Blueprint for a Digital Observatorium

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The sociologist Harold Lasswell envisioned a mechanism for public engagement which extended from design of a curated exhibit related to a complex civic situation, a forum for engaging this information in groups, and a subsequent decision making stage. His model has been put into place in experimental applications in university settings but has not yet been used in the broader public sphere. It harkens back to the role that the market place (the agora) played in ancient Athenian democracy as a forum for collective reflection and deliberation. In efforts to recreate Athenian agoras, current best practice includes Open Space and Futures Search, both accommodating large numbers of self-nominating participants in a festival atmosphere where individuals and small groups collectively contribute to an uncurated display of many incompletely understood ideas in the high energy tradition of the once-touted process of brainstorming. Lasswell was reaching for a more deeply reflective vehicle for building understanding of ideas and their interrelations. This brief report considers the challenges and opportunities for realizing Lasswell's original vision with the support of digital technologies.

Harold Lasswell

Harold Lasswell lived in interesting times. As a scholar at Yale University in the emerging field of political science, he found himself linking philosophies of communication with the ethical implications of interventions of law. Lasswell was sensitized to this convergence of these practices through his war-time role in the field of propaganda. While he contributed to his field in many dimensions, Lasswell is perhaps more celebrated amongst his peers for the turmoil he kindled in his field than for the impact he has had on other disciplines of science – communication and information science, sociology, cognitive psychology, education, business management, economics, art and, of course, philosophy.[1] Today, advocates of participatory democracy are rekindling interests in Lasswell's ideas.[2]

Participatory democracy aspires to reduce risk in high risk social decision-making. Lasswell himself was torn between the necessities of expert participation [frequently scholarly experts] alongside essential participation of the public at large – a challenge which required the fusion of two cultures. The cultures were separated by technical language and by individual experiences. Lasswell envisioned an exhibition forum within which events and ideas are displayed in efforts to immerse audiences of differing levels of technical and popular culture skill in a shared cultural milieu. This forum is described as an urban / social planetarium.[3]   It is fair to assume that Lasswell was sensitized to practices of voting on incomplete or misunderstood information. "*Our traditional patterns of problem-solving are flagrantly defective in presenting the future in ways that contribute insight and understanding*." He saw the necessity of linking the work of the planning table with a broad public reflection and deliberation before ideas were put to the vote.

The Social Planetarium

It is not without a measure of irony that even with the universal access to unfathomable depths of technical and cultural information that exists through the Internet, a curated social planetarium is needed. And, at the same time, there are gaps and uncertainties in our thinking about the way with which a social planetarium is curated and the way that the curated experience is then used to support participatory democracy. The crux of the problem is that a democratic society must be guided by an informed public who can agree upon an understanding of a complex situation and then agree upon a preferred course of action. The future of this vision of a democratic society is at risk for several familiar and serious concerns[4]. The first concern is the capacity for the public to become "informed" with respect to the situation. The second is the public's conceptual foundation for interpreting observations. And the third is the declining capacity [or interest] of the public to reach agreement upon resolution of the situation through deliberation. A fully informed public reaching a unanimous, deeply understood consensus is an ideal which few pragmatic citizens would hold expectations for achieving. Approximations of this ideal need to address multiple streams of conflicting information ("propaganda") which effectively block collective understanding before any decision for collective action can be made. The current champion for the social planetarium concept in the public sphere is Matthew Shapiro.[5]

[1] The policy scientist of democracy: the discipline of Harold D Lasswell. American Political Science Review 100(4): 579-587, 2006.
[2] Matthew Shapiro of the Social Planetarium Initiative http://socialplanetarium.org/ http://www.linkedin.com/groups/Social-Planetarium-Initiative-4444001 September 1, 2013
[3] Lasswell, H. D., 1960. "The Techniques of Decision Seminars". Midwest Journal of Political Science 4, 213-236; Lasswell, H. D., 1963. "The Future of Political Science", New York: Atherton Press; Lasswell, H. D., 1971. "A Pre-View of the Policy Sciences", New York: American Elsevier.
[4] Peter Muhlberger, Jennifer Stromer-Galley and Nick Webb, 2011. Public policy and obstacles to the virtual agora: Insights from the deliberative e-rulemaking project, Information Policy 16:197-214.
[5] http://socialplanetarium.org/ http://www.linkedin.com/groups/Social-Planetarium-Initiative-4444001 September 1, 2013

Historically, the modern notion of a social observatorium might be traced to the situation rooms common during the second world war, an example of which is exhibited at the Imperial War Museum in London, England.[6] In this venue (see Figure 1), wall and table exhibits were periodically updated and deliberations were conducted amidst a battery of telephone communications. As a museum, the room currently houses a 15-meter interactive table providing access to digitized archives. A comparable "Situation Room" was established in the White House in 1961, after then President Kennedy concluded that decision making under crisis had suffered due to a lack of real time information. The Situation Room was renovated in 2007 (see Figure 2).   For technical management challenges, consider NASA's Mission Control Center in Houston (see Figure 3). Today, command centers exist in government and industry organizations wherever complex decision making requires reference to a rich variety of information sources.[7]

Figure 1. Churchill War Room.   Figure 2. Current U.S. Situation Room.   Figure 3. NASA Mission Command.

