Disacousmatic Radio Experience: With a focus on KBS Kong[1][2], Internet Radio Player

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Research Background

In the spring of 2006, the three major terrestrial radio stations in Korea made a somewhat unexpected move. It was the launching of the "Internet radio player," a dedicated software for listening to radio and which is run independently from the popular internet browser. The launch was targeted to expand the coverage of the radio service to areas where radio reception was poor as well as to increase the number of radio listeners in the networked PC environment.

Thanks to the active and strong promotion, more than 8 million copies[5] of the internet radio player software have been downloaded during the past two years. This is a remarkable feat since this is similar to having an impact of providing 8 million additional sets of radio. When you consider the fact that $5 \sim 10\%$[6] of the total radio listening is known to be done through the internet radio in Korea, its impact should be substantial.

The introduction of the internet radio player not only brought change to the 'form' of the radio listening but also to the 'content' of the service. For example, the service allowed the DJs to read down the messages written on the "Kong message board" or request the listeners to respond via the Kong message Board in a speedy manner. The DJ began to interact with the message board and the listeners began to interact with the DJ using the dedicated radio player. "Is this a new form of a 'better radio', or is it something more?" Using this question of Bolter and Grusin(1999) when discussing the 'remediation' to the topic of the radio, then our intuitive answer would be 'yes.'

Thus, the aim of this research is to study the change in listeners' experience in two years after the launch of the internet radio player 'Kong.' The study will review some of the

theories relating to audio and sound, and examine the influence of the internet radio player by conducting interviews with the radio producers of the program and analyzing the user traffic of Kong.

Internet Radio Player and Remediation

"Kong," the subject of this study, is a small application of about 5Mb which enables 'real-time radio listening' through the PC (personal computer) connected to the internet. The difference between Kong and the existing internet radio is, whereas the internet radio is based on or reside within popular web browser or Windows media player, Kong is a proprietary player of the KBS (Korea Broadcasting Station). Because Kong is a proprietary player, the broadcasting station not only controls the 'producing' of the radio service contents but also the 'distribution' of the content just like the days of the analog. This means that the player and the content becomes tightly aligned and has the strong 'listener lock-in' effect to the station. Furthermore, the strong technical control over the player makes it easy to add or subtract various multimedia sub-functions. This is already proven in the fact that there are differences in the added services provided by the terrestrial radio stations, like KBS, MBC, and SBS and in the experiences enjoyed by the listeners.

The main function of Kong is 'radio listening.' However there are added functions like 'Viewable Radio', 'Message Board,' 'Song-list', 'DJ messaging,' and 'Hit Contents selector'. These added services are hidden during the start of the player, but with a simple click, a new window pops up and expands. 〈Figure 1〉 These added services are *borrowed* from the various media of the past and *improved* within the framework of Kong. When you examine these added services in detail, you can find the process of *remediation* of old media.

