

Cultural Event Information: Early Research into Measuring Culture on the Ground

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Abstract

The question of how best to measure culture in a location is intensely debated in the arts sector and in the adjacent disciplines of urban planning and economic policy. Our research examined a wide array of methods of counting culture and discovered a slew of literature on measuring high-level financial, employment, and census statistics in the sector, but found no systematic means of measuring culture at a granular level *as it experienced by citizens*. Our research hypothesizes that information about cultural events can be aggregated using mixed methodologies to produce a previously-unseen view of culture in a community that may be used in future research to give insight on how culture differs and compares across locations. A pilot project conducted in winter 2012-2013 in Los Angeles tested new methods for identifying sources of cultural event data, aggregating and normalizing them, and evaluating for comprehensiveness, feasibility, consistency, and sustainability.

Keywords: culture, arts, indicators, metrics, data, event, cultural vitality

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1 Introduction

In January of 2013, Jamie Bennett, then Chief of Staff at the National Endowment for the Arts, said "we generally have a research and data problem in the arts. Our data sets are often not as robust, and our research is not always seen as being as rigorous as other sectors'" (Hessenius, 2013). Bennett's statement has been widely discussed in the community of arts and cultural professionals, and little disputed. In fact, the problem of our sector's failure to quantify its output and impact has been the subject of concern for decades by our top scholars, advocates, philanthropists, and practitioners.

One possible reason for our sector's failure to use data-driven evidence to describe and understand the field is the reluctance of arts and culture professionals to quantify creative work. Studies of cultural impact and learning that use qualitative methodologies abound, while research that relies on data and statistics, particularly real-time data, lags. Furthermore, a lack of consensus on a definition of culture flexible enough to be inclusive across various spectrums (high/low, professional/amateur, visual/performing arts) but specific enough to delineate a universe of discourse does not currently exist. Finally, until recently, only a handful of practitioners and researchers in the field had the skills and training to support the data collection, management, and analysis work that has in recent years become the hallmark of the "big data" movement.

This is not to say that attempts have not been made to measure the economic or educational impact of cultural activity, but such efforts have often been narrowly focused, or built from small samples that cast doubt on the comprehensiveness or representational value of the data that serve as evidence. A review of current methods of measuring or counting culture is described at length in an environmental scan prepared

in anticipation of the pilot program and updated at its conclusion (<http://projectaudience.org/wp-content/uploads/2013/11/Cultural-Benchmarking-Environmental-Scan-2013093020131206.pdf>).

The objective of the scan was to review the current field of cultural metrics; to describe any gaps that might exist in the evidence base for measuring cultural activity; and to create a context for our project team's work on developing a feasible, real-time methodology for measuring and analyzing cultural output on a more granular level.

Our scan of ongoing cultural data collection activities, indicators projects, and published research suggested that a real need exists for a robust, real-time data set that can provide a detailed, complete, and localized view of cultural offerings available to citizens. Our team imagined that the creation of a sustainable, comprehensive, real-time database containing *every cultural event in a given location* would paint a picture of the available *cultural inventory* in a place and allow it to be analyzed and displayed by amount, location, category, price, and audience in order to provide a picture of the scope, nature, and location of cultural production in a place.

2 Impact

Other cultural indicators projects take a high-level view of cultural impact, examining spending, funding, or employment figures and calculating their effect on local, state, or national economies. Such approaches assume a level of stability and infrastructure that may not accurately reflect the full scope and richness of culture in a community, particularly culture at the edges. In contrast, our interest was principally in the direct impact that cultural production has on the lives of citizens of and visitors to a community. However, the varied use cases that our team has imagined also promise to have immediate utility for cultural policymakers, urban planners, local businesses, philanthropists, arts and education advocates, and researchers and to remake the way that these communities think about culture and the creative industries. A sampling of the potential uses of a comprehensive events data set, suggested by team members and others who have taken an interest in our work, include:

