90% of Internet porn users access only free material, whether through samples of pay-to-access material, illegally copied versions of pay-to-access material, or through amateur material. Even with the pervasiveness of free content, an estimated 3 million Americans purchased pornography online in 2008, paying an average of \$60 per month (Doran 2008). These figures indicate the widespread nature of pornography on the Internet and point to an under-recognized area for research.

The increased presence of sexually explicit material in contemporary mainstream culture does not necessarily translate to social acceptance, however (Voss 2012). In fact, libraries have had to confront interesting problems in their treatment of sexual materials. For example, they have struggled with whether they should allow (or not) the viewing of sexual content on the computers available to their users. According to the American Library Association, libraries do not have an obligation to give access to content not considered protected speech (ALA 2010). This content includes child pornography, and other obscene material that does not offer social or artistic value. Nevertheless, librarians have not wanted to assume the responsibilities of a law enforcement officer, especially in light of the fact that a clear definition of obscenity has yet to be established. In other words, librarians are trained to turn their heads if placed in such a situation.

Complicating this matter further is the fact that individuals may examine porn for "valid" research purposes, such as those falling within the realms of gender studies, human sexuality, popular culture, cinematography, etc. (Creel 2013; Heller and Storms 2012; Farrelly 2008; Dilevko and Gottlieb 2004; Levine 2002). While pornography has become a more visible topic in recent years among a number of disciplines, LIS research into topics concerning pornography and pornographic content are uncommon. This situation raises a question which must be asked. If sex is a primary human drive, why has so little LIS research been performed in this area? Studies of pornographic content, while inarguably one of the most controversial, and yet ubiquitous types of material accessible on the Internet, may offer up insights into previously unknown aspects concerning human information behaviors. In general pornographic materials have not been studied thoroughly in knowledge organization which is, according to Smiraglia (2014), "the field of inquiry (often but not exclusively thought of as situated within information) where the nature and order of knowledge is studied" (p. 58). However, the study of the concept of "pornography" as a form of knowledge, as well as its organization on websites as been neglected. As stated by Spink and Jansen (2004) "sexual information seeking is an important element within human information behavior" (p. 149). Consequently, in order to contribute to an area of research that remains relatively unexplored within knowledge organization and LIS, and to provide useful findings concerning access to pornographic content, this study investigates the organization and terminology used for retrieving pornographic videos by free websites. More specifically, this study explores the categories available to access the videos in an attempt to formulate a framework within which materials of a sexual nature may be explored.

The paper is structured as follows: Section 2 surveys previous studies conducted on pornographic material; Section 3 describes the methodology used; Section 4 reports the main findings, which are discussed in Section 5; and Section 6 concludes the paper and suggests future research directions.

2.0 Related Works

Topics relating to human sexuality are woefully under-examined within the domain of LIS. While numerous publications exist within the domain addressing information behaviors, there is a noticeable rift in the amount of published research when materials of a sexual nature are discussed. As topics within the library context, providing access to materials of a sexual nature has seen some interest (Dilevko and Gottlieb 2004; Dilevko and Gottlieb 2002; Cornog 1991), as has the closely aligned topic of the censorship of sexual materials within library contexts (Holley 2014; Farrell 1997; Cornog and Perper 1996; Kniffel 1993). When the literature within the domain was examined for the more narrowly defined area of pornography, very few papers were found which address the topic directly. Regardless of one's personal beliefs regarding providing access to pornographic materials, the domain needs to recognize that 1) that there are varied reasons behind an individual's interest in pornographic content (i.e., curiosity, research, education, physical, etc.) and, 2) some percentage of all Internet searches are pornographic in nature.² This interest has driven the development of a multibillion dollar a year world-wide industry that has largely gone unrecognized within the domain of LIS.³ The lack of research attention could be attributed to several factors including methodological difficulties in performing research of this nature, and the conservative aims of various institutions supporting LIS research that are likely to be ill at ease in supporting such efforts. Keilty (2012c) wonders if this situation can be attributed to the fact that "pornography has been considered too crude to invite much investigation" (p. 42). On an individual level, research may be thwarted by the fact that the topic lies within a moral gray area, and that there is a very real fear of potential personal fall-out for performing research into a topic seen as untoward (Manley, 1992a; Manley, 1992b).

The issues associated with researching sexually explicit material have been discussed by Voss (2012), who states that "[t]he business aspects of pornography are rarely the actual focus of academic studies and are often merely the justification for such research. This lack of examination is the result of the challenges of studying phenomena related to any facet of sexuality" (p. 392). Hill and Harrington (2014) have added to the conversation surrounding

the topic by insisting on "an understanding of the shift in the role of the librarian from one of 'censor' to one of 'defender of intellectual freedom' and an understanding of how controversial materials, writ large, have been explored" (p. 63).

