

Panel E4

Sala Emiciclo

Animation: Beyond Movement

Iveta Karpathyova

Rotoscoping Design for Bodily Technique in Dance and Interdisciplinary Research on Animation as Embodied Practice



Within my research I am designing a Compendium of embodied knowledge that emphasizes the role of movement in animation, both as a mode of learning and as an object of study through the technique of rotoscoping. In manually rendering movement at 12 frames per second, I approach traditional animation as a design process that allows me to analyze, document and communicate aspects of visual expression in my dance and martial arts practice.

Using embodied research as a methodology to frame and document animation as an embodied technique, I am asking how this bodily knowledge functions in relation to my secondary disciplines of bachata latin dance and Shaolin kung fu to generate an interdisciplinary research approach. For me, embodiment represents a common way of learning through the three practices, which is strongly rooted in awareness of my body and the way I express myself through it both physically and emotionally. It stands for a state of observation and kinetic knowledge acquisition whereby one learns to articulate and think through movement.

To expand, embodiment is not limited to its physicality; it is sustained by other internal mind-related processes that come into play such as body awareness and self-expression. The embodied language in animation is also a training of mind that exercises memory and imagination. An artistic self-expression cultivated through repetitive training and becomes enacted subconsciously and spontaneously through experience with a high level of rigor in the given practice. A specific technique may be practiced by a dancer or animator numerous times throughout their lifetime until it reaches a natural ease, appearing effortless in its execution.

For my final project to be exhibited in March 2017, I am animating a four minute bachata dance sequence that I filmed with a partner. The production includes stages of choreography, dance recording, video editing, and hand-drawn rotoscoping of 2650 frames that corresponds to the timing and musicality of the song in its visual interpretation. Considering rotoscoping and its historical trajectory as a form of motion studies, recording and analyzing this creative process allows me to address my animation technique in relation to my dance practice. I assess what knowledge is generated through the sequential rendering of different states of movement bachata, as my performance is interpreted from kinetic to visual format. Animation techniques being used are as follows:

i. Traditional animation

The production of hand-drawn animation is labor intensive and involves embodied training through rendering each frame in the visual development. Fragmentation of units of movement is related to the aesthetics of dance and martial arts whereby one learns individual forms until merging them together into one swift pattern that is practiced on repeatable basis. Skilled manual control over tools and media allows animator to create

effects that can be impossible to enact with the physical restrictions of human body. In other words, traditional animation allows me to create an exaggeration of movement and timing that can enhance and highlight a particular aspect of visual expression in dance.

ii. Rotoscoping

Rotoscoping enables realistic action and facilitates expression of accurate movements and gestures. This is especially important as I am capturing Bachata dance genre as a specific case study with its own set of performance elements, subtle signs and cues (eg. contra-body motion, syncopations or taps between the beats, enchufla half-turn, chest-level hand styling, hair combing) which are synchronized to music tempo in 4/4 time-signature. Animator Bob Sabiston describes rotoscoping as a technique that mediates performance and offers a wide range of possibilities to creatively capture movement through its relationship with photorealism, tracing and gestural interpretation of real-life capture.

iii. Hand-drawing

The process of drawing is a mindful practice whereby one develops sensitivities towards visual representation. As a pioneering experiment in visual thinking, the dissertation of Dr.Sousanis was made entirely in a comic book format. A chapter on “Bodies in Motion” investigates visual representation and meaning-making through physical activities of drawing. Sousanis writes: “Drawing is a way of seeing and thus, a way of knowing, in which we touch more directly the perceptual and embodied processes underlying thinking” (78).

I reflect on methods of acquiring bodily knowledge in my practices that are commonly overlooked or dismissed as muscle memory or natural talent. Animating process is often performed as an instinctive action while rarely examined through research and approached as an epistemic field of embodied knowledge within academia. Methods such as the practice of figurations, consistency in performance, artistic self-expression, rhythmic timing, cognitive reflexivity or balance between pre-inscribed steps (choreography) and improvisation are traditionally associated with dance and martial arts however I also find them applicable to animation.

Works Cited

Sabiston, Bob. “Bob Sabiston in Conversation with Paul Ward.” *Animation* March 2012 vol. 7 no. 1: 73-82. Sage Journals. Web. 12 Dec. 2012.

Sousanis, Nick. *Unflattening*. Cambridge: Harvard UP, 2015. Print.

Spatz, Ben. *What a Body Can Do: Technique as Knowledge, Practice as Research*. NY, New York: Routledge, 2015. Print.

Biography

Iveta Karpathyova
MDes (2017)
Interdisciplinary Masters of Art, Media and Design
OCAD University

Toronto, Canada
e-mail: ikarpathyova@faculty.ocadu.ca
web: www.ivetaka.com

Upon graduation from Ryerson University (Toronto, Canada) in 2010 with a Bachelor of Design, I moved to France where I worked in trend forecasting and as a Visual Arts instructor. I freelanced as a commercial illustrator in Paris, Montreal and California for five years until returning to Toronto in 2015 to pursue graduate studies. I am currently a Master of Design candidate focusing on the practice of animation with prospective graduation date in April 2017.

Working as a freelance illustrator, I have been practicing drawing and painting on a professional level for the past six years, collaborating with international clients such as World Wildlife Fund, Holt Renfrew and Philips. With illustration as my primary discipline, I always found myself aiming to capture movement and communicate the articulation of feeling or an expression. As I begun producing my graduate studio work I dived into traditional rotoscoping animation as a technique that conveys and gives a better understanding of the way our body moves and expresses itself. Additionally, my background in dancing and martial arts defines my approach to thinking and the perspective through which I view movement.

I have been practicing dancing since young age and began to focus on bachata and salsa in 2013. I am currently a dancer within a Bachata Performance team, cultivating professional understanding of step combinations, turn patterns, styling and body movements. Having acquired a four-year training in this latin dance, I am using my performance as rotoscope basis for my final animation to explore the relationship between these two embodied disciplines.

While living in Paris, I started my training in the practice of Shaolin kung fu in 2013. Over the course of Sept 2015 – April 2016, martial arts has been my case study for animation studio work. I experimented in media and animation techniques to translate movement patterns called *tao forms* which are learnt to be practiced repetitively in training sessions. With the animated films that I developed in my first year of study, I won the Martial Arts Studies film competition and screened my work at the 2016 International Martial Arts Studies conference held in Cardiff University (UK). My animations will also be screened in the Fighting Spirit Film Festival (London, UK) in 2017.

Beyond my freelance practice and master's research I am also involved in additional pursuits within academia. Below is a list of my experience up to date:

- **IAMD Admissions Committee Student Representative**, Graduate Studies, OCAD University, Toronto (2016 - Present)
- **Teacher Assistant**, Faculty of Liberal Arts & Sciences and School of Interdisciplinary Studies, OCAD University, Toronto (2015 - Present)
- **Panelist**, IAMD Program Info Night, Graduate Studies, OCAD University, Toronto (2016 Nov)
- **Presenter**, Martial Arts Studies Conference, Cardiff University, Wales, UK (2016 July)

Awards and Exhibitions include the following:

- Film competition Winner, Martial Arts Studies Conference, Cardiff University, Wales UK

(2016 July)

- Ontario Graduate Scholarship (2016 April)

- "Hello" Graduate exhibition, OCAD University, Toronto (2016 April)

- "Unguarded" Graduate exhibition, OCAD University, Toronto (2015 Nov)