By: Lara Boyle

Apologies in advance – the regularly scheduled article on the visual system and art is postponed. Instead, I wanted to share a lecture by Jeff Koons, one of America's most eminent modern-day artist. Koons has worked for the past year as an artist-in-residence at the Zuckerman Mind Brain Behavior Institute, the building where I am completing my graduate work. This past week he gave a lecture to the Institute's neuroscientists in anticipation of his imminent departure. Below you can find some of his comments on his artistic journey, creative process, and his perspective on how art and neuroscience intersect.

The two men at the front of the lecture hall make an odd pair.

On the left, Jeff Koons wears an immaculately tailored and fashionable navy suit with matching tie. His salted grey hair is clipped short, and his blue eyes twinkle to match a wide smile. He conjures the feeling of car salesman or a stock trader rather than famous artist; perhaps his fashion is a holdover from his early days in New York, when he worked as a commodities broker on Wall Street before he achieved fame as an artist.

To the right stands Nobel Prize winning neuroscientist and psychiatrist, Dr. Eric Kandel. Dressed in his trademark polka-dotted bow-tie, Dr. Kandel exudes a level of mirth achievable only from a lifetime of success in a career one loves. Dr. Kandel's wispy white hair and open-mouthed grin give him the mild "mad scientist" quality that endears him to the public. He grasps Koons' hand as the pair share murmured affirmations of friendship and gratitude.

Dr. Eric Kandel (left) and Jeff Koons (right)

The peculiar friendship between these two men is, in its own right, a symbol of the intersection between the arts and sciences. Dr. Kandel holds a deep interest in art, motivated by his admiration of and writings on three Viennese artists: Gustav Klimt, Oskar Kokoschka and Egon Schiele. Likewise, biology, psychology, and technology are central in Koons' work.

It was psychology that brought Koons and Dr. Kandel together. Koons wanted a psychiatrist to view and write about his work. He saw Dr. Kandel on television and reached out to invite him to see two of his art shows. It so happened that Dr. Kandel had an immense connection to the teachings of a 20th century art historian, Alois Riegl. Riegl emphasized that the viewer's experience of an artwork is part of the artwork – a piece he called the beholder's share. Artists who care about the beholder's share must think like psychologists to imagine and enhance the way people experience their artwork. Both of Koons' two exhibits intimately explored the idea of beholder's share.

Koons argues, "The beholder's share is the art. You know, that's where the value is. It's not in that object – that object can just stimulate, excite – but the art is the perception that the individual has for their own life, their own meanings and how they can expand their parameters and move forward." One of the two series that Dr. Kandel witnessed was Koons' *Gazing Ball* series (linked here), in which he placed the reflective surfaces directly into familiar pieces of art so the viewer would feel they had entered and become a piece of the art.

I imagine that Dr. Kandel and Koons bonded over another famous Viennese psychologist: Sigmund Freud. Koons' training was heavily influenced by Surrealism, and therein by Freudian teachings on the unconscious. Early Surrealist artists strove to unlock and portray in their artwork mankind's hidden desires and motivations. To achieve this goal, they often used techniques employed by psychoanalysts including dream analysis and free association. While Koons may not use these techniques, he certainly imbues his work with a Freudian quality. In his lecture he speaks at length about masculinity, femininity, and the sexual aspects of his work. (Link: Koons, *Balloon Swan*,)

Interestingly, Koons did not mention to the gathered room of neuroscientists his "Made in Heaven" series (linked here), a controversial collection of paintings and sculptures that depicts explicit sexual scenes between him and his future ex-wife, porn star Cicciolina. I recall a quote often misattributed to Oscar Wilde: "Everything in the world is about sex except sex. Sex is about power." While Koons has argued that "Made in Heaven" was meant to explore society's feelings of shame and guilt about sex, the images of Koons staring at the viewer with Cicciolina passively lying beneath him speak to me of power, not passion.

Koons might balk at such an interpretation. He argues in his lecture that self-acceptance and learning to control his emotions were central to his artistic journey. He notes a communal responsibility to share his self-acceptance. "Once you're able to satisfy your own needs," he says, "… and I was able to satisfy my needs – the excitement, the way art was performing like a drug for me… you automatically want to share that with others."

Self-acceptance is the core of Koons' *Banality* series (linked here), where Koons presents everyday trinkets at massive scale. He notes: "Whatever you like, it's perfect…If you like cute little images, it's fantastic. It's as relevant as Michelangelo's Pieta. It's all equal, it's about what gives you excitement and motivates you – that's the relevance. It's that essence of your own potential which is important. That's the value." In exploring these common objects, Koons argues he was able to embrace his own culture and realize his full potential as an artist.

Michelangelo, *Pieta*, 1498-1499

Outside of psychology, Koons work also explores biological time and history. Koons tells the story of his work entitled *One Ball Total Equilibrium Tank* (linked here), in which he consulted the Nobel Prize winning Richard Feynman to find a way to suspend a basketball in an aquarium filled with water. Ultimately, he used a salt gradient to have the basketball appear to be in equilibrium (in reality, it just sunk very, very slowly). Koons' notes: "I wanted this to be a metaphysical piece…you could relate to it not just as an external object – a basketball, but it could be like a womb or like a cell. It's pre-birth, but at the same time its after death."

Another biological representation in Koons' work comes from his *Diamond* series (linked here). The piece shows a diamond surrounded by four facets, one of which pierces the diamond. For Koons, that faceted diamond represented an egg: "This is the moment of creation. The posts are a symbol of male energy, once sperm has already entered the egg, and all the facets of life are coming to unfold…" He continues, "Genes and DNA – this is the truest narrative we have of human history." Koons marks the *Diamond* series as having the greatest influence on the direction of his future art.

Neuroscientist Charles Zuker approaches the microphone at the conclusion of Koons' talk to explain the technological aspect of Koons' work. Some of Koons' pieces of art are massive; his balloon dog (linked here) weighs a ton and is 12 feet long, 3.75 feet wide, and 10 feet tall. In true

neuroscience fashion, Dr. Zuker notes, “For us as neuroscientists, the only way a steel balloon would successfully mimic a real balloon is if it generates an internal representation in our brain that matches our experiences and expectations of the real one…I can tell you he has fully succeeded in fooling the brain.”

To fool the brain, and to mimic the “sense of inflatedness that a real balloon has,” Koons designs his pieces via CT scanners and computer tomography that extract the “geometry, topology, and internal volumes” of his intended object. This technology is only one example from an array of devices and modern techniques that Koons employs to create his works of art.

Perhaps it is not apparent from this article that Koons is a controversial artist. Depending on your viewpoint, his banal works are innovative or kitschy, awe-inspiring or superficial, possibly all of the above. His representations of femininity and masculinity are simplistic, to say the least. Yet, I am inclined to agree with Dr. Zuker that Koons’ ability to re-create the feel of an object, inflated far beyond its normal size and made of a foreign material, is impressive. It’s a surprise and delight to see old objects in new light. “Wake up,” the giant blue balloon dog calls, “Pay attention.” The brain can’t help but respond.