PRESENTATION OUTLINE

- 1. Title Slide
 - Introduce ourselves
 - Introduce Arrival
- 2. Plot Edward on story script
 - Storyline
- 3. Intent Sasha
 - Inspirations
 - i. Story of Your Life (1998) by
 - ii. 2001: A Space Odyssey (1968)
 - iii. Contact (1997)
 - Sasha with directorial intent
 - Denis Villeneuve
 - Science-fiction genre with elements of humanity
 - o Language "unites and divides us"
 - Computing
 - Developed language
 - Software to break down and rebuild language
- 4. Conclusion 1: Comms Tech (Data Driven) Mike A.
 - Internat'l relations via Comms
 - o Globalization, Trade, Internat'l Gov't (NATO, EU, UN, etc.)
 - Increased connectivity across nations
- Comms Tech: Film vs. Reality Group Mike S.
 - Speech-to-Text vs. Heptapod Input Visualizer
 - Text-to-Speech vs. 3D Software
 - Natural Language Processors vs. Negative Space Learning Algorithm
 - o SELTs & Real-Time Translator vs. Heptapod Instant Translator
- 6. Comms Tech Influences Today Computer Mike
 - Virtual learning environment/workplace
 - Multi-nat'l Workforce Collaborations
- 7. Conclusion 2: Learning (Philosophy Driven) Michael S.
 - EPISTEMICS & CONSTRUCTIVISM
 - Modern Learning Debate
 - i. It's potential to develop multi-faceted minds
 - Compare spoken languages to differentiated CS languages
- 8. Learning a Language Sasha
 - Sapir-Whorf Hypothesis
 - i. Thinking like an Engineer: Implications for Education System
 - Early Childhood Scientific Education
 - Cultivate a diverse array of learning and thought structures

LOTS OF HELPFUL GRAPHICS

- Full-immersion learning
 - i. Modeled after French immersion programs from 1960s Canada
 - ii. Normally programs split half and half between languages
 - 1. Similar to arrival -> about half English v. half heptapod language
 - iii. Use of body language, visuals, facial expression
 - 1. Teaching based on movement, big gestures
 - iv. Normally 2-3 years required to demonstrate fluency
 - v. Long process to determine efficiency
- 9. Learning a Science Edward
 - Primate Researcher Example
 - i. Observes via a case study of primate researchers
 - 1. Men v. Females
 - 2. Americans v. Japanese
 - An in-depth look into the epistemics of engineering learning philosophy and approach, a philosophy journal
 - Engineering Failures:
 - i. First and Foremost: *Ignorance*
 - 1. Failure to recognise, failure to record as significant
 - ii. Failure of Scope, limited POV
 - Combines well with <u>POV Affects How Science is Done</u>
 - i. Demonstrates that the model fails with generalizations and larger research due to limited scope & POV
- 10. Learning: Film vs. Reality Mike A
 - Dr. Bank's Brain Rewiring vs. Sapir-Whorf Hypothesis
 - o Dr. Bank's Fluencies vs. Timeline of Learning
 - Film closely follows techniques used in full-immersion programs (ex: half v. half language, using gestures to explain words)
- 11. Closing Points & Reiteration All of Us
 - Conclusion 1a)
 - i. Say your conclusion
 - Conclusion 2a)
 - i. Say your conclusion
 - Conclusion 2b)
 - . Say your conclusion
 - Conclusion 2c)
 - i. Say your conclusion
- 12. Questions?
- 13. Sources