Other authors have noted issues surrounding the way the domain has failed to address pornography and other topics of human sexuality. Crook (2001), highlighted the possible self-censorship that exists when such a large topic is neglected on a national level. Davenport and Cronin (2001) noted that while "electronic commerce offers immense opportunities to the producers of pornographic products and services," it is a topic which is largely absent from academic literature (p. 33). They also observed that new technologies provide easy and discreet access to pornography within the consumer's personal space. Thus this anonymity has, as a consequence, hidden most needs and behaviours of porn consumers.

Several studies within the domain of LIS have reported findings which address topics of a sexual nature. In their analysis of Web queries of users of the Excite search engine, Spink et al. (2001) found that queries categorized as Sex, pornography, preferences accounted for 16.8% of all queries. Searches of this type were found to be prevalent, falling at one-tenth of a percentage point behind the top query category Entertainment, recreation (16.9%). These researchers also mentioned that "not all queries in this category are about pornography; many are about other aspects of sex and sexuality. Thus, in no way is pornography a major topic of Web queries, even though the top ranked terms may indicate this. Only one in about six Web queries is about sex, and, as mentioned, not even all of those are geared toward pornography" (p. 233). A few years later, Spink and Jansen (2004) analyzed queries from search logs extracted from AltaVista and AlltheWeb.com. Their study provided an overview of sexual information seeking on Web search engines and concluded that sexual information seeking "is related to the wider concerns of everyday life, social adaptation, and survival in the information age" (p. 150).

Dilevko and Gottlieb (2002) conducted a broad analysis of pornography that drew a sensible portrait of the industry. Using classifications extracted from four different adult industry sources, they provided categories that could serve as a model for how pornographic concepts could be incorporated into libraries. They stated that because of its recent exponential growth, pornography will necessarily become of interest to researchers and concluded that "libraries must find a place for pornography on the shelves and in the array of knowledge structured by bibliographic access systems" (p. 135). In 2004, Dilevko and Gottlieb insisted on the fact that the treatment of adult pornography as part of popular culture

will have an inevitable impact on scholarly research within college and university libraries. They suggest that as a means of better serving their research communities “academic libraries should acquire and catalogue pornographic Web sites as part of their own collections” (Dilevko and Gottlieb 2004, 48).

More recently, Ogas and Gaddam (2011), two cognitive neuroscientists, examined searches performed on the Web. After an analysis of some 400 million web searches from July 2009 to July 2010, the researchers concluded that 1) 13% of all Web searches were for erotic content; 2) the most popular category of sexual searches was “youth”; and 3) 35 of the top searched sexual interests account for 90% of all erotic searches. Ogas and Gaddam also discovered that there was a marked prevalence for “unconventional /deviant” interests. Their work has revealed that we know remarkably little about human sexuality, and emphasizes the value of Internet searches as a means of examining not only previously unknown aspects about human sexuality, but also the information seeking behaviors among individuals searching for materials of a sexual nature.

Studies of image tagging in non-adult sites have been undertaken on image uploading websites, with the associated user-generated descriptions suggesting that there remains a great deal to be gleaned from their activities. According to Beaudoin (2007, 29) “[t]he popularity of image tagging is a testament to the effort people are willing to expend in describing their images”. We can speculate that the same amount of effort is dedicated to the description of pornographic videos. However, little is known about the descriptive schemes associated with sexual materials found online beyond what has been discussed in a handful of studies.

The few studies reporting on the classification of online pornography have indicated that a degree of variation exists in the way people categorize sexual content. Cunningham (2013), suggests that the schemes for organizing pornographic materials “vary widely, in structure, complexity (e.g., number of categories), and terminology” (p. 18). Keilty (2012b) notes that the “mechanisms of power around classifications of gender and sexuality are not always top-down or bottom-up. Instead, the weight of social discipline among members of sexual subcultures themselves helps to create these classifications, always in a complex relationship with the dominant culture” (p. 428). That some form of social control on the categorization of pornographic content is exerted is supported by the findings of Schuhmacher, Zirn and Völker (2013). These researchers, reporting on the basic phenomena associated with a YouPorn dataset, state the categories employed were not mutually exclusive, and that labelling differences exist by gender. Dean-Hall and Warren’s (2013) analysis of porno-

graphic categorization suggests four predominant attributes are used to describe content: gender, ethnicity, age, and hair color. That some over-arching structure exists in the categorization of porn appears to be supported by the findings of Keilty’s (2012a) examination of contemporary folksonomic classifications of representations of queer desire within XTube. He suggests that “members of sexual subcultures do not name and organize their particular modes of sexual being in entirely idiosyncratic ways, free of culture and discipline. Instead, folksonomies develop within the conventions of a particular language and in relation to broader cultural ideology” (p. 323). Thus, these studies suggest that while variations may be found across particular groups of individuals, socio-linguistic pressures exert control over classificatory structures associated with pornographic content.

