

# “Word- of- Mouth”: A technologically mediated agent provocateur

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## Abstract

*In this paper, we propose a configuration of the museum environment that allows the viewer of a museum exhibit to overhear previous spectators of the same exhibit. “Word-of-Mouth” is an unauthorized comment capturing agent that confronts the subsequent visitor with the unmediated expressions of previous visitors, in what we propose could be a useful disruption of the museum experience towards a more critical approach of the museum visit. We describe a first prototype of the “Word-of-Mouth” configuration and the result of a case study that took place in Naturalis, the National Museum of Natural History in Leiden. By means of the “Word-of-Mouth” prototype, we study the potential value of the visitors' unofficial comments and the impact of the comments' playback inside the museum environment. Ethical and moral implications of an unauthorized recording of conversations are not overlooked, nor is this practice promoted. Our study contributes both conceptually and through the case study results to investigating possibilities for a critical approach of the museum visit.*

**keywords:** disruption, audio tour, eavesdropping , meaning-making

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## **1. Introduction**

“Word-of-Mouth” is a configuration of the museum environment that allows the viewer of a museum exhibit to overhear previous spectators of the same exhibit. We suggest that conversations and comments of the pass-by visitor, recorded inside the museum without the commentator’s awareness, are added to the information that refers to and defines an exhibit and will confront the following spectator in what we propose to be a useful disruption of the museum experience and a productive interruption of assumed conventions during the museum visit.

“Word-of-Mouth” is the outcome of our interest in re-considering the use of technological aids inside the museum by exploring new paradigms and shifts in exhibition practices. In particular, we wish to explore the possibilities of using disruption, as the confrontation with unexpected stimuli that contradict one’s previous expectations or reasonable estimations of a case, as a method to stimulate a more critical approach of the museum visit. The “Word-of-Mouth” configuration is the product of our theoretical exploration over a possible link between museum authority, disruption and critical thinking. Suggesting that critical thinking, in terms of doubt and questioning, should be part of the museum pedagogy and that disruption can have a positive and stimulating element, we examined issues of visitor expectations (Falk & Dierking, 1992), public trust (Cuno, 2004) and museum authority to identify elements of the museum visit with a potential to be usefully disrupted in order to promote a more personal investigation of the information provided.

We propose that disruption as the challenge of certainty and familiarity can create space for questioning and doubt and may introduce alternative options and possibilities for investigation.

Our view shares ideas with Jonah Brucker Cohen (2004) who assigns disruption the value to stimulate critical thinking: “by disrupting how we understand something, we are more likely to question its fundamental existence”. Also, we distinguish from the harassing aspect of the term: We are interested in an interruption experienced within the disguise of familiarity or a disruption “from within” as exercised in practices of “culture jamming” (Dery, 1993), the act of using existing mass media in order to comment on those very media themselves, and “superfictions” (“Encyclopaedia of Superfictions”, n.d.), artworks that mirror organizations, institutes or personalities to create imaginative histories or fictions that develop in a contradicting way.

## **2. Concept**

In contrast with the frequently assumed roles, where the museum is usually expected to interpret, appreciate and create content and meaning for the visitor, “Word-of-Mouth” attempts to integrate the non-authority of visitors as contributors in meaning making inside the museum. While we are not the only ones (McLean, 2003) valuing visitors’ reflections as potentially rich in information or as a means to re-evaluate the official museum version, we think of “Word-of-Mouth” as less of a participating invitation and more of a time capturing and history registering application. Compared to previous participatory works (Boehner, David, Kaye & Sengers, 2005; Cooper, 2006; Ferris et al. 2004; Stevens & Toro-Martell 2003) or recent developments in museum 2.0, the “Word-of-Mouth” interaction is purely fused in the physical space and the process of the visit without any request for further action. Moreover, the unauthorized nature of the recording is a core element in our approach.

