

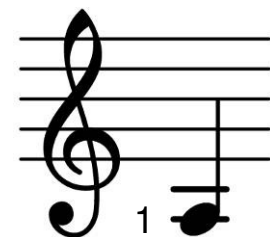


WHEN MUSIC MEETS COMPUTER

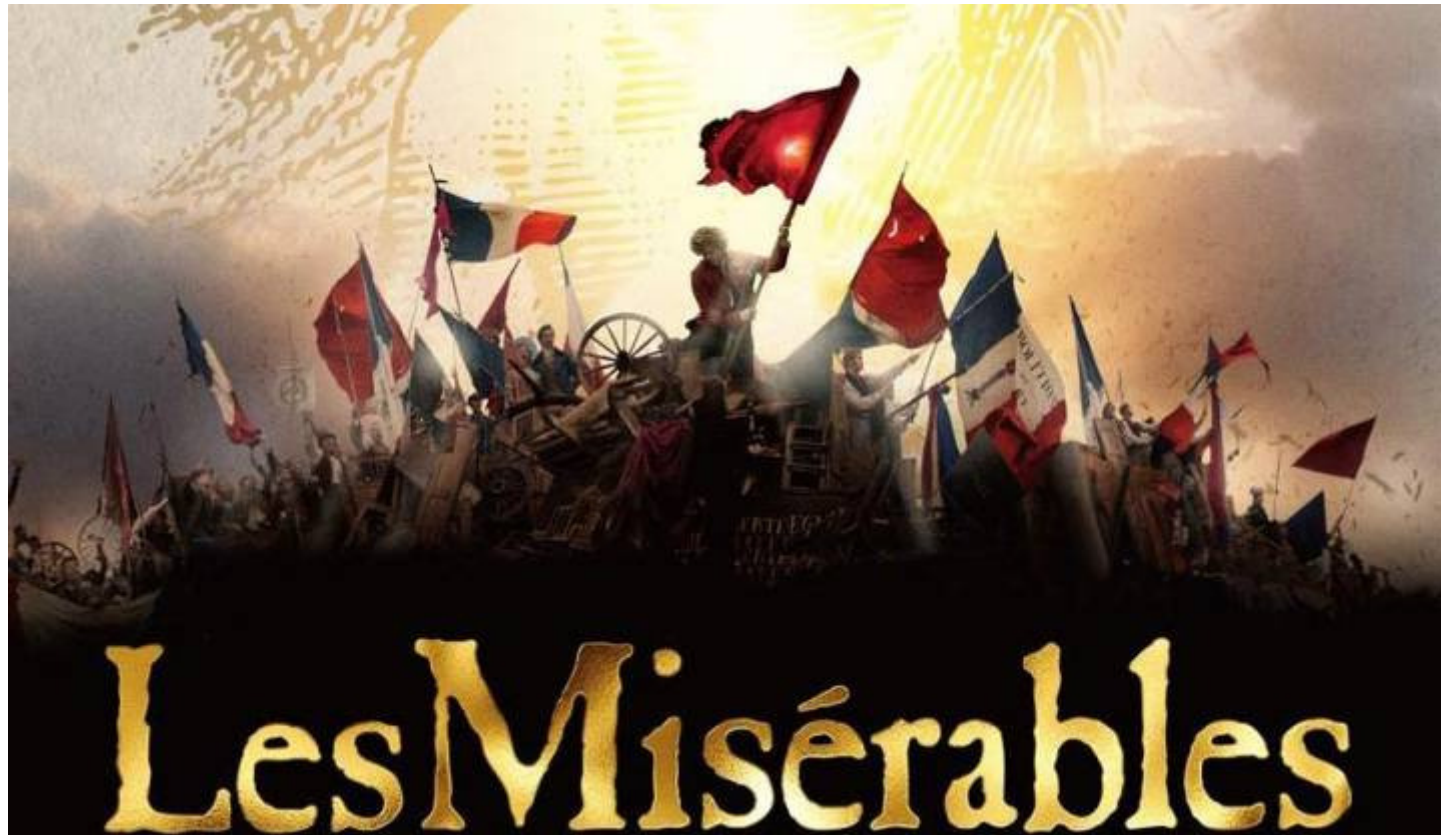
BY **OSBERT NGOK**

21 Feb 2013

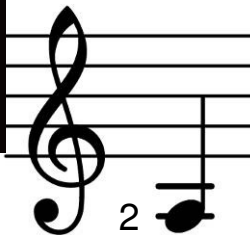
Osbert Ngok Production



CHANGES brought by COMPUTERS to
MUSIC PRODUCTION are
REVOLUTIONARY



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ONCE UPON A TIME YOU CAN

Make A Living

