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# Growing Documentary: A Scalable Collaborative Storytelling Platform

## First Author

Janak Bhimani  
Keio University, Graduate  
School of Media Design  
2F Collaboration Complex,  
4-1-1 Hiyoshi, Kohoku-ku,  
Yokohama, Kanagawa, Japan  
223-8526  
janak@kmd.keio.ac.jp

## Second Author

Annisa Mahdia  
Keio University, Graduate  
School of Media Design  
2F Collaboration Complex,  
4-1-1 Hiyoshi, Kohoku-ku,  
Yokohama, Kanagawa, Japan  
223-8526  
annisa.mahdia@a3.keio.jp

## Third Author

Daisuke Shirai  
Keio University, Graduate  
School of Media Design  
2F Collaboration Complex,  
4-1-1 Hiyoshi, Kohoku-ku,  
Yokohama, Kanagawa, Japan  
223-8526  
dais@kmd.keio.ac.jp

## Fourth Author

Naohisa Ohta  
Keio University, Graduate  
School of Media Design  
2F Collaboration Complex,  
4-1-1 Hiyoshi, Kohoku-ku,  
Yokohama, Kanagawa, Japan  
223-8526  
naohisa@kmd.keio.ac.jp

## Abstract

The Growing Documentary is a platform for computer supported cooperative work (CSCW) using user-generated content to produce digital video contents that can be remixed, reworked and built upon as the story and story tellers change and adapt. The idea and concept for the Growing Documentary came about as a result of the Great East Japan, or Tohoku, Earthquake and Tsunami which occurred on March 11<sup>th</sup>, 2011 (3.11). Not only did this event have an impact on Japan and the rest of the world because of the unprecedented level of damage caused by both terrestrial and oceanic natural disasters; but also because news of the impact was delivered to people with unprecedented expedience and quality via a variety of media to people everywhere.

## Author Keywords

Growing Documentary; crowd-sourcing; HD; 4K; disaster; awareness; social enterprise; socio-technology; Tohoku; earthquake; non-linear

## ACM Classification Keywords

H.5.2 User Interfaces: Input devices and strategies (e.g., mouse, touchscreen). J.5 ARTS AND HUMANITIES

## General Terms

Design, Human Factors

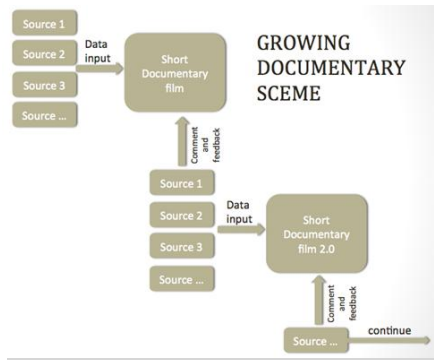


figure 1. Growing Documentary Model

### First prototype: “lenses + landscapes”

The first iteration of the Growing Documentary was a short documentary about the devastation and aftermath of 3.11 from the point of view of three amateur and professional photographers from different walks of life who were all affected by the earthquake and tsunami. The film, “*lenses + landscapes*” [lenses], was produced by crowd-sourcing the photographers, translators and audio via SNS. As the Growing Documentary is a social platform for individual and community cinematic expression, 4K [4K] was chosen as the output resolution. Although the photographers did not have the tools to film in 4K, their high resolution raw still images were combined with multi-framed HD video to render a very high resolution movie clip through the use of community resources which hopefully helped in the path of recovery and reconciliation after the terrible.

### Socio-Technology

The Growing Documentary is a unique concept for producing a documentary film. The content from one film can continue to develop and lead to another documentary film within the same path. The Growing Documentary involves many people from different backgrounds as resource personnel to provide data that is integral in the construction and development of the documentary itself. The documentaries created by utilizing the Growing Documentary platform aim to surface existing problems in society, looking at them from different angles to verify the data so that in the future they may serve not only as a historical records but as resources for academic research. The data collected in the form of video, audio, photo, text, etc. is compiled as one high quality documentary film.



figure 2. “lenses + landscapes”

Once the first documentary film is completed, it will serve as a means to gather more data from the viewers. Through a community portal and/or SNS, comments and feedback can be collected. If there is enough new content generated from this feedback mechanism, this could lead to the production of a new documentary film. The key to the continuation of the Growing Documentary process is audience feedback and participation.

### Non-Linear Narrative Structure

Since the creation of each documentary piece is dependent on the participants’ voluntary contributions, there is no specific final format to which each iteration of the Growing Documentary must adhere. There is no formula per se that must be followed. If, for example, some contributors want to use data from crowd-sourcing tools like the “voluntweeters” [Starbird] after the 2010 Haiti Earthquake while others want to use the information garnered by professional organizations built upon tools like Ushahidi in order to connect professionals in the field with those who want to help [Reyes], there is no conflict in the narrative structure of the documentary as it does not follow a closed format.

### Implementation and Demonstration

The flexibility in the narrative structure of the Growing Documentary allows for freedom in the implementation. “lenses + landscapes” was not only shown at a special screening during the 2011 Tokyo International Film Festival, but audience members as well as those who did not see the movie also had a chance to interact with the film via a SAGE [SAGE] opti-portal. Multiple SAGE “walls” were joined together in San Diego [CineGrid] and people had a chance to immerse themselves in the images, videos and sounds of “lenses

+ landscapes” while interacting with others in Japan in real-time to create their own versions of the story.

### **Applications for Peace and Reconciliation**

The Growing Documentary concept is a prime candidate for use in research regarding HCI for Peace. The goal is to create an adaptable open-source platform that is easily accessible by both those with or without technical proficiency that has the capability of producing output in the form of high resolution digital video contents with low, or almost, no barriers of entry. In a region of conflict, this can prove to be crucial for people being victimized, marginalized or oppressed to convey their message and the reality of the situation with crisp and clear images that reflect the actual situation on the ground for those who are not physically there and bring awareness. In a post conflict scenario, pervasive user-generated data and content can serve as a catalyst the community (re)building [Krumm]. Through the utilization of the Growing Documentary platform, the stories of suffering and destruction can be the basis for new narratives of survival, hope, remembrance and tolerance.

### **Conclusion**

There is nothing new about the idea of a story having many dimensions or layers. In the last few years, the explosion of user-generated content, as a result of its ease of capture and distribution, has transformed the concept of digital citizen journalism [Allan] as a supplement to mainstream information and sources into mainstream information and sources. The Growing Documentary is in the very early stages and further and more detailed development is required. By collaborating with like-minded people who share similar



**figure 3.** SAGE Demonstration

goals, we hope to be able to not only enhance Growing Documentary platform, but, moreover the experiences for those telling the stories as well as those taking them in.

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