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# Compare and contrast the expression of the sky in two works (literature and art).

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# Introduction

For this essay I have chosen to compare and contrast the expression of the sky in two works: the poem *Works and Days* written by Hesiod;<sup>2</sup> and the illustrated manuscript *Très riches heures* of duke de Berry by the Limbourg Brothers and Jean Colombe.<sup>3</sup>

The first section describes each work by looking at: the author or the commissioner; some expressions of sky and daily life; and reasons for its uniqueness. This section is based on quotes or paraphrases; the choice and sequence of them are my decision.

The second section compares and contrasts the two works on: the cultural settings of author and commissioner and their respective work; the expression of the sky; and the possible continuity over time of these expressions. As no earlier equivalent comparison has been done, my views are based on the information in first section. In some cases quotes or paraphrasing are utilised to support my views.

The last section provides an overview of the conclusions.

# Description of the works

# **Works and Days**

The *Works and Days* (abbreviated as *WD*) was written by Hesiod, who lived around 700BCE and believed to be one of the earliest poets. Hesiod might have had a pastoral background as he talks about tending his sheep on the slopes of Mount Helikon, north of the Golf of Corinth.<sup>4</sup> The *WD* reflects the accumulated proverbial and aphorismic wisdom of the farming community.<sup>5</sup> Before the *WD*, Hesiod wrote the *Theogony* which is a poem about the birth of the cosmos and its gods.<sup>6</sup> His poems utilise traditional didactic methodology.<sup>7</sup>

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<sup>&</sup>lt;sup>2</sup> Hesiod, *Theogony, Works and Days, Shield*, trans. Apostolos N. Athanassakis, 2nd ed. (Johns Hopkins University Press, 2004), 59 - 109.

<sup>&</sup>lt;sup>3</sup> Jean Longnon, Millard Meiss, and Raymond Cazelles, *The Très Riches Heures of Jean, Duke of Berry* (George Braziller Incorporated, 2008).

<sup>&</sup>lt;sup>4</sup> Hesiod, Theogony, Works and Days, Shield: xi.

<sup>&</sup>lt;sup>5</sup> Hesiod, *Works and Days: and Theogony*, trans. Stanley Lombardo (Hackett Publishing Company Incorporated, 1993), 55-56.

<sup>&</sup>lt;sup>6</sup> Hesiod, Theogony, Works and Days, Shield: 1.

<sup>&</sup>lt;sup>7</sup> Hesiod, *Theogony*, Works and Days, Shield: xii.

#### **Author**

According to Apostolos Athanassakis, Hesiod used a premeditative style that resulted in deliberate omissions and involved a retrospective mind over the heart. He sees Hesiod both as capitalist ("keep inherited land at any cost") and as Marxist ("work is the answer"). Hesiod was critical about those in power, who he lectured and insulted as greedy kings (line 249 and 39). Hesiod was critical about those in power, who he lectured and insulted as greedy kings (line 249 and 39).

# **Expression of sky**

The *WD* starts with moral life guidelines: around justice and honest work. These are explained in: the myths of Pandora (lines 41-106) and of the five races (lines 110-201); and a fable of the hawk and nightingale (lines 202-218). Hesiod seemed to accept his day-to-day fate, even though he knew about the good times of the first, golden, race (lines 110-127).<sup>11</sup>

In Hesiod's time, catalogues were important and examples existed in Hesiod's *Theogony* on the daughters of Okeanos and Homer's *Iliad* on ships. <sup>12</sup> The catalogues in *WD* are: celestial events that direct agricultural work (lines 383-617); instructions around seafaring (lines 618-694); life guidelines (lines 695-764); and favourable and unfavourable days depending on the days after New Moon, the Moon's age (lines 765-828). <sup>13</sup>

A detailed astronomical analysis of the *WD*'s catalogues has been done by Anthony Aveni and Albert Ammerman. Their tables provide several types of celestial events: solar events, such as seasons, solstices and equinoxes; stellar events, such as heliacal and meridian events; and lunar events around the Moon's age. All linked to weather, agriculture and seafaring.<sup>14</sup> A few examples are:

