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Kepler's Wallenstein-Horoscopes

KLAUDIA EINHORN AND GÜNTHER WUCHTERL

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Astrology often is claimed to be an ancient science based on dozens of centuries of experience and observations. We wanted to know what the essence of this claim might be and investigated historical horoscopes. As expected we found inaccurate planetary positions, but also other inaccuracies as errors in transformations between calendars (e.g. from lunar to solar years) or wrong geographical coordinates. A dominating role is played by errors in the position of the equinoxes – they ultimately were also the trigger of the switch from Julian to Gregorian calendar.

Because the 'exactness' of the horoscopes is the basis of astrological practice we were especially interested in calculations of the man that made the calculations of accurate planetary positions possible by a revolution in the understanding of the planetary laws of motion. But Astrologers consider him to be the father of modern astrology for entirely different reasons and despite the fact he was very likely the most important and most competent critic of astrology of his time. Johannes Kepler did not only point to numerous errors in the astrological practice of his time, but personally discarded almost all astrological elements as human arbitrariness. What remained in his astrology were the planets and the aspects – particular angles between the planetary directions, as seen from a certain place – as a possible, still to be developed, tool for astrometeorological predictions. Astrologers ignore these facts because, as is argued, he had nevertheless cast horoscopes. Generally there is one mayor reference. Wallensteins's horoscope.

Kuffner-Sternwarte, Johann-Staud-Straße 10, A-1160 Wien, Austria
University Observatory Jena, Schillergäichen 2, D-07749 Jena, Germany

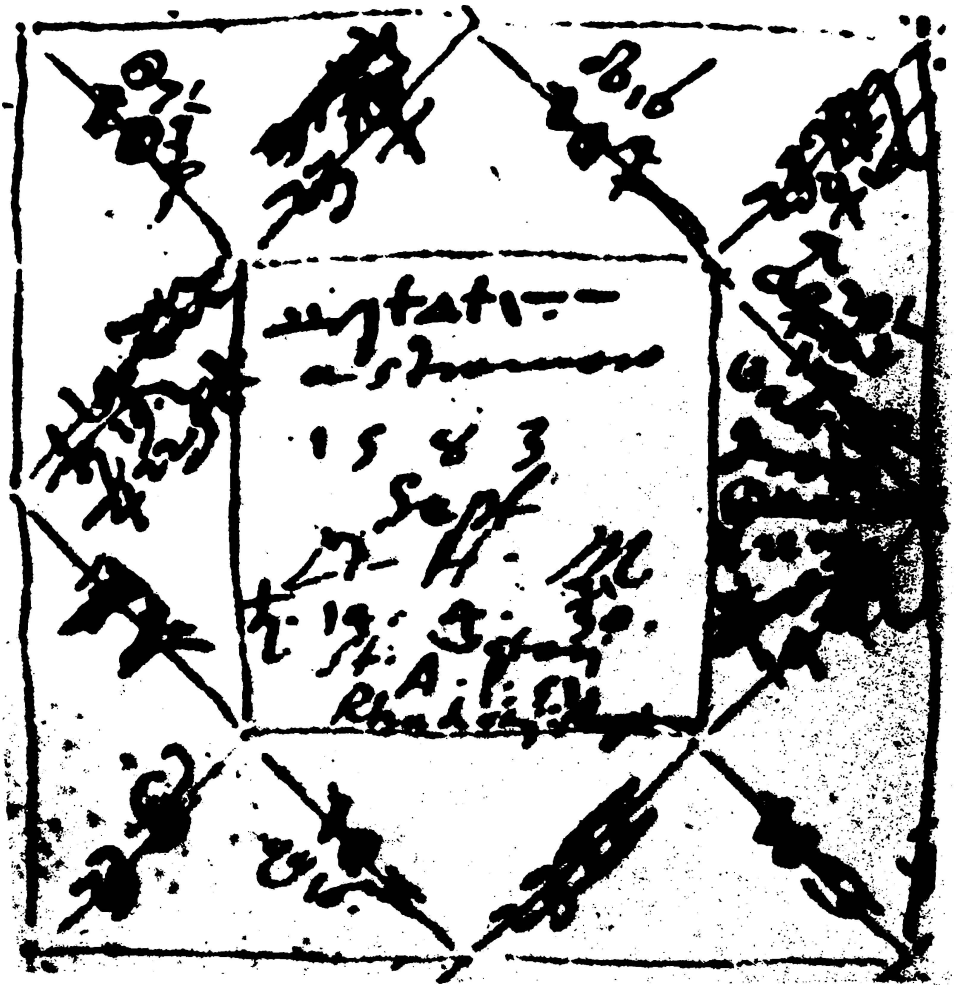


Fig. 1 Kepler's Wallenstein Horoscope (1608, rectified 1625) (Archiv of the Kepler-commission, München, Original: Archive of the Russian Academy of Sciences, St. Petersburg Department.)