1. Comparing the residential potential of neighborhoods based on their cultural offerings. We imagine a kind of "culture score," much like the well-loved walk score (www.walkscore.com). Walk score calculates the walkability—but not the cultural richness—of an address; a similar scoring process could be created with event data to help families and business think about the relative appeal of a neighborhood or even a block, based on the availability, variety, and affordability of nearby cultural offerings.
2. Developing real-time map layers to help travelers to choose neighborhoods to visit or stay in based on their own cultural interests
3. Helping local municipal leaders and businesses to better develop and promote their resources and advocate for development resources
4. Providing advocates with tools to lobby for arts funding
5. Supporting transportation and other infrastructure planning by providing urban planners with detailed information about the frequency, timing, and clustering of cultural activities and by identifying culturally-rich neighborhoods that are underserved by transit and other municipal resources
6. Providing funders with a tool for supporting under-served communities by providing a map of cultural deserts
7. Developing apps and other interactive, location-based calendaring tools that draw on hyperlocal data to deliver personalized recommendations and experiences
8. Helping cultural organizations make planning and programming decisions
9. Supporting scholarship into the growth and development of cities

The project's populist approach to the needs of cultural audiences is mirrored in our goal to create a toolset that will allow citizens to help describe and define the cultural life of their neighborhoods by contributing local event information to the data set. We believe that a cultural data set developed largely for citizens and built, at least in part, by citizens has the potential to transform the ways in which people value and participate in cultural activities in their neighborhoods and cities.

3 Los Angeles Pilot Project

Our team developed a plan for a pilot data collection process to evaluate the feasibility of creating a data set consisting of the preponderance of cultural events in a particular location. Though the pilot team had a clear understanding of some of the key obstacles to the collection of a large-scale events-focused data set, we chose to move ahead with a pilot that would use human resources to harvest, normalize, and analyze events taking place in a one-month period in Los Angeles in order to gain a finer sense of the difficulties involved in such an undertaking. Our work with this events snapshot would be a first step towards developing sustainable, automated methods for creating a sustainable, real-time data set. The team's goals for the pilot were therefore threefold: 1) generate a methodology for capturing the full scope of cultural events in Los Angeles County for a limited period of time; 2) test the methodology for completeness and measure the difficulty of obtaining data of various types and from diverse sources; and 3) conduct open discussions in multiple communities about improving and ultimately automating the methodology and sources, determining the utility of the information, and identifying use cases for the data set.

Los Angeles County was chosen as our study site for both demographic and practical reasons. L.A. County, the most populous county in the United States ("U.S. Census Bureau Releases 2010 Census Results," 2011), is geographically vast and ethnically diverse. In selecting it for the pilot, we were guaranteed a wide range of event types produced for a diverse and culturally-engaged audience. We were confident that many of the complicated problems of definition and classification that we might encounter in other cities would be surfaced in a pilot study in L.A. In addition, we had access in Los Angeles to a large online community events calendar, ExperienceLA.com, built by a coalition of Los Angeles municipal and arts agencies. Arts organizations funded by L.A. County contribute their cultural events to the ExperienceLA.com calendar on a compulsory basis, making its data set a useful starting point for our research. Finally, longstanding colleagues at the Graduate School of Education and Information Science at UCLA had expressed an interest in collaborating with us to provide field researchers to support our data collection efforts, and our ability to capitalize on these cost-free resources (the graduate students involved with field research were given course credit for their work) helped to make the study affordable.

For purposes of the Los Angeles pilot, we developed a definition of culture as "the expression of a creative endeavor." To establish consistency in the use of the definition, we worked as a team to apply it to specific events or event classes, continuously testing our choices for consistency and repeatability, and engaging in sometimes spirited debate with members of Los Angeles' cultural community about what would be included. Sporting events were not included. While sports are often played creatively, we felt that sporting events did not meet the definition of having creative effort as their primary goal. Within this particular study, for both definitional and logistical reasons, high school and college theater, public art, and other forms of cultural production were not captured. However, when replicating the study in a different location, especially one with a smaller population, these same elements might not only be feasible and appropriate to collect, they may comprise some of the most important culture products a community creates.