Basically, Kong is a remediation of four media. First, Kong is a remediation of the traditional radio. Second, the 'viewable radio" is a remediation of TV and CCTV. Third, "Kong Message Board" is a remediation of internet messenger or SMS. Fourth, "Hit Contents Selector" is a remediation of the webpage. In particular, the characteristics of the CCTV in the 'viewable radio' are providing the listeners with the *presentness* of a "live monitoring". This gives the feature of 'here and now' to the internet radio player that is comparable to the feature of 'there and then' found in movie films.
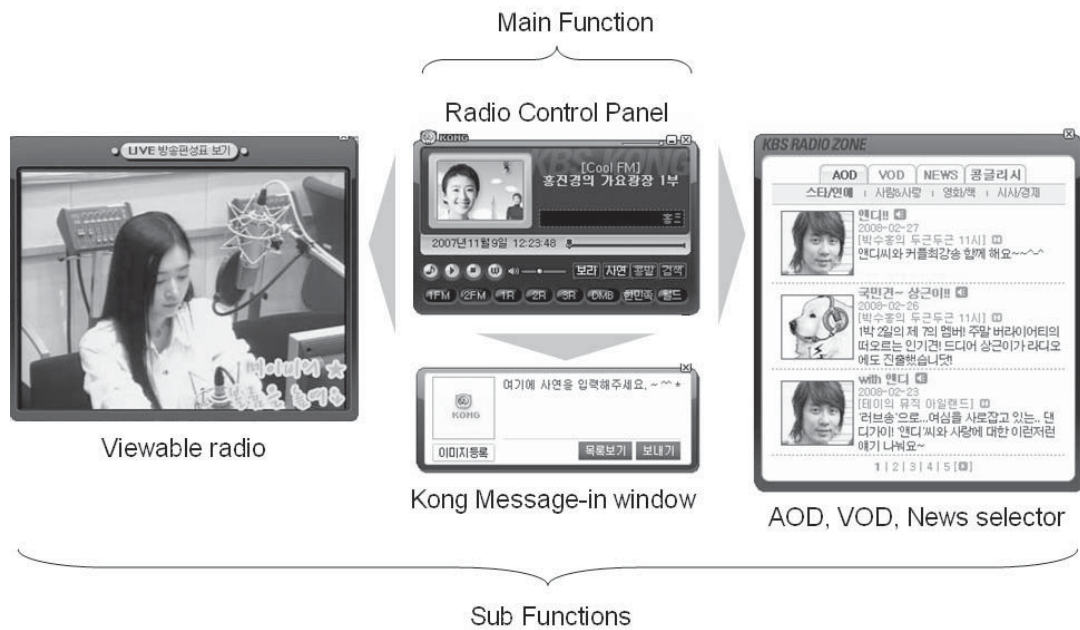
〈Figure 1〉 Interface structure of Kong

Hybridity, Multimediality and Intermediality

Kong is a radio that is viewed and heard. The hear-view i.e., the bi-media character-istics of Kong represents the *Hybridity* of modern culture. As Bolter (2006) said, hybridity "is a common strategy employed not only in modern digital art but also in the production and the consumption of mass media forms and technology." We can find examples of hybridity in the World Wide Web and the mobile equipments, and even in traditional films and TV where the smooth expressive screen is destroyed and replaced by the multimedial space. The product of remediation, the so-called digital hybridity cuts across the various areas of expressive forms including image, text, sound, space and physical, while at the same time integrates the media leading to the creation of a unique cultural logic of the modern times. (Spielman & Bolter, 2006)

In this context, Kong can be seen as a product of hybridization because it incorpo-rates multiple media forms of traditional radio sound, screen images, writing and reading in 'Kong message,' and operating interactions of the PC. Manovich (2001) defines such digital hybridity as the "cultural interfaces." In this context, Kong is a new "cultural interface" that

is a remediation of the internet, TV, and the radio.

Kong also represents "multimediality" in that it is made up of multiple media elements which are produced and provided by the producers while at the same time produced and consumed by the users. Multimediality is a feature not unique to Kong but commonly found in multimedia. The modern digital multimedia integrates these various media elements seamlessly. "Seamless integration" means individual media elements interconnected not only on the surface level but organically connected in a single interface. This is where it differs from a simple collection of 'mono-media.'

What is noteworthy is that each element maintains its individual identity although they are integrated seamlessly. Monovich (2001) calls this important characteristic of multimedia structure as "modularity" or "new media's fractal structure." From the modularity perspective, Kong is a multimedia that is an organic interconnection of the sound module, video module and the text module.

In the realm of art, the integration and the interconnection between various media has been dealt with in the artistic activities and theoretical discussions within the concept of "intermediality." (Wagner, 1996) The Intermedia Movement which started in the mid 1960s strongly rejects the traditional compartmentalized approach that separates the boundaries between different media and those between media and the receiver. Rather, the Intermedia Movement emphasizes the "combines" between media and the interaction between media and the receivers. Oostering (2003) who talks about the theory of intermediality conceptualizes intermediality as the "integration of the aesthetic concepts inherent in individual media and creating a new media context." The Intermedia works like Peter Greenaway' films pursue a symbiosis of language, image and sound. However, the focus of the Intermedia movement or intermediality lies not on the product itself but rather on the process. Oostering (2003) points out that the essence of intermediality is the "flux of mediations" i.e. the movement from one media to another.