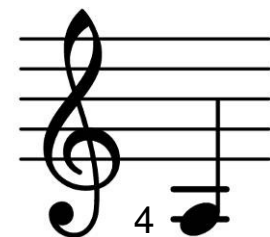
By Transcribing **THIS**...





... into **THIS.**

(It is called “*Manuscript Copyist*”.)

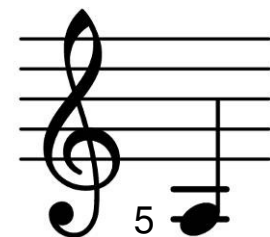




Now, you might want to **Do It Yourself.**



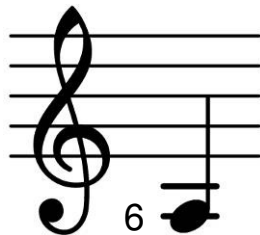
FREE!  musescore

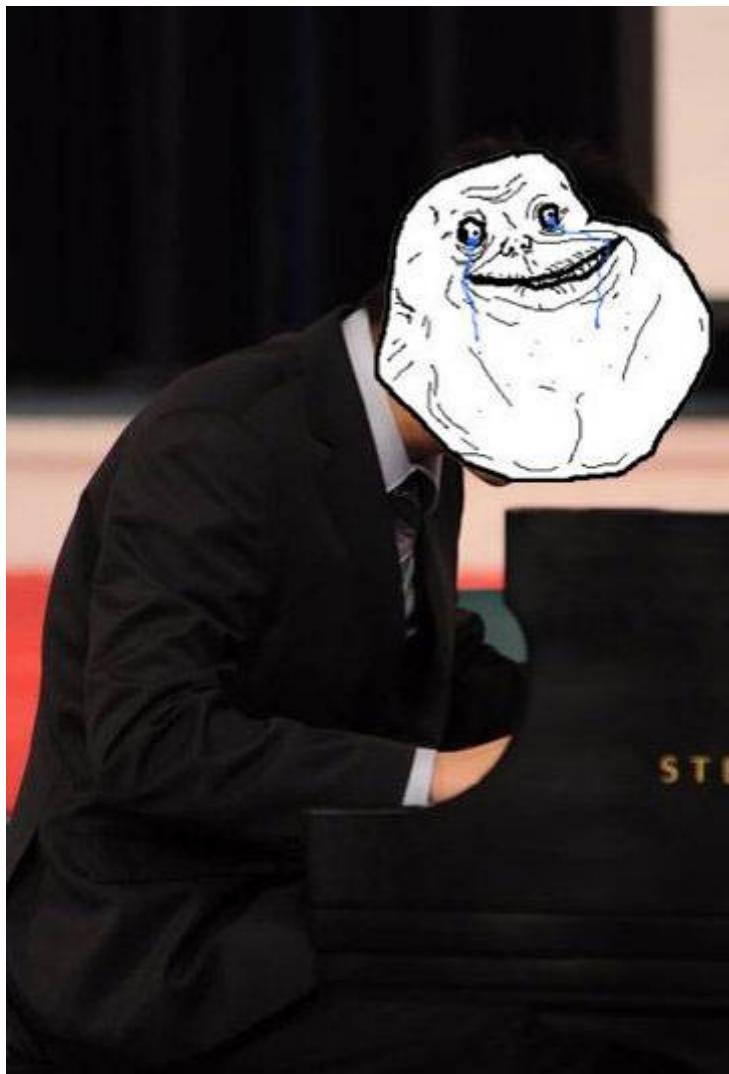




There has to be
something greater than a
Typewriter !