Obviously, the unprompted recording wishes to capture spontaneous and uncensored, unrestricted from the visitor herself, responses. But “Word-of-Mouth” addresses visitors not only as a source of useful information but also as real-life, casual expressions. By exposing visitors’ private behaviors, the presence -being there, passing-by, having experiences and emotions- of other viewers becomes apparent and accessible. And while contributing an additional layer on the exhibits, we also hope to contribute in demystifying the “ideal” visitor as derived from the visitor’s biases and images of anticipated behavior inside the museum.

From another perspective, “Word-of-Mouth” is also a direct invasion of the viewer’s privacy in what we believe to be a disruption of the visitors’ nostalgic impression on the museum and the “museum as a nostalgia factory” (Lisus & Ericson, 1999). The configuration intrudes into the viewers’ privacy and involves subsequent visitors to overhear and participate in the process of monitoring. Such an invading possibility contradicts the visitor’s tendency to think of the museum as a safe and comforting environment, isolated from the everyday life. Instead, we wish to disrupt such a feeling of comfort and introduce instability and uncertainty in a normally controlled environment.

### **3. Implementation**

To shape our concept into an actual system, we considered problems particular to the museum environment as well as the needs and priorities of our concept. The design was split into two products, that is, a recording unit, for capturing comments, and a playback method, to communicate the retrieved comments.

### 3.1 Recording

The challenges of an unauthorized recording led to the development of the “social audio tour” recording unit. Unavoidably, “Word-of-Mouth” relies on conversations between pairs of visitors. But while the museum visit is often suggested as an activity held in company (Falk & Dierking, 1992; McManus 1987), the extent of verbal communication is not evident and it is likely that we may need to stimulate or subtly facilitate conversations. Moreover, the usage of individual audio tours often silences companions and limits the interaction between them. The sound quality of an unprompted recording was also an issue of concern. Therefore, we decided on a mobile recording facility that “follows” the commentators: Pairs of visitors will (without their awareness) record themselves via an audio tour device with automated recording capabilities. Specifically in our prototype, visitors share a headphone pair (in-ear type) with a microphone camouflaged on each cord. The device should be promoted as a “social audio tour” designed for pairs. This mechanism is, partially, a localization of the recording process that tries to capture “better” recordings. But mostly, by reducing the limitations of the individual audio tour and suggesting a shared place and a physical bound, it is an attempt to support interaction and possibly stimulate conversations.

To assure meaningfulness of the playback, we allow an intermediate phase of editing the material to provide audible, clear and semantically complete samples for playback. The continuous recording of a pair’s interaction will be sorted out into self-contained samples corresponding to particular exhibits; a supporting method of mapping the recorded material with exact exhibits or areas in space is additionally required.

### 3.2 Playback

To communicate the captured comments, we propose a series of “extended audio tours” that bring together the museum’s official text and the captured expression of the non-authority of visitors. The two “voices” will be simultaneously present and in interference with each other by means of stereo audio. We believe the audio tour to provide an intruding and surprising way to deliver comments, while the use of a traditional museum tool complies with what we identified as disruption within familiarity. Also, our playback choice introduces a level of interference and “noise” that may result in an interesting split of attention and certain dilemmas of focus.

Moreover, it is significant that the playback successfully demonstrates the unauthorized and unofficial nature of the audio. We want to distinguish from cases of official museum audio that employ a style of casual expression (para. 5, “ACG wins interpretive awards”, n.d.; “SFMOMA podcasts”, n.d.). While these products are approved and finalized, we prefer to explore the possibilities of creating multiple audio tour instances instead of one optimal compilation of the material. Theoretically, the system could dynamically mix the official audio tour track with a deposit of corresponding comments.

## 4. Case Study

We produced a first “Word-of-Mouth” prototype of both a “social audio tour” unit and an “extended audio tour”. Actual tests of both units were possible thanks to Naturalis, the National Museum of Natural History in Leiden (<http://www.naturalis.nl>). Naturalis is not affiliated with the project but they kindly provided us with the museum space for our research.

