

Plants and Time in Hesiod's works

H. KOVANI

National Center for Social Research, Messoghion 14-18, 11527 Athens, Greece.
ekovani@hotmail.com

Abstract. In Hesiod's "Works and Days", the first poem of European literature on the polysemy of agriculture, the socio-economic dimension of agriculture is linked to its cultural aspects. In these connections the element Time/Hour (*Hora*) is considered to be the essence of agricultural products, as the substance of the fertility and the fruitfulness of the plants. This paper is organized around these questions: i) Which plants were

featured in Hesiod's works, and how was their cultivation linked to the natural and cultural environments of the time? ii) How were the *Horai* (hours) simultaneously the goddesses of seasons and plant fertility, and the goddesses of civic order? iii) What did Hesiod project as the consequences of the *Horai* escaping from Earth, both as natural divinities and as powers determining the moral and social order of things?

Key words: Ancient agriculture, Environmental crisis, Hesiod, Historical botany

INTRODUCTION

The work of Hesiod is as a whole permeated by the opposition between *Dike* (justice) and *Hubris*¹.

This antithesis is visible first and foremost in the core of myths and allegories cited by this pre-classical poet. Thus, in "Works and Days" (W.D.), the first didactic poem of European literature to deal with the polysemy of agriculture and its socio-economic and cultural dimensions, before describing the various agricultural tasks and the appropriate time for carrying them out, Hesiod recounts these myths, linking the said antithesis with the significance of its exposure for the life of human beings.

Briefly, the relevant allegorical narratives are the following:

- The "Allegory of the two Strifes": the struggle between wholesome emulation and destructive Erida (quarrelsomeness).
- The myth of *Pandora* (all-gifted), the wife of *Epimetheus* (afterthought), who was the brother of Prometheus (forethought). The myth of Pandora shows how the need for work arose².
- The myth of the five ages of the world: the golden age, the silver age, the bronze age, the age of the race of heroes and the fifth age of iron. The golden age was under the protection

of *Dike*. In the iron age, to which we now belong, mankind is confronted with the choice whether to respect *Dike*³ or fall into a state of *Hubris*.

- Finally, the fable of the "Hawk and the Nightingale" serves as prelude to a condemnation of violence and injustice.

The principal part of the text of "Works and Days" shows how one may escape want, misery and injustice via a life of agricultural toil. In reality labour, in the view of the poet the toil of mortals in general is transformed from a primeval curse to a means of preserving humanity from the vice of avarice. Work, specifically in the fields, becomes a means for re-establishment of the equilibrium which makes possible communication and reconciliation between the two worlds: the divine and the human. The secret of this reconciliation is to be found in respect for the rules and practices of agricultural labour.

Moving on from the labour we shall examine, through Hesiod's description of these tasks, what this respect consists in. What bearing these rules have on the subject of *Dike* but also on the cycle of the seasons? Given the present-day crisis in agriculture to what extent do these rules concern us and what can their allegorical dimension mean for us today?

Grains

In “Works and Days” two crop categories are described, grain and vine⁴. In addition, certain native plants of the Heliconian ecosystem are mentioned. The astronomical and other natural signs marked the beginning and end of each cultivation phase for these crops are discussed here to foster an understanding of the importance that the poet ascribes to the calendar of agricultural activities.

The chapter of “Works and Days” that treats agricultural operations begins with a passage that Hesiod himself, according to the compiler of the “Contest of Hesiod and Homer” selected as the best of all his work. In it Hesiod describes the astronomical sign for cereal cultivation during its cyclic repetition: “When the Pleiades, daughters of Atlas, are rising⁵ begin your harvest and your ploughing when they are going to set⁶. Forty nights and days they are hidden and appear again as the year moves round, when first you sharpen your sickle. This is the law of the plains.” (W.D. 383-387).

