# 尋找未來的路徑

finding future's way

## The Journey to Bees: Artstation at HKU

Anne Hayes and Glenn Davidson of Artstation, UK, are in Hong Kong under the auspices of the University Artists Scheme. The Scheme, the first of its kind at HKU, brings together established professionals from the disciplines of Film, Music, Literature, and the Visual Arts, and aims to foster a greater understanding and appreciation of the arts with artists sharing their practice through dialogue and collaborations.

Artstation, known for their research based projects, first came to HKU in 2014 and worked with our students to create *Meeting Point*, a sculptural arch made of recycled paper that was inflated and held up by air. It was displayed in the foyer of the Chi Wah Learning Commons, an interactive space where students gather to study. The intervention of this arch in a public space raised eyebrows, furrowed brows and brought smiles as students became aware of this 9-metre-high intrusion. One student in thinking about the contrast of the fragility of the material and the imposing structural form of the arch reflected on how authority can also be fragile. These were the types of responses that Artstation seeks to provoke – a range that can be philosophical, political or quizzical, and that speaks to the complexity of how we think of space and territory.

What also underscores Anne and Glenn's practice is how they work alongside scholars, students, and professionals from diverse fields. Their interdisciplinary approach is taken further with their new project, *finding future's way,* a soundscape installation that pays homage to the hardworking bee that has lived, survived and evolved over 50 million years of environmental change. With this project they consulted bee farmers and botanists, and worked with scientists and students from different faculties. This ambitious installation uses the bee as a lens through which to think about how we interact with one another and our relationships to our environment.

This project comes at a time when there are global concerns about the declining population of the bee. Its demise can create catastrophic results: 65 % of plant species depend on the bee for pollination, and they are responsible for the reproductive welfare of over 400 agricultural crops including broccoli, cucumbers, asparagus, berries, and melons. Bees are vital to the welfare of human society and *finding future's way* gives platform to this humble winged insect. Set in the Ground Floor Gallery of Run Run Shaw Tower, the home of the Faculty of Arts, this is a space that students, staff and professors move through every day. This soundscape installation of bees' buzzing and their journeys draws attention to how we treat our space and how we interact with "colony" fellows in this University Hive.

Dr Yeewan Koon
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The University of Hong Kong

## funding future's way

### February 2016

"The HKU campus sits right on a rural urban **boundary** of Hong Kong Island. We started our work here climbing the mountain behind the university and came across a bush of **bees**, near the top of the Morning Trail. In the sun a wild swarm had bought a large privet bush to life with the amazing sound of foraging, for early year pollen. Advancing up to the top of the mountain, we fought our way off the concrete track and through the thick undergrowth. Here we found an old concrete trig point from which we could survey the entire region – a panoramic overview. We could see most of the **city** and the sea around the Island, and spot many as yet unknown places. Elevated higher by standing on the trig point we could also hear a cacophony of distant **sounds**, the traffic below, the airborne sounds of planes above and ships in inland waterways and bays. Behind us birds and earthborn life twitched in the dry bushes and undergrowth. We had stumbled on a privileged **viewing point** (a *genius loci*) in the landscape but also one which functioned as a 'sky ear'. The spatial sounds of the **environment**, their layering, their different scales suggested an alternative and challenging way to explore the landscape before us. We stayed on the mountain till nightfall, lights of the city turned on. Once we were back amongst the now dark forest trail, the night sounds of the mountain wildlife rose up and dwarfed the sounds of the city we had earlier encountered. Back at HKU our project had begun, stimulated by the **intense spatial and sonic experiences** we gained that day on the mountain ".

## October 2016

We started our research by collecting indigenous 'found sounds' for the exhibition. They were selected and scavenged from the city and surrounding countryside, in a search which took us around several locations in the New Territories, near the border with the Mainland. As our research progressed, the focus has refined to - the sound of '**social spaces'** in the city and contrasting these with the social life of the honey bee. Our meeting with the local honey bee, *Apis Cerana*, on the mountain, exposed our human symbiotic relationship. These beautiful, largely harmless and extremely ancient creatures are entwined with our human evolution.

As we began sharing our live recordings made inside bee hives with students and staff, we understood with deep irony the fear response that these creatures can generate in humans. Exhibiting the massing sounds of the honey bee immerses visitors in a new space in which they can confront and contemplate their **personal response**, and even our collective responsibilities.