The team established "event" as the study's core unit of measure. We considered an event to be an occurrence with a defined start and end time and a fixed location, thus creating a standard of measure that was easily and quickly collected and quantifiable for analysis. For example, each day that an exhibition in a museum was open to visitors was counted as a single, unique event. In the case of festivals and fairs, each discrete event, such as a screening of a movie in a film festival, counted as one event.

Our effort was to cast a wide net, to capture not only establishment culture, but to encompass cultural events across the continuum, regardless of professional status, funder, or cost. Based on this definition, burlesque, poetry slams, and stand-up comedy were all included, under the rubric of individual performance. These edge cases serve a vital role, helping the team to validate the consistency and robustness, as well as relevance and currency, of our categories and sub-categories of events, and forcing us to confront and consider the range of activities in a constantly evolving creative landscape.

Certain categories of events were not included, including those considered by our local participants as falling outside of the local community's definition of culture (high school, college, religious and political productions, libraries, sporting events, pornography, and trade shows). Public art and architecture, lacking fixed start and end times, also fell outside of the scope of the study, although tours of public art and architecture were included. Most team members found the choice to exclude public art unfortunate and have expressed an interest in trying to capture both in future iterations of the study.

Although the project team recognizes that the creation of useful permanent databases of culture event information will require robust and sophisticated automated tools for data processing and data management, our pilot project's design was purposefully hand-wrought. Our goal was to use a field team to perform the tasks that automated tools would (for the most part) handle in future and to record in detail the requirements for acquiring, deduplicating, and normalizing data that will eventually be programmed as data-handling algorithms. Only with the use of human insight could we be certain that any requirements definition for future tools is complete and accurate.

The sampling frame consisted of all cultural events Los Angeles County during the period from December 15, 2012 through January 14, 2013. This 31-day frame was chosen based on a balance of expediency and variability. The time span across the holidays allowed seasonal events to be represented, including organizations that may have events only once a year, or organizations that might host different types of events to appeal to holiday tourists or audiences that take part in seasonal events. The research team felt this approach might provide both a diversity of users and a variety of events. The extension of the data collection period into 2013 allowed the team to gather data during what was less busy time, balancing the uncharacteristically busy holiday season with a quieter period in early January.

The actual process of data collection was done by hand on a daily basis by the field staff, a time-consuming practice. The majority of the data collection employed field team members using the data scraper OutWit Hub to extract data from source web pages, although some events, acquired from non-digital (or non-scrapable) sources, were simply entered into the collection spreadsheet manually. In most cases, information still required some individual formatting, which was done on the fly by the field staff. New events were added to online sources up until the date of the event, meaning that recursive review of each of the key sources was required, and an understanding of the periodicity of new content adds by these sources informed the frequency of return visits to various sources. After the initial 31-day period lapsed, the team went into scraped data and further parsed occurrences of movies, museum exhibitions, and gallery shows into daily units. This time-consuming and tedious process was a necessary step in helping our team to understand the specific requirements of data collection, parsing, and normalization that will inform a later, automated phase of event data collection.

4 Discoveries From the Pilot Project

This research project represents the rare study in which process and methods developed were far more important than the data generated. In the spirit of generating a test methodology for further applied research within the field, we moved forward rapidly into the data collection phase, knowing that both the data collected and the methodology would be imperfect, but feeling that that this was the surest method of developing a more robust methodology for the next iteration. We hypothesize that the data we've collected represent certain biases relative to the nature and amount of cultural activity within Los Angeles County.

The most significant form of bias within the data is likely the sources from which it was drawn, which were largely online in the form of publications (LA Weekly), event aggregation sites (Los Angeles editions of For Your Art, Yelp, etc.), and RSS feeds (particularly those issued by event ticketing agencies). The research team has some information that suggests that the sources that were not tapped for data collection in the pilot might contain a disproportionate number of cultural events for specific ethnic communities, some of which make up a significant population segment within L.A. County. For instance, broadcast media sources like television and radio commercials were not incorporated in the pilot but later identified as a major information source for non-English speaking ethnic communities.