Another cosmic sign marks the beginning of ploughing and sowing, the setting of Hyades and Orion in the end of October. In parallel, around the middle of November, a natural voice gives the signal for commencing the cultivation of grain: “Mark”, says Hesiod, “when you hear the voice of the Crane who cries year by year from the clouds above, for she gives the signal for ploughing and shows the season of rainy winter” (W.D. 448-450). Grain harvest also is signaled dramatically: When the house-carrier (snail) climbs up the plants (mid -May) from the earth to escape Pleiades, the farmer has to whet his sickles. During the harvest season, one should avoid shady seats and sleeping until dawn when the sun scorches the body. Then one should be busy and bring home the fruits of harvest, rising early to ensure success. In July, when strong Orion first appears, one should winnow Demeter’s holy grain on a smooth threshing floor in an airy place, then one should measure and store it in jars. For the manufacture of farm implements (late September–October) one used the native plants of

the surrounding forest: “Poles of laurel or elm are most free from worms, and a share-beam of oak and a plough-tree of holm–oak.” (W.D. 435-437).

Grape Vines

An astrological sign marks the time for pruning vines: “When Zeus has finished sixty wintry days after the solstice, then the star Arcturus leaves the holy stream of Ocean and first rises brilliant at dusk. After him the shrilly wailing daughter of Pandion, the swallow, appears to men when spring is just beginning. Before she comes, prune the vines, for it is the best so” (W.D. 567-570). The season for digging vineyards is also marked by the movement of the house-carrier, when it climbs up the plants from earth to escape the Pleiades. Further, the gifts of jubilant Bacchus are announced with particular astronomical magnificence: when Orion and Sirius reach the mid -heaven, and rosy-fingered dawn sees Arcturus then, advises the poet, cut off all the grape- clusters, and “bring them home. Show them to the sun for ten days and ten nights; then cover them over for five, and on the sixth days draw off into the vessels the gifts of joyful Dionysus” (W.D. 610, 614).

Certainly, the astronomical and natural signals not only mark the time of cultivation but also the time for repose. Thus, when the artichoke flowers and when the chirping grass hopper sits on a tree and pours down his shrill song continually from under his wings in the season of wearisome heat, “then goats are plumpest and wine sweetest”. This is the time for blissful rest, for which Hesiod notes: “At that time let me have a shady rock and wine of Biblis⁷, a clot of curds and milk of drained goats with the flesh of an heifer fed in the woods that has never calved, and of firstling kids; then also let me drink bright wine, sitting in the shade, when my heart is satisfied with food, and so, turning my head to face the fresh Zephyr, from the everflowing spring which pours down unfouled thrice pour an offering of water, but make a fourth libation of wine” (W.D. 588-596). The gifts of the land are for the man who loves *Dike* (Justice), i.e., in last analysis, the annual schedule of farming activities must respect the specific time for each cultivation phase.

We will come back to this issue.

Other Plants

Not only is agriculture protected by *Dike* but native plants are as well. These include, in addition to those mentioned above (high-leafed oak, laurel, elm, artichoke): think pine; mallow and asphodel, the poor man's fare⁸; the fig tree, when its leaves are as large as the crow's footprint, it is the sign of the coming of spring⁹; the ash tree, which is used to make spears; reed cane, a plant in whose hollow stalk Prometheus hid the fire that he stole from Zeus for humankind.

Table 1 summarises Hesiod's calendar by listing the dates of different farming tasks and their corresponding natural and astronomical signs. Following, we present Hesiod's perspective on the connection between *Dike* and this calendar.

NATURAL AND CIVIC ORDER

Hesiod's work resonates respect for the farmer's calendar, the precise scheduling of the various phases of cultivation for each crop. Thus, one important question is how Hesiod connects this respect to Justice, and juxtaposes it to Hubris. Recall that *Dike* is one of the *Horai*, which originally were Goddesses of cosmos and of nature. In Homer the *Horai* were the keepers of the gates of heaven, "to whom are entrusted great heaven and Olympus, whether to throw open the thick cloud or shut it" (Iliade 8: 392)¹⁰. *Horai*, as divinities of Nature in relation to *Graces*¹¹ and other Goddesses, are presented in Homeric hymn (HOMERIC HYMNS 1954) to pythian Apollo: "The rich-tressed *Graces* and cheerful *Horai* dance with *Harmonia*¹² and *Hebe*¹³ and *Aphrodite*¹⁴..., holding each other by the wrist" (W.D. 195). Such harmonious relations secured the gifts of Nature for humans. In pre-classic times, the *Horai* represented the seasons, primarily spring¹⁵, the time of blooming.