WHAT IF WE
TRIED *MORE*?





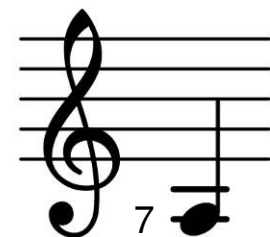
If history repeats itself,

MANY

In this class will wind up

Doing THIS

**le me, Dec 2010*



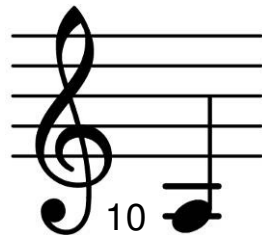
Although what you wanna do is **THIS** ...

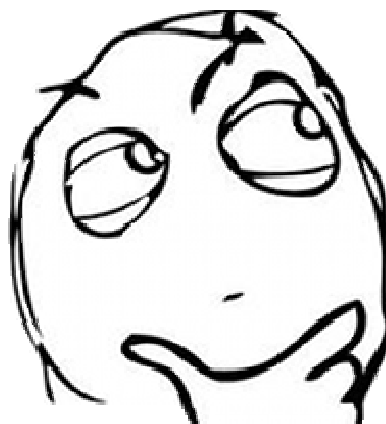


... Or THIS.

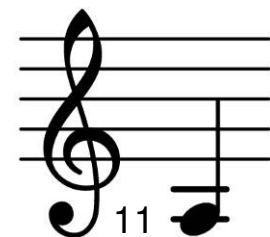


What if you only have **One Person?**





(But nah...)





Detour

BY OSBERT NGOK, 2012

Instruments used:

Rain, (...)
Piano,
Choir,
Jazz Drum Kit,
Timpani,
Bass,
Strings (& Cello),
Flute,
Music Box,
Oboe.

Download [Available](#)

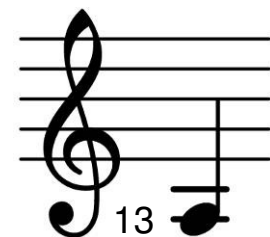
Detour

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There has to be something greater than a **Mixer** !

WHAT IF WE
TRIED *MORE*?

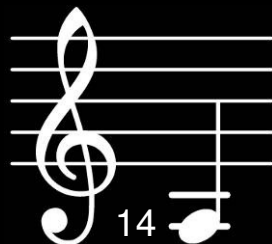




Algorithmic Composition

(SFX: 燈燈燈登!)

(Take my Final Year Project (2011) for example...)