The gallery is a **transitory space**, one through which our audience is passing back and forth to access floors above. *finding future's way* intentionally intervenes in the visitor's journey, the sounds invite people to slow down, spend time listening and thinking, before moving onward.

Living at wholly different sonic scales, the bees and city's human inhabitants are largely unaware of each other. The sounds of the bee are tiny and insignificant in comparison to the immense scale of the city's **soundscape**. Sculpting with sound, we can rebalance this difference, bringing into view and equating these social sonic spaces.

Our **collaboration** with researchers in engineering and biosciences has further articulated differences between the city and bee hive, through the production of two triptych films. These present records of sounds travelling in the membranes of slightly repellent (immiscible) fluids. These experimental results from science further probe the **visceral connection** between sounds and the body. They capture the different scales, velocities and impulses in the sounds of the two living super-organisms, and from this we can sense the ocean of our bodies own reception.

*finding future's way* is an **homage** to the honey bee, and an environmental campaign. It is also the result of a strong collaborative process and dialogue with researchers in Engineering and Biological Sciences and students as well as practical and emotional assistance from the General Education Unit and our wonderful Fine Arts and Faculty of Arts colleagues. We are thankful to you all.

Anne + Glenn  FFW @ HKU Nov 2016.


NOMETRICAL STATION
NOT DEFACE OR DAMAGE
LANDS DEPT
測量站
切勿塗污或破壞
地政總署示

## A Dialogue Between Engineers & Artists

**Anne and Glenn:**
You have two different liquids. So what is the difference between these two liquids?

**Anderson and Sibyl:**
They are both mostly water but they each contain ingredients that makes them different in terms of chemical composition. They can have different densities, but the main thing is that they are immiscible and that's why you can see an interface, a boundary between them. The two liquid phases are quite similar in nature which is why this interface is actually very flexible, like a sensitive membrane that responds to changes in the environment.

# Scale

**Anderson and Sibyl:**
The liquid jet is actually 300-400 micron in diameter. A hair is about 100-200 micron in diameter, so the liquid jet is slightly bigger than a hair. Only at this size range can we really observe differences in the fluid's microscopic morphology. Another reason why we want to study fluid dynamics at this scale is because it frees us from gravity.

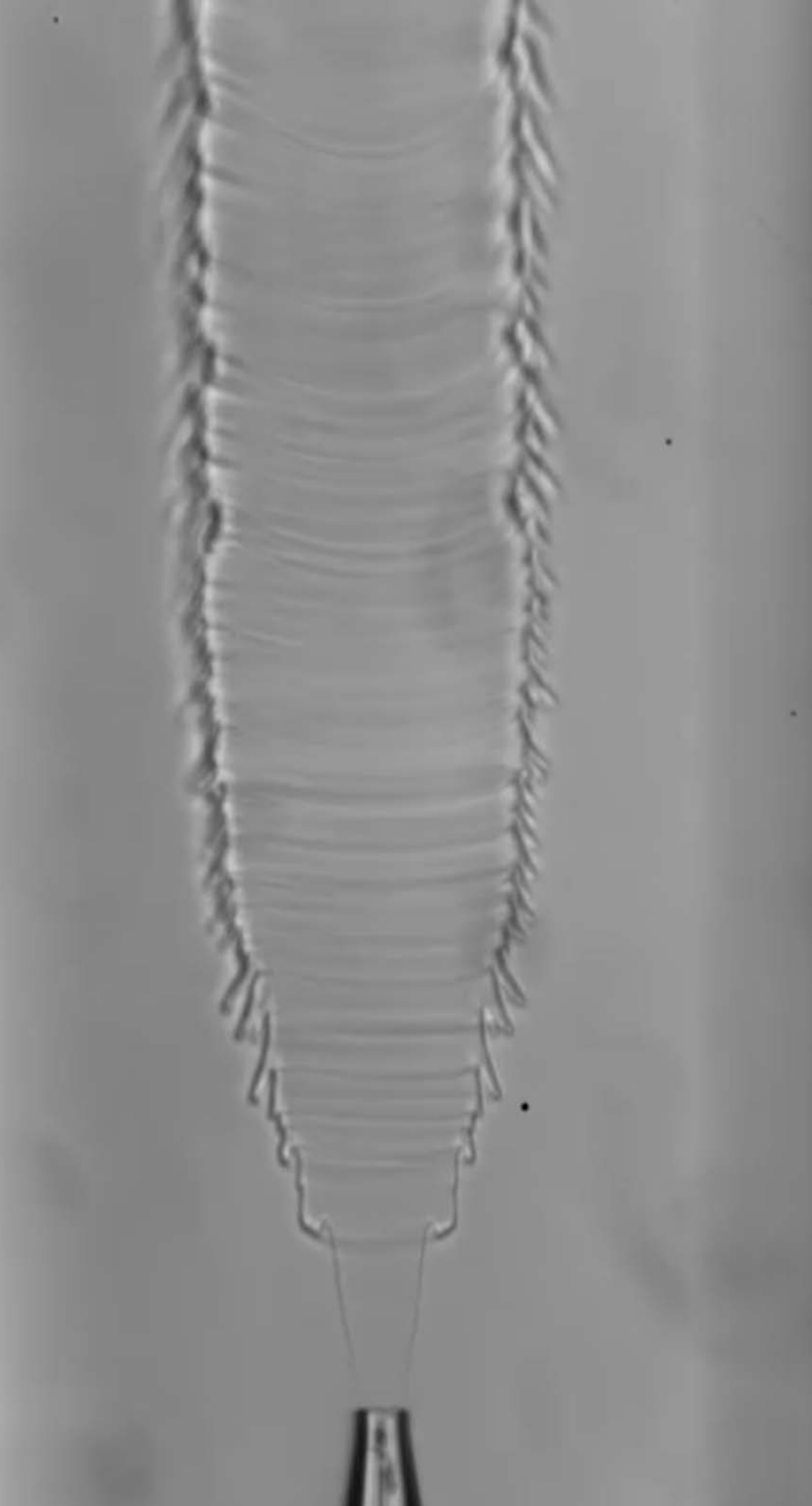
**Anne and Glenn:**
For us, as artists, it is quite interesting to be observing and conceptualising the world at a tiny level. For you, as scientists, I guess it's fairly normal. You observe the microscopic world and construct theories, ideas and measurements. It's a change of perception.

