

CULTURE AND COSMOS

A Journal of the History of Astrology and Cultural Astronomy

Vol. 14 no 1 and 2, Spring/Summer and Autumn/Winter 2010

Published by Culture and Cosmos
and the Sophia Centre Press,
in partnership with the University of Wales Trinity Saint David,
in association with the Sophia Centre for the Study of Cosmology
in Culture,
University of Wales Trinity Saint David,
Faculty of Humanities and the Performing Arts
Lampeter, Ceredigion, Wales, SA48 7ED, UK.

www.cultureandcosmos.org

Cite this paper as: John Meeks (trans.), 'Excerpts from Kepler's Weather Calendar of 1619', *Culture and Cosmos*, Vol. 14 no 1 and 2, Spring/Summer and Autumn/Winter 2010, pp. 199-208.

British Library Cataloguing in Publication Data
A catalogue card for this book is available from the British Library

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from the Publishers.

ISSN 1368-6534

Printed in Great Britain by Lightning Source

Copyright © 2018 Culture and Cosmos
All rights reserved

Translations of Kepler's Astrological Writings

Part I, Section 4.3. Excerpts from Kepler's Weather Calendar of 1619

Translated and annotated by John Meeks

The following passages selected from the 1619 Calendar are relevant to Kepler's predictions for 1618. In view of the momentous nature of the outbreak of war, Kepler does not review the success or failure of his weather predictions. His reflections on the war are characteristic of his conviction that the stars do not determine, but rather influence human affairs, and that despite their strongly stimulating nature, they nevertheless leave full scope for the exercise of freedom.

The appearance of three comets in the autumn of 1618 and the destruction of the city of Plurs in Switzerland receives a detailed commentary, most of which is included here.

Taken from Gesammelte Werke 11.2, pp. 173-188

On Various Menacing Omens of Future Troubles in the Affairs of Government and the Church Especially from Comets and Earthquakes 1618 and 1619

Last May the tinder took fire, just as I had warned, and especially for that particular month. And as the flames have now spread from street to street, there are many who stand open-mouthed, waiting and wondering what good news the coming year may bring. And to be sure, it would be a valuable Prognostication indeed which, instead of offering pious blessings, served to extinguish the fire.

But dear readers, just as little as it is possible to strike a fire back into the flint whence it arose, so little can the heavens prevent the

John Meeks (trans.), 'Excerpts from Kepler's Weather Calendar of 1619', *Culture and Cosmos*, Vol. 14 no 1 and 2, Spring/Summer and Autumn/Winter 2010, pp. 199-208.

www.CultureAndCosmos.com

conflagration from spreading, considering that they did no more than someone who lights a fire: for if no gunpowder had been waiting for it on the earth, it would not have ignited in the first place.

Therefore let him fight the fire who can and may do so, for as far as the heavens are concerned, it will consume everything around it, as long as the wood and straw last, and as long as each of the warring parties consider it advisable under this pretext to keep up the fighting. A Prognostication can occasionally warn that at certain times there will be a natural tendency for the emotions to become enflamed, but once it has happened, no Prognostication can help.

For the approaching year I would wish to give a cautionary warning with respect to innovations in world trade. This applies particularly to the months of March, April and July, during the slow opposition of Jupiter and Mars: it would be advisable not to enter into new trade agreements at this time and to take heed that the existing ones do not lead to a massive revolt. In October a bloody aftermath can follow: the opposition of Mars and Saturn in the place notorious for slaughter (*in loco caedibus infami*) [on 7th October]. And it should no less be borne in mind that famine and epidemics generally follow on the heels of the ravages of war.

Many a reader may ask, 'What can I do to bring such celestial influences onto my side, and prevent my enemy from anticipating me?'

The Answer:

Above all else, be warned against the great majority of Prognosticators. Not so much lest you should be led astray by them, for who will trouble to discover the motives for your actions? But rather lest you should fall into the habit of wasting your time and your thoughts over them, thus making the tragic misfortunes of the country the subject of vain speculation, as though you were watching a comedy, forgetful both of yourself and of the seriousness of the situation.

Rather let what you can learn about the Celestial Influences – if not from others, then through this my Prognostication – serve as a reminder of yourself and your own welfare, and do not resent my well-intentioned forwardness in mixing morals with astrology.

And the further sense of my answer and my recommendation is this: You may see that in our times God is not especially disposed to perform miracles or to respond to personal supplication, but that He helps each one to understand what he must do to escape misfortune. It is His way, therefore, in almost all His works, not to speak with audible words, but

through visible and tangible actions; he is not accustomed to assign to each person his own particular bird to bring him nourishment, as was once the case with the prophet Elijah. Rather, he gave human beings hands, senses and reason, and it pleases him that his Creature should not be a dead, but a living Creature, that man should make use of His gifts, and through his labour and diligence receive his share of all that God has created out of the Earth. In order that His will should be done in this, He has given him the precious and holy gift of poverty, which arouses him from sleep and idleness, so that he does not grow indolent and drown in sin, thus perishing both temporally and eternally.

