

# Trouble Brewing in Sake's Golden Age

By Philip Harper

*Once upon a time, a swallow built its nest in an old tree with lots of hollows, nooks and crannies. Every day, it would fly off to search for food, and bring rice grains back to the nest to eat. Occasionally a few leftovers would drop into a cleft in the tree: sometimes the bird would eat what had collected there. Rain fell on the nest and the rice grains dropped by the swallow and the mixture fermented. When the swallow pecked away at the mass in the hollow, it soon became drunk, and fell right off the tree. People thought it was very strange, that this swallow, which was usually flying cheerfully about, had suddenly fallen off its perch. When they went to investigate, they found the strange mixture in the hollow, and so discovered the secret of how to make sake.*

This story, well-known by the charming title "The Swallow Sake Shop," offers an echo or an ancient folk memory of the origin of brewing alcohol from rice in Japan. Another famous legend relates how monkeys stuffed wild fruits into clefts on trees or basins in rocks and became inebriated by the results of the natural fermentation that took place. If you should be unromantic enough to consult the authorities, you will be disillusioned; both these stories are deemed apocryphal. Yet they shed an interesting light on the very ancient history of the brewing of alcohol in Japan. Sake as we know it, of course, is made from rice, but life is much simpler if one wishes to make merry on a drink made from fruit. The two key ingredients for alcoholic fermentation are yeast, and sugar for it to ferment. From this point of view, the legend of *saruzake* ("monkey sake") is more plausible. Fruits, unlike rice grains, naturally contain sugar (the Japanese word for

glucose actually translates literally as "grape sugar"). As for yeasts, well, they exist universally in the natural world — on the skins of grapes and wild fruits, for example. To go by our legendary evidence, it would seem probable that, at some stage, Japanese people made alcoholic drinks from both rice and fruits. Yet, although there is a modest wine-making industry in Japan today, it is a very recent story (a little over 100 years old) compared to the millennial saga of sake, as we shall see. So are our monkeys a pure figment of the folk imagination? Well, I am most happy to be able to offer a little background for such a pleasant story. The oldest evidence for the production of consumption and alcohol in Japan dates back to the Jomon Period (10,000 B.C. — 300 B.C.). It exists in the form of pottery containers excavated in Nagano Prefecture (host to the Winter Olympics in 1996). A number of what appear to be pottery drinking vessels would, alone, be slim evidence. Yet a larger container was found to contain the seeds of wild grapes — similar to those used, it is agreeable to imagine, by our simian benefactors. So it seems fairly certain that, at this distant stage, the human inhabitants of Japan were making alcoholic drinks of a kind from wild fruits, whatever the source of their inspiration may have been.

Yet, at some point, this art was lost or superseded by an ancestor of modern sake, "a liquor," as our dictionaries inform us, "fermented from rice." Archaeologists tell us that the techniques of wet rice agriculture crossed to Japan from the Asian continent in the Yayoi Period (300B.C. — 300A.D.). Kato Hyakuichi, in his book *Nihon no Sake 5000 Nen* (5000 Years of Japanese Sake), maintains

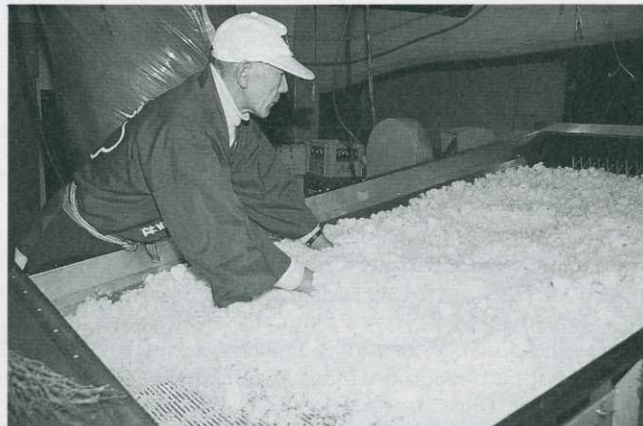
that when such techniques arrived, they almost certainly did not come discretely, but as part of a cultural package, including the skills of constructing necessary tools, and, probably, of making a fermented drink from the rice produced. Due to the lack of conclusive evidence, the jury is out on the matter. However, by the time a Chinese observer found the Japanese making merry in the third century, several centuries had already passed since the introduction of rice agriculture, with all its vast consequences for the subsequent history and culture of the land then known as Wa. The famous Chinese text in question mentions the custom of singing, dancing and drinking at funerals; it seems highly likely that these wakes were cheered by the agency of a drink made from rice. At any rate, the matter is beyond doubt by the seventh century, when an organ specifically responsible for the brewing of sake — from rice, naturally — was already an established feature of the Imperial Palace, then situated in what is now Nara Prefecture. In the rarefied atmosphere of the court of the Nara and Heian periods, brewing techniques were highly ritualized, and profoundly linked with the sacred procedures or Shinto. Indeed, the word for sake at the time, *miki*, is written with characters meaning a *kami* (Shinto divinity), and the familiar character 酒 (sake). The most important document of the period, the *Engishiki*, is an enormously detailed catalog of the practical and ritual procedures for all occasions of state, in many of which sake, brewed by a number of different methods in a variety of styles, played a major part.