The overall discussions about the features of multimedia and intermediality can be summarized as multimediality having integrated three key concepts: "seamless integration" of various media elements, "flux of mediations" transcending the boundaries of each media dynamically, and "modularity" or specific characteristics of individual media elements. In this context, Kong is one of the most significant examples of multimedia with multimediality based on the following three characteristics. First, Kong integrates multiple media elements of sound, video and text. Second, during the integration process, a new 'media' is created.

Third, despite the integration, the modularity or specific characteristics of each media - sound, video and text - is still maintained.

Multi-sensory Modalities and Kong

Because multimedia involves various media elements, it requires a specific sensory mode i.e. "multi-sensory modalities." In other words, with the introduction of Kong, radio which traditionally interfaced through the auditory mode became a multimedia requiring multi-sensory mode. As such, Kong is one of the most significant examples of a single sensory mode of hearing expanded into a multi-sensory mode where visual, auditory and tactile senses are all integrated and activated together.

The primary transition takes place from the "ear to the eye." The transition from the auditory to the visual-auditory sense occurs in the "viewable radio" of reading the screens, writing comments, and reading the message windows. In other words, Kong is no longer a 'listening media' but a 'viewing, writing, and reading media.' Moreover, by utilizing the message windows, Kong is actually moving from the 'listening media' to the 'tapping media." The expansion of the senses is a common characteristic of the modern media including computers and cell phones. SMS, messenger chatting and HCI operation are types of electronic writing that represents not only a "transition to the eyes," but also a "transition to the hand."

The message writing and reading of Kong which is a remediation of SMS and messenger chatting is an environment that is fit for the "thumb tribes" described by Rheingold (2003) as one of the characteristics of the new mankind. Tactile mode can be interpreted from the cultural perspective, and Everett (2003) calls this operation of the tactile interface as the "click culture." The click media giving click pleasure includes cell phones, PDA, computer mouse, joy stick of video games and the remote control of the TV, and Kong is another example of a click media. According to Everett, these click tools or media has the attraction of the "sensory plenitude" by enabling the easy operation of the interface whenever and wherever you want.

Disacousmatic Listening

The introduction of Kong brought changes to the listener's experience from the traditional way of listeners receiving the sound without having access to the source of the sound to the new experience of viewing the sound source while listening to the sound.

Listening to sound without looking at the source is often called the "acousmatic listening." Now, we would like to discuss the transition to the disacousmatic listening involving Kong.

The word "acousmatic" originates from Greek and became theorized by Pierre Shaeffer (Chion, 1990/2003). Acousmatic was originally a noun describing the disciples of Pythagoras who listened to Pythagoras' teaching behind the curtain without seeing Pythagoras. However, the word "acousmatic" is often used today as an adjective describing the unique form of listening to sound without looking at the sound source.

The experience of acousmatic listening became commonplace with the advancement of sound recording and replay media technology (Beck, 1998). Shaeffer (1996/2006) summarizes the four characteristics of acousmatic listening. First, acousmatic listening refers to "pure listening," where you listen without the help of the visual sense, in other words, "separation of the listening from the seeing." Second, acousmatic listening refers to the "listening to the effect" of sound. Because you do not see the source of the sound, you hear only the sonorous forms created by the sound. Third, acousmatic listening allows "variations in listening" which means that each listener has subjective experience of finding out new aspects of the sound. Fourth, acousmatic listening involves "variations in the signal" where the same sound event is recorded and presented in different ways, i.e. the possibility of having multiple versions of the same sound event.

Seen from this perspective, the traditional way of listening to radio is a typical example of acousmatic listening. However, when visual information is given via the screen, acousmatic listening becomes "disacousmatic." (Chion, 1990/2003). A typical example of disacousmatic listening would be TV or films where the source of the sound, i.e. sonar source, is visually shown on screen. Chion (1990/2003), a movie sound theorist, differentiates between "on-screen sound" and "off-screen sound," the former having the sonar source on screen and the latter without. On-screen sound belongs to the disacousmatic listening and the off-screen sound to acousmatic situation. In this context, the listener is able to experience the disacousmatic environment by seeing and listening to the MC or the guest speaking or singing through the "viewable radio window."

