Interview with Leslie Stein

Why so little attention paid to taste and smell?

- If you lose sight or hearing it's readily apparent.
- You need these senses to navigate the modern world. If you lose taste/smell you can still navigate through the world.
- If you lose these senses then there will be more underlying emotional consequences.
- People take these senses for granted – the sensory processes are somehow hidden from sight.

Origin of humans as chemical creatures

- Originally navigated our world through chemical signalling – procreation, food, and danger avoidance were all chemical processes.
- Our chemical senses have such strong emotional connections because these (mentioned) are emotional actions.
    - Running from danger (fight or flight)
    - Finding satisfaction from food
    - Procreation (attraction & love making)

Is there an unrealised potential for future application, as the survival role of the chemical senses is no longer required?

- Chemical senses are not only about the senses of taste and smell, they provide us with information throughout our bodies; our lungs, gut and sperm.
- We need to learn more about what is important information for our bodies. We can use these "taste receptors".
- The chemical senses transcends food – it's all about communication; all kinds of communication – and that's how we survive. This happens at a cellular level and at an organism level, or food communicating its value to us.

What are the most interesting or exciting frontiers for the research into the chemical senses?

- Transmission of flavours through breast milk and amniotic fluid (J. Manela).
- The role of taste receptors throughout our bodies will be very informative.
- The brain as a big, unknown frontier – how we put all this information together. How the different pieces of the brain takes different information (sensory/emotional/memory/etc) and makes these percepts/experiences.

Other

- We really hardly know how these senses work on the peripheral level.
    - i.e. we still don't know what the receptors are for salty taste.
        - Close to figuring out salty receptors, but still perplexed by the individual differences in how we respond to the tastes. Some is genetic, some is experiential. But what drives that, and whether there are epigenetic influences, and how those [factors] interact…[remain unknown].
    - We don't understand what sour taste is all about.

    - I.e. We can do genetic transplant surgery and stuff like that, but we still do know how we taste salt.
    - We discovered olfactory receptors but we still don't really know how it's coded.
        - These senses are so old, and so intricate, and so ingrained in who we are that it's almost impossible to figure out [a complete knowledge of 'how they work].

From the perspective of scientists, what is culture? Is it the metaphysical nature of man that is played out through collaborative interactions, or is it the battle of "extended phenotypes" (Dawkins) competing for survival? For the scientists that I will be engaging, how do they think about culture? If everything nature? Or is there a distinctly cultural realm?

- Haven't thought of culture in terms of biological [unk.]. A modicum of connection with Dawkins, but I also think that it's a way for people to survive by joining together. It's more than science. Some of it's probably geographical.

Communications about Monell for the art world?

- On a quest for knowledge – knowledge in its own right – but also, how that knowledge shapes us and can serve us as human beings.
- How these senses work and how these senses can make the world a better one (emphasis on health and well-being). Obesity and diabetes are big problems in our current world. If these receptors are contributing to the development or maintenance of these diseases, then as we understand how these receptors work (their complexity, or how to block them, facilitate them, or 'tweak' them), then we can open doors to finding ways to meet the challenge of these diseases.

Discussion about public fear of science, chemicals and food

- Chemicals are everywhere. Our bodies are chemicals and our food is made of chemicals.