UNEARTHING THE UNDERGROUND, DATABASING THE AVANT-GARDE, AND MAPPING THE INDEPENDENT MEDIA COMMUNITY

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I. Introduction

The limits of cinema aren't those of intelligence or imagination, but exhibition and distribution. Most...filmmakers...cling to a slim margin of quasi-visibility – random museum unspoolings, fugitive festival bookings. Others fight for whatever space and time the few noninstitution-ridden avant-garde showcases available may have to offer.¹⁵

A product of the technological and social milieu of the 1960s and 1970s, the 'independent filmmaker' was imagined as an artist who worked alone. Unlike her counterparts in Hollywood, the independent artist was in full control of the means of production and had little concern for generating profits from her creations. Former director of the Pacific Film Archives Sheldon Renan defined these independent, avant-garde, experimental, and underground films as works created by an individual for the primary purpose of artistic expression, created with limited means. 16 While the means of production may have been limited, film and video production demanded time, money, and resources. 17 Further, while the imagined audiences for these works may have been limited, independent film and video required channels for distribution and exhibition. Like all artists, independent film and video makers did not work in isolation, rather their work was supported by an entire art world, individuals and organizations that provided a host of services to support the production and circulation of the media that they produced. This support network included community organizations, artist collectives and cooperatives, equipment access centers, film and video distributors and suppliers, museums, archives, and libraries. Proposed under the moniker "Regional Film Centers" in 1972, such organizations supporting the independent media art world became known as Media Art Centers, and formed the center of a grassroots movement aimed at building a nation-wide support network for independent media artists.

Broadly conceived, Media Arts Centers provided a host of services encouraging the production, distribution, exhibition, preservation, and study of non-commercial media. ¹⁸ The National Endowment for the Arts (NEA) began supporting key organizations as "Major Media Centers" in 1972 under the Media Arts Program, and by 1980 the movement gained significant momentum uniting under the umbrella organization NAMAC — the National Alliance of Media Arts Centers. In 1991, over three decades after the first Major Media Centers were acknowledged, NAMAC became the National Alliance of Media Arts and Culture, and the designation "Media Arts Center" disappeared into the archives. Yet, NAMAC continues to serve as the umbrella organization for non-profit media arts organizations, some of which were key players in the Media Arts Center Movement. ¹⁹ However, scholars of film and media history have overlooked the movement and its impact on non-commercial media production

¹⁵ David Ehrenstein, Film: The Front Line 1984 (Denver: Arden Press, 1894):149.

¹⁶ Sheldon Renan, An Introduction to the American Underground Film (New York: E.P. Dutton & Co., 1967): 17.

¹⁷ In 1971, an entry-level portapack video camera/recorder would require an investment equivalent to approximately \$12,000 when adjusted for inflation. A single videotape cost about \$13 (or \$75 today), while the equivalent in 16mm film with processing was priced at approximately \$110 (or about \$600 today). These statistics were estimated from the costs reported in Michael Shamberg, *Guerrilla Television* (New York: Holt, Rinehart and Winston, 1971).

¹⁸ Sheldon Renan, "The Concept of Regional Film Centers," Sightlines 7, no. 3 (1973/1974): 7-9. See also, J. Ronald Green, "Film and Video: An Institutional Paradigm and Some Issues of National Policy," Journal of Cultural Economics 8, no. 1 (1984): 61-79; and J. Ronald Green, "Film and Not-For-Profit Media Institutions," in Film/Culture: Explorations of Cinema in its Social Context, ed. Sari Thomas (Metuchen, NJ: Scarecrow Press, 1982), 37-59.

¹⁹ Pittsburgh Filmmakers, Pittsburgh, Pennsylvania serves as an example, electing to continue to use the tagline "The Media Arts Center" in their advertising materials.

in the United States. Mapping the Independent Media Community (MIMC), a project initiated at The University of Iowa, seeks to recover this lost history from the archives.