In terms of media experience, the transition from the acousmatic listening to disacousmatic listening can be defined as the "departure from the sound." In principle, the departure from the sound stems from the fundamental difference between the aural and the visual. Seen from the relationship between the object and the world, the visual presupposes that there is a 'distance' between the viewer and the object. In this context, we

objectify the world and the world objectifies us. However, in an aural - sound - environment, we become the center of the sound world (Forrester, 2002: Schafer, 1977). And sound is space-invasive and tactile in principle (Cranny-Francis, 2005).

The departure from the sound world is related not only to the difference between the sense modes but also to our ability of visualizing the sound. Humans are known to create their own mental images of the object or the event when their sensory organs do not receive the necessary information immediately. Unlike the audiovisual media, the sound media do not rely on multiple senses and the sound itself is made up of limited information. Therefore, the listener creates one's own image and Ferrington (1994) refers to this image as the "theater of the mind." As shown in 〈Figure 2〉 , the "listener creates 'movies' within the 'theater of the mind' incorporating one's own life experiences." According to Ferrington, the listener has the ability to create multisensory images, and therefore, will mentally fill in the lacking information utilizing one's imaginary experiences.

The question is, will the 'viewing radio' which provides visual information in addition to the sound, also allow listeners to create multisensory images? When the theater is externalized, there is bound to be conflict and tension between the imaginary image created in the 'theatre of the mind' and the physical image shown on screen. Under this conflicting situation, it is highly likely that the listener will focus on the physical image on screen and fail to create multisensory images. As pointed out by Beck (2002), this could result in radio listening to be a secondary and sound turning into a source of noise or inattention.

If the 'viewing radio' fails to create mental images and results in departure from the
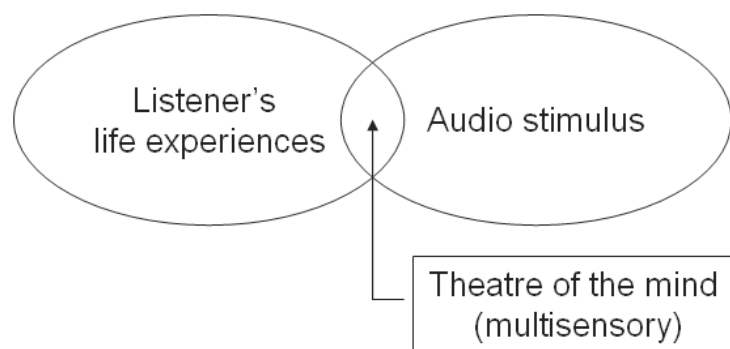

〈Figure 2〉 Theatre of the mind (Ferrington, 1994)

sound, this departure can be intensified by the manual operation of the interfaces. First, the operative nature of the 'viewing radio' is actualized in 'positioning' the listener using a unique measure. Based on the film apparatus theory, Beck (2002) presents his radio apparatus theory and classifies it into two apparatus, the "phantasmagoric apparatus" i.e. the "disappearing apparatus" and the "disciplining apparatus." The phantasmagoric apparatus allows the listener to be free from the burden of using an apparatus, in other words, the apparatus disappears. On the other hand, the disciplining apparatus dictates the listener's position and the listening habits.

Under this classification, the traditional radio would be a phantasmagoric apparatus, and Kong would be a disciplining apparatus because it makes the listener to be positioned in front of the internet, push buttons and intermittently look at the screen while listening to the radio. The disciplining apparatus feature of the radio could impede the listener from concentrating on the sound. Therefore, while it is true that the operation of the interface in Kong provides interactivity and opens up new possibilities, when seen from the sound experience perspective, and specifically from sound concentration perspective, the operative feature of Kong has a negative impact on listening concentration and thus leads to the departure from the sound