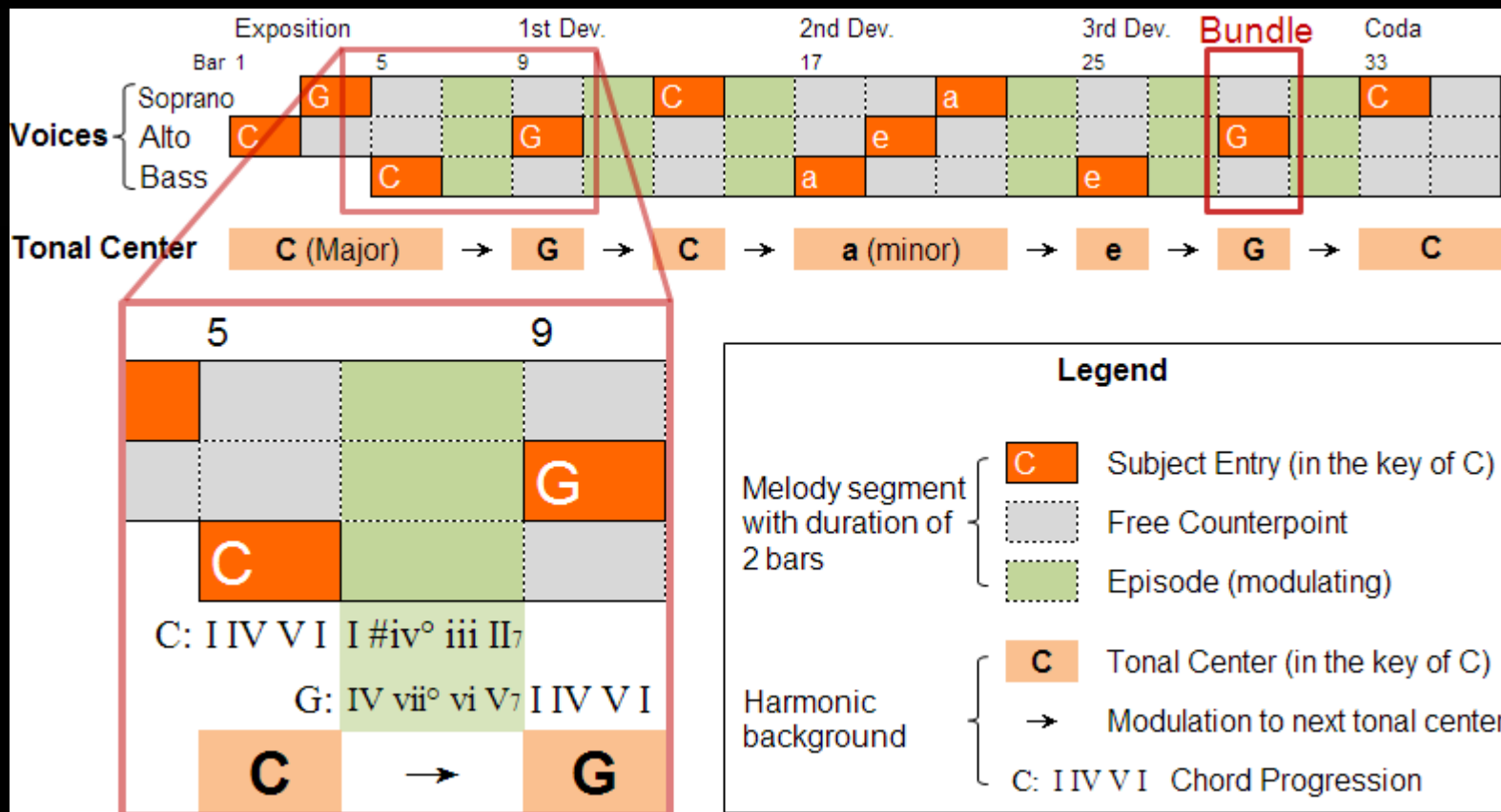


A **Fugue** is
a **multi-voice** musical
composition, built on a
subject (theme) that
imitates itself frequently.



Fig. 1 Beginning measures of J.S. Bach's Fugue No.4 in C# minor, BWV 849
The first three subject entries are highlighted in red, green and amber.





So, we DEFINED what a fugue is
and showed it to a computer.





• Fitness to Chord

... and tried to
teach him
right from wrong*

Too Low:



Just Right:



* Lyrics from *Seasons in the Sun*

•Pitch Span



... and tried to
teach him
right from wrong*

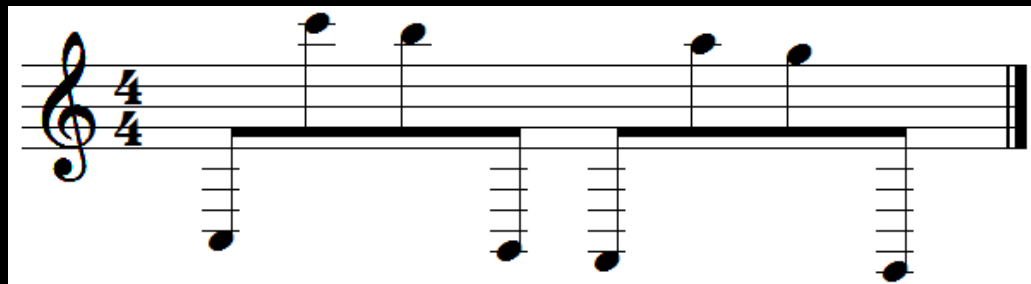
Too Low:



Just Right:



Too High:



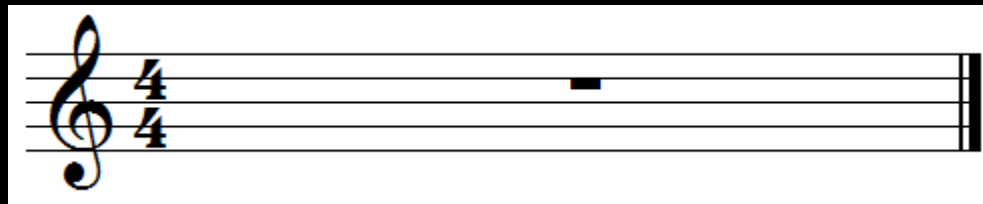
* Lyrics from *Seasons in the Sun*

•Note Density



... and tried to
teach him
right from wrong*

Too Low:



Just Right:



Too High:



* Lyrics from *Seasons in the Sun*

... and **SOME MORE RULES**

... You got

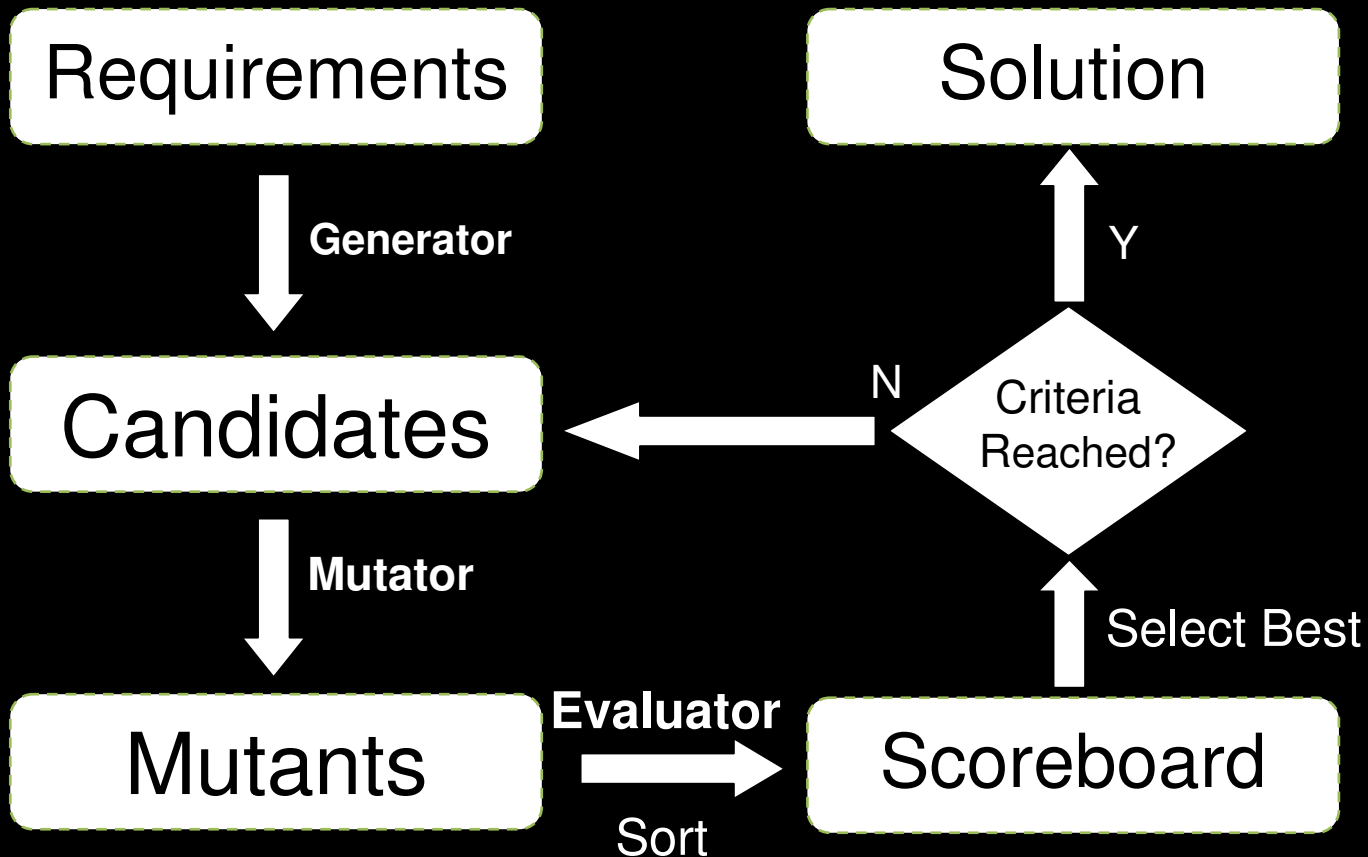
NO DIRECT RANGE
UNISSEY PART FIFTHS / DISTRIBUTION
OCCUREY PARALLEL FIFTHS / DOUBLED VOICES
FORBID PARALLEL FIFTHS / OCTAVES
AVOID DIAPYCNON / REDUCED THE