2. Major Media Center: Carnegie Museum of Art, Pittsburgh, PA

A phenomenon of the [1970s], media arts centers bring works of classic and advanced media art to the public through exhibition programs, workshops, and residencies. They focus the attention of artists, critics, and public on key issues affecting our understanding of the media. And they provide a vital resource for media artists through equipment access programs and to the public through maintenance of film-video collections and publications.²⁰

The founding of the Film Library at the Museum of Modern Art (MoMA), New York in 1935 is cited as a pivotal moment for the preservation of film, the development of film archives, and the recognition of film as art.²¹ Film scholar J. Ronald Green also traces the origins of the Media Arts Center Movement to this event. In fact, a number of film archives and museums such as MoMA, Pacific Film Archive (Berkeley, CA), Walker Art Center (Minneapolis, MN), and Anthology Film Archives (New York, NY) received funding from the National Endowment for the Arts (NEA) as Major Media Centers, funding that was designated for Media Arts Centers for the promotion of film, video, and radio. The NEA's definition, like Green's, embraces a variety of organizations, including those working independently as well as organizations associated with museums, universities, and state arts agencies.²²

Situated throughout the United States, Media Arts Centers large and small provided resources to artists and audiences interested in producing and consuming independent media. In 1979, the second year of funding in this category, the National Endowment for the Arts supported twenty-one Media Arts Centers representing every region of the United States.²³ Statistics from the 1979 National Conference of Media Arts Centers further demonstrated the impact of the centers on the media arts field. The forty-seven attending organizations, representative of one-half of the nation's Media Arts Centers, reported that during the previous year these organizations: supported 835 appearances by film and video makers to which \$170,000 in artist fees and honoraria were awarded, programmed 7,450 film and video screenings to audiences in excess of 850,000 people, broadcast programming to over 2 million homes, and provided equipment to 8,000 artist-members.²⁴ During this 1979 meeting, Media Arts Centers also began arguing for national representation that could lobby on behalf of the growing number of organizations across the country. The National Alliance of Media Arts Centers (NAMAC) was established in the following year to fulfill this role. The founding members of NAMAC included organizations with a national focus, such as The Academy of Motion Picture Arts and Sciences (Los Angeles, CA)

²⁰ Brian O'Doherty, "Media Arts: Film/Radio/Television," in Annual Report 1979 (Washington, DC: National Endowment for the Arts, 1980), 120.

²¹ See Haidee Wasson, Museum Movies: The Museum of Modern Art and the Birth of Art Cinema (Los Angeles: University of California Press, 2005) and Penelope Houston, Keepers of the Frame: The Film Archives (London: British Film Institute, 1994).

²² National Endowment for the Arts, *Annual Report 1979* (Washington, DC: National Endowment for the Arts, 1980): 125.

²³ In 1984, the NEA restructured the funding mechanism, distributing funds to 7 designated regional centers: Center for New Television (Chicago, IL) for the Great Lakes Region; Pittsburgh Filmmakers for the Mid-Atlantic; The Boston/Film Video Foundation for New England; Appalshop (Whitesburg, Kentucky) for the Southeast; Southwest Alternate Media Project (Houston, TX) for the Southwest and Caribbean; Film in the Cities (St. Paul, MN) for the Upper Mid-West, and Rocky Mountain Film Center (University of Colorado) for the West and Pacific Territories. See, National Endowment for the Arts, *Annual Report 1984* (Washington, DC: National Endowment for the Arts, 1985). The NEA would continue funding Media Arts Centers through 1996.

