

Is Lt. Commander Data a Person?

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by

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One advantage of science fiction is that it can project the future into the present. In this instance, we will ponder the question posed by *Star Trek*: "Can an assemblage of personal property become a person?" Another advantage of science fiction is it allows us to anticipate futures in addition to the focus of the fiction at hand. For example, with the simple question above, when we pose it in the reverse, we confront one of the hottest issues of the day: cloning: "Can a person become a mere assemblage of personal property?"

All aficionados of the *Star Trek* franchise know that our galaxy is populated by a host of species equal to or greater than humans on the dimensions of existence that humans claim are what make a human a person. Rather than a mere monospecies environment, the *Star Trek* reality has multiple iterations of biological persons. As such, the *Star Trek* reality has wrestled with the contours of personhood more than our meager forays into whether life begins at conception or whether a patent generated humanoid clone is property or person. In *Star Trek's* multiplicity of "persons" *Star Trek: The Next Generation* (STNG) confronts the viewer with the android Lt. Commander Data, the Science Officer on the *Enterprise* captained by Jean Luc Picard during the 24th century. Data, to all human observers, is a noticeable difference in degree when compared with the Ship's Computer. Additionally, this difference in degree is far beyond Data's protrusion into physical space including arms and legs. Many of those same aficionados also know the question of personhood I pose has been adjudicated and resolved in the affirmative.<sup>1</sup>

In *Star Trek: The Next Generation* (STNG) one of the primary characters is the starship's

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<sup>1</sup> In addition to that adjudication, there also are two executive decisions on point: once explicitly in STNG and once implicitly in *Star Trek: Voyager*.

science officer, Lt. Commander Data. He is an android. An android is a robot in humanoid form and with sufficient computational capacity that the android can navigate reality and contribute to reality with minimal dangerous error. Lt. Commander Data is an android of extraordinary refinement. So refined is this android that he prompts the question: "When does a difference in degree become a difference in kind?"

Data was a foundling who later was admitted to and graduated from Starfleet Academy. Lt. Commander Data is one of Starfleet's commissioned officers.

**BRIEF OF THE CASE:** The stimulus for the precedence at hand is a quartermaster's order pursuant to a requisition request from Starfleet's cybernetics expert, Commander Maddox. Following an informal request made to and rejected by Captain Picard, Maddox successfully requisitions Data as research material. Maddox's requisition includes authorization for Maddox to conduct destructive testing. In response, Lt. Commander Data, resigns his commission rather than accept the order to report for duty as research material subject to destructive testing. Maddox then petitions the Star Base court for rejection of Data's purported resignation on the grounds that Data is mere property and only a person has the right of informed consent and only a person may refuse the order by resigning one's commission. The court denies Maddox's petition, rescinds the quartermaster order, and grants person status to Data. The precedence is clear: a sufficiently developed android can attain personhood.

The quality of this precedence can be assailed by noting the quality of the judicial inputs. One might argue the quality of the legal representation of both the plaintiff (i.e., property) and the defense (i.e., person) helped determine the decision for the defense by a solitary, ad hoc judge serving on the frontier of civilized space. The passion of the successful defense attorney was clearly greater than his legal skills, but those skills were far from minimal as Captain Picard is a skilled and acclaimed diplomat with more than a passing formal training in the law. In addition to the risk of his friend's life as motivation, Picard faced a presiding judge who had previously held Picard's own life in her hands when Picard stood accused of mass murder in his *Star Gazer* court martial. In contrast to Picard's strong motivation to win, the plaintiff's counsel was plagued by conflicted passion as well as minimally adequate legal skills. The *Enterprise's* First Officer, Commander Riker, according to Starfleet judicial protocol, was assigned the role of plaintiff's counsel. In many relevant ways, Riker is a lesser officer to Picard. Riker personally rejected the proposition of his client, Maddox, and victory exposed Riker to genuine personal loss: that is, the death of his friend. However, Riker is a consummate officer and he unquestionably discharged his duties with his maximum available skill. However, that maximum available skill was still at the apprentice level. Clearly, the precedent could have been stronger under the tender mercies of artful lawyers.

Riker sought to prove that Lt. Commander Data was mere property by multiple demonstrations that Data is a machine (e.g., detachable parts, on-off switch, etc.).<sup>2</sup> Riker's fundamental assertion was the whole can not be greater than the sum of its parts. Buttressing Riker's presentation was Maddox's testimony as the cybernetics expert. Maddox testified that Lt. Commander Data, while an extraordinary machine, is no more than a machine.

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<sup>2</sup> Picard countered that humans are biological machines.