3.0 Methods

3.1 Sample

For this study 20 free porn websites offering video content were randomly selected from the returns provided through an Internet search performed with Google using the terms “free porn”. Criteria for inclusion in the study consisted of free access to content, the provision of video content, and the use of some form of categorization system for the content. One of the websites selected for analysis (Spankwire) presented 3 discrete interfaces based on sexual orientation (straight, gay, and transsexual). These three interfaces were analysed separately, bringing the total number of sites examined to 22. Other languages were sometimes included on some websites, however for this study, only English and French site categories were examined.

3.2 Data Collection and Preparation

A variety of administrative (e.g., website name, url) and website characteristic data (e.g., languages, site categories, number of videos, scope notes, literary warrant, and tagging practices) were collected by the researchers in the spring of 2014. As the data were collected from the websites, they were entered into an Excel spreadsheet for later analysis. A total of 2909 site categories were extracted from the 22 websites in the sample. Data preparation consisted of examining the various categories provided by the websites for the videos, and normalizing the data for any categories that were considered duplicates (e.g., redhead, redheads, red head, and red heads all became redhead). At the completion of the data preparation phase a total of 1443 unique English video categories, and 353 unique French video categories, were inventoried.

3.3 Data Analysis

A content analysis approach was adopted to investigate the site categories used on the websites to organize the video content. This allowed the researchers to group the categories under a larger concept (Weber 1990). For example, the Activity category was developed to represent the site categories relating to the narrative action within the videos, such as lap dancing, kissing, screaming, sleeping, etc. Content analysis was chosen for this study because it is the most appropriate method to investigate open-ended items, such as existing search interfaces and web tools (Landry 2002). Additionally, this method of analysis was selected as it is advantageous for providing insight into large amounts of data to develop hypotheses for further testing. The content analysis performed on the site categories resulted in the development of a coding manual which identified and defined 17 conceptual groupings (Table 1):

Category	Definition
Activities	Actions which take place within the narrative of the video
Age	Age of actors
Cinematography	Technical aspects of recording the action on video
Companies / Producers	Identification of companies and, or producers of video
Era	Identification of time period in which the video was made (and / or represents)
Ethnicities	Ethnic types of actor(s)
Gender	Sex as identified in site categories
Genres	Types of film based on narrative elements
Illustrations / Cartoons	Hand or machine drawn video imagery
Individuals / Stars	Particular named individuals who act in the video
Instruction	How-to information geared toward skill and knowledge development
Number of Individuals	Number of actors
Objects	Named items which figure prominently in the narrative of the video
Physical Characteristics	Anatomical details identified in site categories
Roles	Functional positions an individual takes within the narrative
Settings	Locations of narrative
Sexual orientation	Sexual orientation of the actor(s) as depicted in the narrative

Table 1. Conceptual groupings

Additional content analysis was carried out on several conceptual groupings based on the high number of site categories contained within each group (occurrences of

100 or greater). Further analysis was conducted to provide subdivisions within these larger groupings. An example of the sub-groupings within the conceptual grouping *Objects*, is provided below (Table 2).

Sub-Grouping	Site categories
Body Fluids	Jizz, load of cum, own cum, pre-cum, sperm, spit
Clothing	Diaper, fishnet, high heels, leather, school uniform
Food	Banana, cucumber, lollipop, milk, pizza, sandwich
Furniture	Casting couch, desk, piano, toilet
Toys	Anal beads, butt plug, dildo, gag, pocket rocket

Table 2. Example of Sub-Groupings - Objects

Finally, as additional means of data collection, the researchers contacted the website administrators to collect additional data about the websites' development. A formal invitation to participate in the study was sent to the websites' administrators which contained a link to a survey. The survey consisting of 16 questions (open and closed), was designed and administered through SurveyMonkey, sought data concerning the websites' demographics, categorization techniques, users, and future development. Unfortunately, none of the website administrators completed the survey in response to the researchers' request.

4.0 Limitations

Several limitations of the study must be acknowledged. This research project attempted to provide useful information concerning the organization of, and terminology used for accessing, pornographic videos on free websites. First, the topic of access to pornographic material is a non-traditional topic that has received limited research attention, particularly in the domain of LIS. Consequently, the availability of scholarly literature and research studies upon which to ground the current study were particularly scarce.

