## **Mapping Digital Musical Instruments to Ableton Suite**

## **WORKSHOP WITH D. ANDREW STEWARD**

*"Once gesture variables are available…one needs to relate these variables onto the parameters of the synthesizer(s) that will be used to produce the actual sounds. This relationship is commonly known in computer music as (parameter) mapping."*

(Miranda and Wanderley, 2006)

**D. Andrew Stewart** patří k nejlepším současným umělcům, kteří využívají digitální interface a gesture controllery. Pracuje s nejrůznějšími nástroji vědeckého měření biosignálů (elektromyografie) a fyzických senzorů (3DoF akcelerometr a gyroskop). Je zároveň hudební skladatel, pianista a hráč na nejrůznější digitální zvukové nástroje.  
Andrew D. Stewart učí Sonic Art na Lethbridge University v Kanadě, mezi nástroje, kterým se věnuje, patří například [wii](https://www.youtube.com/watch?v=iuLBHORNVCk&list=PL8E8E129461379D39&index=4), ipad s TouchOSC, [Myo](https://www.myo.com/) (muscle detactor), [also](https://www.youtube.com/watch?v=Wrc1c8g2FPk&list=RDWrc1c8g2FPk&index=1), [t-stick](https://www.youtube.com/watch?v=-Dqvf1CXPWg&index=3&list=PL8E8E129461379D39), [Karlax](https://www.youtube.com/watch?v=Q7G9IkfI4bA&index=20&list=PL8E8E129461379D39), [2](https://www.youtube.com/watch?v=O9rDL8D33ZY)  a [live writing](https://vimeo.com/191386076).

WEB: <http://dandrewstewart.ca/>

Performance: <https://vimeo.com/248680125>

## <https://www.youtube.com/watch?v=ihjfYwolx6w&list=PL8E8E129461379D39&index=2>

Obsahem workshopu budou techniky gestického ovládání zvuku pomocí TouchOSC a Abletone Live pro živé performance. Na závěr workshopu bude uspořádána společná performance v Domě umění, která bude uzavřena představením jeho vlastní skladby Jimmy Rap. Tato nová audiovizuální kompozice je založena na živém převodu literárního textu do elektroakustické skladby s vizualizací.

This workshop examines the importance of understanding and establishing limits on the following three areas during the compositional process of creating music for a digital musical instrument: extracting gestures; creating sound with Ableton Suite; mapping gesture to synthesis parameters. Audio and video examples will be drawn from the presenter’s compositions and improvisations for Live Writing, the karlax and the t-stick (i.e., solo compositions and ensemble music combining acoustic and digital instruments).

## **Topics:**

1.          What does traffic mean to you?

1.1.   Relationship between travelling and traffic?

2.          What does traffic sound like?

3.          Is traffic beautiful, noisy, loud, majestic, chaotic, etc. ?

4.          Can you perform traffic? Can you improvise traffic?

4.1.   How so?

5.          What are the limitations of traffic?

5.1.   Timbre, speed/tempo, counterpoint, gesture

6.          What's the opposite of traffic?

## **Nástroje, které budete potřebovat:**

## 1. Vlastní notebook s Win nebo OSX

2. TouchOSC nebo vlastní interface (např. MIDI kontroler),   
[TouchOSC](https://hexler.net/software/touchosc) je možné instalovat na WIN nebo MAC, a zároveň na vlastní smart phone nebo tablet.   
Využití: <https://www.youtube.com/watch?v=-WkI2szMAQc>  ,   
Koupíte jej předem na Appstore nebo Google play (130 Kč = 3 piva)

3. Abletone live suite (možno použít demo version)

4. Max/MSP (optional, není nutné)

**Workshop bude probíhat v angličtině**

## **Místo: Ateliér Time-Based Media, č. 320 Čas: 20. - 21. 2. 2018 od 9:00**

## **Dotazy: pavel.mrkus@ujep.cz, barrypwan@yahoo.com.hk**

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## **Workshop Schedule**

## **Tuesday 20. - Wednesday 21. February**

| DAY | NO. | TIME |  |
| --- | --- | --- | --- |
| 1 |  | 9:00 to 10:30 | -Workshop set with Barry |
| 1 | 10:30 to 12:30 | -Goals for two-day workshop  -Workshop theme: "Traffic"  -Practices (historical and contemporary) for music performance and composition with electronics  -Introduction and demonstrations from the world of gestural controllers, digital musical instruments  -Improvisation |
|  | 12:30 to 1:30 | LUNCH |
| 2 | 1:30 to 4:30 | -Grouping students (forming teams)  -Hands-on controller examples (MYO, Karlax, Live Writing, t-stick, wii, etc.)  -TouchOSC editing  -Students connect their controller (basic sound tests) |
|  | 4:30 to 5:30 | BREAK |
| 3 | 5:30 to 7:30 | -Building synthesis engine in Ableton  -Students show the class what THEY DO with Ableton (1 hours)  -Class improvise a short soundscape simply by manipulating Ableton with the compute keyboard (time permitting) |
|  | | | |
| 2 | 4 | 10:00 to 13:00 | -Mapping expression (theory and concept of mapping)  -Deep analysis of controller data and mapping within Ableton  -Compositional process/sound structure (i.e., Mapping IS the composition; Mapping IS the instrument) |
|  | 13:00 to 14:00 | LUNCH |
| 5 | 14:00 to 16:00 | -Supervised lab time for students to work  -Predominantly students working on their own or in groups to perfect their systems  -Group improvisation (time permitting) |
|  | 17:00 | -Set-up at House of Arts |
|  |  | DINNER |
| 6 | 19:00 to 22:00 | -Workshop performance  -Individual and group performances/improvisations  -Jimmy Raps by D. A. Stewart |