Who in Japan has never seen a Ginkgo Biloba? The tree with the fan shaped leaves. Yes, the very leaf that is the Tokyo city emblem. Sometimes the leaves are partially split in the centre giving them a resemblance to butterfly wings (2 lobes). But be aware, the leaves are not like those of most trees we are used to seeing. The leaves are a build-up of a large number of needles merging together side-by-side in a leaf-like shape. Indeed, the ginkgo is not a tree like most others.

Within the group of gymnosperms, ginkgo is described as a kind on its own. In evolutionary terms, gymnosperms evolved into the angiosperms: plants and trees with flowers. The ginkgo however, is in evolutionary terms, on the more primitive side of the gymnosperms. Together with the cicada, ginkgo is more in between the ferns and the conifers. In the part of Western Europe I come from, ginkgo is not native and is still quite rare. The two magnificent old species known and still surviving are one in Utrecht in the Netherlands, another near Hasselt in Belgium, both dating back to early 18th century and was first introduced in Europe.

Peter Crane is a professor at the School of Forestry and Environmental Studies at Yale University. He is also former director of the Royal Botanic Gardens of Kew U.K. He dedicates a very pleasantly reading book entirely to the "Ginkgo: the tree that time forgot". In the first couple of chapters he describes the tree with its leaves, shoots and seeds. The young tree is rather straight and thin with short spiky horizontal branches. It turns out that the younger tree has more bi-lobed leaves, and that these leaves are mainly on the vertical growing main shoots. The leaves of the shorter and spiky horizontal branches are more the fan shaped leaves. Ginkgo trees have separate genders, the male trees providing the pollen and the female trees the fruits and seeds. It takes about 30 years before the trees start to produce seeds, until then it not possible to know whether you have a male or female tree. But once a female tree starts giving seeds, you will definitely know. The white velvety round fruits have a particular rancid smell which resembles the smell of vomit. Once adult, the trees grow wider and get a more developed crown. In favourable conditions they become a few hundred years old. They need a lot of water and grow best near rivers.

In the following chapters Peter Crane goes back into time looking for evidence of ginkgo in the fossil records. Ginkgo-like ancestors are found as long ago as 300 million years back (Carboniferous). This is twice as long ago as the flowering plants which evolved only some 150 million years ago. Evidence for ginkgo is found on all continents, both in the northern as well as in the southern hemisphere. Ginkgo-like plants survived the Permian, a period with hot climates, acid rains and foul smelling air due to numerous and massive volcanic eruptions. Later the ginkgo survived the Cretaceous, another geologically hazardous period during which the dinosaurs disappeared. Further fossil records indicate that the ginkgo moved north- and southward in relation with the climatic variations of the ice-ages and the interglacial periods. During some period they would grow near to the poles, not caring about dark or light periods lasting for months. So the question is how does it come that suddenly the ginkgo becomes very rare, almost extinct, surviving probably only in China? A hypothesis is that even though the plants are strong and can survive well under hardship, maybe the seeds do not get dispersed any more the way they used to. Maybe in the past there was an animal that had a particular fondness for the stinky fruits and that this animal might have dispersed the seeds in the same way as birds disperse berry seeds with their droppings. And maybe this animal has become extinct. Without the seed getting dispersed the tree cannot migrate in line with the climatic evolution.

In further chapters Peter Crane investigates on the particular places in China where wild ginkgo still grows naturally. He traces the recent history of how the ginkgo came to Japan and Korea, probably with trade and cultural exchange, more particularly the ginkgo might have followed Buddhism. Ginkgo was, and is still often found nearby temples, and is therefore sometimes also called “Chinese pagoda tree”. It is only after the 16th century that the tree is mentioned in Europe by descriptions of Jesuit missionaries and traders. Extensive descriptions were made by Siebold (Flora Japonica) and Kaempfer (Amoenitatum Exoticarum). One of the early still surviving specimens in Europe is a tree planted in the Royal Botanic Garden of Kew in 1761.

Perhaps the most curious thing about Kaempfer’s introduction of ginkgo to the West is the word itself. The Chinese name for ginkgo, then as now, is “silver apricot”. In older Chinese documents the tree is also called “duck’s foot” in similarity to the shape of the leaves. Kaempfer also mentions the words his Japanese translators were using: “Gin an” and “Itsuo”. Research by Shihomi and Terumitsu Hori suggests that in the Kagaku-shi, a dictionary published between 1617 and 1619, the pronunciation is given as “icho” and “ginkyo”, while in the Kinno Zui, published in 1666, the pronunciation is given as “gin‘nan” and “ginkyo”. Some have thought that ginkgo was a misspelling of ginkyo, but the Horis think that the mysterious second g is a legacy of Kaempfer’s roots in northern Germany, where in the local dialect the sound of j was often written as g.

Further aspects in the book are on the use of ginkgo. The wood is very regular and not easy to split when it dries, therefore it was traditionally often used to make lacquer-ware. Another use: inside the smelly fruit is a hard shell which contains the tasty seed. Of course there is extensive mention of this delicacy, though some people may be allergic for some of the substances this grain contains. Today ginkgo trees are grown in orchards, a tall male tree towering over a multitude of smaller female trees. In the West the beneficial particularities of ginkgo are more associated with the leaves. Tea brewed from the ginkgo leaves is reputed to be good for memory, absentmindedness and lack of energy. Beyond the pharmacological aspects, ginkgo is now most known as an ornamental tree. Because of its particular resistance in difficult environments, ginkgo is easy to survive in cities. All over the world ginkgo is now lining avenues and decorating squares and parks. A minor problem is the long time required for the leaves to decompose. Furthermore, because of the smelly fruits, the female trees are avoided in cities.

Peter Crane points out that in a certain way the ginkgo story is one of survival. Now ginkgo is widely spread around the world and will be able to survive in case of local bad luck (fire, storm, disease). But how many other rare species are not so lucky? In many parts of the world, religions are central to the way that people interact with other people and with the environment. In some religions, such as in Christianity, ideas about the natural world are peripheral, leading to an inward centred view that too often turns its back on the natural world.