Second, the sample identified and used to collect data on site categories provided to porn websites users is limited. The goal of providing a high-level, holistic view of video categories for the purpose of hypotheses construction meant detailed statistically significant, quantitative analyses were beyond the study's scope. The analysis of French site categories is even more restricted. The small sample size, coupled with the fact that the French categories were selected from websites which have main interfaces in English, suggest that the study's findings may not be representative of what exists more broadly on free porn websites developed for a French-speaking audience.

However, this data has been included here to highlight the research potential of an extended analysis of porn websites developed in other languages, rather than those that are more or less a translation of an existing website geared toward an Anglophone audience.

An additional limitation resulted from the primarily heterosexual content of the websites in the sample. While websites with varied sexual content were included in the sample, no effort was made on the part of the researchers to select and analyze sites based on specific sexual orientations. It is likely that a sample of non-heterosexually oriented websites would reveal in a different set of categories and subcategories.

A further limitation of the study is that pay-based websites were not examined. As the free websites may receive compensation from advertisers for the number of clicks received by visitors, it is possible that their site development practices vary from those of the pay-based websites.

Finally, the data collection methods employed did not include background details concerning site category development due to the lack of input by the site administrators. This limitation resulted in the researchers having to rely on their own interpretation of the site categories, rather than those provided by the websites' managers and developers. It should also be acknowledged here that the site categories reflect the classification principles of the websites, rather than those of the individual users accessing the content.

5.0 Results

5.1 Site Characteristics

The first phase of data analysis consisted of examining several basic site characteristics. The analysis revealed that content is generally displayed on the website by presenting a representative thumbnail preview and descriptive title for each video. The order in which the videos were uploaded plays a role in the organization of the video content, with the most recently uploaded items generally being displayed first on the websites. The resulting organization of the websites was generally found to be page after page of video thumbnails, with a menu of site categories like "teen," "anal," "ebony," and others situated in close proximity (Woida 2009, 2).

The majority of websites provide a menu where the site categories are presented. The site categories were sometimes presented down the side or across the top of the screen in alphabetical order, or on a separate page through a link displayed at the top of the website. The site categories are clickable and will bring the users to a display interface where video results are presented with a thumbnail. That is to say, the results are displayed with a

small image extracted from each video, usually intended to make it easier and faster for users to get an idea of the content of the entire video. These results also provide, in most cases, some basic metadata such as the length of the video, the uploading date (e.g., added Sep 22, 2014; uploaded 7 days ago), sometimes a ranking (e.g., 65% Like). In addition to providing access to videos through the predetermined site categories, most websites allow users to initiate a search by clicking on thumbnails directly or by entering keywords in a search box.

Porn websites also present several possibilities to refine the obtained results. For example, some websites also provide predetermined combination of tags (e.g., Black Male + College + Missionary + Mature). Some websites provide, once a video has been viewed, clickable tags that users can select to indicate their preferences (e.g., Doggy Style, White Female, Lingerie). Results can also be filtered by named porn stars, "like," and other features. While the websites present multiple avenues for searching, only 3 websites (out of 22) offer some form of search "help" to their visitors.

Further analysis of the websites in the sample revealed the number of videos posted by each, and the language(s) employed in the site categories. Examination of these site characteristics revealed that the size of video collections varied from 120 to more than 5,000,000 clips. However, in many cases (8 of the 22 websites) the collection size was indeterminable. All 22 websites in the sample provided an English language interface. One website was bilingual and contained site categories presented in English and Spanish. A multilingual interface (3 or more languages) was found among 6 websites in the sample, with categories presented in English and Dutch, French, German, Italian, Japanese, Polish, Portuguese, Russian, or Spanish. In the case of 5 websites, site categories were provided in French and English.

Finally, the number of site categories and the formal organizational principles of the websites in the sample were analyzed. The number of site categories in use across the websites in the sample ranged from 20 to 1076. In most cases the websites employed 45 to 70 categories. Two sites (Apetube and Fuq) used the same 1076 categories. In terms of formal organization, the use of hierarchical categorization and scope notes was limited. Only one of the 22 websites (Porn.com) presented hierarchical site categories and only one provides scope notes (xHamster.com). Concerning literary warrant, all examined websites include video content within categories.

5.2 English Conceptual Groupings

An analysis of the site categories used to organize the video content on the websites was carried out as a means

of determining the distribution of conceptual groupings. As seen in Figure 1, the analysis discovered that the 5 most frequently encountered conceptual groupings across the websites in the sample are: Activities, Physical Characteristics, Roles, Ethnicities, and Objects.