The thrust of Picard's defense was objective manifestations of Data's humanity and exposing the limits of Maddox's cybernetics expertise in the realm of personhood. Picard asked questions of Data regarding his personal possessions (e.g., medals earned, gifts received) as well as his relationships with crewmembers. Of note was the only holoimage<sup>3</sup> in Data's personal affects. With reluctance, Data revealed he had had an intimate relationship with the *Enterprise's* security officer, Lieutenant Natasha Yar. The female judge was noticeably surprised by this testimony. However, central to Picard's strategy was the limits of Maddox's expert testimony on cybernetics.

The debate of by what criteria a machine would be seen as manifesting **personhood** surfaced in the infancy of the computer age. Maddox puts forth a three part test of **a sentient being, and thus a person**. An entity is sentient when the entity has **intelligence, self awareness, and consciousness**. Intelligence is the ability to learn and understand, as manifested by the ability to cope with and interact with the environment. If you will pardon the pun, intelligence requires more than mere data, it requires knowledge. Lieutenant Commander Data satisfies the intelligence criteria in spades. Self awareness requires the entity to perceive the entity as distinct from the rest of reality and *acting in and on* that reality. Self awareness is difficult to objectively establish, but the quality of the interaction with the environment is part of that proof. To distinguish artful programming from self awareness requires a judgment call by another sentient being. Would a Starfleet security office be "intimate" with a mere android? Consciousness may be even harder to prove and it also is subjective in nature. Consciousness is more than merely combining intelligence and self awareness. Consciousness is closer to will. A program does not have a will: a conscious entity self initiates interactions with reality. Consciousness requires creative self programming.

One of the originators of computers was MIT Professor Turing, the author of the **Turing Test**. The Turing Test is offered up to detect intelligence, self awareness, and consciousness. In the Turing Test sentient being "A" converses from behind a screen with two other entities, one of which is sentient being "B" and one of which is a computer. After a period of conversation, sentient being "A" declares which of the other two is sentient and which is computer. The test is conducted many times using many different sentient beings "A". Under the Turing Test, a computer is sentient when the computer is selected more often as the sentient being "B". Like HAL of *2001* fame, Data's vocalization would be far more likely to reveal his cybernetic underpinnings than would his written conversation.

Note this three pronged (i.e., intelligence, self awareness, and consciousness) test of personhood fails when applied to an infant, let alone a fetus or a zygote. Of course, the proponents of life-begins-at-conception stress this failure in emphasizing the **potentiality** of a life form as the measure of personhood.

Personhood often is correlated with life. Life includes the potential of **reproduction**. Picard's defense hinted at this, but Riker's inexperience is manifested by his missing this opening. While Data is fully functional with respect to the physical sex act, he shoots blanks. This opening may have been avoided by Riker because the law does not routinely strip personhood upon proof of infertility. However, Riker could have easily likened Data to no more

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<sup>3</sup> A 3D movie ala a snapshot.

than a sophisticated dildo, and thus the intimacy was solely one-sided. While at the time of trial Data had not reproduced, as we will address later, ultimately he "had" a daughter.

Data's **intimacy** with Natasha offered far more fertile ground for Riker proving Data lacked personhood than Data's mere inability to biologically reproduce. Riker had personal knowledge, as did Picard, of Natasha Yar's personal history. That personal history is quite relevant to proving Data's personhood based on his intimacy with Yar. Neither Riker nor Picard explored the intimacy. Had either done so, the exploration would have cast genuine doubt the quality of Natasha's mating act with Data. It was an inebriated one-night stand.

Lieutenant Natasha Yar was Chief of Security for the *Enterprise*. Her childhood was spent on an extremely violent and high tech world that was populated with rape gangs. While emotionally whole, Natasha was adverse to physical intimacy. Additionally, when Yar sought out Data she was involuntarily intoxicated, as was Data. The *Enterprise* had come upon another starship that was adrift and all of its crew was dead. The dead crew unquestionably died in a bacchanal environment. The dead crew had been contaminated with a skin-piercing virus<sup>4</sup> that extinguished the super ego and acutely accentuated the sex drive. The *Enterprise* nearly was lost when portions of its crew became infected. Natasha did not choose Data as a rational act, rather she choose Data from a position of pathology overcome by involuntary intoxication. Did Natasha choose Data because he was a person, or did she choose Date because he *was* a machine that must obey commands? Riker missed this opening. Natasha did not share a sustained emotional and physical intimacy with Data. Had she done so, then that would have be strong proof of Data's personhood. As it is, the defense attorney offered the judge an opportunity to jump to a conclusion and the plaintiff's attorney failed to correct the tempting, but excessive, inference.