²⁴ Wanda Bershen, "Notes from Minnewaska: On Independence," Field of Vision 7 (Summer 1979): 4.

and American Film Institute (Washington D.C), state level organizations and funders such as the Ohio State Arts Council, and smaller regional or locally-based organizations such as Pittsburgh Filmmakers (Pittsburgh, PA) and the Toledo Media Project (Toledo, OH).²⁵

While San Francisco and New York City would dominate the independent media arts field on the opposing coasts of the United States, regional Media Arts Centers supported the production, distribution, and exhibition of independent media arts throughout the US. In his 2005 history, Robert Haller, Director Emeritus of Anthology Film Archives, suggested that Pittsburgh, Pennsylvania came to be the third city for the avant-garde and independent media production during the 1970s. Haller argues that a combination of "institutional, geographic, financial, and personal factors were responsible for making the city a catalyst and a player in the national and international community of what had earlier been called experimental or underground film."26 Pittsburgh's independent media culture was in fact supported by two of the NEA's designated Major Media Centers: the Film Section of Carnegie Institute Museum of Art (now Carnegie Museum of Art) and Pittsburgh Filmmakers. 27 While Pittsburgh Filmmakers offered film, video, and photography courses and workshops, Carnegie Institute scheduled screenings and lectures with traveling filmmakers. Between 1976 and 1977 artists such as Yvonne Rainer, Paul Sharits, Peter Kubleka, Malcome Le Grice, Bruce Conner, and Peter Watkins, visited the city.²⁸ Artists would often visit both Media Arts Centers, screening film and video at Carnegie and hosting workshops and lectures for students and artist-members at Pittsburgh Filmmakers.

Both organizations would also play a role in the Media Arts Center Movement's national efforts, jointly hosting the "Pittsburgh Regional and Major Media Center Conference" in 1978. In attendance were representatives from 18 of the NEA designated Major Media Centers, in addition to leaders from the NEA and American Film Institute. During this meeting attendees lobbied for improved preservation processes and funding, advances in the hardware for media production, a recognition of scholarship in the field and the development of publication venues for the research, expansion of forums for the exhibition of independent film and video, further advocacy for artists, and the designation of film and video as art. Further establishing its distinct position in the field, the Film Section of Carnegie Institute would begin publishing the Film and Video Makers Travel Sheet in 1972, connecting film and video makers and media arts organizations from around the globe.

- 25 Lists of members published from 1983-1989 in NAMAC's newsletter *Media Arts* included 221 individual organizations in the United States and Canada, representing 35 US states, the District of Columbia, Puerto Rico, and the US Virgin Islands. Lindsay Kistler Mattock, "Media Arts Centers as Alternative Archival Spaces: Investigating the Development of Archival Practices in Non-Profit Media Organizations" (PhD diss, University of Pittsburgh, 2014).
- 26 Robert A. Haller, Crossroads: Avant-garde Film in Pittsburgh in the 1970s (New York: Anthology Film Archives, 2005): 7.
- 27 Lucy Fischer and Bill Judson, "Independent Film in Pittsburgh," *Millennium Film Journal* 3 (Winter/Spring 1979): 100-108. Pittsburgh Filmmakers, founded in 1971, continues to support film and media production, education, and exhibition in the Pittsburgh region as one of the oldest running Media Arts Centers in the country.
- 28 Compiled from the 1976-1977 Film and Video Makers Travel Sheet.
- 29 Representatives from the Major Media Centers included:Ted Perry, Department of Film, Museum of Modern Art, NYC; Richard Weise, Film in the Cities, St. Paul MN; John Reilly, Global Village, NYC; Ron Green, Media Study Inc., Buffalo, NY; Mary Macarthur, the Kitchen Center, NYC; Melinda Ward, Department of Film, Walker Art Center, Minneapolis, MN; Robert Sitton, Northwest Film Study Center, Portland Art Museum, OR; Virgil Grillo, Rocky Mountain Film Center, Boulder Colorado; Ed Hugetz, Southwest Alternate Media Project, Houston, TX; Cathy Keane, South Carolina Arts Commission, Columbia, SC; Susan Woll, John, Rubin, and Michelle Schofield of Boston Film/Video Foundation; Gisela Hoelcl, University Film Study Center, Cambridge, MA; Robert Haller and Robert Gaylor, Pittsburgh Film-Makers, Inc.;Tom Luddy, Pacific Film Archives, Berkeley, CA; Howard Guttenplan, Millennium Film Workshop, NYC; William Judson, Film Section, Museum of Art, Carnegie Institute; Michael Rothbard, Intermedia Arts Center, Bayville, NY; Jonas Mekas, Anthology Film Archives, NYC; Thomas Lennon, Association of Independent Video and Film-Makers (AIVF), NYC. As published in, Peter Feinstein, ed., The Independent Film Community: A Report on the Status of Independent Film in the United States (New York: Committee on Film and Television Resources and Services, 1977).
- 30 R. A. Haller, "The Pittsburgh Regional and Major Media Center Conference," Field of Vision 4 (Fall 1978): 23.

