Math, Philosophy and... Music?

Creative approaches to music education
Yaron Herman

- Started learning piano at 16 when a knee injury curtailed his basketball career
- Studied in Israel under Opher Brayer
- Within three years, gained a scholarship to study at Berklee
- Released several albums
- Rated as one of the top jazz pianists in Europe
Opher Brayer

- Describes himself as a teacher foremost - from business management to music
- Develops methodologies - has worked with Microsoft and Disney
- Discovered Schillinger and the mathematical approach as an alternative methodology
- Believes talent can be learned - that you are not born with it
- Developed a system called "Real Time Composition"
Joseph Schillinger

- Born in the Ukraine, 1895. Moved to New York in the 1930s
- Musical advisor to composers such as George Gershwin, Glenn Miller, John Cage, Earl Brown
- Wrote the *Schillinger System of Musical Composition* and founded more than 40 schools
- Berklee College of Music was originally Schillinger House
- The heart of the system is the concept of permutations - notes, rhythms, phrases etc
The Schillinger System

- Permutations of notes: For example, take three notes - how many variations are possible?

- Can vary the notes, placement, rhythm etc.

- Music more than just permutations - emotion. I must give content, commitment and dynamics to the choices

- "Real Time Composition" approach gives form to an idea e.g. AABA

- Gives rise to possibilities and exploration, not having to rely on "inspiration" or "talent"

- Traditional models of music theory and practice are readily available. The challenge as a music educator is to get students excited about exploration and discovery.

- Most importantly, to connect emotionally with the music.
“Opher Brayer is a great motivator and mentor. In regards to psychological elements – he knew exactly where you were in terms of your personality and knew exactly where to push the right buttons to make you overcome your fear; overcome whatever was stopping you from becoming who you could become – psychologically and creatively.

...which is not something we usually deal with in music school, we're like: “there's the knowledge, there's the scale, this is what you can do with it. You can superimpose that on this chord, this chord and this chord”. But no-one goes like,

“And who are you?” "

–Yaron Herman
G. I. Gurdjieff

- Georges Ivanovitch Gurdjieff (1872-1949) Influential spiritual philosopher whose concepts for self transformation focused on developing body, mind and emotions together - "The Work"

- The Law of Three:
  - First: the active or initiating force
  - Second: the passive or resisting force
  - Third: the neutralising or connecting force

- Non-judgemental self-observation
Pedagogy

- "Teaching methods will need to change if educational institutions expect to keep charging thousands for learning that is available free on the internet" - Salman Khan (NZ Herald, June 2014)

- "In my mind, the universities that will thrive are the ones that can articulate what is special about what happens when human beings get together" - Salman Khan (NZ Herald, June 2014)

- "The problem isn't about knowledge - the knowledge is out there. The problem is about the 'being'" - Yaron Herman

- Balance of intellect and emotion

- Encouraging exploration and discovery NOT giving all the answers

- Focusing on the individual...