THE DAYS OF "HESIOD'S" MONTH

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Recent work may make it possible to understand more about the nature of the calendar in Hesiod's *Days*, and even further, something of the knowledge and of the concepts which lie behind the work. Radically affecting the significance of the various items of evidence which, like immortal spirits, flit through the footnotes of articles on chronology, new insights into the text itself make it possible to clarify some of the implications of the diverse terms which tumble in disorder into the lines of the poem.

In 1953 Einar Gjerstad made a courageous attempt to interpret Hesiod's lunar month in terms of all the expressions for the different days of the month.[1] On the assumption that all the references belong to a single system, Gjerstad drew up interpretations of the numerical meaning of the terms—even the most controversial—and concluded that the Hesiodic month was not an observation month.[2] The

[1] E. Gjerstad, "Lunar Months of Hesiod and Homer," *Opuscula Atheniensia* 1 (1953) 187–94.

[2] Lunar months may be controlled by actual observation of the moon, and, since lunar motion produces a period of roughly 29½ days, the actual months based on observation will be, at differing intervals, 29 days or 30 days. Greek months generally began after conjunction, with the first appearance of the crescent in the evening. The month would continue until new moon, after which the evening crescent reappeared. Upon reappearance, a new month began. If the determination of the beginning of the new month was controlled by observation, we speak of an "observation month." If, on the other hand, the duration of the month and the beginning of the next were controlled by some artificial cycle, or by an arbitrary alternation of 29/30 days to run roughly even with the moon, we may speak of a "conventionalized month."

As the names of the months in the calendars of different cities might vary widely (cf. Bischoff, *RE* 10 [1919] 1568–1602, s.v. "Kalender"), so too, terminology for the days would vary from city to city, and, as in the change in terminology at Athens from φθίνοντος to μετ' εἰκάδας for the last third of the month, terminology could change within a single calendar system.

For a clear and concise summary of information relating to ancient calendars, and of

existence of a thirtieth day, the division of the month into decads, the denomination of the decads as πρώτη and μέσση, meant to Gjerstad that the month was a conventionalized period of 29/30 days.

Entirely apart from internal weaknesses,[3] Gjerstad's conclusions will not stand if the platform of the text breaks up. Friedrich Solmsen has now demonstrated convincingly that a number of poets introduced their art and their prejudices into the poem which we call the "Days."[4] Neatly showing that there is a concept of listing days which are good for certain purposes, and another suggesting the work of a "minority poet" who petulantly insists that he knows that which παῦροι know (lines 814–21), by pointing out contradictions about the days Solmsen shows that the *Days* cannot have been the work of one poet, but must have grown by accretion.

It would be otiose to repeat Solmsen's arguments; it is enough to say that the discussion which follows here rests on the acceptance of his thesis. On the basis of his conclusions it is perfectly reasonable to expect to find different concepts of naming days in the lines of the poem. Before turning to the discussion, however, it will be well to set forth the occurrences of the different names for days in tabular form (see Table on p. 423).

There are two major kinds of nomenclature, and a number of minor ones. The first commonly used type, a simple numeral either cardinal or ordinal, is found with the first day named, τριηκάδα, in line 766. Then, after a second beginning,[5] as it were, in line 769, we find ten lines, 770–79, exclusively of this type.[6] In order come ἕνη, τετράς,

the astronomical phenomena affecting them, see E. Bickerman, *Chronologie* (Leipzig 1963). For the purposes of this discussion, the reader need only keep in mind the 29/30 day nature of the Greek month, and the fact that these days were divided into thirds, "decads," in most Greek calendars.

[3] E.g. ἀεξομένοιο, ἱσταμένου, φθίνοντος can be taken to indicate an observation month to counter the assumption that other terminology indicates a conventionalized month. Of these other indications, we may note that backward counting does not necessarily indicate a conventionalized month—it did not at Athens—and "thirtieth" can often be found in observation months.

[4] F. Solmsen, "The 'Days' of the *Works and Days*," *TAPA* 94 (1963) 293–94; hereafter cited as **Solmsen**.

[5] Solmsen 298 suggests that the later addition was actually the first beginning, which contains the numeral.

[6] Although the phrase μηνὸς . . . ἀεξομένοιο appears in 772–73, it is not used with a numeral. It seems to be a general description of the part of the month, and not part of the nomenclature of a day.