3. Social media for independent media artists: The Film and Video Makers Travel Sheet

A boon to librarians, programmers and others who need to know the whereabouts of independents, and a good source of major U.S. showcases for independent productions.³¹

The Film and Video Makers Travel Sheet was an extension of the efforts of Carnegie Institute to support independent film in Pittsburgh, throughout the United States, and abroad. This monthly publication served as a social networking mechanism, intended to connect filmmakers to the organizations that supported screenings and lectures with visiting artists. This "valuable aid for organizations and institutions," was published with the support of Major Media Center funding from the NEA from January of 1973 through March of 1987. An undated departmental document in the Film Section Archives states that several years into the publication of the resource, the *Travel Sheet* was being used by over 2,000 film and video makers and institutions in the United States, Canada, and abroad.³²

Each monthly *Travel Sheet* included listings of upcoming tours and events, installations and exhibitions, newly available film and video, and announcements of interest to film and video makers, including employment opportunities, festivals and competitions, and available grants and funding opportunities. This publication is unique in that the information was provided directly by the artists and organizations electing to submit information about tours and events through a simple paper form provided in every issue.



IMAGE 1: Film and Video Makers Travel Sheet submission form (Image courtesy of Carnegie Museum of Art, Pittsburgh, PA)

Beginning in August of 1977, the editors of the *Travel Sheet* also began to include announcements from *Filmmakers Europe*, a British publication similar to the *Travel Sheet*. The August 1977 *Travel Sheet* announced a data exchange between the two publications, affording opportunities to garner more details regarding independent film and video screening opportunities throughout the world."³³ While the global data supplied by the *Travel Sheet* is limited, records of correspondence in the Carnegie Institute Film Section Archives suggest that the *Travel Sheet* had a broad subscription base, reaching individuals and organizations from across the globe. Included in these files are letters from: Klub Filmowy Bielsko, Poland; Individual in Tehran, Iran; Stedelijk Museum Amsterdam; Universiti Utara Malaysia; British Film Institute; Archives Publiques Canada; Oslo, Norway; Hong Kong; Independent Film & Video Makers Association, London; Arts Council of New Zealand; Centro Documentazione Arti Visive Biblioteca, Rome; Cinémathèque Royale de Belgique; Australian Film Institute; Ghazvin, Iran; among others.

In a further attempt to support touring filmmakers, the Film Section of Carnegie Institute published *The Film and Video Makers Directory* in 1978 and 1979, compiling the addresses of

³¹ A review of the *Film and Video Makers Travel Sheet* published in "New Publications" *Sightlines* 13(4) Summer 1980: 41

³² no title, no date, FV001 – Departmental – Publications – General – Travel Sheet and Directory Descriptions for Bawker International Series Database – 1983 – Box FF.

³³ Edited by William Raban and Clyde Steiner, Travel Sheet August 1977.

the *Travel Sheet* subscribers and those who elected to publish their information in previous issues.³⁴ Organized by US state and by country for international entries, the *Directory* included two sections: one for the contact information of individuals—active makers as well as contact persons at film and video centers, museums, universities, libraries, foundations, periodicals, and distributors—and a second, listing institutions that scheduled personal appearances by artists, those that programmed their work, and other institutions with an interest in independent film and video. In addition, the 1979 *Directory* included extensive information regarding the screening facilities and policies of those institutions exhibiting the work of independents, including the available projection equipment, the average honoraria for artists, and the screening room seating capacity.³⁵ This additional data provides a sense of scale for the exhibition venues in both available resources and physical infrastructure.