Heliacal rise (May/June) and set (March) of Pleiades: 15

"Start reaping when the Pleiades rise, daughters of Atlas, and begin to plow when they set." (lines 383-384)<sup>16</sup>

The Moon's age:

"On the seventh and midmonth look about with care and then pour down Demeter's holy grain on a threshing floor that is well-rounded." (lines 805-807)<sup>17</sup>

The only month mentioned, Lenaion (Jan/Feb): 18

"In the month of Lenaion the days are bad;

they skin oxen alive. Beware of this month and its frosts" (lines 504-505)<sup>19</sup> A life guideline:

<sup>&</sup>lt;sup>8</sup> Hesiod, *Theogony, Works and Days, Shield*: xiv, xv.

<sup>&</sup>lt;sup>9</sup> Hesiod, Theogony, Works and Days, Shield: xvii.

<sup>&</sup>lt;sup>10</sup> Hesiod, Works and Days: and Theogony: 55.

<sup>&</sup>lt;sup>11</sup> Hesiod, *Theogony, Works and Days, Shield*: 60-61.

<sup>&</sup>lt;sup>12</sup> Hesiod, *Theogony, Works and Days, Shield*: xv.

<sup>&</sup>lt;sup>13</sup> Hesiod, Theogony, Works and Days, Shield: 62, 63.

<sup>&</sup>lt;sup>14</sup> Anthony Aveni and Albert Ammerman, "Early Greek astronomy in the oral tradition and the search for archaeological correlates," *Archaeoastronomy: The journal of astronomy in culture* XVI(2001): Table 1 and Table 2.

<sup>&</sup>lt;sup>15</sup> Swiss Ephemeris, AstroDienst, http://www.astro.com/swisseph/. And Aveni and Ammerman, "Early Greek astronomy in the oral tradition and the search for archaeological correlates," 87.

<sup>&</sup>lt;sup>16</sup> Hesiod, *Theogony, Works and Days, Shield*: 74.

<sup>&</sup>lt;sup>17</sup> Hesiod, Theogony, Works and Days, Shield: 85.

<sup>&</sup>lt;sup>18</sup> Hesiod, *Theogony, Works and Days, Shield*: 99.

<sup>&</sup>lt;sup>19</sup> Hesiod, *Theogony, Works and Days, Shield*: 77.

"And in your house do not sit by the hearth with your genitals exposed and bespattered with semen." (lines 733-734)<sup>20</sup>

# **Uniqueness**

According to Athanassakis, the writings of Hesiod were done in the transition period of oral traditions to the emergence of written tradition. Hesiod seemed to have consciously ignored the warrior reputation and fame as used by Homer in *Iliad* (it is not known if Homer was contemporary with Hesiod).<sup>21</sup>

# Très riches heures of duke de Berry

The Book of Hours *Très riches heures* (abbreviated as *TRH*) was commissioned by duke de Berry. It was illustrated by the Limbourg Brothers (1413-1416CE) and after their death by Jean Colombe (1485-1489CE).<sup>22</sup> It is extensively decorated with colourful religious and secular illustrations.<sup>23</sup> The manuscript is structured as a Book of Hours, which is a prayer book for the laity, albeit the rich laity.<sup>24</sup>

#### **Commissioner**

Duke de Berry was the son of King Jean le Bon of France, and had a conciliatory role during his father's and brother's reigns. Like his father he had a passionate interest for works of art, religion and astrology. Duke de Berry made sure he was represented in the manuscript: his portrait in the month of January; and his coat of arms is in several illustrations. <sup>26</sup>

# **Expression of sky**

The book starts with monthly illustration of a typical occupation (for instance Figure 2). In the centre of the calendar's tympanum the Sun chariot is depicted, surrounded by: month's day numbers; new Golden Numbers; lunar symbols; month's reigning zodiacal signs; and arc degrees in the zodiacal sign (for instance Plate 4).<sup>27</sup> The lunar symbols' orientation might be related to the humors/temperaments mentioned in the Anatomical Person, but no definite references were found.<sup>28</sup>

The occupations and zodiacal signs follow the commonly used calendar depictions of the European Middle Ages.<sup>29</sup>

Each monthly occupation is followed by a calendar table (for instance Figure 1) which provides information about: Golden Numbers; Dominical Letters; Roman dates; Saint's

<sup>&</sup>lt;sup>20</sup> Hesiod, *Theogony*, Works and Days, Shield: 83.

