Journey of Wheat: From Wild Grass to Staple Food

Wheat is known to be the most prominent of all the wild grasses (Fernandez-Armesto 88). It is considered “more ‘ecologically tolerant’ even than the other great grasses which have spread around the world” (Fernandez-Armesto 94). Wheat prevailed among other wild grasses since it “proved to be strong enough in warm, lowland regions to defeat the particular kinds of weed that competed for its fields” (Tannahill 30). Wheat was known to have been collected by humans from the wild as far back as 12,000 BCE in Syria (Alcock 32). The first two types of wheat that yielded kernels edible by human beings were einkorn and emmer (Fernandez-Armesto 81). These two were first domesticated by humans in Southwest Asia (Kiple 26). By 7000 BCE, wheat was under proper cultivation in the area (Tannahill 30).

Before wheat could be properly cultivated, it needed to be domesticated first. This domestication took place “at some time before 8000 BCE – the approximate date when domesticated einkorn and emmer were being cultivated around Jericho in the Jordan Valley and at about the same time at Tell Aswad (just to the southeast of Damascus)” (Kiple 27). The necessity and the nature of domestication of wild wheat are described in the following:

The trouble with wild wheat, and other wild grasses is that nature intended that its seed-containing spikelets fall easily off a ripe ear to be dispersed by the wind… Domestication involved reversing this procedure so that the spikelets
became plumper, tended to stay put even on a ripe ear during harvesting and
sported poorly developed barbs. (Kiple 27)

With this domestication, wheat lost its independence; it now would depend on humans for its
reproduction, dispersion, and propagation.

After domestication and cultivation, there comes consumption. Wheat was consumed in
several ways. There have been many arguments for what purpose humans used wheat originally.
“One anthropologist has recently suggested that the primary Neolithic interest in grain was as a
source of beer rather than food” (Tannahill 22). However, others argue that “the people of the
early Neolithic era must have used the pit-boiling method to make [wheat grains] into a kind of
porridge” (Tannahill 24). The ancient process of making porridge is detailed here:

The first thing that had to be done … was separate the edible part of the grain
from the husks surrounding it. In the case of wild types of the seed and chaff are
reluctant to be parted, and it was therefore necessary to toast (‘parch’) the ears to
make the chaff brittle enough to be loosened. At places like Muryebat, in Syria,
the system was to line the floor of a pit with flat stones, light a fire on them, allow
it to burn and then rake it out, leaving a heat-retaining surface on which the grain
could be threshed.

Only after all this… was the grain fit for cooking. And since loose seeds (or
rough flour) could not be cooked directly on the fire or on the less-than-spacious
hot hearthstone, the people of the early Neolithic era must have used the pit-
boiling method to make them into a kind of porridge. (Tannahill 23-4)
Aside from porridge, it was also consumed as bread. “It was reputedly in Egypt that the art of making modern bread was discovered, although the evidence is elusive and the date even more so” (Tannahill 51). The process of making bread was both complex and simple. There were two types of wheat used for baking: “*Triticum durum* wheat, which is hard, and *T. aestivum*, soft and best for bread” (Garnsey 15). Magnus Pyke clarifies the distinction between the two:

‘hard’ wheat contains protein, the chemical configuration of which enables it to be drawn out into the strong, fine, elastic structure of a firm yet ‘light’ loaf, whereas the protein in ‘soft’ wheat pulls out more fragile, less elastic dough which, while less suited to bread-making, makes it a better biscuit flour. Both proteins are of substantially the same chemical composition, it is the three-dimensional geometry of the molecules that is different. (64)

After choosing the flour, the process from there was simple. “After toasting, the grain would simply be rubbed clean in the usual way and then pounded into a coarse flour or groats. The addition of a little water would convert these into a doughy substance that could be baked in a flat cake on the hearthstone, or eaten just as it was” (Tannahill 24). Lastly, wheat creates beer – or, more accurately, ale. The process was quite similar to baking. Instead of fully baking the grain, it is just partially baked; it was then broken up and soaked in water, where it is allowed to ferment for about a day before straining it and considering it ready for drinking (Tannahill 48).

There was plenty of technology invented and involved in this whole process, from cultivation to consumption. Firstly, there was irrigation. People from Southwest Asia used a “technique of breaching of the banks of existing streams so that the water flowed out and bedded itself into narrow canals – a primitive system of irrigation that could be used to water fields for
three miles in either direction” (Tannahill 30-1). Secondly, there is need for the use of fertilizer or, more specifically, manure (Tannahill 30). Then, there are the flat stones and rubbing stones used for threshing (Tannahill 23). There are also the hearthstones and pit-boiling method for baking and cooking (Tannahill 24). There are the pottery, fire- and waterproof containers, and unbreakable metal containers used for storing goods (Tannahill 25-6). More innovative ways of threshing and winnowing were also invented, such as saddle and rotary querns, hopper rubber, and donkey mills of the ancient Egyptians (Tannahill 74-6). Lastly, there is the invention of bread ovens by a fifth-century BCE Athenian named Thearion when baking had become a specialized occupation in Athenian society (Freedman 74).