# Sound

**Anderson and Sibyl:**
This new way of recording sound was discovered by accident – our project had a different objective. After we started our research, we observed these interface corrugations and wanted to identify their source. Initially, we thought that they were caused by a hydrodynamic instability. It took us the longest time to realize that the corrugations were a result of the interface picking up noises in the environment.

**Anne and Glenn:**
It's lovely, the thing about it being simpler. You were looking for complexity but actually it's more direct. And it was the vibrations of the building and the earth that it was picking up.

**Anderson and Sibyl:**
Well, initially it was mainly picking up the noise from the syringe pump that we use for pumping liquid into the water-water system. That was when we realized that we could input other sounds into the jet and experimented with Beethoven's 5th Symphony. The interface could distinguish between different instruments. We tested every frequency and discovered that the input and output were closely matched. This is what a recorder does - it accurately captures what it hears – only ours is a fluid recorder.



# Bees

**Anderson and Sibyl:**
We found experimenting with the bee sound really interesting. When we first heard the recording of the bees' buzzing, it sounded uniform, with differences in volume only. When we input it into the jet, we didn't expect such dramatic changes in the interface – we thought it was just plain noise. This system exaggerates and allows us to visualize frequencies and vibrations which we might not be able to distinguish audibly.

**Anne and Glenn:**
That was exactly what we saw. It distinguished in quite a new way something that you perceive as relatively overall or balanced, and that was quite a surprise. There were lots of tones and pictures and colours that we didn't recognise. What this seems to be doing is really opening up sensitivity, we think it speaks to this very sensitive interface between these two fluids.

**Anderson and Sibyl:**
We think one way in which this recording system is different from other, more traditional systems is that you can actually see the history of the sound in the corrugations. It gives another dimension to listening.

# Listening

**Anne and Glenn:**
The way that we understand what you have produced, is that it is like a visceral body; that your fluid system is like a bodily system—we're what, 50% water? This makes the story about the impact of sound on our biological makeup, our life stories, and our narratives much more visible, much more understandable, if this kind of corrugation is going on inside the visceral body. Your research has opened up a whole new area: the visceral nature of listening.

**Anderson and Sibyl:**
We are no experts in the mechanics of hearing, but we think that the part that's relatively well understood is more about the transmission of signals to the brain. But how does sound get picked up and turned into an electrical signal? How does this first level of detection occur? We did investigate the existence of a liquid body inside the ear that does the first level of pickup. You can draw an analogy between our system and the auditory system.