... You got
the idea.

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Here is how it works...





It would take a while for the computer to **propose** and **refute** his own ideas. So we went for coffee.



[illegible]

(which is) BY **OSBERT NGOK & YUE YU, 2011**

Instruments used:

(... Whatever)

Download Unavailable



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Section 3: Algorithmic Composition



There has to be something greater than a **Composer** !

WHAT IF WE
TRIED *MORE*?







YES, and this time
we build instruments
used in cinematic music
and performance...





(Sounds that can only be created by computers...)
You heard these in the movies but you won't notice!



FROM
SCRATCH





You can
control your instrument **realtime**
in a way you daydream about !

(Watch the interview of Ge Wang @ Stanford Laptop
Orchestra by ABC 7 News back in 2008)

<http://www.youtube.com/watch?v=hmszXmks2EI>





**You can also
utilize your iFriends !**

(Watch Feliz Navidad by North Point's iBand in 2010)

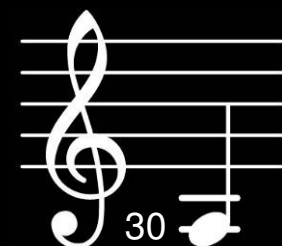
<http://www.youtube.com/watch?v=DcexJQM-8W0>





What do **YOU** want to do
in **HKUST** in 2013?

**YOU
DECIDE.**

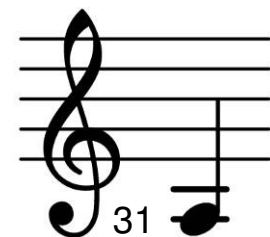




There has to be something greater than

.....!

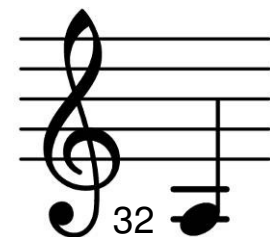
WHAT IF WE
TRIED *MORE*?



Q & A Time !

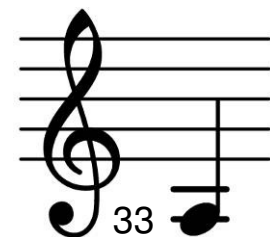


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Thank You!



Credits



- <http://www.uh.edu/news-events/stories/2012/november/Orchestra>
- <http://www.flickr.com/photos/djlein/3026560720/>
- <http://www.xkcd.com/>
- <http://builder.cheezburger.com/builder/raege>