In the public sphere, social observatorium might be traced back to humble kiosk. The kiosk, a Persian term, refers to a small space, originally a small garden or open-sided pavilion for the purposes of transacting ideas or goods. In this

sense, a kiosk is a very, very small agora. The "information kiosk" emerged as a communications device, different from a sign by virtue of its eclectic inclusion of messages. The central theme for a public information kiosk is that on this posting site viewers will be able to get information about things that are happening here and now. Information kiosks have evolved from static posting boards (see Figure 4), to visitors desks and to self-guided electronic bulletin boards.

We almost universally find flip charts and will displays in use during formal meetings today. This display technology is responsive to the need to see all of the ideas or options at once so that visitors and participants can browse as they are considering their opportunities.

Figure 4. Traditional kiosk.

With a slight diversion and a deeper look into history, the Outlook Tower in Edinburgh preempts the kiosk as a viewing platform.[8] The tower's creator, Sir Patrick Geddes – biologist, sociologist, geographer, philanthropist and pioneering town planner, described the tower as a "social observatory" from which the city, with its complex relationships and systems could be viewed. The unifying theme here is the idea of having all of the "relevant" features of a city in view at one time in an effort to make a holistic assessment of things.

As direct visualization of all relevant things became impractical and as information density increased, providing browsing access to an open information source became problematic. Individuals close to the exhibit limited access to the exhibit by others. Information was extended into wall displays and signs, and the displays moved indoors. Moving a public exhibit indoors has significant implications because doors convey containment and exclusion, and special provisions need to be made to welcome visitors inside. Inspiration once again comes from the ancient agora, were shop owners provided both an open point of contact and also a semi-enclosed "back hallway" (a stoa) into which customers were invited for more extended discussions. When the public information kiosk became a public information center, visitors were obliged to make the conscious decision that they were seeking out information and willing to invest some of their time in gathering that information. If their interest was entertainment, then the means were devised to provide information kiosks for entertainment news.

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[6] Winston Churchill's Cabinet War Room currently housed at the Imperial War Museum
http://www.iwm.org.uk/exhibitions/churchill-war-rooms/the-cabinet-war-rooms
[7] http://war-rooms.blogspot.com/2011/08/war-room-control-room-management.html#!/2011/08/war-room-control-room-management.html
[8] http://vivendodiscimus.blogspot.com/2010/01/outlook-tower-civic-observatory-social.html

The trick was, and still remains, to balance the right information, at the right time, in the right format for the target audience, and at the right sites for ease of access. If information exhibits are sufficiently compelling, information seekers will come. Digital technology has contributed considerably to aid in balancing information depth with viewers bandwidth, and interactive digital exhibits allow viewers to mine for the information that they need. In order to transfer from the static information kiosk to the electronic kiosk, we needed to develop a new social meme using electronic devices.

Efforts in Modern History to Establish Social Observatorium

The salient distinction between a social observatorium and a museum is the local setting the current time frame. Somewhere in the nexus of the historical society museums, the public libraries and the local newspapers, public perceptions of time and place converge. The three streams of current local information, curated repositories of information, and historically remembered information have occasionally come together. The social observatorium is envisioned as an institution where such interaction is reliably discovered. However, the social observatorium is not a disconnected lens looking at and reporting information. The observatorium is part of a three phase inquiry system for social system design and construction. The first phase is a prototype design phase, the second phase is a review and enhance phase, and the third phase is a collective action planning phase. While social observatorium are relatively easy to imagine as a special event, they are far more problematic to launch and sustain as an institution. This point can be illustrated with reference to three examples: an academic project, a municipal resource, and an artistic forum.

1. Academic Project. Matthew Shapiro notes "From 1937-1951, Vassar College had a "Social Museum" (see Figure 5) in which students worked together across disciplines and developed exhibits on various topics significant to the time, including housing, energy, and the war."[9] "Topics include Latin America, the dairy industry, child welfare, folk art, housing, public health, science and industry, as well as economic and social issues in Poughkeepsie and Dutchess County. "[10]

"The vision of social responsibility and public service whether volunteer or paid has pervaded the climate of the college. Social sciences emphasized "laboratory work in the field," and in 1937 the Social Museum opened to display social research through the visual arts and language."[11] The exhibits were, apparently, topical and designed to provide rich background for topics addressed on campus by invited speakers from the earliest days. "When Eleanor Roosevelt and Harold Ickes participated in a symposium at Vassar on municipal housing in 1937, an exhibition of materials on housing was displayed in the Social Museum."