#### 4.1 Sampling Session

Our “social audio tour” prototype consists of an mp3 player for the audio tour playback and a mini-disc recorder for the automated recording, built in a carrying box with a headphone pair (in-ear type) with electret microphones on each cord. While more sophisticated solutions are possible, this prototype was sufficient to investigate the nature of the visitors' interaction and the efficiency of the “social audio tour” as well as to examine if the recorded material justifies the “Word-of-Mouth” prepositions. Being aware of the complications of an unauthorized recording, we organized a test with a group of volunteers instead of the general public of the museum: It was announced as a try-out of an audio tour and none of the participants was aware of the actual function of the system. The test took place on June 1<sup>st</sup>, 2006 and three pairs of testers took the tour.

The participants' responses on the “social audio tour” were pretty positive. Although there were certain complaints about the interface and some difficulties in coordination, all participants agreed that the construction introduced additional opportunities for discussion between the users. Most of the participants stated that the social audio tour invited them to talk with each other and comment or reflect on the information they listened to, either at the end of the tour sample or immediately while listening. Although most participants were not fond of using the device with a stranger, they all affirmed that it was a quite enjoyable experience to share with a familiar person. None of the participants realized that a recording took place.

The test produced over two hours of recordings which can be roughly categorized into five groups of samples. There are parts referring to the device or the test itself: questions on the operation of the device, comments on the interface or estimation of the purpose of the test. Other

samples deal with the accomplishment of the tour as an activity in space such as identifying a particular exhibit or looking for labels. These sample groups are heavily influenced by the prompted nature of the visit. There are, though, two groups of samples referring to the content of the visit (“relevant” samples): comments on specific exhibits of the audio tour and comments on exhibits that caught the participants’ attention. Lastly, there are a few comments on issues of common interest of the participants such as study related information or mild gossip.

The “relevant” samples demonstrate a variety of topics. The speakers share their experiences and examples as well as knowledge they possess. There are samples of their impressions and reactions but also elaborate discussions on scientific facts. The time occurrence of the samples may or may not relate to the audio tour playback but comments made during the playback are in their majority relevant to the text and can be timed to particular sentences of the tour. We are particularly happy with the quality of the collected comments and encouraged to communicate them.

#### 4.2 Intermediate Session

Before proceeding with the “extended audio tour”, we organized an intermediate reproduction of the material to investigate the potential value and interestingness of the comments. The commentators themselves, whom we thought more likely to express negative reviews on their sayings than ourselves or other listeners, received their own samples only and were asked for a permission to use the material, a rating of their samples and a response to the incident.

Interestingly, the speakers were surprised by the extent of their exchange and interaction during the visit: they did not expect having said something “useful” but on the samples they

realized the opposite. The speakers' favorite comments are often ones that convey extra information ("missing from the guide") or ones that propose a question for the next visitor to figure out. The speakers' opinion on "funny" or emotional comments is divided: half of them appreciate sharing their surprise on an exhibit and half of them find it irrelevant for the next visitor; the listeners' responses will suggest the opposite. One speaker was particularly concerned for the correctness of his comments and the informal language used: the reaction relates to our suggestion that unmediated recordings can by-pass the visitor's self-censorship.

#### 4.3 Playback Session

We produced an instance of the extended audio tour with the comments in hand: each track of the tour is a mix of the official text for the exhibit on the left channel and the comments on the same exhibit on the right channel. This audio tour was edited manually; further suggestions for an automated production of audio tours are still to be explored.

To explore the impact of the extended audio tour, both our volunteers and general visitors of Naturalis took the tour and answered a questionnaire; the first ones were also interviewed. In our examination, we focused on three factors: the listeners' acceptance and appreciation of the comments as a source of information and opinion, the listeners' appreciation of the comments as real-life expressions and the listeners' perception of the procedure they have been involved in.