Now consider the sad plight of the present times in the light of these observations. No divine revelation is needed – much less an astrological one – to show what you and your enemy are lacking. God has written His will into your heart; you are no longer so blinded by desire that you cannot perceive your heart beating in protest against every unjust deed or wrongly pursued phantom and illusion. And if God should threaten us with the direst misfortunes, this is His usual way of preaching to humanity; He generally lets it rest at this, it being His will that you should preach to yourself, and confess to yourself your own injustice. ‘Be not as the horse or the mule, which have no understanding’.¹ ...

Now if a person have no Christian love in his heart, but is constantly speaking of divine providence, it is nothing but a travesty, and the old cry of *Templum Domini, Templum Domini*,² which once reduced Jerusalem to ashes. But if you are determined at all costs to have your will, and, under the cover of respect due to higher or lower personages, either to yourself or to others, you conceal the evil nature of what you would insist upon, then know that Misfortune can insist better, and what you cannot lift, you must let fall in the end. ...

VI. Three Comets of 1618

I had completed my Prognostication up to this point when I received the news that from the 27th August (in Hungary from the 25th) a comet had been visible. I was urged to look for it, and on the 1st, 2nd and 3rd September I finally succeeded in finding it in the morning sky before sunrise. Its tail was turned upwards to the right, but was rather dim. No doubt it had been brighter on the 24th [sic] of August, otherwise it could

¹ Psalms 32:9.

² Jeremiah 7:4.

not have been seen by ordinary people. God alone knows how long it had been in the sky before anyone noticed it; then it moved further away from the Sun, its orbit passing over the head of the constellation Leo, from whence it continued its course back into Cancer and somewhat upwards towards Septentrion, through the claws of the Bear, almost exactly following the path along which its very dim tail was stretched. I saw it for the last time on 24th and 25th September by the new Calendar, roughly in the 29th degree of Cancer.... Welcome Guest, I was expecting you, as can be seen from my Prognostication of 1618. And what good tidings do you bring? ‘There is no comet which brings no evil’, says the poet, referring to his bald head.

Which lands are subject to Leo can be read in almost all Prognostications: among other places Bohemia and Linz. For my part, I have had bad experiences with these attributions, and it would seem that the astrologers have assigned the Kingdom of Bohemia thus because of the Lion in its coat-of-arms. I don’t want to dismiss it out of hand, but I would prefer to seek my orientation elsewhere. For I hold that if someone ... has the sun in Leo in his nativity, and if in the year of his birth a comet appeared there (this was the case in 1590 – and all such persons have now attained to some age) any interpretation of his birth sign must needs take the comet into account. The same would apply to a prince with the Sun in Leo, especially if he had several planets in the Lion. All things considered, it would appear that our present affairs will be drawing to a close, and that we will need to brace ourselves for new ones, which will either commence among the opposing parties themselves or among those who assist them and depend upon them. And it may be that the wild Bear would signify an invasion of the Muscovites, Tartars and Turks in Poland or Silesia, bringing great misfortune and sorrow to the governments of those countries. And whatever may take its beginning now will doubtless continue for several years, until the great assembly (*Reichstag*) of the superior planets in the Lion, from whence the Comet came, in 1623/1624. There may also be changes in England. For the opposition of the Sun and Mercury to Jupiter on 26th August (just after the Comet appeared) in the third degree of Pisces may easily be so interpreted, the more so in view of the Square which Saturn makes between them in the first third of Gemini. Disregarding the assignment of cities to the twelve signs, to write truthfully I can see no reason in the heavens, why all the provinces of Austria should not benefit from Jupiter in Pisces, which may be expected to give all manner of gentle impulses to promote peace and tranquillity.

Indeed, we would have all reason to rejoice, but for the adverse terrestrial factors delaying the celestial ones.

However, it should be borne in mind that a year ago I gave my verdict in view of the fact that Jupiter would enter Pisces on the 14th April 1619; yet all the same, we have had difficult dealings with our neighbours (who should have been subject to the same influence), which to all appearances promise little good to come.

I am having a serious look at the year 1607, when a comet appeared, also in September, also in Leo and also at the time of an opposition of the Sun and Jupiter. This comet was moving forwards towards Sagittarius. My interpretation is public knowledge: that changes in government and religious affairs would be carried to the happy conclusion desired by the majority of the people. Further, I pointed out that when seen from Bohemia (where I was living at the time) the comet's tail pointed towards Hungary. Now whether or not the event proved me right each one may judge for himself, for one person desires and imagines one thing, another something quite different.