Three initial motivations for the foundation of Media Arts Centers have been described: organizations that were founded with a concern for exhibition (the film society or cinémathèque), those providing resources and technology to filmmakers (artist collectives), and those primarily concerned with the collection and study of media art (film libraries and archives). Each of these models can be found within the data from the *Travel Sheet* and *Directory*, along with those Media Arts Centers that embraced all of these roles. As such, the data contained within these publications provides a snapshot of the extended network of individuals and organizations supporting the exhibition, production, and distribution of independent media during one of the key decades of growth for Media Arts Centers.

4. Mapping the Independent Media Community: MIMC

This Directory is intended to encourage and facilitate a wider use of exhibition and lecture tours by film and video makers. It will of course, have many other uses as well.³⁷

The preceding quote from the 1978 Film and Video Makers Directory suggests the future uses unimagined by the publishers at that time. Editors of the Travel Sheet utilized a database to manage and organize subscription records, but could only circulate this data in paper form. The goal of the Mapping the Independent Media Community (MIMC) project is to recreate this lost database and reimagine the network of organizations and individuals represented in the Travel Sheet and Directory, developing a research tool for the study of independent media arts and the Media Arts Center Movement both in the United States and abroad.

Access to the complete publication run of the *Travel Sheet* from January of 1973 through March of 1987 has been made possible through the efforts of Carnegie Museum of Art's (CMOA) *Time-Based Media Project*. Supported by funding from the A.W. Mellon Foundation, the *Time-Based Media Project* is an effort to process the media and records from the collections of the Film Section. The Film Section archive includes film and video works collected by the museum as well as the records generated during the Section's operation from 1970 through 2002, when the Film Section was eliminated during the reorganization of the Museum of Art departments.

³⁴ The 1978 *Directory* contains close to 2400 individual records, while the 1979 includes close to 3200 individuals and organizations, suggesting a 33% increase in the subscription base in the 12 months between the publication of the editions of the resource.

³⁵ The Film Section would publish one final directory in 1986 with support from the NEA, MEDIA: Media Exhibitors Directory for Independent Artists. This directory, as with the Film and Video Makers Directly listed those organizations exhibiting independent media art. MEDIA manuscript, 1986, Box FF, "Departmental – Publication – General – Media Exhibitors Directory For Independent Artists," Film Section Archives, Carnegie Museum of Art, Pittsburgh, PA

³⁶ J. Ronald Green, "Film and Not-for-Profit Media Institutions," in Film/Culture Explorations of Cinema in its Social Context, ed. Sari Thomas (Metuchen, NJ: Scarecrow Press, 1982), 45.

³⁷ Rebecca Popovich Burdick, ed., Film and Video Makers Directory (Pittsburgh: Carnegie Institute, 1978): ii.

The ongoing work of Senior Research Associate Emily Davis and Archival Assistant Katherine Barbera has lead to a partnership between the University of Iowa and CMOA. Recognizing a similar desire to digitize and make the records available and fully searchable online, project lead Lindsay Mattock and graduate assistants from the University of Iowa have developed a workflow for the digitization of archival resources from the Film Section, focusing on the Film and Video Makers Directory and Travel Sheet. By assisting with the OCR (optical character recognition) process, this partnership has provided an opportunity for the Iowa research team to pull the data from these resources to create the MIMC database and provide CMOA with fully searchable digitized copies of the records for incorporation into the forthcoming CMOA digital archive resulting from the Time-Based Media Project.

The data being drawn from the Film and Video Makers Directory and Film and Video Makers Travel Sheet hold significant research potential. While these sources were published and circulated widely, the original databases containing the subscription data have been long lost. The subscription records, published in the 1978 and 1979 Directory, provide a static snapshot of the organizations, individuals, and artists supporting independent media in these years; the Travel Sheet provides key links between these data-points, including announcements of scheduled events and the availability of filmmakers for lecture tours. This additional data provides an opportunity to understand how this network functioned to support the work of independents throughout the 1970s and into the 1980s.