**Anne and Glenn:**
So deep inside us, as a kind of fluid medium, there is some other pre-emptive computation of sound going on, something much quicker than the physical nature of the eardrum. This is what really excites us, this idea of before we understand something, before we decode it and make sense of it, there is pre-eminence in the body of that event.

To me, what I appreciate about the *finding future's way* project is that it looks at boundaries and involves dialogues with others, and that is particularly thrilling for me, as a fine arts student.

In a way, *finding future's way* bridges past, present and future, in a "multidisciplinary" context: Glenn and Anne looked at ancient bee fossils and prehistoric cave paintings of a woman collecting honey and are also using the project to emphasize the significance of taking the environment into account when we think of our future.

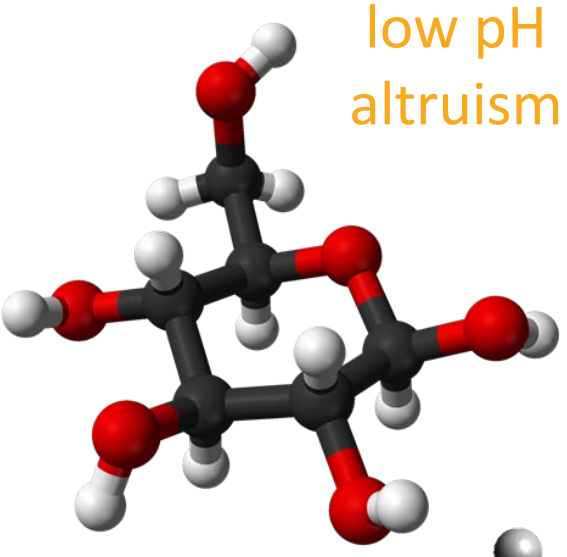
We students so often just choose a hole …. called fine arts or engineering or biology or english literature, and we dig and dig and dig. That is, until we come across something, such as this project, that does not conform to our holes.

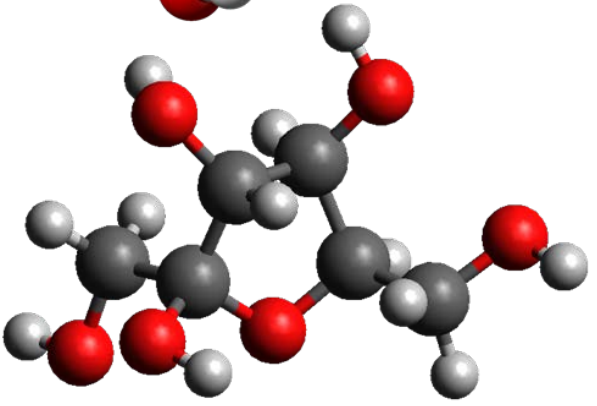

## A Student's Perspective 1

Ms Gigi Leung is a Year 2 Bachelor of Arts student majoring in English Studies and Fine Arts.

# H o n e y

eternal
chemical hexagon
shape of honeycomb
stability
dehydration
enzymes
hostile to bacterial growth
low pH
altruism





**A Student's Perspective 2**

Ms Alice Leung is a Year 2 Bachelor of Science student in Molecular Biology and Biotechnology.



## Acknowledgements

*finding future's way* is a truly collaborative effort and the artists express their heartfelt thanks to the many individuals who helped make this project a reality. We would particularly like to thank Dr Alice Lam, whose support of the University Artists Scheme makes our work at HKU possible.

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We are grateful to Dr Wong Chi Chung and Ms Celeste Shai from the General Education Unit for their enthusiasm in the environmental aspects of the project and for putting us in touch with Mr Fai Hui at the Wild Roots organic farm, the Yeung family whose bees we recorded and Mr Yip Tsz Lam at Kadoorie Farm and Botanic Garden, and to the Outreach Team in the Faculty of Arts, Professor John Carroll, Ms Georgina Challen, Mr Cyrus Chan and Ms Eva Yung, for their support and commitment.

We welcomed student engagement with the project and would like to especially thank Ms Gigi Leung and Ms Alice Leung for their inspirational ideas and dedicated work on the exhibition. Lastly, we would like to thank the many staff members, students and friends we have met during our time at HKU and whose perspectives on our work have helped shape *finding future's way*.

學院藝術家

University Artists

Supported by Dr Alice Lam

Faculty of Arts
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