As Figure 1 indicates, the predominant site categories found across all websites are those belonging to the conceptual grouping describing the Activities shown in the videos. An examination of the site categories within this conceptual grouping shows that this set is dominated by terms which identify Types of activity (e.g., lap dancing, kissing, wanking), and this is followed terms relating to Fetish (e.g., bondage, caning, domination), and Biofluids (e.g., cum swapping, drooling, golden showers). The next most frequently found conceptual grouping Physical Characteristics, which identifies site categories relating to body parts, includes an obvious focus on terminology relating to Breasts (e.g., buxom, knockers, tits), Penises (e.g., cock, dick, prostrate), and Vaginas (e.g., clit, pussy, snatch), but indicates additional anatomical details of interest. For example, Hair was discovered to be an important concept within this grouping. This subgrouping included site categories with all possible variations from blonde to red hair, and with absence/presence of hair qualifiers (e.g., bald, hairless, long hair). The third most often found conceptual grouping among the websites was Role, which contains site categories describing the characters' narrative function, is largely dominated by site categories connected to Everyday Life (e.g., friend, hippy, neighbor), or Jobs (e.g., cop, librarian, boss). The next most often found conceptual grouping Ethnicities, which includes site categories associated with different ethnic groups, contains a majority of categories associated to Origins (e.g., Asian, Dutch, Scottish). Finally, rounding out the top five most frequently encountered conceptual grouping is that for Objects. This grouping, which identifies objects within the narrative of the video, contains a predominance of site categories describing Clothes (e.g., bra, hot pants, school uniform). This subgrouping was followed at a distance by categories related to Toys (e.g., anal beads, dildo, speculum), and Everyday Objects (e.g., cash, pillow, window).

To complete the analysis of the site categories, how the site categories were distributed across the 22 websites was examined (Figure 2).

It was discovered that none of the site categories were found on all 22 of the examined websites. While only a few site categories are found on more than 10 websites, a majority of these categories were found to be unique, or near-unique, and were used on only 1 (19.6%) or 2 (70.4%) websites. This distribution demonstrates to what extent the terms used to describe porn videos vary from one site to another.

5.3 French Conceptual Groupings

As a part of the study's analysis, the researchers also examined the site categories used on the websites in an additional language. 5 websites (madthumbs, porn.com, youporn.com, pornhub.com, and Xhamster) provided site categories in French, and these were used for analysis below. The same conceptual groupings and subgroupings used in the analysis of the English site categories were used to code the French site categories identified in the sample.

As is illustrated in Figure 3, the 5 most frequently used French site categories fell into the conceptual groupings Activities, Objects, Settings, Physical Characteristics, and Ethnicities. These 5 conceptual groupings indicate a somewhat different distribution when compared to those found in use in the corresponding English interfaces (i.e., Activities, Physical Characteristics, Roles, Ethnicities and Objects).

The analysis of the 5 most often encountered French conceptual groupings revealed that similar to the English interface, Activity predominated. The Activities grouping is dominated by site categories associated to the Types of activity (e.g., branlette, groupe, léchage), followed by Biofluids (e.g., crachat, éjac, facial), and Non-sexual (e.g., danse, fumer, rasage) categories. In the French Objects grouping, it was observed to mainly contain site categories related to Clothes (e.g., bottes, corset, robe), followed by Everyday Objects (e.g., ballons, huile, serviette), Weapons & Restraints (e.g., bandeau pour les yeux, fouet, menottes), and Toys (e.g., gode ceinture, godemichet, jouets). The conceptual grouping Settings is also an important for French site categories. Various Institutional Places (e.g., bibliothèque, bureau, école) where the action takes place are used to describe the videos, suggesting that this particular aspect is an essential for the French porn consumers. The 3 main subgroupings identified in the conceptual grouping for Physical Characteristics are General Aspects (e.g., dodue, jolie pépée, nains), Hair, and Breasts (e.g., gros seins, petits nichons, tétons). Finally, the conceptual grouping Ethnicities contains mainly site categories relating to Origins (e.g., allemande, japonais, turc), which is similar to what was found in the corresponding English conceptual grouping.