More significantly, the information published in the *Travel Sheet* and *Directory* was not curated by the editors; rather, artists and institutional leaders had simply to complete and mail the form included in each issue to be added to the next issue.



IMAGE 2: Film and Video Makers Travel Sheet October 1978

Through this simple mechanism, artists could announce their travel plans (however vague), scheduled tour dates, and newly available work. Throughout the 1970s the *Travel Sheet* also included a list of organizations that, through use of the same form, could advertise their interest in hosting makers and their work. This lack of formal selection by the editors at the CMOA produced a self-representative database of the independent makers community providing in-

sight into the known hubs for independent filmmaking in major metropolitan areas (New York City, San Francisco, and Chicago), suspected influential cities (Pittsburgh, Pennsylvania), and other locations throughout the United States and abroad.³⁸

The comprehensiveness and organic growth of the Travel Sheet as an opt-in resource provides important insight into areas of the United States that are often overlooked. The data related to the American Midwest illustrates this point. The Walker Art Museum in Minneapolis, Minnesota and the Art Institute of Chicago have emerged as well connected nodes in the initial analysis of the data. As known supporters of the independent media arts, this is not surprising; however, lesser-known venues in the Midwest, such as the REFOCUS group at the University of Iowa, also appear in the data. A subscriber to the Travel Sheet, REFOCUS held annual festivals from 1966 through 1978 hosting local artists as well as those traveling on the national circuit. The physical distance between major cities in the Midwest proved a challenge to independent artists, as Robert Pest, Director of City Movie-Center, reflected in a letter to William Judson, Director of the Film Section at Carnegie Institute: "Media arts presenters in the Midwest face serious travel costs for visiting artists; the *Travel Sheet* enabled us to connect with other presenters to share travel costs." He continues, "As the Director of City Movie-Center for six years, I was responsible for bringing approximately 25 leading film and video artists to Kansas City for guest appearances, lectures, and workshops. Most of those engagements came as the result of the Travel Sheet listings." The Travel Sheet proved to be a valuable resource for artists and organizations throughout the United States and Europe, and MIMC will afford opportunities to study these areas, visualizing the relationships between organizations and artists in less densely populated areas alongside the more developed art centers in the US and Europe.

5. Big data and not-so big data

Big Data is not notable because of its size, but because of its relationality to other data. Due to efforts to mine and aggregate data, Big Data is fundamentally networked. 40

When measured in size against datasets emerging from the STEM fields, the records from the *Travel Sheet* and *Directory* pale in comparison. However, as Boyd and Crawford note, it is the degree to which the data is networked that complicates the representation of a dataset. The networked nature of the data from the *Travel Sheet* present issues that many working with large amounts of "fuzzy humanities data" have faced. From the beginning steps of building the dataset, creating a disaggregation system that could handle the variations in both the structure of the digitized text and the frequently changing nature of the data itself (changing names, non-traditional addresses, and geographical boundaries) has been a challenge.

The complications began with the OCR process. Throughout its 13 years of publication, the *Travel Sheet* evolved in both size and scope, including not only the artists' events, new works, and organization directory, but advertisements, opportunity announcements (festivals and employment), and other relevant information for independent media artists. The increase in physical size, layout modifications, and the density of the data has posed challenges to automating the OCR process and ingestion of records into the database. Inconsistencies in the formatting of names, addresses, titles, and event data have prevented the use of standard delineators to automatically ingest the data into the database fields. At this stage in the process we are forced

³⁸ While the *Directory* and *Travel Sheet* include data from Australia, South America, Europe, Canada, and Asia, a majority of the data represents organizations and artists in the United States.

³⁹ Letter From Robert Pest to William Judson, June 6 1987, Box FF, "Departmental – Publication – General – Travel Sheet Fan Mail," Film Section Archives, Carnegie Museum of Art, Pittsburgh, PA.