Reactions to the addition of the comments vary, as indeed expected, but we are glad to see that all responders acknowledge the comments as informative and original material and enjoy the extra facts and the "not usual" information they convey. Favorite comments are mostly "funny" comments and proposed questions. The conversations were suggested as more interesting to

follow and easier to recall than the “expert talk” of the official tour and one interviewee pointed out an eavesdropping feeling that excites natural curiosity. For most, the occurrence of the two channels was confusing, even annoying, and their feelings related to a fear of missing information. Not surprisingly, the “calm” museum voice is expected to be of important information but none of the responders wishes to omit the comments: they asked for a more clear allocation of the two “voices” or some control over the playback.

We are also happy to see an appreciation of the comments as real-life expressions. Casual or emotional reactions to the exhibits and an “insight into visitors’ thought” justify the comments for the responders. One interviewee said that he often identified his own impressions and emotions in the comments; this re-appearance made him feel “encouraged”, finding out that he is not the only one with such a reaction. In our view, this relates to a fear of being wrong where everybody else, the museum experts and the other visitors, knows better. It may be the case that exposure to other people’s comments works counter to this feeling. Another responder shared her experience as a tour leader: having observed that visitors “act” a lot in a museum, she valued that the commentators were expressive and honest in their emotions and not restricted or shy in their questions. For us, this remark obviously justifies the unprompted nature of the recordings and relates to our suggestion that exposure to comments may loosen up the visitor’s tendency for “acting”.

Most of the participants describe their experience as a funny and surprising situation to be involved in. But interesting issues appear when the unauthorized nature of the recordings comes into discussion. Although the majority of participants figured this out, we were surprised by the amount of visitors who did not. Could this mean that a recording possibility is incompatible with the visitor’s idea of the museum? Or, how much does the trust on the museum stop the visitors

from identifying the nature of the recordings? Also, although many participants did not wish to be recorded themselves, none of them felt uncomfortable listening to or having listened to other visitor's unauthorized material. Of course, it is possible that they did not associate their discomfort with the other visitors' feelings but one may question the extent that the museum context "authorizes" and validates the procedure. At least one responder questioned if a recording took place also during the try-out.

## **5. Discussion**

Overall, the "Word-of-Mouth" experiment was satisfactory. We are impressed by the captured expressions which are rich in both content and emotion. The listeners' responses demonstrate plenty of interest in and fondness of the comments, also as a counterbalance to the museum expert talk. And mostly, we are pleased with the variety in reactions that "Word-of-Mouth" triggered.

While our prototype was sufficient for gathering material and responses, various improvements are needed for a sustained version of the system. We would like to work on the usability of the recording unit as well as to investigate more efficient ways to communicate the collected material. In particular, we are interested in a (semi-) automated or real-time production of the extended audio tours. Furthermore, we are curious of the state of the system after a long-term run: How will the expanding amount of comments influence the playback? Will it be a need for "clearance" of the deposit and if so, how could this be done in a non authoritarian way? Also, some visitors showed an interest for replies and comments on the comments: we are uncertain on this addition but we would be challenged to figure out how to record visitors who are now aware

of a recording possibility. Unavoidably, this brings up issues of life expectancy and evolution in time of our idea: When does it stop being disruptive? And can it become a common practice of the visit?

As suggested throughout this paper, there are strong ethical and moral considerations regarding unauthorized recording of visitors. It is beyond the scope of this study to resolve such issues, but they clearly cannot be overlooked, nor perhaps overcome. Let it be clear that “Word-of-Mouth” was not proposed to be implemented as such – it serves to discuss disruption of visitor expectations as an opportunity for insightful encounters. We trust that our study offers valuable input to future discussions, both conceptually and by presenting results of a case study.

Lastly, a separate note should be made on the “social audio tour”: although an intermediate component of this project, we are very fond of the idea and practice and we wish to further explore the concept on its own.

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