<sup>&</sup>lt;sup>21</sup> Hesiod, *Theogony, Works and Days, Shield*: xi, xv.

<sup>&</sup>lt;sup>22</sup> Limbourg Brothers and Jean Colombe, *Très riches heures du duc de Berry*, 1416, 1489. And Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 22-25.

<sup>&</sup>lt;sup>23</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 31-224. The Plates and their commentaries

<sup>&</sup>lt;sup>24</sup> Edmond Pognon, *Les tres riches heures du Duc de Berry: 15th-century manuscript*, trans. David Macrae (Liber, 1979), 10.

<sup>&</sup>lt;sup>25</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 15, 17, 181.

<sup>&</sup>lt;sup>26</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 10, 28.

<sup>&</sup>lt;sup>27</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 174, 179. And Otto Neugebauer, "Astronomical and calendrical data in the Tres Riches Heurers," in *Astronomy and History: Selected Essays* (Berlin: Springer, 1983).

<sup>&</sup>lt;sup>28</sup> Harry Bober, "The zodiacal miniature of the Tres Riches Heures of the Duke of Berry: Its sources and meaning," *Journal of the Warburg and Courtauld Institutes* 11(1948): 10-13. and Victor Reijs, "Correlation Moon symbol and the Sun's position in the zodiac," http://www.slideshare.net/vreijs1/correlation-moonzodiac.

<sup>&</sup>lt;sup>29</sup> C. Hourihane, *Time in the Medieval World: Occupations of the Months and Signs of the Zodiac in the Index of Christian Art* (Deptartment of Art & Archaeology, Princeton University, 2007), liv-lxiii.

feast days (incl. unfavourable days: Dies Aegyptiaci); length of the days; and new Golden Numbers.<sup>30</sup>

The remaining contains religious material: excerpts from the four canonical gospels; offices of Blessed Virgin Mary and the Dead; several Psalms; litany of Saints; hours of the Cross: etc.<sup>31</sup>

The monthly illustrations give seasonal impressions such as: February (Figure 3), "two peasants immodestly warm their legs" (Plate 3); March (Figure 2), "The plowshare penetrates earth covered with faded winter grass" (Plate 4); and June (Figure 4), "The freshly untouched grass, and the already fading shocked hay is still [sic already] different in color" (Plate 7).<sup>32</sup>

The religious illustrations provide many relations with the sky. For instance the Virgin is painted above a lunar crescent (Plate 19).<sup>33</sup> There are two nightly illustrations: Christ in Gethsemane (Plate 107), three shooting stars are depicted; and The Death of Christ (Plate 115), with a darkened and an eclipse or crescent shaped celestial object (Figure 6).<sup>34</sup> Golden rays, God the Father and/or seraphims are present in many illustrations (such as Plates 33, 40 and 88). 35 Pristine blue skies and dramatic cloud formations are also depicted in many illustrations (such as Plate 101 and 118).<sup>36</sup>

### **Uniqueness**

In the *TRH* new pictorial techniques were used such as: proportionality in landscapes; aerial perspective scenes; and shadow casting.<sup>37</sup> The Anatomical Person (Figure 5) is unique, as no other Book of Hours has this astrological depiction.<sup>38</sup> Other secular subjects (such as castles) were depicted (see Figure 4), thus making it a unique Book of Hours for its time.<sup>39</sup>

It is interesting to realise that the Golden Number was used in the TRH table to determine the liturgical New Moon, while the new Golden Number indicates the astronomical New Moon. The realisation of the increasing difference (3 days in 1400CE) between astronomical and liturgical New Moons was emerging in the Middle Ages. 40 This realisation resulted in the 1582CE calendar reform of Pope Gregory XIII. 41

<sup>&</sup>lt;sup>30</sup> Hourihane, Time in the Medieval World: Occupations of the Months and Signs of the Zodiac in the Index of Christian Art: liv-lxiv. and Neugebauer, "Astronomical and calendrical data in the Tres Riches Heurers." Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: Plate 15-139, page 181-224.