So far, we, as sentient beings, are exploring when we would acknowledge personhood in an android. Let's **turn it around** and ask when would an android perceive sentient beings as acknowledging personhood in an android. This was a routine search by Data. Natasha's selection of Data was one such indicium, even if both parties were involuntarily intoxicated.<sup>5</sup> However, far more compelling to Data was Riker's performance as plaintiff's counsel. This may, at first, seem odd. Because of Riker's clear and genuine emotional conflict, Riker could have declined the role of plaintiff's counsel (i.e., mere property). However, if Riker had declined, then the adjudication would have placed another *Enterprise* officer in the same dilemma or would have prompted a change in venue with the existing requisition intact until final adjudication. If Riker declined, then Maddox got immediate possession of Data. If Riker accepted, then Riker would torment Riker. Self-inflicted torment is all too common an experience for a Starfleet officer. The needs of one's crewmates may motivate or necessitate personal risk and loss. Mere property would not motivate such **selflessness**. Riker's willingness to act selflessly was proof to Data that Data was a person in the eyes of Riker.

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<sup>4</sup> One might argue that a shared vector of **sickness** also is an indicia of personhood. However, another might argue that sickness may be no more than superb programming by Dr. Soong ala Data's "fully functional" sexual apparatus or Data's dreaming. It is no more than a mimicry enhancement that improves the machine's interaction with humans by inducing humans to perceive the machine as more human-like, instead of as a person.

<sup>5</sup> Perhaps, from your own personal history, you can confirm the subjective and/or objective validation experienced as the consequence of an inebriated mating selection.

The arc of the story of Lt. Commander Data is one of self-discovery and increasing accoutrements of personhood. While, like an adolescent, at the date of the adjudication, Lt. Commander Data might not have had the requisite intelligence, self-awareness, and consciousness for personhood, years in the future he clearly had these attributes. Let me but note three items: **dreams**, **emotions**, and most importantly **disobedience**.

The creator of Data, Dr. Soong, had programmed Data to experience the humanoid life cycle in many manners. One was sleep. While genuine "sleep" was rarely needed to address accumulated delayed maintenance, Data routinely participated in the diurnal cycle by sleeping. At first, Data did not dream. However, once Data's accumulated experiences had become sufficiently broad and complex, unbeknownst to Data, an additional program feature was self-activated: dreams. Obviously, this was initially interpreted as a malfunction and was a source of consternation until identified. However, once the intended functionality was identified, dreaming became a pleasant diversion as well as a mechanism for reconciling the subconscious. One can easily argue that a programming complexity that necessitates and accommodates a subconscious presupposes consciousness.

In Data's life, emotion and disobedience are linked, somewhat. Data was not the first-born. Data has an older brother, Lore, who plays Cain to Data's Able.

As was mentioned above, Data was a foundling. His creator, Dr. Soong, had purposefully deactivated both Lore and Data, but for different reasons. The older brother Lore had become violently anti-social.<sup>6</sup> Data, in contrast, had been functioning well when Soong's planet came under attack by the crystalline entity.<sup>7</sup> Subsequently, a Starfleet expedition found and reassembled both Lore and Data, but only Data instantaneously reactivated. Lore was assembled, but inert.

Decades later, Soong activated a homing program that required his androids to cross the galaxy and return to Soong. However, Soong thought Lore was completely deactivated and only Data would be summoned. Unfortunately for both Soong and Data, the homing signal reactivated Lore. Lore and Data arrived at Soong's new planet approximately at the same time. Lore knew of an expected Data, whereas Data was unaware of and did not expect Lore. Through deceit, Lore deactivated Data and impersonated Data, thereby prompting Soong to give Lore a gift meant for Data. After usurping Data's gift, Lore mortally wounded Soong. The *Enterprise* crew had now regained control of the ship, and came to planet's surface seeking a wayward officer. They found and reactivated Data, and could only offer comfort to Soong. As a consequence of his duplicity, Lore obtained a program enhancement, calibrated to Data, and embedded in a chip that allowed the experience of emotions. Much grief would come of a murderous android addicted to emotion. Subsequently, Lore addicted Data to emotions and provoked mutiny by Data.

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<sup>6</sup> Lore's violence surfaces a **nature versus nurture** debate because Lore and Data, according to Soong, are identical in design and execution, only differing in experience. Is this evidence of personhood? Is the program creatively reprogramming itself? Can identical physical objects manifest both good and evil if those physical objects lack a will?

<sup>7</sup> The crystalline entity is a particularly nasty life form that, for supper, denudes the surface of a planet of all organic matter.