For a number of years, a comparable social observatorium was installed at the US War College in conjunction with work at George Mason University.

Figure 5. Vassar's "Social Museum"

2. Municipal Resource. For reasons related to curatorship and sponsorship, it has been difficult to establish a durable social planetarium that focuses on municipal challenges and opportunities (see subsequent sections, and note the cross over from culture to municipal management in some art efforts). An early concerted, and still recurrent, effort to establish a municipal social planetarium in the authentic spirit of Lasswell's concept was mounted by Alexander N. Christakis and John N. Warfield when they were working together in the Institute for Advanced Study in the Integrative Sciences at George Mason University.[12] In 1983, a concept paper announced a plan to launch a demonstration project on the island of Crete in Greece; however, after a thirty year hiatus, hope has refocused through the Future Worlds Center on the town of Voroclini in Cyprus where citizen-initiated dialogues have been major contributors towards reunification of the island. Christakis and Warfield were seeking more than an planetarium alone: they were seeking to establish what they called "The Lasswell Triad" –a pre-legislative forum (which effectively serves as a curatorial process); the social planetarium itself; and then a decision seminar wherein policy matters are deliberated and decided. The problem is getting all three legs of the stool in place concurrently, and it is now clear that without a culture of citizen collaborative design (the pre-legislative forum), an exhibit reverts to a montage of current news and historic footnotes. Moreover, without the link from the pre-legislative forum through the planetarium exhibition, the decision seminar risks losing its legitimacy it its claim to be a broad expression of public understanding.

[9] http://www.linkedin.com/groups/Social-Museum-Vassar-College-1937-4444001.S.237569149?qid=670a7edd-65c9-4d05-8d3c-e4f83d58236d&trk=group_most_popular-0-b-ttl&goback=%2Egmp_4444001
http://150.vassar.edu/histories/urban-studies/index.html
[10] http://specialcollections.vassar.edu/findingaids/vc_social_museum.html#d0e32
[11] http://150.vassar.edu/histories/urban-studies/index.html
[12] http://www.gmu.edu/depts/t-iasis/wandwaver/app06.htm

3. Artistic Forum. Again, through the research of Matthew Shapiro, The Vancouver Museum was conceived "to interpret Vancouver and unlock its stories. Our toolbox will include the artifacts and narratives in our collection but we will "mix things up" by incorporating new areas of investigation like the visual arts, design, architecture, urban planning, music, new media, fashion, popular culture and photography. … We will become a gathering place for dialogue. And we will become agents for provocative conversations."[13] In support of its mission, the museum announces that it has a staff position called "curator of contemporary issues."[14] An earlier modest step in this direction was taken by the City of Boston in their "Where's Boston" orientation exhibition situation originally atop the Prudential Building, extending the ancient tradition exemplified by Patrick Geddes' Outlook Tower in Edinburgh with continuously running multiple slide shows of city images. The images from the exhibition[15] are currently available online through Flickr, however the presence of the shared experience with a life audience has yet to be replicated in a fully digital form.   The American Alliance for Museums sees the opportunity to link museums more intimately with formal education institutions.[16] We see an essential future role of museums as a link between the public at large and the planning elite of cities.

Adopting Digital Technology

Digital technology allows us to construct exhibits in the form of "portals" to massive amounts of information related to specific situations. Corporate and university websites, for example, provide interested parties with a self-guided tour of celebrated features of those environments. Separate websites allow interested parties to hear from customer forum about their experiences with products and services. One portal offers the bright picture, and another portal offers the darker view. Each of these views are "curated" with a specific political intention – once to sell the virtues and the other to acknowledge the shortcomings. It would be remarkable – although not impossible – to blend the content in the interests of some "full disclosure." Absent a fully unbiased curator, the Internet also allows interested parties to search for un-curated content through fully unbiased search engines. Here we face a tradeoff situation – the focused bias of a curated "social planetarium" or the information overload of a non-curated data dump. In the middle ground we are seeing an explosion of "groups" within the social media sphere. Yahoo, Google, and Linked-in … to name but a few of the most familiar platforms. The strong lens of a curator is substituted for the editorial filter of a moderator in many groups. Moderators tend to focus on sustaining a kind "tone" to exchanges while still tolerating contrasting perspectives. More to the point, of course, is that authorship is distributed, so the social planetarium is decorated with perspectives from any willing source. Even as these groups approximate a vision of Lasswell's social planetarium, there is a tendency for specific individuals to dominate the platform, and as information content extends toward overload, viewers can lose sight of the scope of perspectives contributing toward the shared experience and emerging understanding.