Now if in the light of these affairs I should venture a comparison with the present comet, then its movement is not forwards as in 1607 but retrograde, and its direction is not downwards but upwards. Therefore I fear that where the intentions of higher and lower ranking individuals are in opposition it may be the cause of negative thoughts. ...

VII. But we have still not finished with aspects, visions and comets, for just as I was working on this part of the Prognostication, the fearful and tragic news arrived from Graubunden of the sudden destruction of the prosperous town of Plurs on the Mäna, a strong and swift-flowing river...³ [T]he river, and with it the whole town, was buried in a matter of moments beneath an avalanche when a large chunk of the mountain became dislodged, and descended from a precipitous height, changing the course of the river, making it to flow over what was once a hill and is now a valley.

There are indications that this may have been caused by an earthquake which split the rock: the extreme dryness of the weather here; the fact that in nearby Cleven a rumbling was heard; but this in particular, that

³ The city of Plurs in Upper Engadin (today Piura in Italy) was destroyed by an avalanche on 4th September 1618, while the first of the three comets was still visible. The question of whether the avalanche was caused by an earthquake is still disputed. There were warnings a few days before the event about a wide fissure which had suddenly formed in the earth, but the authorities seem not to have taken this seriously.

travellers returning from the region reported how, for four days before the avalanche a dreadful stench was spread abroad, as though the very air were infected. So unbearable did it become, that a number of people were moved to leave the area. This stench may be an indicator that in the deepest clefts of the earth a volatile, fiery *materia* was smouldering. Once fully ignited, it split the earth violently apart, just as trees or rock may be split apart by a charge of explosives. A similar thing happened in Rome before the birth of Christ, when a chasm was opened in the earth, from which a pestilential stench rose up; until at last Q. Curtius sprang into the abyss with his horse. A few further observations give support this assumption. As I had guessed, reliable sources report that the rockface from which the material was dislodged seems much too small to account for the town being buried under such a massive landslide. Further, some corpses were found at a considerable distance from the town, being partly singed as though by a fire. Finally, landslides occurred in other parts of Graubunden, burying considerable tracts of agricultural land.

Now last year I suggested plainly enough, that when comets or earthquakes occur, we must be prepared to interpret them as the grievous events which they are. Let us try to read the significance of this fearful catastrophe; we will be far less likely to go astray than in our interpretations of the stars, for we need no rules from the superstitious books of the Arabians, but rather the pure and clear rule from the gospel of our master Jesus Christ, who is Himself the Truth: 'Or those eighteen, upon whom the tower in Siloam fell, and slew them, think ye that they were sinners above all men that dwelt in Jerusalem? I tell ye Nay, but except ye repent, ye shall all likewise perish.'⁴ ...

Continuation: Two further Comets, etc.

Gentle reader, there seems to be no end to the wonders sent by God, and to the strong and threatening portents arriving before the year's end. For ... in the wake of the Comet of August and September two other Comets have come forth. The first appeared on 20th November, displaying a very long, bright, fiery tail which extended some 40° in the clear morning twilight from the east to the south. Passing beneath the constellations Hydra and Corvus, it then curved like a scimitar near Crater. ...

In the following days it moved further to the south and west, nearly reaching Cor Hydrae [*Alphard*] by 29th November.

⁴ Luke 13:1-5.

The last Comet then appeared on this very morning alongside the other, close to the [celestial] equator in the sign of Scorpio. Its reddish-yellow tail pointed westwards along the zodiac towards the [celestial] pole. By 9th December the tail had attained a length of 72°, while becoming paler and watery in hue. It extended from the eastern leg of Boötes (*Crure Boötis Orientali*) to the breast of Ursa Major (*pectus Ursae*). But while the Comet is still much in evidence, the weather here in Linz has been persistently cloudy, so that no observations are possible. God willing, I hope to report more about it on some other occasion. For the present, I only wish to append this much:

1. That perhaps the Prognostications were not detailed enough.

2. As far as the weather is concerned, the predictions can stand unchanged, for they were made on the basis of the ordinary aspects. Even if I had anticipated the comets, I would not have known how they would affect the weather differently, apart from the one general rule, that they might be followed by great and unusual extremes, such as inflation and outbreaks of the plague. Nevertheless, the ordinary aspects will still make themselves felt and assert themselves on the days indicated.

3. These comets confirm what I said in my Foreword about the drought conditions in the autumn; and as the first comet already faded in September, it seems clear that Nature already felt the approach of the others.