In "Works and Days" the rich-haired *Horai* are divinities of blossoming who crowned the head of Pandora with spring flowers. In "Theogony", *Horai* are the daughters of Zeus and Themis (goddess and personification of Justice). Themis, daughter of Heaven and Gaia, bore the three *Horai*: *Dike*, *Eunomia*, and *Eirene* who mind the

works of moral men (W.D. 901-902). In Pindar, too, *Horai* are presented as goddesses of civic order and daughters of Themis: "There dwells Order (*Eunomia*), with her sister Justice (*Dike*) / firm foundation for cities, and Peace (*Eirene*) steward of wealth for men / who was raised with them, the golden daughters of wise counseling Themis" (Olympian, 13:28).

As Goddesses of Nature and of the season *Horai* symbolized the gifts that Gaia distributed to humankind on a regular basis, i.e., the *Horai* assured the fruitfulness, the colors, and the aroma of fruits; and as goddesses of civic order, they imposed on people Justice and equal rights. The *Horai* do not have distinctive attributes; they are inseparable from one another and act in unison. In Hellenistic times the *Horai* were considered primarily as the personification of seasons, each with distinctive attributes. Originally three, they became four during the Hellenistic period, eventually numbering as many as the hours of the day.

To understand why Hesiod ascribes so much importance to the timing of the different cultivation phases we note that from the beginning of one cultivation cycle to its end, i.e., sowing to harvest, a certain time span elapses, which has a double significance: i) time in its natural, meteorological sense, that is, the various changes of weather that are the physical frame of this cultivation, and ii) the passage of time in which the farmer works, worries, hopes for the best results for his efforts, and so on. This passage of time became the potential field for the development of social and moral values. This is the same that Socrates of Xenophon had in mind when he made the eulogy to agriculture: "Even the wealthiest cannot hold aloof from husbandry", for the pursuit of it is in some sense a luxury as well as a means of increasing one's estate and of training the body in all that a free person should be able to do. "For, in the first place, the earth yields to cultivators the food by which men live; she yields besides the luxuries they enjoy. Secondly, she supplies all the things, with which they decorate altars and statues and themselves, along with most pleasant sights and scents" (Oeconomicus v: 1-3).

By posing several questions, the philosopher emphasizes the cultural dimensions of agriculture: "What art rewards the labourer more generously?"

Table 1 - Hesiod's Calendar.

Date	Work	Signals for agricultural tasks
Late September-October	Wood cutting and implement manufacture	When the star Sirius passes over the heads of men, only a little while by day and takes greater share of night (W.D. 417-419)
November-early December	Ploughing and sowing	When you hear the voice of the crane (W.D. 448), when the Pleiades are going to set (W.D. 384), and Hyades and Orion also begin to set (W.D. 615)
Late December-early February	Mainly indoor work	In winter when the cold keeps men from field work (W.D. 493-494)
ca. 15-22 February	Pruning vines	Sixty wintry days after the Solstice, the star Arcturus rises brilliant at dusk and the swallow appears to men (W.D. 564-569)
ca. 22 February-7 May	Spring ploughing of fallow Digging vineyards	When the cuckoo first calls in the leaves of the oak (W.D. 486-487), when the house-carrier climbs up the plants from the earth to escape the Pleiades (W.D. 571-572)
ca. 1 April-7 May	Spring sailing	When a man first sees leaves on the topmost shoot of a fig tree as large as the footprint that a crow makes (W.D. 679-681)
ca. 7 May-16 June	Harvesting grain. Summer ploughing of fallow	Rising of Pleiades (W.D. 574)
ca. 16 June-15 July	Winnowing and threshing grain, saving hay and litter, employing work force for the following year	When Orion first appears (W.D. 597)
ca. 15 July	Picnic	When the artichoke flowers and the cicadas pours down his shrill song (W.D. 582-584)
ca. 15 July-11 August	Summer sailing	When the season of wearisome heat is come to an end, is the right time for men to go sailing. At that time the winds are steady and the sea is harmless... But make all haste you can to return home again and do not wait till the time of the new wine and autumn rain (W.D. 663-672)
ca. 4-24 September	Vintage	When Orion and Sirius come into midheaven, and rosy-fingered dawn sees Arcturus (W.D. 609-610)

Sources: HESIOD 1954b: "Works and Days" (W.D.), LORIMER (1951), CRONIN (2000)