1. Content in the digital domain can be hierarchically layered. This is a familiar basis for the "structure" of websites. Information is connected with hypertext links so that users can navigate more deeply into some ideas and also retain the option to browse laterally across ideas that are distinct yet contextually related. Information managed in this fashion seeks to limit information overload. As a self-guided experience, each user is free to form a distinct impression of the site from the portion of the site that they explore.

2. Content in the digital domain can be self-curated. This is not to suggest that any automated means for sorting and displaying ideas might not itself be biased.   Information management technologies can search digital documents for key words and can then assemble displays based on a taxonomic framework using those key words. The framework might be nested such that at deeper stages of exploration, content is parsed into progressively more narrowly defined bins. In effect, ideas can be curated into "clusters" based upon their shared attributes. To navigate the clusters, some means of labeling the clusters is needed. Searching, tagging, clustering, and displaying clusters will become exponentially costly as the body of ideas grows, and manual clustering will become cost prohibitive in the near term. Automation is increasingly possible, however, and Steven Prosser and Gary Cliff Martin published a patent in 2008 specifically for automating affinity clustering (http://www.faqs.org/patents/app/20080281790#ixzz2dwZFLdlF).

3. Content in the digital domain can also be self-filtered. This trend is disturbing for those who seek to foster greater levels of boundary-spanning learning. Self-filtering is implicitly imposed by reference to a specific user's profile of preferences and behaviors. In essence, "context discovery" platforms seek to match new information with old patterns, thus effectively reinforcing old knowledge while intentionally filtering out distracting new ideas. An interesting opportunity may exist, however, to use individual user information to assemble sets of users into "highly-similar" or "highly-diversified" groups.

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[13]http://www.museumofvancouver.ca/sites/default/files/VM%20Final%20Vision%20Book.pdf?goback=%2Egde_4444001_member_125368695#%21
[14] http://www.museumofvancouver.ca/about/overview
[15] http://www.flickr.com/photos/rnolan1087/426093277/
[16] http://www.aam-us.org/resources/center-for-the-future-of-museums/future-of-education

4. Content in the digital domain can be shared. Direct content sharing has been enabled through reference to URL addresses. Indirect content sharing is enable through features such as flagged "like" choices, purchase choices, and even through browser history patterns. Users may be aware of some forms of sharing and fully unaware of other ways with which their access to and use of digital information is gathered and shared. Commercial websites like to know which features of their sites attract and retain user interest, and many users may still be unaware that this information is being captured. Intentional sharing is being accelerated through the use of Tweets on the Twitter platform. It is a small leap to imagine broad emergence of "chat rooms" linked to specific content … carrying the asynchronous comments appended to blogs to real time discussions. These chats might include Voice over Internet or full video conference embodiments.

Digital Arena

1. Information: Museums / Libraries / Classrooms. Much as modern museums have moved audiences from a passive observer role into an interactive explorer role, the modern versions of observatorium seek to incorporate dynamic features. A museum is different from a traditional classroom primarily due to the fact that a museum provides a platform for making discoveries and then making mental connections that link those discoveries into a pattern. The pattern may be unique for each museum viewer. In the classroom, ideas are compared in search of distinctions among ideas. Ideas are effectively pitted against each other, and through some form of logical debate winners and looser are assessed. This type of learning presupposes that all ideas have some innate right-ness and wrong-ness … some goodness and some evil … which the student is supposed to correctly identify. Museums present all ideas as fully as possible and encourage viewers to use them to construct a story of times and places beyond their own direct experience. The individual stories, then, are neither fully right nor fully wrong. The stories are what work for the individual. If the story crafting process is conducted in groups, then the story becomes a group story. As the story building group gets larger and more diverse, the story that the group constructs takes on added strength. At some threshold, our stories become our truths. The elements that we choose to weave into our stories are our salient features of our perceived world. Museum goers carry their stories beyond the museum itself. Their stories take on a life in the real world because they have breathed life into them. The museum experience makes this possible by presenting images of artifacts that reflect the presence of the real world in a transparently artificial display.

Our stories are the models of our world that we tell to ourselves and to each other as we build social cohesion.   What is included and what is not included do not differ in their right-ness or their wrong-ness, but rather in their relevant-ness as a reflection of our understanding of the way that the world works.

