

# INVISIBLE PERFORMANCE IN THE CONTROL ROOM: THE RESONANCE BETWEEN THE PERFORMANCE AND THE TECHNICAL PARTICIPANT

Suk Chon & Joonsung Yoon

Recently, media technologies pervade stages for performing arts. It is also a very interesting phenomenon as itself. Just as the independence of the musical from the opera, those cases might be a precursor for the birth of a new performance. In the timing of these changes, new requirements are needed as new roles, we believe.



*Technical Rehearsal of Sympathy (PANSORI & SAMULNORI), 2010, Suk Seon An & Duck Su Kim / group PERFORMATIVE, performance media, Copyright group PERFORMATIVE.*

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## INTRODUCTION

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In ISEA2009, the creative group, PERFORMATIVE has presented the performance combining dance and technology. Major topic was the real-time connectivity between dancers and visual images. In ISEA 2011, we would like to introduce the inter-relationship between the performance and the action of inspired people by the performance. In September 12th, 2010, Korean maestro in the traditional performance, Duksoo Kim played 'Samul nori' with the creative group, PERFORMATIVE which accomplished technological parts. There were two stages. One is an ensemble of big and small drums. The other is variations of 4 different types of percussion instruments. We used an interactive real-time visualization system generated by the rhythm of percussion instruments in the performance.

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## KOREAN TRADITIONAL PERFORMANCE 'SAMUL NORI'

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Korean traditional performance, 'Samul Nori' is composed of four percussion instruments, 'Kkwaengg-wari (a small gong, the role of thunder),' 'Jing (a larger gong, the role of wind),' 'Janggu (an hourglass-shaped drum, the role of rain)' and 'Buk (a barrel drum similar to the bass drum, the role of cloud)'. Its

root is farmers' music which is a Korean folk genre comprising music, acrobatics, folk dance, and rituals. This performance is characterized by strong, accented rhythms, vibrant body movements and an energetic spirit. It is an improvisational performance using patterns of ancient rhythms, and the audiences will feel the 'Shin Myoung' which means a combination of enjoyment and commitment in Korean. This condition is similar to the possession of a spirit in the ancient ritual.

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## TECHNICAL ISSUE

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Our technological issue was to produce live images according to the sound of performance. Originally, we wanted to use various input sound factors like pitch, melody and rage in the system. During the simulation, we, however, found out that too many input factors made too tacky results. Therefore, we chose the rhythm only, which makes the most dramatic result as the major factor. Then, it was possible to analyze real-time sound of performance. We unpacked various sounds of instruments through the FFT (Fast Fourier Transform), and could assort the dynamics of whole sounds.

Finally, we generated images and visual effects on the stage with Flash program through those input data. And, we programmed that the volume and the speed of the performing piece could affect the size and the visual effect of the image. Besides, we added real-time operation function which could make more various images for the performance. Fortunately, this change was more effective in the performance than the original plan.

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## UNEXPECTED RESULT

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At the performance, the most interesting situation has occurred in the control room. During the performance, the visual operator was immersed in the rhythm of percussion instruments. And he began to manipulate the operating system in improvisation without his cognizance. This inspired control was highly synchronized and conformed to the performance. The Operator was getting into the percussion's rhythm and controlling the system at the same time. He created interesting and colorful images than the existing plan. It was unexpected result at the rehearsal.

At the rehearsal, every control and operation was planned for the corresponding director's instruction, because it was needed to check the technical system and to direct the script in a short time. But the performance began, those tensions gradually disappeared. And the visual operator was excited and inspired, that is, he was in 'Shin Myoung.' He manipulated the keyboard and the mouse powerfully and dramatically as if he played a big drum on the stage. When he heard the resonance in a big drum, he was transmitting more dynamic images.

As a result, the accidental link was able to express the feature of music just like the originally planned one. The visual operator's response and action were very considerable and interesting, while these actions occurred in the place that the audience could not see. Even though the performance is for a performance on the stage, we would note that the operator's inspired control provokes and produces another invisible performance at the back stage. 'Shin Myoung' has worked for the audience and the supporting group members as well.

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## RESONANCE OF 'SIN MYOUNG'

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The resonance of 'Shin Myoung' would be embedded in the cold and logical area of control room too, and we need to reconsider the relationships between the artwork and the audience, and the artwork and its technical staffs in terms of the performer. We need to expand the concept of performer in performing arts at this moment, and to include players in the backstage. The inclusion can be explained by its traditional in-the-show and after-show event. At the Korean traditional performing arts, the audience usually does not stay calm, but provides and interrupt the performance by spitting out admiration or exclamation, that is, 'Chuim-se.'" Also, there is a ceremony altogether with the audience and the performer after the official performance. They call it, 'Dwit-pul-yi.' Intermingling with performers, audiences jump into the stage and freely dance and singing together. In the traditional attitude, the whole inclusion has been done for a long time. These two traditional forms have usually been meant the viable communication of a performance and its response. If we dare extend the meaning in terms of the inclusion, it might be a sharing of dynamics and emotions.

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## CONCLUSION

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Recently, media technologies pervade stages for performing arts. It is also a very interesting phenomenon as itself. Just as the independence of the musical from the opera, those cases might be a precursor for the birth of a new performance. In the timing of these changes, new requirements are needed as new roles, we believe. After our performance, our focus on a performer on the stage has transformed into the technical controller. These participating staffs do not simply control automated technologies. They are participating in the performance by involving directly in real-time performance, and their responses are based on high and deep empathy. Under these circumstances, how should we consider these active participants rather than simply supporting staffs?

They should not be considered as just technical staffs, but a part of the performance. In particular, if we apply forms and attitudes in the Korean traditional performance, there might be a juxtaposition of sharing and embracing aspects for the whole inclusion. The utilization of media technology in performing arts will be expanded gradually. Fortunately, media technologies have a distinct characteristic of interactivity, which might be applied to performing arts. The interaction is limited to a system and the performer so far. What we have to research furthermore would be the interaction among the performance, the audience and the supporting members beyond between the performance and the performer.

## References and Notes:

1. *Christiane Paul, "Telepresence, telematics, and telerobotics" in Digital Art (London: Thames & Hudson world of art, 2003), 154-164.*
2. *Steve Dixon, "Performing Interactivity" in Digital Performance (Cambridge, MA: The MIT Press, 2007)*
3. *I LOVE KUKAK website, <http://ilovekukak.com.ne.kr/kcmbank/sa1.htm> (accessed June 14, 2011).*
4. *Joongang Newspaper website, [http://article.joinsmsn.com/brandnews/article/article.asp?total\\_id=4838162&ctg=2300](http://article.joinsmsn.com/brandnews/article/article.asp?total_id=4838162&ctg=2300) (accessed June 18, 2011).*