

# Chapter 11

## Assessing the Appeal Power of Narrative Performance by using Eyeblink Synchronization among Audience

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### **ABSTRACT**

*In this chapter, the authors showed that eyeblink synchronization enables researchers to investigate the appeal power of narrative performance empirically. The proposed method relies on the ability of audience members as epistemic agents to recognize and understand the performance. As spontaneous eyeblinks loosely co-vary with individual's allocation and release of attentions, the timings of eyeblinks could be entrained by the details of narrative performances as the common inputs. Thus, the standard basis accumulated by the collective eyeblink responses enables experimenter to judge whether or not a particular performance contains universal appeal to sense-making. Here, the authors introduced that the empirical studies to assess the appeal power of Rakugo (a traditional narrative performance). An expert artist, compared to a novice performer, created implicit breakpoints on participants' attentional process. It were discussed that the applicable scopes of the eyeblink relevant indices, upcoming research on eyeblink synchronization, and new research on human collective behaviors.*

### **INTRODUCTION**

In the context of research on narrative performance<sup>1</sup>, evaluation of the performance is a difficult problem. In this chapter, the authors propose universal quantitative methods to examine the appeal power of particular narrative performances. The assumption of these methods is quite simple: the appeal power of a performance can be defined as the forces that significantly provoke coherent responses among au-

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dience members. Therefore, synchronous patterns of unintentional reactions among an audience could be measured as indices of the appeal power of narrative performances. The authors specifically utilize eyeblinks as responses for this purpose.

## **BACKGROUND: THE UNIVERSAL STRUCTURE OF NARRATIVE PERFORMANCE**

### **The Common Elements of Narrative Performance**

Narrative performance contains three elements as its essential nature: performer, script<sup>2</sup>, and audience. Grotowski (1968) speculated of the role of the theater audience: “Can theatre exist without audience? At least one spectator is needed to make it a performance” (p. 32). Also, Goodwin (1986) noted that “The meaning of the story will be found to have thus emerges not from the actions of the speaker alone, but rather as the product of a collaborative process of interaction in which the audience plays a very active role” (p.283) in a special issue of the journal *Text* titled “The Audience as Co-Author.” A script expressed by a performer becomes a performance thanks to their audience. A narrative performance is created as time elapses. A performer generates their performance through interactions between their own conditions and the atmosphere of the audience on that day. Therefore, no two performances are exactly the same, even if a storyline is prepared beforehand. Thus, every performance is created in improvised way to some extent. In order to investigate narrative performances empirically, researchers have to evaluate the performances in an objective way.

### **Methodological Difficulties of Studying Live Narrative Performances**

A live narrative performance always exists only one time. Although live performance of such a nature moves people, it contains too many complicated elements to explore its generative rule in detail. Given these circumstances, the appeal power of performance is very difficult to be evaluated adequately. Many researchers have attempted to explore this dynamic nature of creation by identifying and categorizing the components of performance. The criteria and the procedure of this kind of analysis have usually been ad-hoc. At the same time, owing to the lack of definite criteria, scores or objective evaluations were seldom given unlike in the research fields of e.g. sports or games. These situations have often prevented researchers from comparing and discussing the results obtained from investigations of narrative arts from a common perspective.

Epistemological change is needed in order to create methods to assess the appeal power of narrative performance. Previous methods such as categorizing of components depended on the epistemic ability of researchers. Contrary to this, the authors propose an alternative method that depends on the epistemic ability of audience members. Eyeblick synchronization could be used as an index to assess the appeal power of performance. The appeal power of the performance is often attributed to the performer(s) *per se*. More precisely, however, the appeal power of the performance is never defined by only the component of performer, but also by that of audience participations. The appeal power of a particular performance, which is actualized as scripts embodied by the performer(s), is the probability to provoke certain cognitive and emotional responses from audience members. In this meaning, this appeal power of performances is determined by the audience as well as the performer(s). Thus, it is very natural to assume that the

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