2. Gaming: Second Life. Simulation games provide a forum for role playing. These expressive digital venue allow users to transform themselves and to intact through "avatars" with others. The others who self select to gather in a role playing game share some features yet also retain individual identities. In interactions with each other, their behavior writes a story. If they collaborate, they write stories together – even if their collaboration is based on mutual agreement to engage in mock combat. Typically a meta-narrative writes itself as the role playing simulations unfold. Combatants at one cycle might find themselves as allies in a future turn. Players who return to a simulation and re-engage in the future carry the story line beyond the individual simulation, and effectively extend the role playing culture into a larger culture of online gaming. Gamers can carry their online identities into the real world, celebrating heroics and enjoying a real-world sense of connectivity through transparently artificial world. The gaming arena makes this possible by establishing a physical context within which human engagement can be supported.

Our behaviors are reflection of our skills and our intentions which we project into real and simulated worlds as a means of communicating our presence.   The mutual agreement to communicate our presence to each other reflects a need through which all humanity is linked.

3. Deliberations: Hangouts / Skype / GoToMeeting / WebEX. Virtual presence discussion rooms are pragmatic inventions through which complex ideas can be exchanged and new understanding created without exclusive reliance on lengthy, iterative documents. Documents can certainly be elements of a virtual meeting; however, the meeting is really about the need to state and explore perceptions, some of which may never have been explored before. The precedent for the virtual meeting is the telephone. Incremental enhancement includes the capacity to see some of the body language alongside the spoken language during deliberation. Represent or recreate a "real" group experience with a digital facsimile takes time. Bonds of trust among individuals who are meeting for a first time are most readily formed (if, in fact, they are formed at all) in face-to-face meetings which blend informal and formal deliberative opportunities.   As we observe each other engaging each other, we form some impressions of the trustworthiness of our fellow participants. This trustworthiness is particularly important when deliberations involve values that may differ among participants. Deliberations are easier when values are explicitly understood and fully shared. However, when deliberations are limited only to those who happen to share specific values, communities fragment into groups who might then contest each others' different values.   This is a tragedy because even though differences in some values might be expected to exist across broad and diverse communities, when communities come to focus on their differences they can lose sight of their commonalities. Virtual presence platforms can help groups deliberate and may help groups recognize where value

difference might emerge; however, digital platforms have not yet (to this author's knowledge) provided a reliable means for resolving value differences. The limitations of virtual presence platforms is that they carry enough human interaction to feel familiar, yet not enough humanity to build new bridges across difficult terrain.

4. Mashups: Hybrid arena. A virtual museum experience is more than the exhibits alone. A museum includes a walking tour through a self-guided selection of curated exhibits, and typically also a rolling deliberation as viewers move in groups through a sequence of experiences. The content is curated, the navigation is self-directed, and the deliberation is an emergent process. These three modalities can be combined into a digital experience which, if appropriately designed and curated, could implement Lasswell's social planetarium. Moreover, elements of the digital experience can be pulled forward into face-to-face venue, linking the best of both worlds – information management digitally and experience management directly. In instances when difficult, value-ladened issues need to be explored by a community, the hybrid model seems likely to offer the greatest community building capacity. Images of individuals working with digital displays in a face-to-face observatorium have been gathered by Matthew Shapiro of the Social Planetarium Initiative (see Figure 6).

Figure 6. Digital technology incorporated into a walk through and a sit down social observatorium.

Digital Exhibits

1. Static information. Static information does not change as it is explored by the viewer. The image could be a wrap-around pantographic photo or even a video document. The image even could be kinetic art – so long as the movement itself was beyond the viewer's influence. To be effective, the information must be familiar enough to seem understandable yet unfamiliar enough to seem interesting and worthy of some reflection. Space needs to be preserved to allow viewers opportunity to insert themselves into the exhibit so that they can form a personal connection with the exhibit. The art historian Dean Rader refers to this challenge as a need to refrain from "over-specify" a specific meaning that is carried in an artifact or an exhibit. Invite the viewer to fill in meaning from their own world of experience. Reflective time is discovery time. There is a dynamic feature of static exhibits which relates to the rate at which a viewer moves from exhibit to exhibit. If there is too much information in the field of view to comfortably consider, the viewer might simply browse over the exhibit without diving into it. An artful balance must be struck between browsing among exhibits and diving into a specific exhibit. During this exploration, individuals who are part of a group will be tugged through exhibits at the pace of the group. If there is not ample space around an exhibit for the group to collectively reflect, then individual reflection time will be compromised as the group rolls forward. John Warfield, one of Lasswell's historic interpreters, described the walk through an observatorium as "the observatorium is designed and established so that **people can walk through a sequential learning experience**, in which they gain both an overview and an in-depth understanding of the system that has been designed ..."[17] The views and the trails are curated, but the path and the meaning is discovered.

