1. **Confirmation of my learning-**

**Title Significance**: Title Significance refers to the significance or importance of the title to the story. It provides important information about the story, symbolics etc. The title of this week’s story is “The Algorithms for Love”. The algorithm in my field (Computer Science) is a step-by-step instruction on how to approach a problem that will lead to its solution in the end. It means defining the machine’s behavior towards certain tasks. The title is trying to say that love may not be some random emotion like it’s supposed to be, but rather a predefined instruction someone has implanted in us and we just follow it. The title significance becomes more prominent when Tara was introduced to Brad and he failed to distinguish her as an Artificial Intelligence. From that moment on, the realization that the tests we do to distinguish us from AI are just an illusion, breaks the main character(Elena) and she starts to destroy Tara. She begins to question everything that they do in their lives, Even the very little things. She feels like she can predict everything regarding her loved ones and the people around her and she does too. I understood the title by reading the entire story multiple times. The meaning made its first appearance through Elena, when she says, “What if we are just like Tara?” (Liu, 2004). And then finally made its mark through Elena again when she said that her algorithms are still running, that she scans for the right thing to say (Liu, 2004).

**Four Core SF Concepts of “The Algorithms for Love”**-

1. **Invention:** This is one of the most prominent concepts of the story. The entire outcome and everything that happens in the story is triggered by it. The inventions in “The Algorithms for Love” are Laura, Witty Kimberly, Aimee, and Tara (all toys with superb artificial intelligence). Laura was the first invention by Elena. She was built as a simple yet adaptive interactive doll who could learn new words and mash-up existing words to make up meaningful sentences (Liu, 2004). The doll was extremely popular and put her company on the map. The second invention was Witty Kimberly. An upgrade of Laura. The market research showed that over 20% of the customers for Kimberly were adults, mostly engineers and computer science students (Liu, 2004). It propelled her company to a new height. After this, she created Aimee, just plain Aimee. Born out of grievance from the loss of a baby. The actual Aimee was Elena’s daughter who died just 91 days after being born (Liu, 2004). Elena created the second Aimee to remember her child and her hope was to give the mothers in the same situation as her a way to connect with their lost child. The last invention was Tara. She was the most expensive project of Elena, which took her 4 years to develop and was never finished to her full length. As stated by Elena, “Below the neck she was paralyzed” (Liu, 2004). Her mind was created using the best quantum processors and the best available technologies, and her programming was a combination of highly enhanced database along with the modification of Elena herself (Liu, 2004). This is one of the most prominent because the story moves forward with each invention.
2. **Discovery/revelation**: This is the other most prominent concept of the story. The main discovery moment in “The Algorithms for Love” is when Elena states, “The algorithm was making a mockery of intelligence” (Liu, 2004). Elena had worked on Tara in secret and gave Brad an interaction with her. He couldn’t distinguish her from real intelligence. Which eventually turns out to be a Turing test which she was passing with flying colors. And this made her state the mentioned quote. She discovers that artificial intelligence should not be able to topple natural intelligence. There are other discovery moments in the story. Some of them are- when Elena discovers that she can never bear another child after Aimee as the walls of her womb would never heal (Liu, 2004). And the worst part is, she discovers it after Aimee has already turned to ashes. Another discovery moment is when Elena finds out the simple algorithm followed by the Chinese craftsmen to mass produce the collection of china that the museum now holds as treasures. She states, “. Reach out, pick up the cup in front of you with your left hand, dip the brush, one, two, three strokes, put the cup behind you, rinse and repeat. What a simple algorithm” (Liu, 2004). Another crucial discovery in the story is when Elena states that the Turing test will never prove anything and AI is an illusion (Liu, 2004). Elena mentions the Chinese room and the process of it, we get to know how the answers were never produced through critical thinking, but rather following the steps someone had already provided. This discovery also influences the story’s title and the meaning of it as well.
3. **Exploration**- The story’s setting is a near-future environment where creating the first-ever doll with many technical elements inside was considered decades-old technology. The story also explores the success of the company with each invention and the effect of it on the creator’s life. The story explores the different venues in Elena’s life such as, her first-ever showcase in Hong Kong. The most important exploration is Elena working on Tara in secret. So, even though Brad and Elena were partners in life, Elena decided to keep Tara hidden from him and the rest of the world as well. But she kept on working on generic models for toys as well so that no one gets suspicious of her.
4. **Transformation**- the transformation moment in the story is shown as a mental transformation. Elena is transformed with every incident that takes place in her life. Losing Aimee makes Elena to take the step to create a toy Aimee(AI doll) to try and fill the void left by the loss. But it creates riffs between the couple and their relationship starts to decline. The most crucial transformation moment is when she sees that Tara has passed the Turning test. From that moment on, she never looks at herself and everyone else the same. She feels like everything is predefined, and everyone is just following the same algorithm to pass their days. She finally tells Brad about the Chinese room and breaks the news on Tara. Even though Brad is really excited, Elena knows what she has done and she is not happy about it. She wanted herself to be wrong, that everyone was not following the algorithm, but with each interaction, she kept getting the same answers. Everyone was following the same script for the comfortable routine life and expected others to do the same as well. It finally leads her to destroy the 4 years of hard work named Tara.

