NDC Synth Creation Process

Many citizens in the NDC are manufactured, be they biosynthetic or mechanical in nature. These citizens are collectively known as Synthetics, or Synths. While the processes involved with creating the bodies of new Synths vary, certain processes remain constant.

Synths are created by two parallel processes.

The first process is the creation of the Synth's mind, which develops within a VR space contained within an Anima System host unit. This process takes considerably longer than growing or manufacturing a body and, as such, begins nearly two weeks before the body begins to form.

The second is the production of their body, which takes place in factories for Operators and in cloning chambers for biosynthetics. For organics, their cloning manages all aspects of each body's creation, starting with the initial single cell all the way to a fully formed young adult. Sophisticated Machine Intelligences and Synthetic Intelligences oversee the formation of these bodies, ensuring that no issues exist.

The entire process, including inception, training, and combat/civilian readiness, takes eight weeks and three days.

Phase One - Infancy until Adolescence

Duration: Two Weeks

Organic specific

A single egg is prepared for the Biological Synth. These eggs begin with 'pure' copies of the most desirable Synth genetics. Their genes are then manipulated, randomizing certain elements and creating variation within others. The result will be a unique individual, with their own strengths, weaknesses, and appearance.

This egg will remain in stasis for nearly two weeks.

Operator Specific

In comparison to the genetic randomization of their organic brethren, Operators receive a semi-random selection of personality traits which are selected to allow each Operator to be unique, but still highly motivated towards their work. A starter set of physical traits, such as height, hair/eye/skin color, and general appearance are also generated at this time.

General

A new, infant mind is imprinted into an BW-E-2 Anima System host unit. This new mind is based upon the Synth's determined genetics, if they are an organic, and will be placed into a fully-grown body once the mind has sufficiently matured.

Infancy to adolescence takes place in roughly three days, during which time the new Synths will experience a childhood's worth of education, major life moments, and practical experiences within a VR space dedicated to child development.

A combination of Machine Intelligences and Synthetic Intelligences, or Intsynths, manage most of this process. They act as friends and caretakers in the VR space, patiently guiding the new beings through learning how to use their bodies and how to be a good member of society. These AI companions intentionally choose the forms of various species, genders, and appearances in order to help the children integrate into society in the future.

For the first few "years" of their lives, these are the only people that the child Synth will interact with. Later in life, they will not remember their caregivers specific appearances - only a hazy recollection of being raised by a warm, loving mother figure, a stern, yet compassionate father figure, and a number of teachers that vaguely resembled the senior Cadre members, officers, and NDC leadership that they interact with later in their lives. Interestingly, these hazy recollections seem to be consistent among clones at each cloning facility, leading many Synths to believe that their 'Mother' and 'Father' reside within.

The children are eventually introduced to other developing Synths within the VR space. These groups, called Cohorts, are typically 100 children in size. The Cohort will experience their entire youth together, going through various training scenarios, classrooms focused on hands-on learning, and play. Frequently, a number of these children are developing Intsynths.

During this time, friendships are born, rivalries are established, and the Synths' deep drive to contribute to the whole becomes deeply rooted. The children learn topics including math, science, engineering, gymnastics, proper exercise techniques, literature, and more. Much of this early education is simply imprinted into their minds to save time and allow the children to focus their 'active time' on hands-on learning. By the time of their decanting, they will have earned an education similar to students who graduate from a school for gifted children.

This phase is one of the most carefully monitored and managed stage of the entire process. It is crucial to the NDC that Synths are not simply carbon-copy clones or identical machines, but true individuals who are ready to be equal citizens within their society.

Phase Two - Adolescence until Adulthood

Duration: Two Days

As the children's mental maturity increases, the caretakers monitor their aptitudes. Children who show signs of above-average reaction times and decision making capabilities are slated for the Warrior cadre.

Children who show signs of natural leadership capabilities, advanced thought frameworks, and multitasking capabilities are slated for the Administrator cadre. Other qualities are monitored to help guide the children towards a specific Cadre, though it is not unheard of for the children to choose to pursue a Cadre that was not selected for them.

During this time, members of the various Cadres join the VR sessions and discuss what their Cadre does, what attributes make someone a strong fit for their Cadre, and generally entertain the children by showing their works and telling their stories. These events are as much recruitment as they are entertainment, and it is not uncommon to see a child's previously slated cadre take a strong shift in a new direction.

In addition to the various meet-and-greets, the Synths' educations continue during this phase. They are taught more advanced concepts, practice leadership skills, and begin to hone their use of Geist-like abilities and the Anima System. Interfacing with machines, using a HUD, and other Geist/Anima features will be second nature by the time of their 'birth'.