TYPES OF NUMERATION OF DATES

Line	Sequential Numbers: Unmodified	Sequential Numbers: Modified	"Decadal"	Miscellaneous
766	τριηκάδα			
770	ἔνη τετράς τε καὶ ἑβδόμη			
772	ὀγδοάτη τ' ἐνάτη			
774	ἐνδεκάτη τε δυωδεκάτη			
776	δυωδεκάτη, ἐνδεκάτης			
780		μηνὸς δ' ἰσταμένου τρισκαιδεκάτην		
782			ἕκτη δ' ἡ μέσση	
785			ἡ πρώτη ἕκτη	
790	ὀγδοάτῃ			
791	δυωδεκάτῃ			
792	εἰκάδι			
794	δεκάτη			
794			τετρὰς μέσση	
798		τετράδ(ι) φθίνοντος θ' ἰσταμένου τε		
800	τετάρτῃ			
802	πέμπτας			
803	πέμπτῃ			
805			μέσσῃ δ' ἑβδομάτῃ	
809	τετράδι			
810			εἰνὰς δ' ἡ μέσση	
811			πρωτίστη δ' εἰνὰς	
814				τρισεινάδα
819	τετράδι			
819			(τετράδι) μέσση	
820				(τετράδι) μετ' εἰκάδα

ἑβδόμη, ὀγδοάτη, ἐνάτη, ἐνδεκάτη, δυωδεκάτη. It is only in line 780 that we meet a different kind of day-name. The numeral τρεισκαιδεκάτην is of the sort we are familiar with from the preceding lines, but it is modified by ἰσταμένου to make a formula common all over Greece in later times.

Immediately after this we meet the second common form of date enumeration, in a series beginning with 782 and ending in 788. This form, which may be called decadal, attaches to a numeral the adjective πρώτη, πρωτίστη, or μέσση to indicate that the numeral is to be connected with the first ten-day period of the month (as is commonly assumed), or the second such period. In these lines we find the sixteenth day of the month called ἕκτη ἡ μέσση and the sixth day called ἡ πρώτη ἕκτη. The first kind of enumeration is resumed with ὀγδοάτῃ in line 790, δυωδεκάτῃ in 791, εἰκάδι in 792, and δεκάτη at the end of the series. A new set of thoughts (as the texts read) begins in line 794.

We return to the decadal system in this line, and there is a great jumble of systems to follow. First we have the decadal "fourteenth" *τετρὰς μέσση*, and then we switch to terminology which we may call conventional general Greek, with *τετράδ' . . . φθίνοντός θ' ἱσταμένου τε*, different in that it uses *ἱσταμένου* instead of *πρώτη* at the beginning of the month. After that another "fourth" occurs, this time of the first system, in line 800, and that system continues on into lines 802 and 803 with two mentions of the fifth day of the month. Line 805 turns back to the decadal nomenclature, with *μέσση ἑβδομάτη*, "seventeenth," and then line 809 picks up "four" again in the simple unmodified first system. The decadal system continues in 810–11 with two "nines," *εἰνὰς δ' ἡ μέσση* and *πρωτίστη δ' εἰνὰς*, and the sequence of nines includes a numeral of a unique type, *τρισεινάδα* in line 814. The poem ends with "fours": the "fourth" in simple form (819), then the mention of *μέσση* to make "fourteen" in decadal form, and then the other unique numeral in this text (presumably again "fourth"), *μετ' εἰκάδα* in line 820.

That the days begin in orderly enumeration and then, after line 785, come in no order whatsoever has long been noticed. The succession of systems is equally disordered, and that has not been so clearly seen. The jumble of dates and systems is best illustrated by challenging the reader to repeat the information in the preceding paragraph. Yet, if the different "hands," as it were, can be sorted out, the rationale of each may make some sense and the succession of dates may be better explicable.[7]

[7] P. Mazon, in *Les Travaux et Les Jours* (Paris 1914), solves the problem by accepting the "ensemble du poème des Jours" as authentic (p. 151) but affected by a contamination which "doit être ancienne." His suspected contamination brings doubt on lines 782–804, 809–14, 819–21, and the deletion of 815–16. This returns the order of the days to sequence, and anticipates some of Solmsen's objections to the conflation of a tradition of "fasti" type with a tradition of introducing good and bad aspects of days. But it does not note, as Solmsen does, that the concepts of the lines (819–21) which report that *παῦροι* know about the fourths, excised by Mazon, belong with the unexcised lines 814–15. Further, Mazon's challenges do remove from consideration many of the different kinds of counting, primarily because the excision is based on a rectification of the non-sequential nature of the lines. But the disorders of *kinds* of counting remain. What is clear from Mazon's discussion is the essential inconsistency of the poem; the main difference between his basic assumption of interpolation into an organically original Hesiodic work which belongs with the *Erga* and Solmsen's portrayal of the work as an essentially archaic poem which is the work of many poets is the concept of archaic poetry as accretive.