Arguably, the definition of culture as employed within this study could be cast more widely (or more narrowly) to present a very different picture of the cultural event activity within the area. Key elements for this particular sample were the decision to include commercial film showings (a decision made after discussion with residents and local cultural professionals about the importance of the moviemaking industries to Los Angeles); the decision to exclude public visual art and architecture for definitional reasons; and the decision to exclude science museum and historical institution events for the purposes of making the study more feasible.

Data collector focus was another source of potential bias. As one of the data collection team noted “Realizing that there is such a large number of events occurring throughout Los Angeles County on a given date and that collecting data for each event would take a considerable amount of time, I had to make decisions about when to stop and what information not to collect. There are definitely gaps in the data collected, and this only speaks to data collected from one source.” She went on to write she saw the need for a larger team of field workers, since a single category could include more than 100 events on a given day.

Finally, the time frame selected may bias the sample towards certain types of events, either by organization, venue, or category. While we attempted to find a sampling period that would encompass the full scope of the diversity of events, it was certainly vulnerable to seasonality.

While gathering the event-based data during the one-month data collection period, we hypothesized that certain events had gone uncaptured because they were publicized through methods we had not considered, or because entire categories of events had been overlooked in our planning. The research process had been designed to incorporate a phase of validation, in which we would attempt to determine the completeness of the data collected during the one-month pilot by contacting individual producing organizations in each of several sample zip codes directly and comparing their events calendars to our data set. We hoped that the validation process would reveal types of events, event sources or organizations, and event audiences that were unknown to us and allow us to revise our future methodology to anticipate these overlooked events.

The validation process proved to be more difficult than anticipated. We used the Cultural Data Project data set, <http://www.culturaldata.org/>, a resource we had not used for data collection, as one of the validation sources. A second source was listings provided by Arts for LA <http://www.artsforla.org/>, a non-profit regional advocacy organization that supports arts, culture, and arts education. We received participant and member listings from each resource for a group of randomly selected zip codes within L.A. County, and canvassed the organizations in the validation set for information on events they had produced during our collection timeframe. Initial attempts to cross-reference these two data sets failed when the validating sources had no cultural organizations within the selected zip codes. We initiated a second round of validation, this time purposely sampling zip codes we knew to be rich in cultural institutions. We contacted the small number of organizations that had not been represented within our data set, only to discover those organizations had sponsored no events during the time period we were studying.

While one might conclude that our data set was therefore exhaustive, we believe that not to be the case. Rather, the validation results point to a lack of reliable census data for cultural organizations. As our

sources, techniques, and data improve through iteration, we expect our data set to become larger and more diverse, although until more complete rosters of cultural organizations become available to us, it may be difficult to confirm with precision what share of cultural events are being captured.

In keeping with the threefold goals of the pilot project, we identified areas for redress in the next iteration:

- a greater degree of automation, as our current collection methodology is time-consuming and subject to researcher bias
- expanding the data collection to include longer time frames and different seasons
- development of better validation practices
- cooperation with under-represented communities, particularly ethnic and non-English speaking groups
- incorporation of non-Web-based sources for event information
- refining definitions of culture and changing the unit of measure from an event to a culture-hour

5 Conclusion

The pilot project met the team's initial goals of developing a methodology for capturing a variety of cultural events from a range of sources, for testing that methodology for completeness and ease, and for conducting conversations with members of the local community about enhancing our methods in future phases. We acquired a nuanced understanding of the gaps in data based on our current methodology and identified a number of items for review, particularly the establishment of a more consistent core unit of measure, and the need to identify sources for events that may never be published in electronic formats. The pilot project provided clear indications of the shortcomings of our current methodology as well as potential solutions for addressing them in future iterations.

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