With Phase Three approaching, the Synth will soon leave the virtual space.

Phase Two Point Five - Body Development

Duration: Two Days, Simultaneous with Phase Two

Organic Specific

While the Synth's mind has been developing through adolescence, their body begins to take form. The Synth's egg is removed from stasis and placed into a cloning vat to begin the growth process.

The vat is filled with a liquid suspension that contains nutrients, nanites, and various growth accelerators. The egg is introduced onto a synthetic womb material, where it will undergo the first few months of natural development at an accelerated pace. Nanites monitor this process, ensuring that any defects or abnormalities are removed and/or dealt with in an appropriate fashion.

During this time, the body's mind begins to be mapped to the Synth's mind within the host unit. By the time the body is ready, the body is fully prepared to accept the Synth's mind via the Anima System. Once the body is fully formed and entering the adult stages of development, a Geist is implanted. During this time, the implant works its way through the body's skin and attaches itself to one of the vertebrae in their neck. The Geist will be fully ready for use when the Synth's mind is transferred, though a mild itching may persist for up to a week after decanting while the implant completes its implantation process.

It takes roughly two days to grow the body from an egg into an adult.

Operator Specific

While the process for constructing Operator bodies is much less involved, it is no less impressive. Specifications for each Operator are derived from the traits randomly assigned to each new mind in phase one.

After specifications are determined, assembly lines go to work on manufacturing the Operators' bodies. Skeletons are assembled first, with artificial musculature and components built around said skeleton. Finally, the nanocellulose skin and hair is applied to each body, and the bodies brought to the Synth facility.

Phase Three - Adulthood

Duration: Two Days (within the cloning facility)

The last phase of development starts with transitioning Synths to their physical bodies. While their first few steps might be shaky and unsure, they quickly find that things feel the same way they always have. Even the various UI-related features they enjoyed within the VR space are largely replicated by their Geist.

They spend these two days becoming more accustomed to their bodies, working their way through gymnastics and combat exercises to do so. They get to experience real food, adjust to a normal passage of time, and enjoy spending time with other members of their Cadre outside of a training scenario or classroom.

The second day of Phase Four ends with the *Selection Ceremony*, a coming-of-age event that sees the Synths formally inducted into the Cadres they will be part of for the rest of their lives. Overseen by representatives of each of the Cadres, the event is similar to Graduation and acknowledges all of the hard work and dedication required for the Synths to have made it to this point. Later, when the Synths have left the facility, they will discover that the Ceremony is a common thread among Synths and non-Synths in the NDC.

Phase Four - Basic Training

Duration: Seven Weeks

Now sufficiently acclimated to the real world, Synths are taken to the NDC's basic training facilities. There they are joined by other prospects for the training that will prepare them to join the military or serve as citizen soldiers in the future. The Synths' new Cadres also stay in touch, providing encouragement, advice, and supplemental learning materials.

The first two weeks of training is focused on education. The Synths discover how their social structures, hierarchies, and social norms fit into the NDC's military and Cadres. They are taught all of the basic information required to operate as a soldier and citizen within the NDC, including physics, military ranks, and strategies.

The next three weeks run the Synths through a variety of physical fitness and team-building exercises.

Many of these take the form of friendly, yet competitive joint training competitions. A significant portion of these exercises are designed to hone their skills by supplementing their imprinted memories with 'real world' experiences.

The following, and final, two weeks of basic are primarily firearms and tactics training. Synths learn how to use weapons in real life scenarios, the differences between using their bodies and that of various machines through the Geist and Anima System, and how to efficiently deal with difficult enemies or scenarios as part of a group.

Phase Five - A Choice

Duration: One Day

The final stage of the Synths' development is a simple one. After a life of extensive training, socialization, and education, the NDC offers the Synths a choice. They can choose to join the military to protect and serve the NDC's peoples and interests, or they can choose to join the civilian workforce, to ensure the prosperity of the NDC's people and economy. Both are viewed as equally important.

To assist in the decision making process, senior representatives of the various Cadres are on hand to ask questions and welcome new members into their ranks.

For Synths who choose to pursue a military career, they will continue their education within a segment of their Cadre dedicated to the New Dusk Conclave's military. There, they start the next phase of their education as apprentices, and will spend the next months learning the ins-and-outs of their profession.

For those that choose the civilian path, their next steps are more uncertain. Their Cadre will attempt to find them work within the civilian sector based on various job requests. They will still, typically, work as apprentices for some time, though in a much less structured way. If the Synth wishes to pursue higher education, enrollment into the NDC's universities is prepared and they will gain admittance as soon as there is space for them.

OOC Notes

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