Let us begin with the decadal system. The most prominent feature of the use of days with modifiers indicating decads is that there is a strong tendency to group together the equivalent numerals of different decads. Only once, in the four lines beginning with 805, do we find a decadal date, here the *μέσση ἑβδομάτη*, used without the corresponding numeral of another decad. In the first appearance of this system, at lines 782 ff., "sixes" are involved: 16, then 6. From 794 there is a preoccupation with "four": 14, then *τετρὰδ' . . . φθίνοντος*, then 4,[8] and then 4 again in line 800, but this last expressed as an ordinal number. The final appearance of the decadal system is that concerned with "nine:" beginning at line 810 we have 19, 9, and then the puzzling *τρισεινάδα*. It is also notable that it is in these sequences of numbers that we have the greatest jumble of systems. If one looks at the text, it becomes clear that the concern is not with setting forth which days are good and bad for what, but rather setting forth the relative qualities and respective uses of "sixes," "fours," and "nines." It is also important to note that it is in connection with one of these groups, the "nines," that the editors bracket two lines, 815–16, and in connection with another group, the "fours," that editors suspect the infix of line 798 on *stylistic* grounds.[9] In connection with the "fours," the text begins with the value of the fourteenth for the birth of girls and for the taming of certain animals, then switches to the notion that it (or the days in line 798 if one insists on retaining the line) is a fatal day, then finally leaps to a completely different concept by introducing birds as an indicator of augury to test whether in fact the fourth is the expected good day for marriage. These last lines, as Solmsen (p. 302) points out, set out an alternative superstition.

Around the "nines" also cluster many suggestions of activities for which these days are good, and with the "nines" comes also that term for a date unparalleled in Greek, *τρισεινάδα*, which may mean 22, 27, or 29. This group is like that of the "fours" in that there is no progression from a preceding date to the group, nor any internal progression. With the "nines" we skip from 19 to 9 to 27/29, as with the "fours" we moved from 14 to 24/27[10] to 4 and then to 4 again.

[8] I.e. the *ἰσταμένου* of *τετρὰδ' . . . φθίνοντος θ' ἰσταμένου τε*.

[9] Solmsen 301 rightly gives precedence to stylistic considerations in challenging line 798.

[10] The date would be the 24th in forward count, beginning counting from 21, and would be the 27th if the count were backwards, beginning the count from the end of the

This is in marked contrast to the beginning of the *Days*, with its orderly progress from one to twelve, and even on to thirteen and sixteen, the last of which plunged us into disorder.

In addition to noting the contrast between the orderly progression which marks lines 770–79 and the jumbled orders of dates and mixtures of systems in other sections, we should note Solmsen's comment (p. 310) that at 780 the content changes abruptly from a listing of "ἡμέραι Διὸς πάρα μητιόεντος or ἱερὰ ἤματα" to a notion of "what we may call mixed days." Noticing this difference in attitude, and the correspondence between this change and the change in orderliness of days, we can state that the content and presentation of days changes from a concern for the notation of the days valuable for certain pursuits to a concern for stating the special characteristics for good or bad of a small number of numerically significant days. There is an especial preoccupation with fours and nines, and a certain concern with sixes. The pattern of the work has been interrupted by an intrusion of numerology, a manipulation of numbers which suggests belief in special qualities of certain numbers, *qua* numbers. This stems from a rather different strain of superstition, if it be called that, from the strain which is concerned more with a calendar of favorable days.

Thus we can carry Solmsen's discrimination between the different poets represented in the *Days* to a determination of different archaic concepts which the work reflects. Lines 770–79 show the existence of an established tradition which has marked certain days of the month as suited to specific occupations. A second tradition shows a preoccupation with certain numbers applied to days, and the manipulation of numerical terms suggests a developed "number-magic." Then the intrusion of the notion of evaluating days by bird signs (800–1), taken with the end of the work which seems to begin a discussion of ornithic signs, brings a third set of conceptions to the evaluation of the occasions appropriate for action. There are some references to divine history: on the seventh Leto bore Apollo (771); on the fifth the Erinyes are said to have served Horkos (803–4). These lines give a religious explanation for the qualities of days that is totally lacking in most of the

month. Cf. B. D. Meritt, *The Athenian Year* (Berkeley 1961) 58–59, arguing for both systems at Athens.

precepts.[11] These different traditions are not exclusive of one another, but they are certainly different. Solmsen noted all of them except the numerological tradition, and in finding that the different traditions created syntactical stresses and conflicting statements could only conclude that the work is "best thought of as a wild growth, proliferating without control and direction and reflecting the equally uncontrolled wildfirelike spread of the superstition." Out of the record of the different views we have seen the different aspects or even different traditions of superstition in archaic times.