⁴⁰ danah boyd and Kate Crawford, "Six Provocations for Big Data," A Decade in Internet Time: Symposium on the Dynamics of the Internet and Society, September 21, 2011, Oxford University.

⁴¹ Melissa M.Terras, "The Potential and Problems in Using High Performance Computing in the Arts and Humanities: the Researching e-Science Analysis of Census Holdings (ReACH) Project," *Digital Humanities Quarterly* 3, no 4. (2009).

to rely on manual manipulation of the data for both data entry and the disambiguation of multiple identical records in the *Travel Sheet* and *Directory*.

The nature of the data also poses specific challenges for the MIMC project. The Travel Sheet and Directory not only list the dates of screenings and events, the location of organizations, and rental information for specific works, but also the home addresses of many independent artists. While this information was circulated publicly to those with a subscription to the Travel Sheet, this personal information was never intended for the potential audiences on the World Wide Web, nor would the artists that supplied the data have imagined the historical use of this information. As we begin to design the visualizations of the MIMC database, we are cognizant of this question of privacy, but also strive to provide a nuanced understanding of circulation of independent media and movement of artists over time. When geolocating this information in some less-dense areas of the network (the state of lowa, for example) mapping data points to a specific city will suffice, however, in dense metropolitan areas like New York City, where the database contains hundreds of entries, more nuance is required to fully understand the geographic relationship between data points.



IMAGE 3: Selected data from the 1978 and 1979 Film and Video Makers Directory, organizations (yellow), individuals (orange)

While mapping to zip code or neighborhood presents possible solutions, the age of the data has also lead to renegotiations of boundaries as neighborhoods have changed, cities and counties dissolved, and location markers such as zip codes have been consolidated and eliminated over time. As additional datasets are merged into the data from the Travel Sheet and Directory, these subtleties will continue to be important, though the MIMC team must balance privacy with the accuracy of the geographic visualizations of the data.



IMAGE 4: Organizations and Individuals, New York City 1979

⁴² Data points from the former Yugoslavia are perhaps the most illustrative of this point.

The decisions made during the construction of a database also pose specific challenges and frame the interpretation of the data, even before a thorough analysis can begin. Kenneth M. Price addressed the limits of neutrality in database creation, suggesting "Argument is always there from the beginning... the initial understanding of the materials governs how more finegrained views will appear because of the way the objects of attention are shaped by divisions and subdivisions within the database. The process of database creation is not neutral, nor should it be"43 As database records are generated from the Travel Sheet and Directory, the MIMC research team has attempted to remain unbiased, using the language from the original publications to construct the database fields. However, as analysis and visualization begin, the incorporation of additional information to the records will pose further challenges. For example, classifying the types of organizations and institutions by function — as archives, museums, libraries, cinemathegues, cine clubs, film festivals, artist collectives, etc. — assumes that the missions and functions of each of these organization-types is well defined. The multi-faceted mission of Media Arts Centers begins to capture the complex role that many organizations played; however, this designation was not embraced by all. While this additional level of interpretation could provide insight into the role of organizations and the significance of different types of organizations to the media arts community over time, any imposed classification scheme will mask some roles while risking over-inflating others.

6. Beyond the Travel Sheet: MIMC, phase 2

...database can be a suggestive metaphor because it points to the re-configurable quality of our material (and that of similar sites). The term also conveys simultaneously "finished" and "unfinished" qualities; while a project can be logically thought of as "done" or "not yet done," we usually conceive of a database as usable as soon as it begins to exist, and we take as a given that the data will continue to proliferate, potentially indefinitely.⁴⁴

Initial analysis of the partial dataset that has been incorporated into the MIMC database demonstrates the power and potential for this project. [include SNA and node maps] While we cannot yet draw conclusions, the initial visualizations begin to demonstrate the network that emerges from the data between organizations and artists. The Directory and Travel Sheet publications were important resources for film and video makers throughout the 1970s and 1980s, but they were not the only source. The ultimate goal of the MIMC project is to aggregate multiple historical datasets into one tool that will provide for the analysis and visualization of the Media Arts Center Movement and independent media production, distribution, and exhibition.