6.0 Discussion

Overall, the findings reveal that the terms used by the adult industry to classify pornographic films could be grouped to highlight specific topics, concepts, and subject areas that connect pornography to culture, as stated by Dilevko and Gottlieb (2002). Their study suggested that "terms used by the adult industry to classify porno-

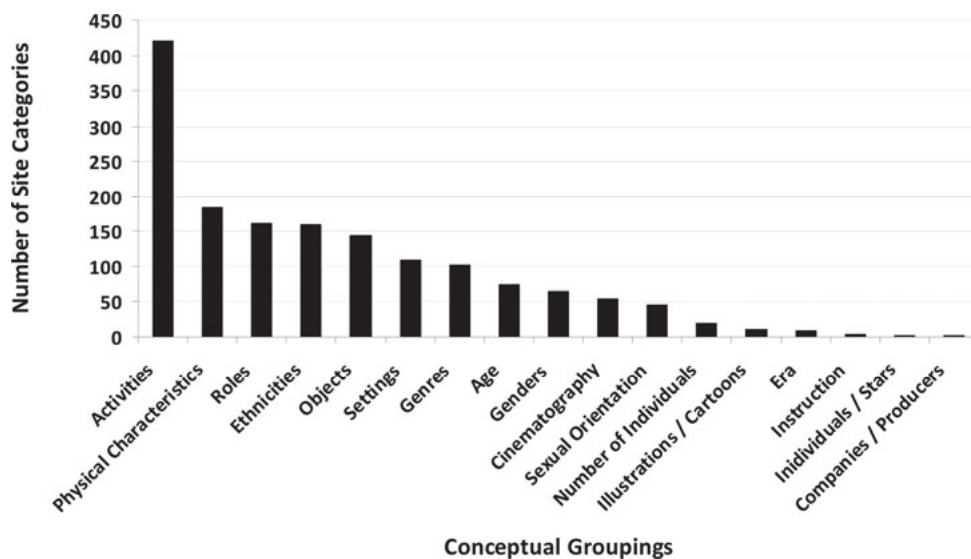


Figure 1. English Conceptual Groupings

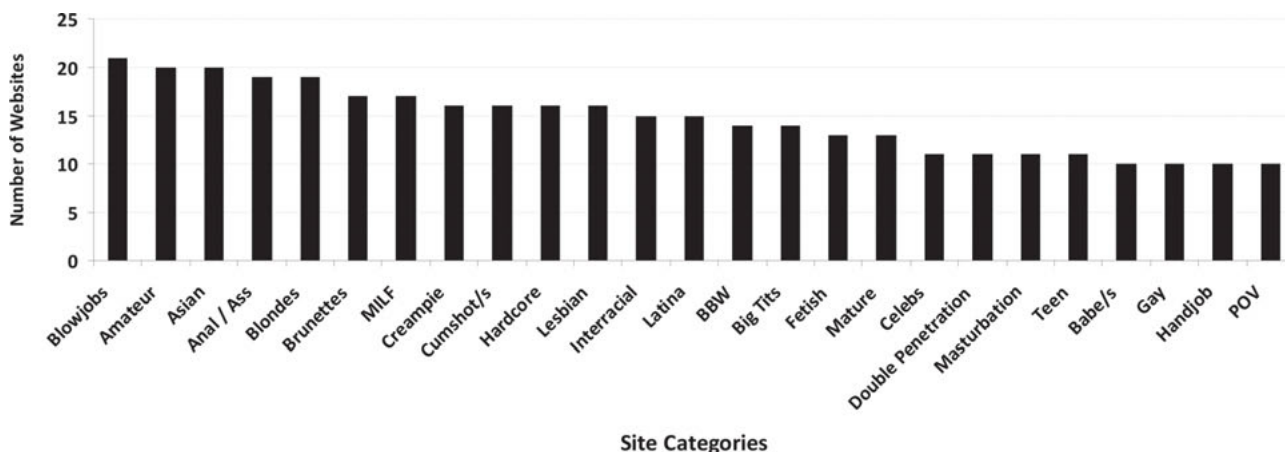


Figure 2. Frequency of Site Categories across Websites

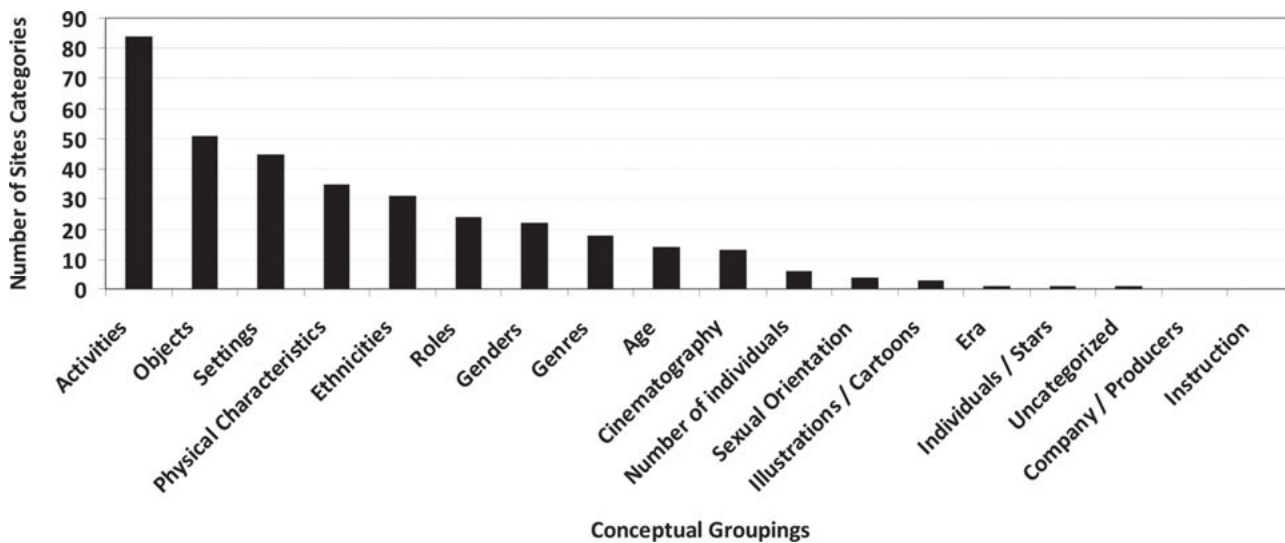


Figure 3. Frequency of Site Categories across French Websites

graphic films could be grouped according to particular categories” (p. 115). However the lack of standardization in the description of pornographic videos, and in the so-called categories, also revealed the subjective nature of the content and the difficulty of reaching consensus. Inevitably this will impact the search results.

In their study Ogas and Gaddam (2011) inventoried the most popular sexual search categories. However, our analysis of the site categories found within the examined sample of websites presented slightly different results (Table 3).

Top Conceptual Groupings	%	Top Sexual Search Categories (Ogas and Gaddam, 2011)	%
Activities	26.97	Youth	13.54
Physical Characteristics	11.72	Gay	4.70
Roles	10.31	MILFs	4.27
Ethnicities	10.31	Breasts	3.95
Objects	10.19	Cheating wives	3.37
Setting	9.16	Vaginas	2.82
Genres	6.92	Penises	2.41
Age	6.47	Amateurs	2.36
Genders	4.74	Mature	2.11
Cinematography	4.16	Animation	2.11

Table 3. Comparison of Top Conceptual Groupings and Top Search Categories

For example, an important disconnect between what porn searchers use in their queries and the options offered by the sample’s websites is interesting. First, Ogas and Gaddam’s (2011) work suggest that very few searches are performed to find pornographic material related to the types of activities to be seen in the videos. Nevertheless, site categories associated to *Activities* count for nearly 27% of all categories found in the examined websites. Second, while Ogas and Gaddam (2011) found a predominant focus on youthfulness (13.54%) in their analysis of the search categories in the weblog dataset they examined, site categories relating to all indications of *Age* (4.74%) accounted