What art welcomes her follower more gladly, inviting him to come and take whatever he wants? What art entertains strangers more generously? ... What other art yields more seemly first-fruits for the gods or gives occasion for more crowded festivals?" (Oeconomicus v: 4, 8-10)¹⁶. Hesiod first emphasizes that agriculture will reward the cultivator generously as long as he respects the starting time for each farming task and, in general, the farmer's calendar. One should not put off one's work until tomorrow or the day after, "for a sluggish worker does not fill his barn, nor one who puts off his work: industry makes work go well, but a man who puts off work is always at hand- grips with ruin" (W.D. 410-413). The respect for work that the gods ordained for humans is the respect for the

farmer's calendar. This respect concerns first the *Horai* as goddesses of nature and of the season of fruitfulness. For this the *Horai* reward the farmer with a good crop. With her recompense Dike is not only the goddess of nature but also the goddess of fairness. It all happens as if respect for the afore-mentioned time is the door that leads to the realm of *Dike (Hora)* as divinity of the gifts of land, assuring the harmonious relation between people and nature.

Neither famine nor disaster ever haunt men who, according to Hesiod, personify true justice. "But lightheartedly they tend the fields which are all their care. The earth bears them victual in plenty and on the mountains the oak bears acorns upon the top and bees in the midst" (W.D. 230-

233). Thus, men of true justice flourish and the grain-giving earth bears them fruit.

The belief in the good of *Dike* is necessary for emphasizing the inevitable evil caused by *Hubris*. Recall that *Hubris*, in the frame of the agriculture, derives from disrespect toward the annual agricultural schedule, toward the timing of astral and natural phenomena. Both gods and people are angry with a man who, due to this disrespect, lives idle “for in nature he is like the stingless drones who waste the labour of the bees, eating without working” (W.D. 304-305). Evil is easy to come by, and in large volume: the road to her is smooth, and she lives very near us. “But between us and Goodness the gods have placed the sweat of our brows. Long and steep is the path that leads to her, and it is rough at the first; but when a man has reached the top, then is she easy to reach, though before that she was hard” (W.D. 287-288). In fact, *Hubris* against the natural order disdains the social order, justice, and Goodness. If justice vanishes, then shame, says Hesiod, goes away as well.

Although these perspectives do not resonate well with contemporary thought, they direct our attention to concern for how agricultural crises might be connected to disrespect toward the *Horai*, i.e., disdain for the proper timing for production and reproduction of natural species. One could say that correct scheduling assures the quality of fruit. Elsewhere we have examined the way that quality deterioration of agricultural products is vident in the tendency of these products to lose their taste and aroma, a loss that constitutes an attack against the deepest and most personal of the senses, taste and smell (cf. KOVANI 1995: 116). This is, according to HEGEL (1979: 55-88), an attack against “the non-intellectualized senses”, which are fundamentally interrelated, both one with the other as well as with the basic sensory organs, particularly smell¹⁷. Today, it is a question of interdisciplinary import to explain why such an attack against the aroma of fruits is an attack against the basic symbol of memory, i.e., *Mnemosyne*, the mother of the protectors of each authentic creative work.

CONCLUDING REMARKS

After the Hellenistic period, *Horai* were the personification of the seasons. Ovid in “*Metamorphoses*” presents this image: “To right and left stood Day and Month and Year and Century, and the Horae set at equal distances. Young Spring was there, wreathed with a floral crown; Summer all unclad with garland of ripe grain; Autumn was there, stained with the trodden grape; and icy Winter with white and bristly locks” (II: 23).

Many works of art, including paintings, mosaics and sculptures, depict *Horai* as weather goddesses, as the personification of the seasons, or as goddesses of youth, typically associated with the Spring. Whatever the *Horai* have inspired in the arts, they constitute proof of the cultural dimension of agriculture in the pre-industrial area. This dimension has been lost, as we well know, with the mechanization of agriculture and the introduction of intensive, chemical farming.

To the extent that contemporary agricultural crises have been well characterized, one is surprised at the tragedy of several of its aspects:

- How will problems of malnutrition be solved in the Third World?
- How should one confront the environmental crises, including the loss of biodiversity, created by industrial farming and the introduction genetically modified organisms?
- How should the problem of diminished food quality be addressed, e.g., the loss of taste and aroma, the very fundamental sensory inputs?

