The Oracle Paths Volume 3: The Oracle Cities

Chapter 210 - We are not in a Webnovel

A heavy silence settled in the room after this long tirade. Kyle was nothing but regrets, while Jake, Sarah and Will displayed the utmost calm, as if there was nothing wrong with this speech.

'I have a question for you. ' Jake said, uncrossing his arms.

'Please ask.'

Jake pondered his words for a brief moment before voicing his doubts. Clearing his throat, he started,

'Even if most Players merge with the bloodlines obtained in their Ordeals directly, what's stopping you from taking a blood sample from them afterwards? Even if some refuse, it should be largely feasible during routine check-ups for soldiers. '

All eyes that were pointed at Jake turned back to the giant behind his desk. Will was about to ask the same question, and he had to adjust his glasses to hide his smirk.

'Heh heh, that's a very good question. ' Jay Parks conceded with a relaxed expression. 'We could do that indeed. And we do. But it's not enough. The Oracle System's assimilation of bloodline somehow bears its mark. The result does work and is generally stable and harmonious, but it's not perfect.

'In genetics, each gene has multiple variations called alleles. For example, if you take the eye colour gene, there is an allele for blue or green eyes. Since chromosomes work in pairs, we have two alleles for each gene, one from each parent. It is the mixture of the two that determines the final colour.

'When the Oracle System performs the bloodline fusion, the original alleles are usually overwritten in favor of the bloodline alleles, regardless of whether that matters or not. For example, the blue eye allele, which is normally recessive, will be replaced by the bloodline allele if it gives a particular eye colour.

'Some bloodlines also have drawbacks that will be passed on during the transgenic operation. As long as the genetics between the two species are close, it is possible to deduce without too much trouble the consequences of each gene and allele.

'The thing is that you have to understand that a 1% difference between two genomes can lead to two very different species. For example, chimpanzees are 98% similar to us. Even if we sequence the genome of a Player that has a new bloodline, it takes years of study and testing to deduce the implications, effects and interactions between each gene.Add to that the epigenetics and the accompanying aetheric code and it's beyond our area of expertise.'

Jake was able to roughly keep up thanks to his high school memories, but Kyle, Tim and the two princesses had already dropped out. The giant would have spoken in Chinese that it would have been the same result.

'So if I understand correctly, you'd rather study a pure sample because at least you're sure the Oracle didn't delete or alter certain genes to make them compatible with us. ' Sarah checked to make sure she fully understood. ' That's right. ' The geneticist concurred. ' But not only that. The most important thing is the notion of epigenetics and aetheric code. Epigenetics is the fact that most of our genes are normally non-coding. For example, we have in our genome the genes that allow lizards to regenerate their tails or limbs and yet we are unable to do so. These are remnants of our evolution. Depending on our mental state, our environment, and our actions, certain inactive genes can be activated and vice versa. This happens, for example, in astronauts who stay in space for extended periods of time, but similar differences can be observed between a happy and a sad person. This is a vast area of research that has not yet been fully explored.

'Epigenetics becomes an even thornier subject when you add the Aetheric code and Aether in general. We're talking about portions of blood, but to transfer the genome from a bloodline you only need one cell.However, if only one cell was used, the result would not be so impressive.

'In the case of the Myrmidians, for example, the only distinguishing features are olive-coloured skin, golden hair and eyes. Nothing that human genetics cannot explain. Other genes influence the hormonal and neurochemical state, but again, nothing we can't understand. There are many other genes that we don't know about, of course, but most of the effects are based on interaction with the Aetheric code. This Aetheric code, like your stats, can become stronger. Aether Runes become more vigorous and energetic, and this is how some Myrmidians become more powerful.

'When they reach a certain energy level, certain genes or Aether Runes that were inactive are activated in turn, and they awaken new abilities as if the bloodline has become purer. The truth is, the 'purity' hasn't changed. A bloodline cannot become purer by some miracle. We are not in a manga or a .'

Jake had finally figured out what had been bothering him since the beginning of his first Ordeal. The Myrmidian blood they were given during their training was diluted with varying degrees of effect, but the truth was that except for Lucia, they were all missing a good part of the Myrmid hero's genes.

First generation descendants only had 50% of the genes, while second generation descendants could have 0-100% of the original genes.Over the long term, the genes had spread through the population, becoming more and more diluted, until it became almost impossible to see a pure Myrmidian being born.

Lucia's case was actually a miracle. Her genome was not 100% Myrmidian, since her father was Eltarian, but the mixture had produced a unique bloodline as powerful as the original one.

The effect of the blood they were made to consume was therefore due to the amount of Aether contained in the runes of the Aetheric code, and not to the genome contained in the blood. This also meant that two Myrmidians with 10% pure blood could have very different genes in practice and therefore different abilities.

With 20% pure blood, a Myrmidian would have additional genes, but not necessarily the same as a person who was only 10% Myrmidian. The difference in potency was due to the amount of Aether associated.

The consequence was that buying an impure bloodline from the Oracle Store was totally useless, since the genes obtained would be incomplete and random. If a bloodline, for example, had three genes: One giving red eyes, another giving big ears and a third giving fire-breathing in conjunction with the Aetheric Code, then getting a 66% pure bloodline could theoretically give only red eyes and big ears to the person receiving the transfer. In other words, a total failure!

' Now I suppose the notion of portioning makes sense. 'Jake reasoned aloud so that everyone could understand. 'Even though I only need a drop of blood to get the Kintharian and Myrmidian bloodline, the more blood I have, the more Aether contained inside can be transferred to strengthen my Aetheric Code and therefore my bloodline. Thus, with a liter of blood, I do not have ten portions, but only one.

'In this case... each portion of blood that I yield to you will effectively make my bloodline weaker. I appreciate the honesty, but it will be difficult to convince me. If you want a whole portion, it's because you eventually want to give it to someone else, right?'

Jay Parks chuckled embarrassingly.

'Well, I'd be lying if I said no. Once the study is complete, we'll be able to transfer the genes that we're interested in, or at least understand, to many soldiers, but the Aether inside will only benefit a few people.

'Without the Aether Code, the bloodline is virtually useless. The Aether Code is transferred, even with a cell, but not the Aether contained in those runes. So the soldiers who only get the genes transferred will lag far behind those who have assimilated a full portion of blood.

' Their bloodline will then be pure, but at its weakest. Bloodlines are classified in the Mirror Universe according to three criteria: purity, grade and level. Grade refers to the potency of the bloodline. You can even find a ranking in the Oracle Store listing all known bloodlines, but it costs a fortune. Even using all the Aether of New Earth and its inhabitants we couldn't buy this information.

Lastly, the Level, simply refers to the advancement of the bloodline.
Each bloodline gets stronger as the Aether runes solidify from absorbing the Aether. This is a passive and long process, but it is possible to speed it up with training or by using a special Aether
Encoding called Black Aether.'

Seeing Jake and Sarah's hesitant and unconvinced expressions, the geneticist decided that a demonstration was better than a big speech. It would also be a good opportunity to show them what New Earth was capable of.