for only a modest number of site categories in use on the websites. More comparable findings between how websites organize their videos and how individuals search for porn were discovered between the current study’s conceptual grouping *Physical Characteristics* (11.72%) and Ogas and Gaddam’s (2011) sexual categories *Breasts*, *Vaginas*, and *Penises* (9.18%). The findings presented by this study suggest that the way porn websites organize their content corresponds only weakly to the search desires of consumers.

An analysis of the distribution of the site categories among the 5 websites that offer French interfaces revealed

once again that a majority of site categories are unique, and can be found on only a single website. However, it is also worth mentioning that a few site categories (e.g., amateur / amateur, asian / asiatique, blonde / blonde) are present on almost all websites, English and French.

A final observation of the site categories of the French interfaces needs to be made here. Many “French” site categories in fact use terms and abbreviations borrowed from other languages, mainly English (e.g., pile-driver, reverse cowgirl, rimming). This could mean that French equivalents do not exist. However a larger sample of websites presenting site categories in French will be necessary to complete this analysis of the terminology used to describe porn videos in French.

The examination of our sample of porn websites also highlighted many usability issues. First, the searching options offered by the sample of websites revealed variations which could be confusing, or even chaotic, in terms of usability for novice users. For example, the websites typically offered limited, if any, assistance to users searching for content beyond providing a list of site categories and a search box. The lack of a search help screen, and / or scope notes to determine the meaning behind the site categories in use on the websites, the mixture of coarse and granular levels of site categories, and the questionably associated video content returned in response to a search, create a less than ideal search experience. It may be that the usability of the free websites in the sample is purposefully circuitous in order for them to achieve a higher number of user clicks to increase advertisement revenues.