2. Interactive Dashboards. A dashboard exhibit displays a continually changing summary view of data for an underlying complex dynamic process. For example, one "meter" on a dashboard might report the [calculated] number of people on the planet at the current moment, while another might report the declining number of polar bears or the current temperature in the Bearing Sea. The digital dashboards themselves can be tuned by users to call up different summaries of dynamic data. Users explore data that they feel might have some interesting meaning for them, and the "just in time" presentation of preferred bits of information limits information overload and matches inquiry with reflection. The

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[17] The Harold Lasswell Model of Design, Decision, and Learning Environments, Warfield, J.N, unpublished papers. The corporate observatorium: Sustaining management communication and continuity in an age of complexity.

exploration is curated by the set of pre-programmed meters available to the dashboard, and the alternative dashboard types that might be called up by the viewer. While there are a great many manual interactive exhibits in museums and classrooms, interactive dashboards for mining large data sets and simulation models are uniquely available through digital technology. The relevant data is curated and the exploration is self-guided.

3. Dynamic Exhibits. When a viewer is able to make a durable change to an exhibit, such as by adding an image or an idea to a kiosk or recording an oral history statement into an archive, the exhibit dynamically changes as viewers interact with it. Public fairs and festivals represent one extreme of dynamic exhibits: in these events viewers are part of the event. Classrooms are dynamic exhibits, too, wherein responses from some students affect the thinking of others. The way that any group of people interact with an exhibit or each other in real time invariably represents a dynamic experience both for the participant and other observers. Buckminster Fuller embraced this principle when he designed the "World Game" as a model for community experiential learning that was assembled for public use.[18] The rules of engagement are curated, however the engagement itself is effectively performance art. The playing field is defined and the rules of engagement are specified, but the nature of the interactions are emergent.

4. Self-Discovered Patterns. A special situation exists when a pattern emerges which follows simple rules yet gives rise to unexpected results. In such circumstances, the curator curates the set of rules that enables a self-emerging form to arise. In the ancient game of dominos, tiles are aligned in response to relationships that exist between pairs of tiles. When all of the tiles that can be played have been played, the resulting pattern is unique to the specific game. There are similarities across games, yet each game gives rise to a distinct pattern. In the game of dominos, there is not much information value extended to the resulting pattern: however; when the rules are changed so that tiles are linked only if the idea expressed on one tile "strongly supports" the success of the idea on a second tile, a pattern of propagated influence (reflecting the judgment of the players) emerges. This pattern is an exhibition of a collective mind, and it can be powerful. Business managers use this technique to assemble ideas into systems views when they are looking for root causes (or deep drivers) of problems (or opportunities). Such an exhibit is curated not at the level of the ideas that are put onto the table, but rather simply by the rules for which individual ideas are assembled into systems patterns. The nature of the interactions are specified, but the rules of engagement and the scope of the playing field are negotiable among the players.

Observatorium Curators and Sponsors

Curation, as an art and as a science, is central to Lasswell's concerns about propaganda in the public sphere: it is also a barrier for the realization of the social observatorium. Two aspects of curation are particularly problematic in the public sphere. First, the task of choosing what to ask or what to display is unavoidably political for, at the outset, the choice of where to draw community attention [and by default where to reduce community attention] involves a choice wherein some topics win while others lose. Even if a choice were made by random lottery, the construction of the lottery itself simply moves the political act a bit further upstream. Identifying a choice as a political expression is not a judgment on the merits of the choice, but rather recognition of the pragmatic necessity of making some choices with the objective of influencing other people on a civic or individual level. Second, the consequence of drawing community attention to an issue or an opportunity can raise unexpected administrative costs. Community learning might change expectations for action from legislators and administrators. Changing expectations may result in changing obligations, and the cost of making changes will typically be larger than the cost for sustaining a status quo.

Much of political theory is directed at understanding the stability of governments and subgovernments.[19] The challenge to Lasswell's social observatorium vision, then, is who will play the civic curator role? Pushing against prevailing political wisdom to tako on the curatorial action relies upon an "advocacy coalition"[20] who will drive the specific initiative. This coalition must have the shared belief that others will be willing to cooperate in a collective effort simply because they will see the effort as essential to their own well being.[21] And yet, in all cases where ambiguity necessities inquiry, the outcome of decisions made through the mechanism of an unbiased curatorial social observatorium cannot be foretold. "Ambiguity is not uncertainty, which can be solved by more information, but a state of not knowing what interpretations of values to bring to bear."[22] The advocacy coalition must make the compelling case that the reduction of ambiguity itself as the sole outcome is worthy of the community effort.

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[18] http://www.worldgame.org/

[19] D. McColl, 1990. Subgovernments as determinants of political viability, Political Sci Q 105(2):269-293.

[20] P.A. Sabatier and H.C. Jenkins-Smith, 2007. The Advocacy Coalition Framework: An Assessment, in Theories of the Policy Process, (second), P.A. Sabatier, Ed., Westview Press, p117-166.

[21] E. Ostrom, 2000. Collective action and the evolution of social norms, J Economic Perspectives 14(3):137-158.