Symbols and Abbreviations					
Zodiacal Signs		Stars etc. and further horoscope-factors		aspects	
Aries	♈	Sun	☉	Conjunction = 0°	♄
Taurus	♉	Moon	☾	Sextil = 60°	*
Gemini	♊	Mercury	☿	Square = 90°	□
Cancer	♋	Venus	♀	Trigon = 120°	△
Leo	♌	Mars	♂	Opposition = 180°	♁
Virgo	♍	Jupiter	♃		
Libra	♎	Saturn	♄		
Scorpion	♏	Lunar nodes	♁		
Sagittarius	♐	Medium Coeli	MC		
Capricorn	♑	Ascendant	AC		
Aquarius	♒				
Pisces	♓				

Table 1: Symbols

Wallenstein-Horoscopes 1608

We found the text to that famous horoscope from 1608, together with the rectified Wallenstein-horoscope from 1625 in Herz (1895)¹. Because Wallenstein wanted to remain incognito, he used a middleman to contact Kepler and communicate his birth-data. According to that information the duke of Friedland was born on 24th September 1583, in the gregorian calendar, at 4h30 p.m. and under a polar height of 51°00'. In the astrological literature it is not taken into account that this must be the respective time that was in use at that time, namely the local apparent time. In well known astrological data-bases the above time is marked as LMT (locam mean time). But the local mean time relevant for this horoscope is 16^h22^m.

We checked the horoscope with Redshift 3² (using DE 102, ephemeris with a precision of better than 20 arcsec for the relevant time) and *Ephemeris Tool 4.5*³ with VSOP87 high precision ephemeris and found that the famous Wallenstein horoscope is wrong. For a polar height of 51°00' and a birth time of 16^h22^m LMT

¹*Keplers Astrologie*, Dr. Norbert Herz; Wien 1895 atd.

²Redshift 3, United Soft Media, München 1998.

³M. Dings, 2001.

we obtain the values given in Tab. 2⁴. Kepler must have made an error because the historical horoscope is cast for a somewhat earlier time. The time used in the horoscope can, in principle, be easily determined by reading of the distance of the Sun to the meridian, resp. MC shown in the chart. In the present case it was not that easy because Kepler apparently had the habit of writing only numbers rounded to full degrees into the chart. We nevertheless found in the horoscope text the exact value for the Sun that he used, as well as a possible evidence in the original hand-drawing. Apparently the number 21 was later inscribed above the 30 minutes. This may be checked by an analysis of the inks used. We assume that Kepler recognized his error when doing the rectification demanded by Wallenstein, and that the additional number 21 may be an indication of that, as well as for the de-facto time, that the natal chart is actually corresponding to. 16^h13^m LMT results in MC = 7°49' and AC = 10°23'. These are likely the values Kepler obtained and entered into the chart after rounding. The fact that he also rounded the value of the rectified MC from 11°25' to 11° and generally does not give the minutes of house-cusps in charts fortifies that assumption.

Hence 16^h21^m likely is the time Kepler erroneously used to calculate this horoscope. With our method calculating the distance Sun-Meridian we obtained 16^h22^m local apparent time. In that case and with modern ephemerides the resulting AC would be 10°48' ≈. A value that likely would be rounded upwards.

The errors hence are 9 minutes for the time, 2° for the MC and almost 4° for the AC. Strictly speaking the error is even larger, because the latitude of Wallenstein's birth place, Hermanice is not 51° as communicated to Kepler but 50°22' according to modern data. That results in a further shift of the Ascendant to 15°03'. (cf. Tab. 3). From an astrological perspective, seemingly small errors as discussed above have severe consequences because they may change the chart interpretation completely. If a planet e.g. is located near to a cusp of a house, it may fall into one of the neighboring houses changing the interpretation drastically. Most importantly such inaccuracies have especially grave consequences for the predictions. Errors of a few degrees in the calculation of the main-axis of a chart (MC-IC, AC-DC) lead to significant changes in the prognoses. The resulting prediction time-shifts for *Transits* are of the order of months, in case of the *Directions* up to many years. An error as above of 5° in AC means that the resulting prognoses may shift by, depending on the details of the method, up to 5 years. Contrary to Wallenstein, who probably would not be amused about such an error, the difference presumably was not really important for Kepler, because, as he repeatedly emphasized,

⁴According to the historical astronomical notation and the convention used in astrology we write ecliptic longitude in the form zodiacal sign, degrees, minutes, seconds. 10 degrees ecliptic longitude correspond to Aries 10°00'00" or 10°00'00" ♈, for short, or 35°15'10" to Taurus 5°15'10" = 5°15'10" ♉. The general form then reads GG°MM'SS" zodiacal-sign-symbol. Symbols are summarized in Table 1.

