

original lunar calendar. But the link to *pṛt spdt*, whatever it was, suffices to claim the existence of an original lunar calendar. This link already sufficiently sets apart that calendar from other conceivable lunar calendars. But can this link be positively proven?

6.2. *Can the Link between the Moon and Sirius and the Existence of the Original Lunar Calendar Be Positively Proven?*

The price of positive proof is high. Such proof exists, I believe, in the case of the civil-based lunar calendar (Depuydt 1997: 161–69). Not every detail about the later lunar calendar is clear. But its link with the civil new year sufficiently defines it. And this link is indubitably certain. What's in a term? What does it mean to call the proof for the civil-based lunar calendar “positive”? To me, it evokes the impression that the available facts cannot be explained in any other way. This involves a total lack of pressure from the nagging question, “But how else could it have been?”

By contrast, I am unable to produce the same tranquility of mind with regard to the original lunar calendar. Yet I cannot think of any other explanation for certain undeniable facts viewed together as a set. Nor can anyone else as far as I know. The question “How else could it have been?” is totally absent as far as the civil-based lunar calendar is concerned. But it remains present in the mind in the case of the original lunar calendar. The challenge remains to answer the question. But no answer has ever been provided. The existence of the original lunar calendar therefore depends on the continued inability to answer this very real question.

If certain facts are undeniable, how come the original lunar calendar is itself not also undeniable? This is because there is more than just the bare *facts*. There are also the *connections* between the facts. These connections are not accessible to observation. If they do not exist, then the facts lose significance. The facts become random. Therefore, when one asks, “How else could it have been?”, there is competition, not only from another possible explanation than the original lunar calendar, but also from the absence of the need to produce an explanation because the facts are insignificant.

The uncertainty about the original lunar calendar can be illustrated by the Ebers calendar. Borchardt (1935: 19–29) and Parker (1950: 37–39) both considered it prime evidence for the original lunar calendar, even if Borchardt read *psdntyw*, lunar Day 1, where everyone else now reads civil Day 9. But surprisingly, in recent times, hardly anyone still assumes that the Ebers Calendar has a lunar component (for a survey, see Depuydt 1996).

What are these undeniable facts pertaining to the original lunar calendar? One finds them in Parker's classic treatment (1950: 30–50) of the original lunar calendar. For concerns of method, the facts are first presented without any interpretation in 6.3, this in order to showcase their undeniability. Connections between the facts are made only in 6.4.

6.3. *Undeniable Facts Which, when Connected to One Another, Are Widely Believed to Evidence the Existence of the Original Lunar Calendar*

(1) *First fact*: In pBerlin 10056, A, from Illahun, a time unit called *ṛmpt* “year,” consisting of lunar months, begins about civil II *šmw* (see fig. 5).⁴

Line 1 mentions the time period {*ṛmpt* 1 “one year” (not {*ṛmpt-sp* 1 “[regnal] Year 1”!; compare {*ṛmpt-sp* 31 “Ycar 31” in line 2). Line 2 makes mention of temple-needs for a period of {*ṛmpt* 6 “six months.” From the descending day numbers in lines 4–9 (26, 25,

⁴ The day numbers are generally assumed to have been established by *observation* of the moon. But I have recently (1997: 180–82) noted the simplicity of the following number patterns and suggested that the numbers were produced *mechanically*.

II <i>šmw</i> 26	III <i>šmw</i>	26	25
IV <i>šmw</i>	I <i>ṛht</i>	25	19 (not 20!)
II <i>ṛht</i>	III <i>ṛht</i>	20	19
IV <i>ṛht</i>	I <i>pṛt</i>	19	18
II <i>pṛt</i>	III <i>pṛt</i>	18	17
IV <i>pṛt</i>	I <i>šmw</i>	17	16

This table could have been constructed by the following simple rules. First of all, 26 is a given. Then, (1) write out the alternations II–IV and III–I vertically. (2) Go down from 26 by subtracting 1, though 5 at the year limit (26, 25, 20, 19, 18, 17). (3) Subtract 1 from the left number to obtain the right number, though subtract 6 at the year limit.