[22] Peter Muhlberger, Jennifer Stromer-Galley and Nick Webb, 2011. Public policy and obstacles to the virtual agora: Insights from the deliberative e-rulemaking project, Information Policy 16: p 205.

While policy science is incomplete with respect to the role of the public in the formal political process, interpretation of events in the public sphere by special interests groups are recognized as potential catalysts for change.[23] In effort to preserve the status quo, elected officials, agency officers and economic interests should be expected to resist efforts to establish an unbiased curation of social observatorium. With limited prospects for cultivating political support for broad scale community engagement, the venture must turn towards the arts community for advocacy. This is not to say that arts institutions are independent, but rather that arts as a culture has a calling beyond prevailing political administrations. In the words of Japanese philosopher and artist Kenji Miyazawa, "*Our art must be the foundation of the coming culture*."

While working through the arts communities in an effort to realize Lasswell's vision is on one hand a pragmatic default in the face of political resistance to inquiry in the public sphere, it is also a preferred positioning for a creative expression which can run parallel with formal strategic planning processes. The social observatorium is an expression of what "might be," and to the extent that this vision may need to be moderated by "political reality," the output of the social observatorium is a whispered prayer more than a civic mandate. It speaks directly to Lasswell's own predicament in working between the community of the elite and the community of the masses, and positions the output of the observatorium as a matter of judgment for and from the masses as an expression of popular art. Aristotelian doctrine elevates the judgment of the many in political matters, and such a view would certainly relate to the extent to which the views of the expert elite can also be brought into the observatorium in language understandable to the masses.

Learning to Rely in Broadly Inclusive, Self-Curating Public Expression

Sociologists speak of "memes" as ideas, behaviors or habits that are transmitted from person to person and carried down through generations. Our traditions of public discourse are memes. Our dissatisfaction with our meme for relying on elected representatives to solve our most pressing crises cannot, in itself, present us with a new meme for public discourse. Digital technology, however, does offer a platform within which new memes can be tested. As we struggle within the traditions of face-to-face deliberation, we have opportunities to weave new memes from the digital world into our traditional practices. One of the powerful innovations from the digital technology sphere is the enhancements of information collection, management, representation and editing. Citizens deliberating in face-to-face gatherings can come into the discussions sensitized to the scope of the challenge through an immersive experience in a social observatorium. A shared experience such as this can provide a context through which a group sees itself sharing an underlying identity as a community engaging a shared challenge or opportunity. The social observatorium is a powerful first step in developing a shared language for discussing a situation. Upon such a foundation, deliberation can progress to exploration of relationships among ideas, and knowledge of those relationships can inform the way that we understand our situation.

CONCLUSION

The social observatorium has taken a long time to come of age. Part of this delay was due to the slow diffusion of new forms of robust collaborative design, part was due to chaotic explosion of interactive capacities within the digital space, and part is due to resistance in re-imagining of the purposes of our institutions as we collectively face the need for a paradigm shift in global social equity.

Lasswell's vision may point to the future because it is bringing us back in touch with essentials of Athenian democracy. Warfield and Christakis' reflection on "The Lasswell Triad" has parallels in the institutional structure of the ancient agora. The agora in its broadest sense was an inclusive space for the recombining of ideas – a pre-legislative arena where ideas were recombined and took on new shapes. The pynx was a theater for the display of ideas, with the audience in full view being part of the dynamic exhibit in response to oratory. The executive decision-making forum of the senate met in the bouleterion.[24]

In organic systems such as civic governance, form and function are opposites of the same coin. The architectural form that fostered and sustained democracy in ancient Athens may contain design elements appropriate for modern agoras. A particularly inspired view of democratic practice in ancient Athens is offered by Richard Sennet.[25]

> From roughly 600 to 350 BC, Athens located its democratic practices in the town square and the theater. In these spaces, very different kinds of democracy were practiced. The square stimulated citizens to move beyond their personal concerns and acknowledged the presence and needs of other citizens. The theater helped citizens focus their attention and concentrate on decision-making. We would never want to fully copy the social conditions of Athenian democracy (the majority of people were slaves; women were excluded from politics), but we can learn something by steadying trial these often volatile, intensely competitive people connected that democracy to a architecture.

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[23] J.W. Kingdon, 2002. Agendas, Alternatives, and Public Policies (Longman Classics Edition), 2nd ed. Longman.

[24] http://www.ancient.eu.com/article/141/

[25] Sennet, Richard, 1999. The Spaces of Democracy, Harvard Design Magazine 8:68-72.