From this role as a factor in sacred proceedings, we find that sake had, by the Middle Ages, become the object



of profane commerce (although its divine associations have not disappeared even today). Rather surprisingly, it was great temples which were responsible for this trend. The reasons for this shift, from brewing by the court to brewing by temples, evaded me for years. That religious institutions should do a roaring trade in booze, of all things, puzzled me considerably. Then, recently, I visited Shoryaku-ji, a temple in Nara, and the splendid book published to celebrate the temple's millennium in 1992 answered many of my questions. First, I read that temples had originally been prohibited from making sake on religious grounds. In the 10th century, this prohibition was relaxed since it was held necessary to provide sake to be offered to the kami of the site — Shinto, not Buddhist divinities, in a peculiarly Japanese twist. When Shoryaku-ji began selling its sake is not entirely clear, but a document dated 1444 already refers to its very considerable profits. The Nara temples of the time were responsible for a great number of technical advances, many crucial to today's brewing methods. The record of the practice of pasteurization (predating its discovery in Europe by centuries) is a famous example. Shoryaku-ji itself is famous for its pioneering of the making of *moto* (a yeast starter), and for making clear sake — the first true ancestor of modern sake. The making of *moto* and many other features of contemporary sake brewing were perfected in almost all aspects in the isolated Japan of the Edo Period.

So, when Commodore Perry forced opened the doors to let Westerners see Japan in 1865, after its self-imposed isolation of more than 200 years, what was this sake which the visitors found? That they found it intriguing and rather mysterious is clear. Basil Chamberlain Hall, in his turn-of-the-



The process of mixing koji and rice by hand is the traditional way of fermentation.

century book, *Japanese Things*, astutely sidesteps the common pitfall by observing that “no suitable English term has yet been found for this favorite intoxicant” Less canny observers try vainly to fit it into a familiar niche, calling it rice wine, or rice beer. A German writer even refers to it as *Reisschnapps*: The pale yellow color perhaps led people to think of wine, more technical minds observed it to be made from a grain, hence the suggestion that it be classed as a beer. In fact, sake has its own unique pattern of fermentation. Fermentable sugars, which the brewer of beer obtains by malting barley, are produced in sake making by the action of a mould (*koji*, in Japanese), which converts starch in the rice grain into sugars. The use of moulds in brewing, though unfamiliar to western visitors, is common in South-east Asia. However, the Japanese method of propagating the mould on steamed white rice is totally unique to this country. (Elsewhere, moulds are grown on — literally — raw materials.) The idiosyncratic and highly complex brewing technique developed in isolation by Japan's sake makers can produce a drink with a hefty 20% of alcohol by volume — and this by fermentation alone, without recourse to fortification (which raises the level of alcohol in the case of sherry and port) or

distillation — despite the suspicions of the German writer quoted above.

In the Meiji Period, when all manner of innovations, from pillar-boxes and ball-room dancing to constitutional law and railways, changed the face of Japan, well-meaning foreigners came up with any number of suggestions for “improving” the sake-brewing process. Most came to nothing, since they failed to grasp the extraordinarily complex subtleties of the Japanese brewing method, to which ideas based on

Western brewing science were inadequate or irrelevant.

At the same time, however, Western science began the process of showing how superbly Japanese brewers without any knowledge of yeast controlled the micro-organisms which drive fermentation. When pure sake yeast strains became widely used in the early decades of this century, it removed one of the largest risks of Edo-period-brewing — that of infection by inferior yeast strains. Production-line techniques were also important in modernization, which has of course been a major feature of the industry in this century.

Japan's rush to close the gap with the West by studying medicine, science, colonialism and other features of Western civilization presents an awesome example of flexibility and absorption, combined with great rigidity of will. Yet all the perceived benefits of progress were placed in a grimmer light by the disastrous consequences of the Pacific War. The whole of Japanese society suffered tremendous trauma. In those terrible years, starvation was a real danger, and the fact that sake is made from the grain that is also the staple food made for acute shortages (a problem already noted by the very first European commentator on sake, the Jesuit Francis Xavier, writing in 1552). A method of brewing was



developed with the happy effect of producing around three times as much sake from the same quantity of rice. This was achieved by fortifying and fermenting the mash with rectified alcohol. Although the addition of alcohol as a way of reducing the chance of bacterial infection had been known for several hundred years by this stage, it now suddenly had become essentially universal, and on a huge scale.