(1) <i>hrt rnpt 1</i>	Needs for one year.
(2) <i>hrt 3bd 6 rnpt-sp 31</i>	Needs for 6 months. Year 31.
(4) <i>3bd 2 smw sw 26 nfrjj 3bd 3 smw sw 25</i>	II <i>smw</i> 26 till III <i>smw</i> 25.
(5) <i>3bd 4 smw sw 25 nfrjj rnpt-sp 31 3bd 1 3ht sw 19</i>	IV <i>smw</i> 25 till Year 31 I <i>3ht</i> 19.
(6) <i>rnpt-sp 31 3bd 2 3ht sw 20 nfrjj 3bd 3 3ht sw 19</i>	Year 31 II <i>3ht</i> 20 till III <i>3ht</i> 19.
(7) <i>3bd 4 3ht sw 1[9] nfrjj 3bd 1 prt sw 18</i>	IV <i>3ht</i> 19 till I <i>prt</i> 18.
(8) <i>3bd 2 prt sw 18 nfrjj 3bd 3 prt sw 17</i>	II <i>prt</i> 18 till III <i>prt</i> 17.
(9) <i>3bd 1 prt sw 17 nfrjj 3bd 1 smw sw 16</i>	IV <i>prt</i> 17 till I <i>smw</i> 16.

Fig. 5. pBerlin 10056, A, verso, I, lines 1–2, 4–9 (dates only). For the hieroglyphic transcription, see Luft 1992a: 74.

Year 9 of King Amenhotep I eternal			
<i>wp-rnpt</i>	III <i>smw</i>	Day 9	rising of Sirius
<i>thy</i>	IV <i>smw</i>	Day 9	"
<i>mnht</i>	I <i>3ht</i>	Day 9	"
<i>hwt-hr</i>	II <i>3ht</i>	Day 9	"
<i>k3-hr-k3</i>	III <i>3ht</i>	Day 9	"
<i>sf-bdt</i>	IV <i>3ht</i>	Day 9	"
<i>rkh (wr)</i>	I <i>prt</i>	Day 9	"
<i>rkh (nds)</i>	II <i>prt</i>	Day 9	"
<i>rnwtt</i>	III <i>prt</i>	Day 9	"
<i>hnsu</i>	IV <i>prt</i>	Day 9	"
<i>hntj-ht</i>	I <i>smw</i>	Day 9	"
<i>jpt-hmt</i>	II <i>smw</i>	Day 9	"

Fig. 6. The Ebers Calendar in translation.

24, and so on), time periods of 29 or 30 days can be inferred. What else can these be but lunar months? It is otherwise not obvious from the text itself whether the 12 numbers refer to Months 1, 3, 5, and so on, or to Months 2, 4, 6, and so on, of a set of 12 lunar months.

(2) *Second fact:* In the Illahun archive, the rising of Sirius (*prt spdt*) falls generally in late IV *prt* (Luft 1992a: 156–57; see also section 2 above).

(3) *Third fact:* In the Ebers calendar (see fig. 6), a set of 12 names pertaining somehow to months begins with the rising of Sirius.

(4) *Fourth fact:* In the Canopus Decree of 238 B.C.E., *prt spdt* is explicitly equated with *wp rnpt*; other sources point to the same equation (Parker 1950: 33–34).

(5) *Fifth fact:* At Illahun and elsewhere, civil *w3g* (see section 4) falls on I *3ht* 18, that is, at the very beginning of a year or of a set of months.

(6) *Sixth fact:* In the Illahun archive, the non-civil *w3g* (see section 4) falls generally in II or III *smw* (Luft 1992a: 150–52).

(7) *Seventh fact:* pBerlin 10007 from Illahun (see fig. 7) exhibits the following sequence: *prt spdt* (line 17)—*w3g* (line 18)—*wp rnpt* (line 22)—*w3[g]* (line 23). *w3[]* must be *w3g*. No other feast begins with the two sounds *w3*.

6.4. Connections between the Seven Facts in 6.3 Leading to the Hypothesis of the Original Lunar Calendar

6.4.0. Some possible connections between the facts listed in 6.3 and connections between connections follow. An even tighter web of connections could probably be woven. Provided the facts on which the web is based are undeniable (see 6.3), such a web is the appropriate vehicle to think and communicate clearly and distinctly about the existence of the original lunar calendar. Again, the connections are not facts in the strict sense. One can only invite the reader to ponder the reasonableness of these connections or to connect the facts in ways leading to a hypothesis other than a lunar calendar beginning around *prt spdt*.

6.4.1. A Time Period about a Year Long Begins soon after the Rising of Sirius

Sets of 12 items pertaining to months called together a “year” can begin soon after the rising. This requires connecting the fact that such a set began around II *smw* in the later Middle Kingdom at Illahun (see fact [1]) with the fact that *prt spdt* fell generally in late IV *prt* (see fact [2]). The same connection (between *prt spdt* and a set of 12 items pertaining somehow to months) is observed in the layout of the Ebers calendar (see fact [3]). The Ebers set begins later in the year (about III *smw*) than the Illahun set (about