In the Pnyx Athenians debated it and decided on the city's actions. The Pnyx was a bowl-shaped, open-air theater, a ten-minute walk from this city's central square. Chiseled out of a hill, the Pnyx resembled other Greek theaters, and, like tem, was used originally for dancing and plays. In the sixth and fifth century is BC, however, Athenians, seeking the order in their politics, put this ordinary theater to a different use. Speakers started in the opened rows space on a stone platform, called a bema, soul that they could be seen by everyone. Behind the speaker the land dropped away, so that words seemed to hover in the air between the empty sky and the crowd of normally five to six thousand men; from morning to late afternoon, sunlight struck the speakers face, so that nothing in his expression or gestures was obscured by shadow. The audience for this political theater, men who belong to the same local tribe, sat around the bowl in assigned places. Sitting in a semicircle, citizens could see each other's reactions as they watched the orator at the bema.

The man's sat or stirred this way for a long time – as long as the sunlight lasted. The theatrical space thus functioned as a detection mechanism – its focus and duration allowed the participants to get beneath the surface of momentary impressions. This disciplinary space of eye, voice, and body had one great virtue: through concentration of attention on a speaker and identification of the others in the audience who might call out challenges or comments, the ancient political theater sought to hold the citizens responsible for their words.

In the pynx, to visual rules organized the often raucous meetings at which people made decisions: exposure – of the speaker and the audience to one another – and fixity of place, with the speaker stead and the audience sat. These two visual rules supported a verbal order: the unfolding of an argument.

The other space of democracy was the town square, the Athenian agora. This square consisted of a large open space crossed diagonally by the main street of Athens; at the sides of the agoras were temples and buildings called stoas, sheds that opened sideways onto the agora Many activities occurred simultaneously in the agoras – commerce, religious rituals, simple hanging out. The agora also contained a rectangular law court, surrounded by a low wall, so that citizens who were banking or making an offering to the gods, for instance, could also follow the progress of justice. The stoa helped calm this diverse hubbub; as one moved out of the open space into a building, one moved into more private spaces. The rooms at the back of the stoas were used for dinner parties and private meetings. Perhaps the most interesting feature of the stoa was the transition space just under the shelter of the roof on the open side; here one could retreat yet keep in touch with the square.

What import did the complex, teeming space of the agora have for the practice of democracy? A democracy supposes that people can openly entertain views other than their own. This was Aristotle's contention in the Politicis. He thought the awareness of differences occurs primarily in cities, since every city is formed by synoikismos, a drawing together of different families and tribes, of competing economic interests, and of natives with foreigners.

Two millennia later, a "difference" seems to be largely about identity – about race, gender, or class. Aristotle's definition of difference was more complicated. He also included the experience of doing disparate, even incongruous things – such as praying and banking – in the same space. The mixture in a city of action as well as identity is the foundation of its distinctive politics. Aristotle's hope was that, becoming accustomed to a diverse, complex milieu, citizens would be less likely to react violently when challenged by something strange or contrary. Instead, this diverse environment should encourage and support the discussion of differing views or conflicting interests. The agora was the place in the city for this tolerance of difference.

Yet if in the same space different persons or activities are merely concentrated by remain isolated and segregated, diversity loses its force. To count, differences must interact.

The Athenian agora made diverse male citizens interact in two ways. First, the open space of the agora contained few visual barriers between event occurring at the same time; Athenians did not experience physical compartmentalization. Thus, coming to the town square to negotiate with a banker, one might observe a trial in the law court and even shout out one's opinion about the proceedings. Second, the agora established a space for stepping back from such engagements – the edge, just under the roof of the stoa; here was a fluid, liminal zone between private and public.

These two principles of visual design – lack of visual barriers and a well-defined transitional zone between public and private – shaped people's experience of communication. The flow of speech was less continuous and singular than in the Pnyx; in the agora, verbal communication was more fragmentary, as people moved from one scene to another. The operations of the eye were correspondingly more active and varied in the agora than in the Pnyx; a person standing under the stoa roof looked out, scanning. In the Pnyx, the eye was mostly focused on the orator at the bema.

This ancient city illustrates how politics can shape urban design. The theater and the square are the two best design for democracy. The theater organizes the sustained attention required for group decision making; the square is a school for the often fragmentary, confusing experience of diversity. The square prepares people for debate; the theater disciplines their debating."

Proximity and linkage of idea exchange and assembly, public exhibition, and executive decision making must be woven into designs for future social planetarium. Leading universities are testing new models for idea-gathering and decision-making centers.[26][27] Experiments with reconstructing open public market spaces into 21st century agoras are currently underway[28] Deliberative design technology exists for managing pre-legislative construction of social planetarium exhibits.[29]

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[26] http://dt.asu.edu/
[27] http://gwmoving.planetforward.org/
[28] https://www.facebook.com/events/542530615800995/#!/quincyfarmersmarket
[29] http://www.globalagoras.org