The *Horai*, divine protectors, of the colors and the aroma of fruits, are long gone. They have been substituted by the crops’ contemporary protectors, namely the natural sciences. But, it seems that, even though absent, the *Horai* can still be a paradigm for contemporary science and its relation to agricultural production. This can be an archetypical paradigm that teaches the transparency of intentions, the lack of self-interest, justice, and sincerity in contemporary purpose and design, i.e., a paradigm that instructs on the purity and generosity of the protective function of *Horai* for the quality of agricultural products, a function

symbolized by the transparency of their white peplus (veil). If that is right, a challenge for the researchers concerned with food production and

in general with ethnobotany, will be to elucidate the conditions under which such a paradigm can be effectively applied.

NOTES

- ¹ Hesiod (Hesiodos), earliest didactic poet of ancient Greece (8th-7th cent. BC), was born at Ascra, a village at the foot of Mount Helicon in Boeotia. His other important work is *Theogony*, which is a history of the creation of the world (earth, hell, ocean, night, sun and moon) originating in Chaos and Eros. In "Works and Days" this incident is recorded: Hesiod and his brother Perses engaged a lawsuit involving patrimony. Perses, who had wasted his resources, substance applied to Hesiod for help. But, were the division of the patrimony and the consequent quarrel real events or simply literary conveniences around which to construct a moral pedagogic paradigm of public import? Various theories have been advanced about this question (cf. RZACH 1913; NICOLAI 1964: 194; MURRAY 1897: 53; CRONIN 2000).
- ² Zeus exacted vengeance upon Prometheus, who had stolen fire from heaven, by making a woman who, by her charms and beauty, would bring misery upon the human race. Pandora brought from heaven a box containing every human ill, which she was forbidden to open. Curiosity made her do so, whereupon they all escaped and spread over the earth, hope alone remaining.
- ³ The silver age succumbs to greed, to *Hubris*. The bronze age is, like the age of heroes, an era of struggle but where the former is consumed in violence and goes astray the latter triumph because they are struggling for *Dike*.
- ⁴ Hesiod's annual farming calendar is not complete. The poet does not mention at least two of what surely were important elements of the agricultural cycle at that time, stock-raising and olive culture (CRONIN 2000).
- ⁵ Early in May.
- ⁶ In November.
- ⁷ Wine of Biblis: excellent wine perhaps of Thracian origin.

- ⁸ By the poets and first by Homer asphodel made an immortal flower and said to cover the Elysian meads (Odys. XI,539).
- ⁹ "When a man first sees leaves on the topmost shoot of a fig-tree as large as the foot-print that a crow makes, then the sea is passable, and this is the spring sailing time " HESIOD, *ibid*, 678-679.
- ¹⁰ In the Iliade (8:433) the *Horai* were also in the service of *Hera* (for unyoking from their chariot the fair-maned horses).
- ¹¹ The Graces, the three sisters *Aglaia*, *Thalia*, and *Euphrosyne*, are regarded as the bestowers of beauty and charm and portrayed as women of exquisite beauty.
- ¹² *Harmonia* (Harmony), a daughter of Ares and Aphrodite, and wife of Cadmus The day of their wedding *Harmonia* received as divine presents a peplus (a veil) and a necklace.
- ¹³ *Hebe*, youthful prime, the daughter of Zeus and Hera, the goddess of youth and spring, and the cup-bearer of Olympus.
- ¹⁴ According to popular belief *Aphrodite* was the goddess of love who excited this passion in the hearts of gods and men, and by this power ruled over all living creation.
- ¹⁵ We note that in this metaphor from the Iliade (6:146): "Just as the generations of leaves, such are those also of men. As for the leaves, the wind scatters some on the earth, but the luxuriant forest sprouts others when the season of spring has come; so of men one generation springs up and another passes away."
- ¹⁶ CICERON (1965), VIRGIL (1935) and other philosophers and poets from ancient times until the present repeat the same idea (KOVANI 1995). Particularly, according to ARISTOTLE (1959), the best common people are the agricultural population "so that it is possible to introduce democracy as well as other forms of constitution where the multitude lives by agriculture or by pasturing cattle."
- ¹⁷ On the senses of smell and taste consult MAINE DE BIRAN (1960: 47) and ARNAUD (1990: 139).

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