**Speculative ‘What if?’ Scenario:** Speculative scenarios try to answer the question of what if anything fictional actually happened. The story’s speculative scenario revolves around the Turing test and the Chinese room (Boily, 2024, slide 5). The scenario of questioning the creator's own intelligence after the creation of AI doll makes up the speculative scenario in “The Algorithms for Love”. Elena creates the AI doll Aimee in the grievance of losing her own child (also called Aimee) in hopes of filling in the void left by the passing child. If does achieve its goal as we later see that other women were holding Aimee as their own child. But Elena begins to question herself, “What if we are just like Tara?” (Liu, 2004). This begins to break Elena as she moves forward, she keeps finding the same script people follow every day to keep a comfortable routine life. She could predict what Brad or the receptionist would say. She keeps hoping that they won’t say what she has predicted, but they do! The Turing test and the Chinese room proves that AI is just an illusion. It never truly understands the meaning of anything and gives out answers based on instructions.

**Quotation Analysis**: “The watchmaker was the watch” (Liu, 2004). This quote relates to the story from the introduction of Tara. The quote’s deeper meaning is that the one who created the watch also follows the same predictable and mechanical course of the watch itself. The watch has seconds, minutes, and hour needles and they move at the same speed and pattern for eternity. The watchmaker, as he continues to work on making more watches, also follow a similar script. He/She will arrive at work, assemble, create, and modify materials (same thing every day) following the same predictable course as the watch. After Tara passes the Turing test, Elena realizes that everyone follows a similar course. They all have their version of the script, but the same predictable course, all day everyday. Elena walks past the reception clenching her teeth that she would say something different, But no! she says exactly what Elena was expecting (Liu, 2004). Same thing also happened outside the Ogden’s cube, who follows a similar expected pattern Elena had known (Liu, 2004). The quote relates to the story by linking the people’s course of everyday action and compare it to something predictable.

**Specialized Terms:**

**Algorithm**- It means a set of rules or step-by-step guide to do something. It relates to the story of how everyone follows the same predictable course to pass their day-to-day life. After Tara was introduced, Elena begins to notice that just like Tara, human beings also follow an algorithm. A pattern that they have gotten used to doing every day.

**The Turing Test**- is a test created by a British Engineer named Alan Turing. The test is for the Artificial Intelligence to prove that they are natural intelligence by convincing the human. If the human fails to distinguish it from natural intelligence, then the AI has passed the test. The story has a direct link to it as Tara (The AI doll) successfully convinces Brad that she is natural (Liu, 2004). Elena goes to Brad and jokingly asks him, “So how long did it take you?” which in response Brad says, “How long did it take me what?” (Liu, 2004). Means that Brad failed to distinguish Tara from natural intelligence and thus, she passed the test.

**The Chinese room**- is a puzzle created by the philosopher John Searle to address the reliance of AI engineers on Turing tests (Liu, 2004). The puzzle states that the subjects may give out meaningful answers based on the instructions that they were provided, but not because they understood the questions or the answers itself! This term is used by Elena to discredit the Turing test, stating that, “the Turing test will never prove anything, and AI is an illusion” (Liu, 2004). Which might in fact be very true, AI has instructions, predefined steps to respond to certain situation and it will never change. It never understands what the question is, and responds to everything as defined by the algorithm.

**The Uncanny Valley**- The term uncanny valley is used to describe the following statement, “The more ‘life-like’ an object (i.e. a robot) appears, the more uncomfortable humans will be with it” (Boily, 2024, slide 8). It relates to the story when Elena becomes uncomfortable with Tara passing the Turing test. Elena states that, “The algorithms made a mockery of intelligence” (Liu, 2004). As time went on, Elena continued to get uncomfortable around her dolls. Frustrated, she takes her screwdrivers and pliers to work and destroys Tara after ripping out the power supply from Tara’s back (Liu, 2004). The ending of the story also gives off this uncomfortable state of Elena as Laura replies that she loves her (Elena) too (Liu, 2004). Elena said I love you to Brad, but he never replied and the sounds echoed throughout the house and activated Laura and she replied in accordance with her algorithm. Clearly, it wasn’t meant for Laura, but she replied anyway, This is the last nail in the coffin moment for Elena with AI!

1. **Cite this week’s story with quotations**-

Elena says, “I want to scream” (Liu, 2004).

1. **Cite this week’s lesson material-**

“Is love just another type of algorithm?” (Boily, 2024, slide 11).

1. **QUESTION AREA**: I don’t have any questions.

References

Liu, K. (2004, July). *The Algorithms for Love*. Ken Liu - Writer. [The Algorithms for Love (kenliu.name)](https://kenliu.name/stories/algorithms/)

Boily, L (2024). *EAC234: ONLINE LESSON : “The Algorithms for Love” by Ken Liu*[PowerPoint slides]. Learn@seneca. <https://learn.senecapolytechnic.ca/ultra/courses/_725725_1/outline>