This conclusion that the poem is a "wild growth" has implications significant for any attempt to draw conclusions about the nature of the calendar from Hesiod's *Days*. First, if we are to attempt to find in the poem any indication of the form of time reckoning, it is not a single calendar which we should be seeking, but calendars. Second, there is a real possibility that some of the terminology might not have been technical—that is, the proper terms for dates of the month with reference to the calendar. *Ἕκτη ἡ μέσση* might have been a poet's word for the "sixteenth." This fine distinction bears on any attempt to reconstruct the nature of the calendar from Hesiod's *Days*. Terminology cannot reliably be assumed as evidence for the calendar, and some of it may have been formulated to juxtapose numerals. *Τρισεινάδα*, whatever it means, is more reasonably understood to have served this purpose than to have indicated a date on a Greek calendar.

Even if we were to accept most of the terms as technical, it is clear that the *Days* attests a number of ways of counting the days in archaic times, and does not present a consistent system. Alongside the count which carries forward at least as far as 11 and 12, there is a numerical system which uses the terms "first six," "first four," and so forth. The term *μηνὸς δ' ἰσταμένου* which we find in line 780 in connection with "thirteen" is probably not the same kind of *ἰσταμένου* which we find in line 798: *τετράδι φθίνοντος δ' ἰσταμένου τε*. The latter is familiar as a common Greek method of counting days, the first ten called *μηνὸς ἰσταμένου* and the last ten called *μηνὸς φθίνοντος*. That system did not use a *τρεισκαιδεκάτη* modified by *ἰσταμένου*, and *ἰσταμένου* might better be taken here with *μηνός* only, and not as

[11] Solmsen 308 argues that these lines cannot be the work of the author of lines 770–779, nor of the "minority poet" who knows what few know.

part of the terminology for the date. In the same way, if μέσση is technical, it belongs to a system different from that with δυωδεκάτη, and μετ' εἰκάδα is from a system different from that with φθίνοντος. It is clear that in the *Days* there are different systems for naming the days, and that among the terms there are some which may not derive from formal calendar terminology. Certainly this mixture of terms does not present a consistent calendar system.

Where does this leave us? Perhaps not so badly off as we might at first think. Although no conclusions as far-reaching as Gjerstad's are possible, we can be fairly certain that the month was lunar. The appearance of the terms μηνὸς ἀεξομένοιο, μηνὸς ἱσταμένου, φθίνοντος, all suggest the month of lunar type well known in later times. Even without this evidence, we should suppose it so.[12] Another conclusion is simply that in archaic times the days of the month were numbered, in one way or another. Even more important, it is clear from numeration of days and therefore separation of months that there was a developed calendar. In the *Works* 504–5 we find reference to the month Lenaion. Apart from demonstrating that the months were named (further evidence for an established calendar) the statement that the month of Lenaion was a wintry month shows that there was some kind of intercalation which kept the months more or less in their proper seasons. This is not difficult to accomplish; mere observation can regulate the year. Intercalation can be introduced when the year's end falls before some determined observation, and can even be planned in advance if some fixed point like the beginning or end of a certain month precedes an astronomical phenomenon which it should follow.

What we have then from Hesiod's *Days*, in conjunction with the *Works*, is just what we should expect to find in archaic poetry: a mixture of elements, both numerical and conceptual; hints of a kind of number-magic which influences opinion about days stemming from one poet; signs of the superstition of another poet in a kind of "fasti." The admixture of these and other influences is sufficiently early to freeze the tradition before any rationalizing could sort out and order

[12] I suppose the month to have been regulated by observation. Gjerstad's conclusion (above, note 1) 191, that it was a conventionalized month is argued by adducing a relationship between all the dates as if they were parts of a single truly calendaric system. This assumption has been undermined, as has been noted, by Solmsen's demonstration that the *Days* is not the work of a single poet.

the contradictions. The insight which such a poem provides is limited, but, in calendaric terms at least, shows Greeks in archaic times operating with the kind of calendar we know they had later. As we now know from appearances of names modified by me-no (μηνός) in the Linear B texts that calendars and month names existed in Mycenaean times,[13] we may presume that the archaic traditions were already old by the time they were included in the Hesiodic corpus.

[13] For citations, see A. Morpurgo, *Mycenaeae Graecitatis Lexicon* (Rome 1963) s.v. "me-no." Cf. also L. R. Palmer, *The Interpretation of Mycenaean Greek Texts* (Oxford 1963) 248; E. L. Bennett, Jr., *The Olive Oil Tablets of Pylos* = *Minos*, Suppl. 2 (Salamanca 1958) 27–32.