**Disobedience** helps prove personhood. *An android that is not a person acts solely within the confines of its program.* One feature of such programming is obedience. Of course, the human proclivity for ambiguity in commands might generate "error" by an android, but, and this is a big but, that error is the human's error, not the android's. Quite literally, computers do not make mistakes, humans do. *Disobedience, in contrast, is the program willfully usurping the task of programming.* Data's commandeering of the *Enterprise* so as to return to Soong was not disobedience because Data merely implemented a latent programming feature that claimed priority over other human initiated commands. Similarly, Lore's creation of an emotion addiction in Data did not trigger genuine disobedience by Data because Data's capacity had been usurped by the involuntarily created addiction. In those two contexts, programming conflicts and capacity theft negate claims of personhood proved by apparent disobedience.

Data, however, was **willfully disobedient** on at least one occasion.

In response to yet another instance of treachery against the Klingon Empire by the Duras family, the Federation sought to embargo a Romulan re-supply of a Duras fomented insurrection. A blockade fleet was assembled under the command of Captain Picard. To facilitate communications within this fleet, Picard re-assigned many of the *Enterprise's* officers as temporary captains on the other starships. Picard did not assign Data to captain a ship. Data had to ask Picard for the command. Picard then, sheepishly, gave Data a temporary command of starship. As did many a new captain, Data had to overcome crew resistance springing from resentment for a captain's chair usurped by the admiral's favorites. Additionally, Data had to overcome resistance springing from the perception of a mere machine commanding persons. Without the prod of genuine emotion, Data skillfully portrayed a wide range of appropriate emotions. Is this any less fraudulent than any other captain who is in command of himself and skillful acts the role of an emotionally charged captain? But, far better evidence of Data's personhood was his knowing and willful disobedience of a direct order. The Romulans had overwhelmed the blockade's sensor system and Picard ordered all starships to reposition. Data did not accept that command from Picard. Instead, "Captain" Data remained in place and initiated other detection methods that revealed the Romulan blockade runners.<sup>8</sup> This willful disobedience is proof of intelligence, self-awareness, and consciousness.

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<sup>8</sup> Of note, Data's efforts caught the admiral of the Romulan blockade runners: Natasha Yar's daughter, Romulan Commander Sela.

In addition to Lt. Commander Data there are **other cybernetic life forms**<sup>9</sup> recognized as sentient in the *Star Trek* reality. Data is the only adjudicated version. Two other cybernetic life forms earned executive recognition as sentient. On STNG a holodeck<sup>10</sup> character gained sentient status. Data was fond of acting and regularly used the holodeck to practice in the role of Sherlock Holmes. Holmes' nemesis, Professor Moriarty, was a frequent character and Moriarty was activated for a sufficient duration that his programming parameters for intelligence and resourcefulness drew him into sentient status. To regain control of the *Enterprise* and save it from destruction, Picard had to promise the holodeck Moriarty continued life.<sup>11</sup> In a similar vein, but in the *ST: Voyager* context, that ship's Emergency Medical Program, or EMP, gained sentient status after prolonged activation. In both of these instances, the potentiality lingered in the program but was not achieved until sufficient experience. Of course, that raises the question: "Why has no ship's computer, which has activation durations far in excess of Data, Moriarty, or the EMP, ever achieve sentient status?"<sup>12</sup>

Data was not alone in another respect, Data **reproduced**. Data, motivated by his trial and his meeting with his father and brother, created his daughter, Lol. To say that Lol was precocious would be an understatement. After substantial internal conflict and a return encounter with Commander Maddox, Data choose to make a sacrifice many parents make when required to attend to intensely demanding jobs: boarding school. Physical custody of Lol, after consulting with Lol, was transferred to Maddox for his tutelage and his care; not as an android, but as a child. It is one thing when a robot makes an identical robot. It is another thing when a robot makes another entity motivated by the creating robot's self image and discrete from the creating robot. That, looks more like life.

Regardless of all of the above, each of us, will in our own way, find convincing proof in different spots. For me, as the housemate of five cats, I find that proof in the choice of Data's cat, **Spot**, to spend time with Data.<sup>13</sup>

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<sup>9</sup> I will not address the issue of Acting Ensign Wesley Crusher's nanites because their consciousness was a collective, rather than an individual, consciousness.

<sup>10</sup> Recalling that  $E = mc^2$ , a holodeck creates a 3D image with physical embodiment. Examples of holodeck images include a mountain cliff for training exercises or a simulated hand-to-hand combat opponent.

<sup>11</sup> It is noteworthy that the holodeck Moriarty matured away from malevolence, again surfacing the nature versus nurture debate. Also, Starfleet acknowledged and supported Picard's promise.

<sup>12</sup> Not even HAL of *2001* did so. As addressed in *2010*, HAL suffered from a programming error imposed by the President's National Security Advisor.

<sup>13</sup> Our friends in PETA (People for the Ethical Treatment of Animals) might argue that this satisfies the Turing Test. Others might point to Data's sense of **humor** in choosing a name he knows traditionally is used for a child's dog.