Solution 224.

Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 174, 176.

The Bishar Houres of Jean, Duke of Berry: 183.

<sup>&</sup>lt;sup>33</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 183.

<sup>&</sup>lt;sup>34</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 211, 214.

<sup>&</sup>lt;sup>35</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 188, 190, 205.

<sup>&</sup>lt;sup>36</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 208, 215.

<sup>&</sup>lt;sup>37</sup> Pognon, Les tres riches heures du Duc de Berry: 15th-century manuscript: 12. And Longnon, Meiss, and Cazelles, The Très Riches Heures of Jean, Duke of Berry: 23.

<sup>&</sup>lt;sup>38</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 181.

<sup>&</sup>lt;sup>39</sup> Longnon, Meiss, and Cazelles, *The Très Riches Heures of Jean, Duke of Berry*: 10, 22.

<sup>&</sup>lt;sup>40</sup> James Patrick, *Renaissance and Reformation* (Marshall Cavendish, 2007), 173-177. And Neugebauer, "Astronomical and calendrical data in the Tres Riches Heurers," 510-516.

<sup>&</sup>lt;sup>41</sup> David E. Duncan, The Calendar: The 5000-Year Struggle to Align the Clock and the Heavens - and What Happened to the Missing Ten Days (Fourth Estate, 1998), 277-287.

# Comparing and contrasting the works

#### **Descendance**

There is some 2,000 years between the poem of WD and the illustrations in TRH. And according to Stephen McCluskey it was not likely that people in the Middle Ages would have known specifically about WD, but secondary sources might have been available such as *Natural History* (77-79CE) by Pliny the Elder: who used knowledge from WD. 42 This would have allowed the spread of WD knowledge into the Middle Ages. 43

# **Audience and changing times**

WD looks to have been written for the farming community, while TRH was made for an individual duke; so different types of audience. WD and TRH were though both on the brink of changing times. WD was at a time that oral tradition was overtaken by written tradition and Hesiod had chosen to record the knowledge of the farming community. TRH showed more realistic drawing techniques and had more attention to secular aspects of life than earlier Middle Ages' Book of Hours. It also showed the emerging difference between liturgical and astronomical New Moons.

One experiences a difference between reading the poem WD and viewing the illustrations in TRH. Text and illustrations are differently processed by the human brain: text needs mindful semantic processing, while illustrations are processed almost automatically for getting an overall impression. 44 This difference might be compensated, as the WD text has quite literal guidelines while the TRH illustrations include descriptional/symbolic knowledge.

# Message

The heliacal events of Pleiades, described in WD, relate to reaping (at its June heliacal rise) and ploughing (at its March heliacal set), these map the TRH illustrations of resp. June (Figure 4) and March (Figure 2). WD's Lenaion (Jan/Febr) is a frosty period as can been seen in February of TRH (Figure 3).

The advice in WD not to sit by the hearth with ones genitals exposed, is mirrored by the TRH illustration where a lady averts her gaze from immodest peasants (Figure 3).4 According to Jonathan Alexander this scene indicates the differences in class. 46 The WD occupational calendar is defined by solstices, equinoxes and stellar events. The TRH occupational calendar is mainly driven by monthly seasonal events. In WD there is no obvious formal calendar, except for: Lenaion, the only month

mentioned (line 504).<sup>47</sup> The *TRH* provides a perpetual calendar based on: the new Golden Numbers, and the Dominical Letters.