Like most foods, wheat didn’t just stay in one particular area. It spread to all corners of the globe. Firstly, wheat started in the Southwest Asia. “The earliest evidence for it comes in Syria and Turkey, not long after 8000 BC. It spread very rapidly in cultivations, as far east as Baluchistan by 6000 BC, and as far west as southern France by 5500 BC” (Dalby 348). “It arrived in Europe around 6000 BCE, could be found in Egypt after 5000 BCE, and reached south Asia and China by 4000 BCE. The major early civilizations that emerged – the city-states of Mesopotamia, dynastic Egypt, and the civilization of the Indus Valley were all dependent on wheat” (Kiple 28). One record of wheat in ancient China was in a third-century BCE poem ‘The Summon of the Soul’: “… all kinds of good food are ready: / Rice, broom-corn, early wheat, mixed all with yellow millet” (Tannahill 130).

With the gradual domination of wheat in the human diet, it gathered extensive meanings in various social settings. Reay Tannahill stated that “woman now had… most of the responsibility got husking and grinding the grain. Man, by contrast, was released from the physical and mental strains of the hunt to peaceable tending of his flocks… In the end he took
over” (32-3). Here, it shows how the cultivation and consumption of wheat contributed to the rise of patriarchy. The work involved was divided between genders, giving the women now more work. Also, “most of the brewers in the ancient world were women, who sold ale from their houses” (Tannahill 48).

Wheat also left imprints in the Bible: “In the Old Testament…, the unleavened bread requirement [for the Hebrews] was explained by reference to the exodus, when ‘the people took their dough before it was leavened’ (Exod. 12:34)” (Tannahill 58), and “the New Testament says, ‘for all flesh is as grass, and all the glory of man as the flower of grass’ (Pyke 63). In the second part the word ‘grass’ alludes to wheat. Both show the importance of bread, which was made in wheat, in both Jewish and Christian societies.

“In an engaging story of Herodotus, an Egyptian king, Psammerthicus, ‘discovered’ that the Phrygians not the Egyptians were the original race of mankind, by means of an experiment in behavioural psychology. The first word uttered by two infants, isolated from birth, was interpreted as the Phrygian word for bread, ‘becos’” (Garnsey 17). This reveals that even in ancient Egyptian society bread was held in high esteem among other foods.

As Egypt was invaded by the Roman Empire, its wheat supply was mostly imported to Rome to feed its increasing population. In classical Rome and Greece, bread became the standard army food (Dalby 59). To the ancient Greeks, bread was one of the gifts of the goddess Demeter, and to Romans likewise of Ceres; bread was often offered to gods in certain occasions (Dalby 59). Wheat is also more accurately described as a “prestige food than as a staple food, and barley was the staple food for most Greeks” (Garnsey 119). Peter Garnsey reasoned that the elite
preference for wheat was supported by the inaccurate judgement of medical men that barley had lower nutritional value than wheat (120).

For the next 1800 years, wheat evolved from wild grass to staple food, yet it stayed in the Eurasia. It wasn’t until 1493 on Christopher Columbus’ second transatlantic voyage that wheat made its first appearance in Hispaniola, in the Americas (Fernandez-Armesto 169). Wheat was also “planted wherever conquistadors established farms… and by 1535, Mexico was exporting wheat to the Antilles” (Sokolov 29). In 1609, “Garcilaso de la Vega informs us that wheat was first brought to his country [Peru] by the noblewoman Maria de Escobar” (Sokolov 87). Then, Reay Tannahill states that the Pilgrim Fathers who landed on Plymouth Rock in 1620 had brought wheat with them (122). As the population of the colonies boomed, wheat dominated the farmlands of North America. “The American prairie, which never saw a grain of wheat until the sixteenth century, nor grew it in significant amounts until the nineteenth century, has become the wheat bin of the world” (Fernandez-Armesto 165).

Now in modern times, as mentioned before, the American prairie has become the wheat bin of the world. United States became a massive producer of wheat. In 1840 it took 233 man-hours to grow one hundred bushels of wheat; by 1920 it only took 87 (Tannahill 308). This was possible due to the flood of innovations and new technologies. Reay Tannahill lists several of the labour-saving devices: McCormick reaper (patented in 1834), the Pitts mechanical thresher (introduced in 1837), the Marsh harvester (1858), and the Appleby binder and knotter (Tannahill 308). People also created new varieties of wheat to maximize growth and production. Magnus Pyke catalogs these new varieties: “Red Fife in the 1840, then Marquis, then in the 1920s Ceres, followed by Thatcher, later succeeded by Regent” (69).
By 1980 the Maize and Wheat Improvement Centre of Texcoco in Mexico, which had developed the miracle wheats of the 1960s, was at the final testing stage with new strains developed for use by poor farmers on poor soil. These varieties, known as the ‘multiline’ wheats, promised to diminish the risks associated with vast acreages of a uniform crop, since they had a degree of in-built protection against the assaults of nature… By 1981 nearly every country … was once more reduced to importing grain from the world’s half dozen grain exporters, notably the United States. (Tannahill 344)

Now wheat has lost most of its social meaning. It has been brought down as a mass-produced food. People now only hear the word ‘wheat’ when it involves some sort of healthy eating, such as whole wheat bread. Even though it still does dominate our diets, from cakes to cookies to pizza to pasta, people don’t associate all these foods with wheat. When asked, people relate them as ‘flour-based’ and not ‘wheat-based’. People no longer start with the hard work involve in planting, threshing, and milling wheat. People have machines and factories to do those for them, thus the much lost significance of wheat. Wheat has now withdrawn towards the backgrounds of humanity. From wild grass to prestige food and practically back to grass, that is the journey of the grass that stood alongside human civilization for most of its existence.