4. A most mournful event on the earth has been joined to those signs in the heavens: namely, the sorrowful passing on 14th December of Her most Serene Highness the Roman Empress, crowned Queen in Germany, Hungary and Bohemia, our gracious Sovereign....

May the Almighty, Who has warned us in such manifold ways let us feel His mercy even in the midst of His wrath..., and may He let the punishments with which we have been threatened spur us on for the betterment of our lives and the redemption of our souls. Amen.

From the Calendar of 1620

A year later Kepler returned to the comets, again devoting a considerable portion of the calendar to the theme. He writes:

[GW, 11.2, p. 211]

In the year 1618 three distinct comets appeared: the first in September, the second and third in November, and I cannot forbear to say that various people give me credit for having

predicted them from the planetary aspects. But they did not follow the exact meaning of my words. I simply had a foreboding, that should a conflict arise out of the various tensions which prevailed in the world, there might be a harbinger to warn of its coming; moreover, there had not been a comet for the last 12 years.

In the text which follows this passage, Kepler expresses his scepticism about reports that an unnamed brother of the Rosicrucian Order had prophesied the comets, and points out how easily a bright planet like Jupiter or Venus may be mistaken for a comet when it is surrounded by an atmospheric halo. He adds that the bookshops were filled with publications about comets, and that there were frequent rumours of comets during the year 1619. Further, he disassociates himself from certain prophecies concerning the comets which had been incorrectly attributed to him.

Notes on the Comets

The September Comet (1628 I) was reported by Korean observers to have a bluish-white tail more than 15° long. It became visible a few days after perihelion (August 15). Kepler observed it on 6th September with a telescope, and may have thus become the first person to observe a comet telescopically. This was, in fact, the first comet to appear since the invention of the telescope 8 years earlier.⁵

Horatio Grassi, reporting on the two comets which appeared in November, writes:

On the eighteenth day of November, to the southeast there emerged a second new fire of the sword-shaped type... This comet was of very slight brilliance, but of such great extent that it formed a visual angle of about 40°. ...However, these fires, doubtless from lack of size and lack of brilliance, did not greatly kindle men's minds, frozen at that time by the north wind, and the fires were not considered worthy of very acute observation....

⁵ Fred Schaaf, *Comet of the Century* (New York, 1997), pp. 219-21.

*I hasten on to the third, which as it surpassed the others in magnitude of light and daily continuance, ... drew to itself the eyes of all.*⁶

*This "Great Comet" of 1618 was apparently first observed in Libra, and during the next few weeks its tail extended as far as the bowl of the Big Dipper, attaining the astonishing length of 104°, according to Regiomontanus.*⁷

The Comet of 1607 to which Kepler refers was the last appearance of Halley's Comet before the discovery of its periodic orbit by Edmund Halley in 1682. Halley's calculations were, of course, only possible through the application of Kepler's three laws of planetary motion (as further refined by Newton) and with the help of Kepler's drawings and observations of the comet's movement in 1607. Ironically, Kepler himself believed that comets move along straight lines, and even went to considerable trouble to deduce such an orbit for the Comet of 1607.

Kepler had first noticed the comet following a fireworks display in Prague on 25th September. It was visible before perihelion, and displayed a tail some 10° in length. As Kepler remarks, no other comet was seen until 1618.

The credit given to Kepler for anticipating the comets has its basis in a passage in the Prognostication of 1618 under the heading "On World Trade, War and Peace", where he writes:

It is true, that quite apart from the vehement aspects in May and June, even now, from day to day, more and more earthly comets are appearing and flying about, which bode no good. But whether these are really such important and remarkable comets, or just lowly, vain will-o'-the-wisps, that disappear again in a moment, I leave for those to judge who are better acquainted with the earthly comets than the celestial ones.

⁶ Translated in Stillman Drake and C. D. O'Malley, *Controversy on the Comets of 1618* (Philadelphia, 1960), p. 8 (I have emended 'magnitude' in Drake and O'Malley's translation to 'extent', because in astronomy the word 'magnitude' always denotes brilliance).

⁷ Schaaf, *Comet of the Century*, p. 221.

But if a genuine comet should appear in the sky, or an earthquake strike, then the time would be ripe for us astrologers to sharpen our quills alongside the politicians.⁸

It is clear from the context that he did not expressly predict the appearance of a comet, but, as he explains in the 1620 Calendar, felt it not unlikely that one might come as harbinger of the social and religious strife which was already in the air. The 'earthly comets' he refers to seem to be images for the chaotic forces which threaten to bring disorder and violence but, because they are undirected, often dissolve as quickly as they arose. Kepler's efforts to explain the avalanche of 1618 as the result of an earthquake may also be understood in the light of this passage.

⁸ See **Part I.4.2** in this volume, p. 197.