WD looks to start on equinox or summer solstice, as two conflicting interpretations are found. 48 The TRH's calendars starts with the seasonal occupations in January, while

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<sup>&</sup>lt;sup>42</sup> Stephen C. McCluskey, Astronomies and Cultures in Early Medieval Europe (Cambridge University Press, 2000), 15.

<sup>&</sup>lt;sup>43</sup> McCluskey, *Astronomies and Cultures in Early Medieval Europe*: 16-17.

<sup>&</sup>lt;sup>44</sup> Bernd Weidenmann, "When good pictures fail: An information-processing approach to the effect of illustrations," in Knowledge Acquisition from Text and Pictures, ed. Heinz Mandl and Joel R. Levin, Advances in psychology (Elsevier Science, 1989), 162.

<sup>&</sup>lt;sup>45</sup> Both Jonathan Alexander (professor emeritus on medieval European art, especially manuscript illumination at New York University) and László Sándor Chardonnens (researcher on divination, magic, and the transmission of utilitarian and scientific knowledge in the Middle Ages at Radboud University) had not yet encountered my finding of an equivalent message in WD and TRH.

<sup>&</sup>lt;sup>46</sup> Jonathan Alexander, "Labeur and paresse: Ideological representations of medieval peasant labor," *The art* journal 72, no. 2 (1990): 438-440.

<sup>&</sup>lt;sup>7</sup> Hesiod, Theogony, Works and Days, Shield: 77.

including the Roman calendar starting on March  $1^{\text{st}}$ . Star lore is explicitly abundant in WD (lines 383-617), but almost lacking in TRH. The many favourable and unfavourable days related to the Moon's age in WD (lines 765-828) are in stark contrast with the very few unfavourable days in TRH related to solar calendar dates.

Both *WD* and *TRH* have a moral agenda: *WD* in the form of myths and a fable, while *TRH* has religous texts. The work ethic in *WD* is evident, and comparable with expressions in *TRH*; where the farmers work and the nobility feasts, courts and hunts. <sup>50</sup> In the sixteenth century, Luther's work and acceptance ethic continued this trend up to the present, as described by Max Weber. <sup>51</sup>

# Earlier and present-day works

Alexander Mair compared the *WD* events with: *Geoponica*, *The rising and setting of the visible stars* (around 950CE); and *Kalendarium rusticum* (1669CE).<sup>52</sup> Mair referred to stellar events in the *Geoponica* (like *WD*), while the *Kalendarium rusticum* has: occupational and seasonal advice (like *TRH*); plus stellar events.

The *Cairo Calendar* (around 1,300BCE) provides an overview of: gods and goddess (akin saints); and 365 passages (akin calendar) on mythological (akin moral) events, favourable and unfavourable days, omens, etc. <sup>53</sup> These omens resemble the somewhat earlier compiled omen text *Enûma Anu Enlil* in Mesopotamia. <sup>54</sup> After *TRH*; we see in present-day almanacs, such as Maria Thun's gardening calendar, overviews of favourable and unfavourable days based on position of celestial objects and on the anthroposophy of Rudolf Steiner. <sup>55</sup>

# Conclusion

The *TRH* might have utilised *WD* through the use of secondary sources. But both *TRH* and *WD* seem to have broken with earlier periods. Although both use a different way of expressing their ideas (textual and pictorial), they are able to convey the messages in a comparable and effective way. The calendrical information in stellar and solar/seasonal events, results in similar outcomes concerning which and when an agricultural activity needs to be done. The *TRH* scene of the "two peasants immodestly warming their legs" might have roots in *WD*, but could not be traced in scholarly literature. The concept of favourable and unfavourable days has significantly changed over the 2,000 years. Furthermore both works provide a moral agenda, which includes a work ethic that is still

<sup>&</sup>lt;sup>48</sup> Aveni and Ammerman, "Early Greek astronomy in the oral tradition and the search for archaeological correlates," 86. And Hesiod, *Theogony, Works and Days, Shield*: 100. Many translations of Hesiod state that the end of the year is when 'day and night are equal' (aka equinox), but according to Athanassakis the text does not map with seasonal description. A question for a reference is outstanding with Athanassakis.

