

## **Malleable contents and future musical forms**

Atau Tanaka

Active in the experimental music movement since the mid-80s, Atau Tanaka conducts research, creates installations, and gives performances with musical man-machine interfaces. Born in Tokyo, he grew up in the US. He moved to Paris in 1992 to conduct research at IRCAM and became Apple France's Artistic Ambassador for interactive music, then moved to Tokyo on a residency at NTT/ICC. In 2001 Tanaka returned to Paris, where he is a researcher at Sony CSL Paris. He brings art to research, investigating how community-based listening and urban mobility lead to the creation of new, participative forms of music. In *receiver*, Tanaka gives an account of his concept of networked, mobilized music.

<http://www.csl.sony.fr/atau>  
Tanaka at Sony CSL Paris

Artists have always reacted to the context of their times. Even if a work might be considered "timeless" the artist's actions forcibly take place in the context of his contemporary situation. In this light, artists have provided unique insight in their reactions and commentary on technology, be it the Italian Futurists, Duchamps and his ready-mades, or the video art of Nam Jun Paik in the 60s. If we look beyond Western European culture, artistic practice often weaves into the fabric of society in even more organic ways. Music has always brought this to popular culture, where musicians remark on societal and technological change through new musical forms.

Developments in recorded media gave rise to entirely new musical genres. The 45 rpm vinyl record holds only four minutes of music per side, helping define the rock 'n' roll single of Chuck Berry, Little Richard, and Elvis. With the 33 rpm and its twenty minutes per side, the Beatles conceived the concept album, witnessed in Sgt Pepper's Lonely Hearts Club Band. When the total time went up to 74 minutes with the CD, musicians stopped trying to fill the disc with music and instead made unexpected use of the medium, leaving a long gap of silence at what seemed like the end, putting a surprise track long after the listener thought the album was finished.

It seems natural, then, that artists would seize the possibilities afforded by network distribution of music and formats like MP3 to once again create new forms of music. Instead, we have had industry wars about piracy. These legal efforts are spear-headed not by artists but by those who earn their livelihood from artists' work – the labels, publishers, and industry bodies like the RIAA. They are in a battle of survival to impose old-fashioned business practices onto new infrastructures. Computer companies like Apple and telecoms operators are entering the fray,

not with any creative vision, but with a profit motive in the commoditization of music. This ultimately trivializes music as a form of cultural expression, and stifles creative responses to the deployment of music on new media.

This is not to say that there are no interesting works in this new era. DJ Dangermouse released the *Grey Album* – a mash-up of the Beatles' legendary *White Album* and Jay-Z's *Black Album*. By provoking the industry through shameless sampling, the *Grey Album* was banned, denounced, and became an instant cult classic. This technique of viral self-publicity continues the tradition of seminal works from the 80s by John Oswald and his *Plunderphonics* and Negativland's musical identity theft of Michael Jackson and U2. These artists, in a time pre-dating the Web and MP3, foresaw not just litigation culture, but the re-mix, sampling and mash-up aesthetics that are now current among youth in the DJ and bootleg scenes.

<http://www.wired.com/news/digiwood/0,1412,63314,00.html>  
A Wired story on mash-up music

How do we take these underground trends that we see on the periphery and bring them center stage? New content licensing models recognize this cultural shift - the Creative Commons allows transmission of cultural products through re-sampling. But have legal constructs like CC brought about a fundamental change in music itself? Ultimately it is still a view of the Web as a distribution medium and not as a creative medium. The vision that I put forth is that the internet can become the canvas on which artists directly create their works, exclusively and specifically for the medium. In the music conservatory universe, we have a name for respecting an instrument's voice: idiomatic writing. If we apply the notion of idiomatic writing to networks and mobile devices, we can imagine totally new forms of music that could not be heard in any other way.

To just download music is to treat it as a dead medium. Having a new licensing model to publish re-sampleable content is a bit better. But leveraging the human potential of network interaction to create new musical experiences would be the ultimate. It is a vision that respects both music and networks as dynamic, living forms. Music is alive when it is performed, *live*. The internet and mobile telecommunications support pulsing social communications. How can we play one off against the other to create compelling new cultural forms?

These are dynamics that we cannot forecast - SMS being the classic example of unintended use becoming killer app. The explosion of peer-to-peer networks is another area that took the research world by surprise. And harder yet, it is difficult to predict what the next big thing will be. Social Software is a case in

point. We know that we are within six degrees of separation from a vast part of the population, and we can map out these connections. So, then what? What kinds of interesting things can we do with these human networks? What we can do is to see how artists have invented new forms in response to new media, and how communities of users self-organize to create new forms of communications, and to try to catalyze future creativity along these lines. This is the idea of facilitating serendipity applied to cultural production.