According to the ISO 9241 standard, usability can be defined as “[t]he extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use” (ISO 1998, 2). While the effectiveness (user’s goals were met successfully) of the websites’ design was not examined in the current study, it is likely that in most cases some degree of effectiveness is achieved. Porn searchers are likely to find videos that match their search objectives via the multiple avenues to content provided by the websites in the sample. However, for efficiency (the speed in which users can accurately complete the tasks for which they use the product), the porn websites in the sample are likely to be less successful. Navigation design functionalities such as site categories menus, keyword search box and other options offered for results refinement all have an impact on efficiency. The websites in the sample presented interfaces which were overly complex in terms of their layout and features, and thus are likely to require more time and effort to make navigation and action choices. Finally, the third usability goal, the user satisfaction, remains a complete mystery. Are users satisfied when searching for porn videos? As much as

possible, to be considered satisfying, a website must be easy to learn, engaging to use, and error-free. It is useful to ask if porn websites should be evaluated according to the same usability standards as other websites, based on their unique design considerations and usability issues. In the case of this specific type of website, it may be that effectiveness and efficiency are secondary considerations in relation to user satisfaction. With so many websites offering similar content, porn users have choices. If they are not satisfied by a particular website, they will find another one that offers them a better search experience.

7.0 Conclusion and Future Work

In conclusion, the analysis of the free websites revealed several commonly encountered concepts for organizing pornographic video content. The predominant concept found in both the English and French interfaces included those categories which identified the activities within the videos. The next three most often found concepts in the English interfaces, which include physical characteristics, roles, and ethnicity, all concern particular details of the videos' actors and actresses. This is followed closely by a concept illustrating an interest in objects used within the narrative. In contrast, the French concepts follow a slightly different pattern, focusing first on the inanimate objects within the narrative, followed by the setting of the videos, and then the physical characteristics and ethnicity of the performers. According to the findings of previous researchers, the categorical organization of the pornographic videos found in use on the websites does not parallel the aspects searched by individuals seeking sexual content. This anomaly, coupled with the complex and sometimes chaotic layouts and site features that were found are believed to negatively impact the usability of the websites.

Several intriguing avenues for future research were identified during the course of carrying out the present study. An examination of content providers' website development processes would provide an understanding of the categories and designs used, as well as any additional constraints. Analyzing the tagging practices of a websites and comparing those to site categories would identify any differences to be found in top-down and bottom-up classification approaches. Analyses of websites from additional cultures and languages would help clarify what effect cultural and linguistic differences might play. Further linguistic scrutiny of the site categories, such as analyzing and comparing parts of speech may reveal additional patterns of use for providing access to pornographic material. A comparison of the site categories and the conceptual groupings of this study against library subject headings would help to identify the usefulness of traditional LIS tools. Investigations of site categories among GLBT-

oriented sites may prove useful to determining the impact sexual orientation may have on the conceptual groupings of the websites' video content. This work would contribute to the previously completed research in this area. Finally, investigations into how individuals search for pornography would be invaluable since evidence that porn searchers find videos that match their searching objectives is missing from the current literature.

The debate about pornography in libraries has, for the most part, been limited to discussions about the role of libraries and librarians in preserving intellectual freedom and balancing competing definitions of censorship and obscenity. Our study has suggested that, instead of finding reasons to restrict access to pornography, libraries should encourage a greater intellectual access to pornographic materials. One way to begin to achieve this goal is to examine the intellectual structures and organizational practices already in use. Future work should be carried out to further map users desires.

Notes

1. While transporting obscene content via the United States Postal Service, commercial carriers, or the Internet is illegal according to 18 U.S.C. § 1460; 18 U.S.C. § 1461; 18 U.S.C. § 1462; 18 U.S.C. § 1463, pornography is protected under the First Amendment except in cases involving child pornography, and other patently obscene content. According to the U.S. Supreme Court, the definition of what is to be considered obscene is to be determined locally by communities.
2. The percentages of Internet queries for sexual content found in different datasets has been reported as ranging 7.5% to 16.8% in the scholarly literature on the topic. Spink, Jansen, Wolfram, and Saracevic (2002) examined several datasets from three distinct years and found that queries of a sexual nature were the second most common type of search (16.8%) in 1997, the fourth most common (7.5%) in 1999, and the fifth most common Internet search (8.5%) in 2001. Covenant Eyes (2014), the conservative Christian Web filtering software company, notes that between 13% and 25% of all Internet searches are pornographic in nature.
3. In 2006, the adult industry generated revenues of \$13 billion in the United States alone (Covenant Eyes, 2014).

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