The Travel Sheet and Directory provide a bounded dataset from which to build a prototype of what has been imagined as a sophisticated research portal for scholars, students, and anyone from the community with an interest in this area. MIMC builds upon work in film, cinema, and media studies employing Digital Humanities tools and methods such as GIS (geographic information systems) to build and analyze data, such as Jeffrey Klenotic's Mapping Movies (http://mappingmovies.unh.edu/maps/erma.html) and AusCinemas, the Australian Cinema Map (http://auscinemas.flinders.edu.au). In contrast to these projects, MIMC will not be limited to a geographic visualization of the dataset, but will experiment with multiple visualizations of the data including timelines, social network analysis, and other representations of the linkages between organizations and artists over time.

⁴³ Kenneth M. Price, "Edition, Project, Database, Archive, Thematic Research Collection: What's in a Name?" Digital Humanities Quarterly 3, no. 3 (2009): para 21.

⁴⁴ Price, "Edition, Project, Database, Archive, Thematic Research Collection," para. 19.

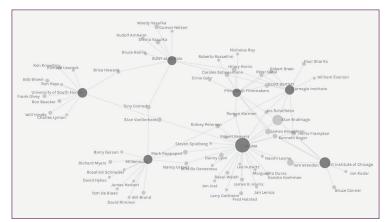


IMAGE 5: Selected data from the Film and Video Makers Travel Sheet January 1973 - January 1974

The MIMC tool will support the ingest of additional historical datasets, allowing for a comprehensive analysis of data from the 1970s through to the present.

Upon successful completion of the public prototype additional datasets will be digitized and ingested into the MIMC database. Publications such as Film Resource Centers in New York City (1976), Filmmakers Europe, and Film Canadiana have already been identified as possible sources, and will provide additional data for international venues and major metropolitan areas in the United States. Distribution catalogs from Canyon Cinema and the Filmmakers Cooperative could provide additional insight into the number of works available as compared to those announced in the Travel Sheet. As a key funder of Media Arts Centers in the 1970s and 1980s, data from the National Endowment for the Arts will also provide insight into the funding mechanisms supporting the artists and organizations during these key decades.

As a research tool, *Mapping the Independent Media Community* will support future scholarship related to independent media arts, the Media Arts Center Movement, and Digital Humanities methodology. Scholars of media, film, and communication studies are beginning to experiment with digital modes of analysis for film and video, using digital tools to perform color analysis, caption mining, and automated analysis of other aesthetic elements of individual works. Similar to traditional studies of cinema, these tools are used in the analysis of individual films, that is, reading the film as text rather than studying the larger context of production, exhibition, collection, and study, as *MIMC* aims to do, supporting research in the area of New Cinema History — studying film without film.⁴⁶

Beyond data visualization and aggregating data sets, MIMC can also serve as a tool for librarians and archivists by identifying those artists that are not represented in archival collections at present, and further identifying where collections of media and records may lie in wait to be accessioned into archival collections and preserved for posterity. As MIMC continues to grow, the project team welcomes collaboration so that the project may holistically represent the growth of independent media across the globe.

⁴⁵ See, Barbara Flueckiger, "Analysis of Film Colors in a Digital Humanities Perspective," Frames Cinema Journal 1 (2012); Jason Mittell, "Caption Mining at the Crossroads of Digital Humanities & Media Studies," Just TV blog post, November 30, 2012, http://justtv.wordpress.com/2012/11/30/caption-mining-at-the-crossroads-of-digital-humanities-media-studies/; Adelheid Heftberger, "Do Computers Dream of Cinema? Film Data for Computer Analysis and Visualization" (p. 210-223), in Understanding Digital Humanities, ed. David M. Berry (New York: Palgrave Macmillan, 2012).

⁴⁶ See Jon Lewis and Eric Smoodin, eds., Looking Past The Screen: Case Studies in American Film History and Method (Durham, NC: Duke University Press, 2007).

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