Finally, as all the world knows, the Bombs were dropped, Japan surrendered, the war ended, and the Emperor became human (to everyone except a few right-wingers). The Japanese people set about rebuilding, and with all the reserves of will and perseverance which they had served them so well and so ill since the Meiji Period, resurrected an economic phoenix from the ashes of their ill-fated colonialist past. But what, you will ask, of sake? Here, if I may, I would like to fast-forward to 1988, a date of no importance whatever in the history of sake, but which does happen to be the year in which your humble servant arrived, and tasted sake for the first time.

In the year of Our Lord 1988, then, I arrived as an English teacher. My first sake experience was of hot sake, as served at a get-together with my Japanese colleagues. This, remember, is 10 years ago, when Japan was blowing its economy up into a bubble of truly historic proportions. So what kind of sake was the brewing industry serving to exploit all this readily available (albeit, in retrospect, fictional) wealth? What I was drinking — what, with the aid of a hangover the size of the contemporary U.S.A. National Debt, was to impress on me the wisdom of forbearance — was exactly the kind of sake which had been developed to give the thirsty Japanese something — anything — to drink in that desperate period when There Were No Things, as Japanese people above a certain age are prone to say. *Sanbaizojoshu* the jaw-cracking definition under Tax Law of this type of sake means, roughly,

“sake brewed and increased three times.” (I usually say “triple sake” in English.) In a Japan which had grown almost obscenely wealthy, the sake industry was still relying for its mainstay on a style of brewing with its roots in hardship and poverty.

After my first couple of epic hangovers, I had decided to stick to Japanese beer, which was painless if dull, and at least better than Budweiser. Here, fate intervened in the unlikely form of a Japanese fellow with a passion for blues and sake. If I remember correctly, we became friends on the strength of conversations about The Blues Brothers and Peter-Green-era Fleetwood Mac (which is nothing like the Fleetwood Mac you’re thinking of if you only know life after Rumours). This in itself is a minor miracle, since his English vocabulary and my Japanese together could have been written on a beermat quite comfortably. To cut a long story short, he dragged me off to drink “real sake.” I found this to mean *chilled* sake (this is ten years ago, remember), and sake with a glorious range of flavors, from the obviously ricey to the startlingly fruity. To a cut a still-ongoing story still shorter, I was hooked: in 1991, I became a member of Ume no Yado, a small, traditional brewery in Nara prefecture, where I am still a member of the team as I write.

But, to return to the point, what of sake? When I started drinking it, I was frequently told that sake was better than it had ever been. Certainly, there was plenty of evidence to suggest it. After decades of dominance by triple sake, higher grades — particularly *ginjo* sake, a deluxe grade which was for long brewed only for entry in trade contests (which, in itself, tells one a great deal about the mindset of the industry) were becoming increasingly available to discerning drinkers. In the next breath, though, I almost inevitably heard how the traditional guilds of craftsmen brewers were on the verge of extinction, since young people in

the rural areas from which the guilds stem were seeking other forms of employment. The sense of crisis was one factor which led me to embark on such a preposterous career. Now, ten years on, the inexorable decline (particularly at the lower end of the market) continues. That an industry which misreads the market should undergo some paring down is inevitable. Older colleagues in the industry tell me that, in the postwar years, “we could sell as much as we could make,” and critics point to the industry’s tendency to pursue quantity rather than quality as being at the root of its current problems. I might be sanguine if only companies brewing rotgut were going out of business, but I am heartily sick of seeing much-loved and illustrious sake brands lost for ever. When I arrived in Japan, there were approximately 2000 sake breweries, each with a unique combination of microscopic fauna, local water and technical traditions. If we at Ume no Yado were to stop brewing, our unique taste, with its long history, would be gone forever. And that, sadly, is exactly what has happened to far too many breweries, the number of which is now below 1700, and looks set to drop to around half that number. Now, with Japan in the grid of the worst recession since the war, the industry is fighting an uphill battle to improve the middle-aged image sake is encumbered with. The bitterest irony is that quality has, without doubt, improved. Be that as may, the grim fact is that, for all the (to me) indisputable glories of sake today, the industry is facing its direst crisis for decades. Sake drinkers today have much to rejoice in, yet may find themselves witness to a golden age which is also sake’s darkest hour.

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