Kong as an Internet Service

When we look at the traffic and access trend of Kong by time, we see that Kong is closer to a type of an internet service with media hybridity than a traditional radio service. Figure 3 shows the similarity between the internet usage trend and Kong's access trend. [7] Kong's access rate increases dramatically during the hours when people get to work and turn on their computers. The access rate declines somewhat during lunch time, and then increases until the end of work day and then declines as peoples leave their offices. However, one difference between the internet access trend and Kong's is that while the third peak of the internet usage happens around 8 p.m., Kong's third peak occurs around 10 p.m. This is because Kong programs are run by teenage entertainers. This trend is very different from the TV viewing behavior trend and with the DMB where peak hours are during the commute times. Therefore we can see that Kong is an interactive media that is deliberately selected and utilized. The producers of Kong also points out that Kong's competitors would be other internet service programs like Melon, Bugs music, Pandora TV or Africa.
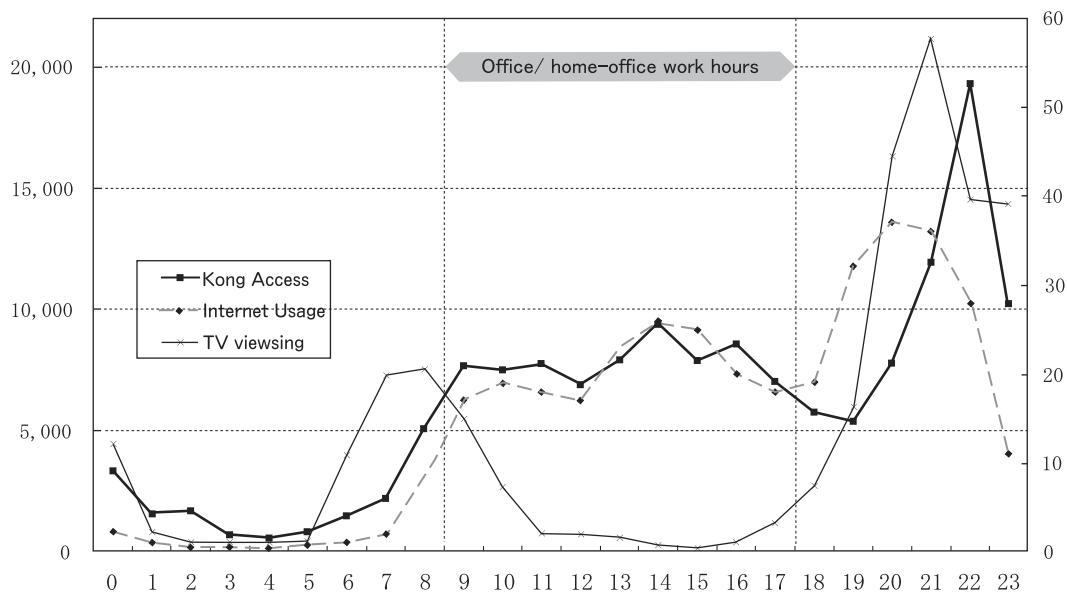
〈Figure 3〉 Comparison of Kong access rate and internet access rate by time: recent 3 months

Teens Usage of Kong

One of the most positive influences of Kong is the introduction of radio to the younger digital generation who had less or no interest or understanding of radio. Figure 4 shows the comparison of listeners who use radio through frequency and those who use the Kong service. The figure shows that with the introduction of Kong, the number of radio listeners in their teens have dramatically increased. Because most teens do not understand the concept of channels, frequency or of the radio set, the impact of Kong on the teen listeners is highly significant.