If we cannot be deterministic with digital technology, and if we let go of ultimate creative control, where does that leave the researcher and the artist in the scientific and cultural value chains? One answer may be to look beyond just music and to look beyond just technology for inspiration. I have been interested in how post-modern cultural theory can be applied to become a catalyst for future musical forms. Jean Baudrillard, in conceiving the notion of "simulacres", traced out the displacement of value in society following the advents of the Industrial Revolution and the Information Age. In the pre-industrial era, value was in the original, whereas with the arrival of mass production, value shifted to the capability of reproduction. Already twenty years ago, he foresaw the arrival of the Information Age where conception of objects takes place in the absence of any original, and instead by purely virtual processes. At this point value would shift to a notion he called the "model". If we draw parallels from this thinking to music, we could say that the original was live performance. With the arrival of recorded media, value was displaced to the mechanical reproduction of music, and indeed success was measured on the number of copies a hit record sold. Now that music reproduction has been trivialized to simple file duplication, what then could be the parallel to Baudrillard's "model"?

[http://www.mnstate.edu/gracyk/courses/aesthetics%20of%20music/attali\\_outline\\_text\\_only.htm](http://www.mnstate.edu/gracyk/courses/aesthetics%20of%20music/attali_outline_text_only.htm)  
An outline of Attali's *Noise* by T. Gracyk

Jacques Attali, in *Noise: The Political Economy of Music*, perhaps has the answer. For him, music was first and foremost an act of "ritual sacrifice". From there, music lived through eras of "représentation" (in the French sense of the word, meaning "performing"), and "répétition", before ending at some future date, in an era of "composition". The eras of "representation" and "repetition" correspond to Baudrillard's original and reproduction. But what of the term "composition"? Attali is not talking about the act of a composer, but is instead alluding to potential musical forms generated at the time of listening. Seen in this light, Baudrillard's "model" = Attali's "composition".

From these conceptual abstractions, how can we conceive of real musical systems and new content formats? To put the question another way, if we are freed from traditional Western European notions of the artist and his ego, the virtuoso and

the masterpiece, can these social ways of thinking about cultural production lead us to imagine new forms of music that represent or amplify the human dynamics seen in mobile communications?

<http://www.xmira.com/atau>  
Tanakas site

These are the issues that motivate my work as an artist and researcher. In my musical creations, I have moved from the use of interactive sensor systems as musical instruments onstage to creating installations where, instead of a finished work, the public takes part in the creative process through responsive tactile, visual, sonic environments. *Global String*, produced with Kasper Toeplitz and presented at European media arts festivals like Ars Electronica, is a monumental guitar string that traverses the distance between two cities by transforming itself from huge steel cables at each end into immaterial network space in between. Ultimately it is still just an incarnation of the oldest known musical instrument from Greek times: the monochord. Another installation piece, *Bondage*, currently on a museum tour of the US, generates sound from the lines and pixels of a photograph of a kimono-clad woman in bondage by Nobuyoshi Araki. A wood and paper Japanese panel becomes the surface on which digital interactive imagery is projected. Gestures of gallery visitors are picked up by camera analysis and uncover parts of the original photo, generating frequency bands of sine waves. The result is a total environment, a concentrated space where sound meets image, and draws upon cultural voyeuristic fantasies where the viewer tries to access the untouchable woman on the other side of the screen.

I bring these conceptual views and artistic approaches into my research at Sony CSL Paris. The goal: to see if the human creative dynamic can be taken out of the abstract realms to conceive of potential new end-user experiences. I create mobile music systems that are facilitators of malleable content forms. Mobile devices endowed with sensors are in wireless communication with a "Malleable Music Engine". Communities of friends enter a virtual space like a chat room, but a musical one. Each person is identified by a distinct part in the music. Their movements about town, and their subconscious gestures while listening - be it gripping the device tighter in intense moments, or tapping along to the beat - are picked up by sensors and sent up over the wireless network. The music engine takes this human-context information and transforms it into a musical context, using it to modulate, modify, and re-mix a piece of pop music. The connected users hear the same stream of music, it becomes a shared experience. The music is not a fixed file, it is slightly different every time, a song that evolves and responds to the situation of its listeners, a Social Remix. The idea is to leverage mobility and Social Computing to create "Mobile Social Music Software".

Industrials will of course be asking by now how to earn money from this view of dynamic content formats. I believe that this creative approach can in fact lead to future business models. There is a contradiction in the current marketplace – as CD sales are falling, ringtone sales are exploding. Music has deep cultural value, while ringtones are basically sound icons. Why are people ready to pay for a ringtone when they expect to access music for free? If we extend the vision of Duchamps' *Ready-made*, we arrive at the *Throw-away*. It seems to be a question of convenience – people are happy to pay a couple of euros for disposable media, but they want magic for free. Malleable media occupy the space between the convenience of the throwaway and the deepness of experience. Malleable modules can be as convenient as ringtones to purchase, while the Social Remixes that are created with them are dynamic, connection-based services. Ultimately, looking at music as a service is completely consistent with the origins of music as a cultural offering where musicians share and transmit their art through generosity.

If we have truly shifted from a post-Industrial economy to an experience-based society, then it seems that cultural production must evolve to respond to this shift. Artists have always reflected on the time in which they exist. Communities spontaneously adapt to technological change by creating new social situations unimagined by engineers. My work seeks to tap into these creative and human urges to imagine future forms of music. Network music should be more than just about downloading; mobile music is more than just songs-on-demand. These infrastructures can be exploited as creative canvases to make Malleable Media.

<http://www.viktoria.se/fal/events/mobilemusic/>  
Mobile music technology workshop at NIME 2005

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