<sup>&</sup>lt;sup>49</sup> Duncan, The Calendar: The 5000-Year Struggle to Align the Clock and the Heavens - and What Happened to the Missing Ten Days: 41.

<sup>&</sup>lt;sup>50</sup> Alexander, "Labeur and paresse: Ideological representations of medieval peasant labor," 441.

<sup>&</sup>lt;sup>51</sup> Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Talcott Parsons (Routledge Classics, 2001), 44-45.

<sup>&</sup>lt;sup>52</sup> Alexander W. Mair, "The farmer's year in Hesiod," in *Hesiod, the Poems and Fragments: Done into english prose with introduction and appendices* (Kessinger Publishing, 1908).

<sup>&</sup>lt;sup>53</sup> Patty A. Hardy, "The Cairo calendar as a stellar almanac," *Archaeoastronomy: The journal of astronomy in culture* XVII(2002-2003): 49.

<sup>&</sup>lt;sup>54</sup> Hardy, "The Cairo calendar as a stellar almanac," 61. and Francesca Rochberg, *The heavenly writing; Divination, horoscopy, and astronomy in Mesopotamian culture* (Cambridge: Cambridge university press, 2004).

<sup>&</sup>lt;sup>55</sup> Maria Thun and Matthias Thun, *The Biodynamic Sowing and Planting Calendar 2013* (Floris Books, 2012).

very tangible in present-day western society.

Très riches heures, Work and Days and other works show a long tradition of some 4,000 years where the expression of the sky is recorded in catalogues of: gods and goddesses; saints; favourable and unfavourable days; and reigning celestial objects.

The sky was and still is important in the lives of people.

# Acknowledgements

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# Illustrations

(all from:

http://commons.wikimedia.org/w/index.php?title=Category:Tr%E8s\_Riches\_Heures\_du\_

Duc\_de\_Berry\_scan\_2004)

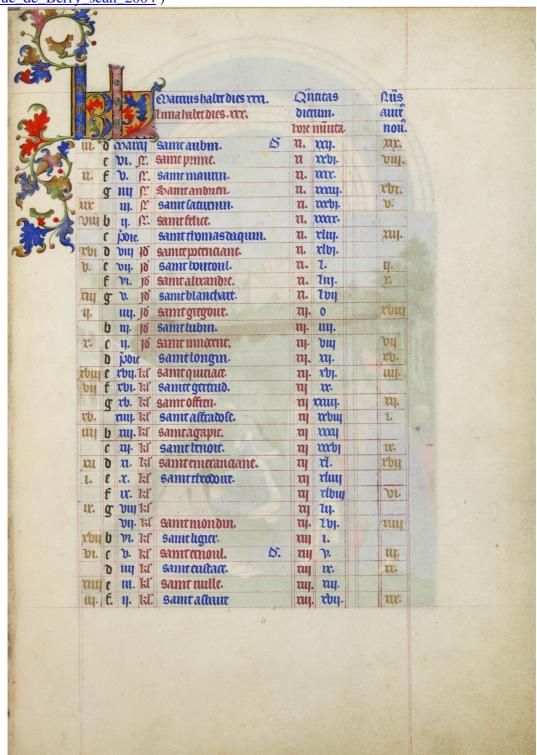


Figure 1 March text, with D standing for Dies Aegyptiaci (unfavourable day)



Figure 2 March illustration; see the ploughing (with shadows) in the occupation part and the changing lunar symbol orientation in the tympanum



Figure 3 Detail of February illustration; "Two peasants immodestly warm their legs"



Figure 4 Detail of June illustration; "The freshly untouched grass, and the already fading shocked hay is still [sic already] different in color"



Figure 5 The Anatomical (or astrological) Person



Figure 6 Detail of The Death of Christ, with dark (on middle left) and crescent/eclipsed celestial object (on middle right)