Before using Kong as a "radio service," the teens first use Kong as an access point to interact with the younger entertainers i.e. idol stars. The teens leave massive amounts of messages on Kong message window, download 'viewable radio' to upload it on fan club websites, and engage in other derivative activities such as making UCC on the internet. The producers of the teens' programs say that in programs run by young entertainers, the secondary derivatives outweigh the main program of Kong or radio portions. In other words, the disacousmatic listening mentioned earlier is taking place quite naturally among the teens, and they are using Kong as a viewing, listening and a tapping radio.
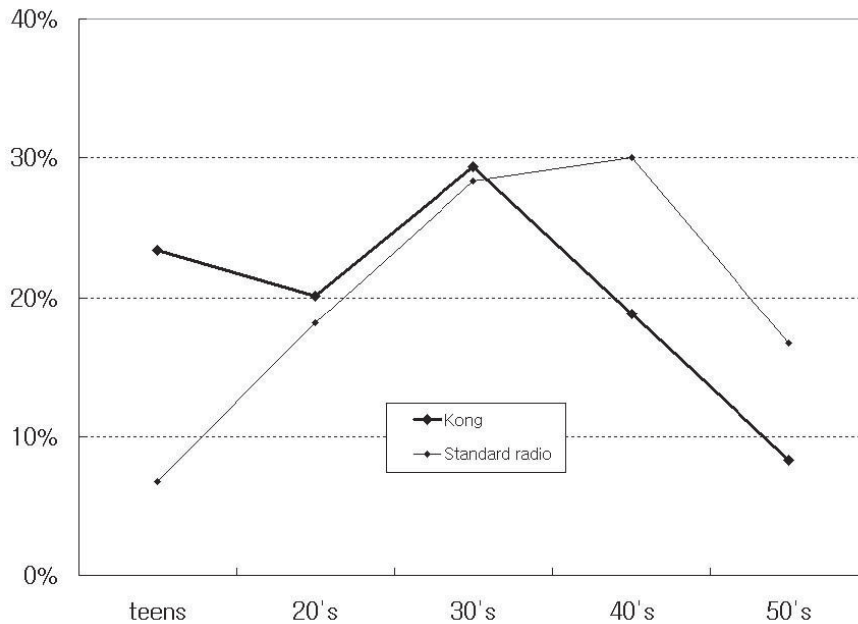
〈Figure 4〉 Kong's access rate by age groups (February. 〜 April 2007)

Kong Message Board as a Collective Personality

Kong Message Window is a space where producers can confirm that the listeners are 'alive.' The smooth connection between the production and consumption i.e. the multimediality is expressed in this space. All the interviewed producers talked about the "quantitative expansion of interaction and the effect of real-time" which is a new phenomena brought about by Kong Message Window. About 5% of Kong's visitors leave at least one line of comment on the Message Window, although the figure varies by program. This figure is enough to prove that the "counterparty of the dialogue is alive." The explosive use of Kong Message Window is due to its' free of charge advantage compared to mails or SMS, its' high access rate thanks to the interface, and the listeners being already familiar with the messenger type of an interface. It shows that the 'click culture' mentioned earlier is reflected in the listeners' use of Kong.

There is not really a perfect match between the listening rate and the number of messages on the Kong message window which is felt by the producers as 'collective personality.' The number of messages correlates more with the DJ's way of running the program or interactive characteristics of a specific corner in the program. However, it is true

that the more 'visible' messages on the Message Window will have a stronger sense of existence to the producers than the 'invisible' access rate. According to the producers of the program, "although the number of messages may not have direct correlation with the listening rate, because the messages are visible, it makes us think about why there are more messages on certain days and why there are less messages on the other." This concern is realized in the effects of 'dependent' 'self-hypnosis or comfort' because some producers actually try to attract more messages on their message windows in order to show that their program is more popular than the others'. For example, the producers may come up with giving easier quizzes, or announce that the nth message will win a prize etc in order to attract more messages.

Figure 5 is an analysis of the message board to find out the relationship between the messages and the message writers. The analysis found that although the 'message window is dominated by a few, it still represents the voice of the majority.' When you analyze the average data per day, 659 messages which is 30% of the total 2,224 messages were written by 9 "strong participants." This shows a seriously dysfunctional distribution proportion.
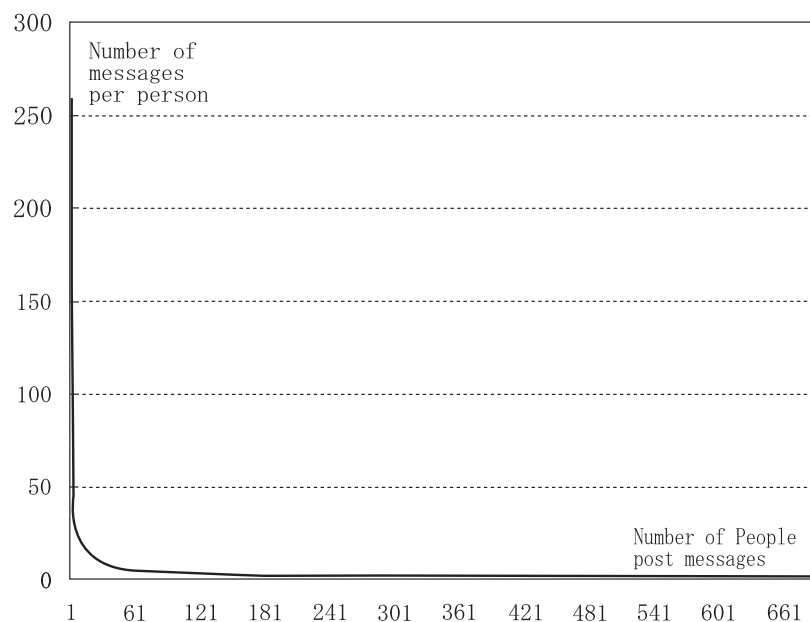
⟨Figure 5⟩ Number of messages per person and the message writers (April 27, 2007)

