

THE SOUND OF EBAY

# The Generator

Soundcoding: Stefan Nussbaumer

The Sound of eBay is an UBERMORGEN.COM project

## THE HISTORY (& SUPERCOLLIDER)

The eBay-Generator is an application that translates data from arbitrary eBay useraccounts into little music pieces. A first prototype - using the South American eBay-clone Mercadolibre - has already been presented in September 2007. Experiences with this first version have led to this current version of the eBay-Generator, which produces "songs" on request which are then published at <http://www.Sound-of-eBay.com>. Each generator (there can be an unlimited number of them working in parallel) is running on a normal Apple/Mac (this is currently the only platform that supports the software due the use of Appl e's built-in Speech synthesis). I have chosen this concept for several reasons: The eBay-Generator is mainly made in SuperCollider, a programming-environment for audio, designed to run on local workstations that can send commands (OSC) to other SuperCollider-Servers (e.g. set parameters in synths running on a remote engine). Although this net-based concept makes working in a network convenient, it is not set up to function like a webserver. It simply seemed more convenient having easy control over processes running on my local machine rather than running a remote server.

## BUBBLING EBAY USER GROOVES

eBay's concept is based on transactions between buyers and sellers – transactions between human beings, not consumers and companies. The eBay-Generator reflects this concept in a way that it does not only generate your free personal song, even the generator itself shall become a free application that any (Macuser) can install freely on her/his Computer to produce an endless stream of bubbling eBay-grooves.

## HASH

Not only that this may reflect the buyer-seller relation in a way, this concept of a distributed generation also offers a few other interesting options like: every generator owns its own history (rememberance), meaning from the first time it is run it constantly collects usernames and calculates its occurrences in all transactions. Every username is considered for any new generation. The generator calculates a simple hashsum for a given username. The sum of all hashes, divided by the number of occurrences (average), results in a final sum that determines the sound. Specific hashes like the hashes of users whose comments get sampled and played in the track are treated separately.

Hashes are useful as they can e.g. be analyzed like this: a given hash gets analyzed for its characteristics by dividing it by all values from 1 to itself. Each time the result is whole-numbered, the divisor gets added to an array. This simple mechanism allows the generation of characteristic patterns that may be used for rhythm, harmonics and other parameters.

## HARMONY AND RHYTHM

However the musical structure is not merely determined by userdata. Rather than generating scales and harmonics, the data (resp. patches gained from it) is used to cut out a sub-spectrum out of a 11 different scales that are hardcoded into each generator. The predefined scales are a selection out of a scheme invented by Max Meyer resp. [Harry Partch](#) called „[Diamond Tonality](#)“ (I borrowed the SC-concept for generating this structure from James McCartney, the original author of [SuperCollider](#) ...).

Although there is an underlying harmonic structure and a rather conventional rhythmic structure, not every generated song will be a 'hit' – it's a bubbling sea of eBay-userdata. Some songs may have surprising changes in their melodies, some may remind of other existing popmelodies for a moment, some may result in a funky jazz-improvisation ... play around with it. Generate more than one song from a given username. Generate songs also from users that have had a transaction with an already queried user. This all has an influence on the sound ...

## PROGRESS AND DEVELOPMENT

Still the sound is a work in progress. The biggest difficulty in this is the process of sound-generation i.e. writing a score that is then being rendered into an aiff-file in non-realtime. Basically I found this to be most convenient, as it allows a reliable generation over many songs, although testing is time-consuming (and 'having fun' as well ...). Each generation needs a few minutes (depending on the size of the local history-file and other processes running on the machine). In the end the score gets written to a file which is more or less the only way to analyse the output.

All OSC-commands ([OpenSound Control](#)) within the score, that get rendered in the music, are generated by a pattern-structure, which needs exact planning. Contrary to the [Sound of Mercadolibre](#), where the music was generated in a realtime process, it is not easily possible to set parameters of a specific synth in dependence to what some other synth is doing at the same time.

In this sense the Sound of eBay must still somewhat be called 'under development' (though it's not only the human brain that develops it on – also the history of each generator might cause shifts ...). I hope I will be able to release a standalone-version of the generator in the near future which will be freely available to anyone (GPL-license). Until then I can only say it's not done until it's done ...

Stefan Nussbaumer (stefanus AT chello.at)

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Tech-documentation Online: <http://wiki.basislager.org/>

Generate your personal Ebay-Song: <http://www.Sound-of-eBay.com>

UBERMORGEN.COM: <http://www.ubermorgen.com>

Enjoy the silence!