





## Z<sub>t</sub> and the Shadow-spawn

by David Dodkins

 $S_0$ , you wish to hear the tale of  $Z_t$  and the shadow-spawn? Well, here it is, young one.

Once, long ago, when the mighty King Agamemnon and his brother Menelaus and all the great heroes of old, were away over the Aegean besieging the walls of Troy, there lived a young prince of Corinth by the name of  $Z_t$ .

When his father, the King of Corinth, sailed with the rest of the Greeks to fulfil their oath to Menelaus,  $Z_t$  was still just a boy, far too young to accompany the warriors. But that was seven years ago, and the warriors had not yet returned.  $Z_t$  had been forced to assume ever greater responsibility for the running of the kingdom, a task he felt he was ill-equipped to perform, for he had never faced battle nor done any deed worthy of a ballad. In hushed voices, the noble houses called him White Noise. Even on the amulet that his mother gave him on her deathbed, there was written: " $Z_t = a_t$ ".

As the seventh year of the Trojan War drew to an end, Pallas Athena turned her gaze to Corinth and took pity on the inexperienced  $Z_{t}$ , who would have to be king soon, for she knew that his father would

not return from the war. She resolved to prepare him for what was to come. She wrapped herself in her grey cloak, and thus, hidden from mortal eyes, she entered the palace of Corinth at midnight and cut off a lock of  $Z_t$ 's hair. She weaved the lock into the shape of a man, blew life into it, and unleashed it on the city. She had created a shadow-spawn - beasts that look like men yet have no soul.

By dawn, the monster had attacked and killed an entire patrol of watchmen, leaving only a single man alive to report to the captain of the guard. When  $Z_t$  was informed of the monster running loose in the city, he was afraid, for he knew not what to do. He had never dealt with a beast of legend before; he doubted his judgement and abilities. So, Pallas Athena of the grey eyes garbed herself as one of the servants in the palace and thus approached  $Z_t$  in human form.

"My lord," she said, "you are troubled by this beast in the city. Dread it not, but go alone to the acropolis, the city's highest point, when it is deserted, and the sun is at its highest. Take nothing with you but a flask of wine and leg of lamb, and when you are certain that you are alone, build an altar and make an offering of the wine and mutton. Then pray to Helios, the sun god protector of Corinth, for guidance. You will surely be answered."

 $Z_t$  thought this to be good advice and did as Athena bade him. He climbed to the acropolis, built an altar, offered the wine and lamb, and prayed for guidance. The moment he had finished, the monster stepped out of the shadows.  $Z_t$  realised he had made a grave mistake in coming alone and unarmed to the deserted acropolis while a monster was loose in the city. The beast approached  $Z_t$  and cut his cheek with his long claws.

In a guttural voice, he said, "Had you but thought to bring a sword with you, you would have slain me now. Instead, more of your citizens will die because of your mistakes. This scar will remind you of your error". And then he was gone.

On his way back to the palace, Z<sub>t</sub> was hard at work thinking about what had happened: "Why did he not kill me? Why did I not take a sword with me? But I must learn from this. When I am king one day,

my mistakes will cost even more lives. I must learn from each error I make so I do not repeat them."

As he thought about these things, his amulet grew hot against his chest. Glancing at it, he saw that the writing on the amulet had magically changed: in the place of " $Z_t = a_t$ " there now stood " $Z_t = a_t - \theta a_{(t-1)}$ " - the ancient formula used by the cult of the Moving Average Process.

"Yes" Zt thought, "I am a function of my past errors."

When he arrived at the palace, Pallas Athena approached him in the guise of the captain of the guard. "So, my lord, more men have died because of your mistakes."

"Yes, captain, it is true," replied  $Z_t$ , "but though I regret my errors, I am no longer afraid of them. They are a part of me."

"Good. A future king needs to be able to admit his mistakes, learn from them, and correct them. You will have one more chance to defeat the beast."

As Athena thus spoke, she cast off her guise so that  $Z_t$  knew he was in the presence of an Olympian. "Tonight, you must go to the tomb of your forebears at moonrise when the huntress Artemis takes to the sky in her silver chariot. Take your sword and your helm and face the beast. Tonight, the future of the House of Corinth is decided, for your father fell in combat this morning." With a clap of thunder, she was gone from  $Z_t$ 's sight.

Heeding the Olympian's advice,  $Z_t$  went to his ancestors' tomb alone. The beast was waiting for him there. Mockingly, it called out to  $Z_t$ .

"So you have come to die here among your dead? Put away your sword. You do not have your father's skill. Do not attempt to ensnare me with words, for you have neither your mother's silver tongue nor her magic. You are not worthy of your ancestors."

"Peace, demon, 'tis all true what you have said. I have neither my father's skill with a blade nor my mother's power with words, but their memory lives in me yet. My father died on foreign soil to protect our people. His bravery will overcome my fear. My mother may have had powerful magic, but the most powerful magic of all is the power of love. My love for our people will overcome your dark arts. I am not my ancestors, but I am still their blood. And I know your name now, demon."

Zt did not need to look at his amulet to know that it now showed the formula of the ancient sect of the ARMA process, the demon-hunters: " $Z_t = \phi Z_{(t-I)} + a_t - \theta_{(t-I)}$ ". He now knew that though he was not his parents, he was still a function of those that came before.

Sheathing his sword, Z<sub>t</sub> approached the monster.

"I name you: blood of my blood, flesh of my flesh, shadow of my soul. You are an ARIMA process. You are I. I am you. You are the destruction I would have wrought in my ignorance. You are who I was, but now I am differenced from you. I have seen you. I have seen the cost of my errors. I have seen the gifts of my ancestors. I am not you anymore; I am differenced."

With these words,  $Z_t$  took hold of the shadow-spawn, and it dissolved in his arms.

Legend says that it imparted these final words to  $Z_t$ : "Finally, you are ready to be king. Remember me. Remember what will happen if you do not rise to the challenges that await you. You are stronger than you believe."