However when you eliminate these few minority, you find the positive aspect where the 'weaker participants,' those sending 6 or less messages, still account for 50% of the total messages. According to one senior producer, "it is expected that a few people would send the most number of messages since that was the case when postcards were used as main means of sending messages on radio." But it is true that a much stronger few participants were exerting more influence on the message window.

The 'message writing' function of Kong is very similar to the internet messenger. In other words, you don't need to open a separate webpage to send your messages since you can send short messages very easily. Kong's interface allows the listener to upload short messages easily as if sending a message to a friend. And because it is offered free of charge, the quantity of messages and the response rate far exceeds those of the post cards. The change in the interface is directly linked to the quality of the messages in Kong. As with the messengers, Kong's messages are short and full of energy. According to a DJ, "they write messages on the message window as if sending a short message to a friend⋯ although the stories are short and fragmented, they are fresher, and the listeners prefer short messages." He says, "It's really fun. Sometimes chaotic, but to see someone respond instantaneously to your own comments make you feel like you are talking to them. I don't feel like I am the only one talking. Their writing is pretty good too these days, so they make you laugh. And the fact that I communicate through oral means and they responding through writing is also exciting."

Conclusion: Radio-ness Revisited

One of the essential questions raised by the change of listener's radio experience through Kong is the issue of identity of radio. According to Beck (2002), the development of digital technology has led to the integration of the traditional radio with the satellite, cable and the internet and has created a new form of a digital 'radio.' Then, what is radio? Can we call all of these forms a radio? As is the case with Kong, the issue becomes more complicated when digital radio provides visual or text services through the screen.

Some claim that the new digital radio type such as internet radio should not be considered a radio since it does not have the traditional characteristics of a terrestrial radio service. However, the theories of sound set forth by Scruton (1997), Beck (2002) and Tacchi (2000) argue that sound should not be the target because it is neither a feature nor a quality of a physical object. They argue that the existence of sound is defined by how a normal

observer hears the object. Therefore, if a "normal listener considers it to be radio, then it is a radio," and considers all traditional and potential forms to be radio.

Tachi (2000) defines "radio or all features that can be considered as radiogenic" as "radiobility" although the new forms may not fit into the traditional sense of the radio. He says that the question of 'what is radio' should be culturally defined. Beck (2002) also presents the concept of "radioworld" which is similar to Tachi's "radiobility" and proposes that we consider "all forms of radio of the past, present and possible in the future" including the "un-radio-like" to be considered a radio.

Although controversy will continue, there is no question that the definition of radio is according to the concept of space and time. If we were to describe the identity of radio from a cultural and relative perspective, we should consider the current status of Kong as that of the radio at least for the now for the following reasons. First, the users are considering it to be radio. Second, the service is provided by the radio station. And third, there is remediation of the word "radio" in the use of names like the "internet radio," "net.radio" and the "digital radio."

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5 A proximate calculation of KBS, MBC, and SBS player downloads based on 'KBS Radio survey 2007" published by Korea Broadcasting Systems.

6 According to the "Media & Consumer Research 2006" published by Korea Broadcasting Advertising Corporation.

7 According to the "Study on Information Status in Second Half of 2006" published by Korea Internet Promotion Agency, an average office worker spends an average of 2.6 hours per day accessing the internet. The access rate increases at around 9 a.m., right after lunch time, and around 8 p.m.

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