MC = Medium Coeli (Intersection of the Ecliptik and the Meridian)		
ecl. long.	Calculated (Redshift 3)	Kepler's noted values
	9°56' 𐄂*	8° 𐄂
	249°56' 𐄂	248° 𐄂
AC = Ascendant (intersection of the rising part of the ecliptic with the horizon)		
ecl. long.	Calculated (Redshift 3)	Kepler's noted values
	14°11' 𐄂	10° 𐄂
	314°11' 𐄂	310° 𐄂

Table 2: Main errors in the Wallenstein horoscope: Comparison of AC and MC as given by Kepler (on the natal chart and in the text) and determined from modern ephemeris.

Wallenstein-Horoscope 1608				
Birth data communicated to Kepler: 24. 9. 1583, 16 ^h 30 ^m , polar height, $h_{\text{pol}} = 51^\circ$				
h_{pol} Ident.	Kepler's noted values 51° orig.	bona fide Kepler's values 51°00' WH1	fitting specifications 51°00' WH1 BF	fitting specifications 50°22' WH1 K
MC	8° 𐄂	7°49' 𐄂	9°56' 𐄂	9°56' 𐄂
AC	10° 𐄂	10°23' 𐄂	14°11' 𐄂	15°03' 𐄂
☉	0°45' 𐄂	0°44'30" 𐄂	0°51'32" 𐄂	0°51'32" 𐄂
☾	7°03' 𐄂	7°03' 𐄂	6°55'17" 𐄂	6°55'17" 𐄂
♃	22°35' 𐄂	22°35' 𐄂	22°59'20" 𐄂	22°59'20" 𐄂
♄	16°50' 𐄂	16°50' 𐄂	16°49'08" 𐄂	16°49'08" 𐄂
♅	27°59' 𐄂	27°59' 𐄂	27°59'48" 𐄂	27°59'48" 𐄂
♆	22°43' 𐄂	22°43' 𐄂	22°32'57" 𐄂	22°32'57" 𐄂
♇	19°00' 𐄂	19°00' 𐄂	19°01'28" 𐄂	19°01'28" 𐄂
♁	16°03' 𐄂	16°03' 𐄂	16°10' 𐄂	16°10' 𐄂
LMT	16 ^h 14 ^m	16 ^h 13 ^m	16 ^h 22 ^m	16 ^h 22 ^m
LAT	16 ^h 22 ^m	16 ^h 21 ^m	16 ^h 30 ^m	16 ^h 30 ^m
rem.	from MC-Sun distance AC inconsistent with time corr.: AC: 10°48'	according to the 21 ^m entry AC and MC correspond to time	specified birth-time	specified birth-time modern latitude

Table 3: Wallenstein natal chart data. Col. 2 gives Kepler's original data according to Herz (1895) and the original drawing. Col. 3 gives modern values for a hypothetical birth time that corresponds to AC and MC of the original horoscope and the 21^m note (cf. Fig. 1). Cols. 4 and 5 give modern values for the birth time (local apparent time, LAT and local mean time, LMT) as communicated to Kepler, for the specified and modern latitude of Hermanice, resp.

Directions in the Wallenstein-Horoscope 1608					
Direction	WH1	WH1 BF	Direction	WH 1	WH1 BF
AC ♂ ♄			AC ♂ ♄		
AO AC	336°01'	338°16'	AO AC	336°01'	338°16'
AO ♄	355°17'	355°18'	AO ♄	356°53'	356°49'
diff.	19°16'	17°01'	diff.	20°52'	18°33'
SA days	21	18	SA days	23	20
SA AR	19°11'	16°24'	SA AR	21°04'	18°15'
being due	22th yr	19th yr	being due	23rd yr	21th yr
acc. Kepler	21th yr	21th yr	acc. Kepler	23rd-24th yr	23rd-24th yr
Direction	WH1	WH1 BF	Direction	WH 1	WH1 BF
AC ♀ ♃			AC ♀ ♃		
AO AC	336°01'	338°16'	AO AC	336°01'	338°16'
AO ♃ ♀	12°22'	12°23'	AO ♃ ♀	22°19'	22°18'
diff.	36°21'	34°06'	Diff.	46°18'	44°01'
SA days	39	37	SA days	49	47
SA AR	36°25'	34°27'	SA AR	46°27'	44°25'
due	39th yr	37th yr	due	49rd yr	47th yr
acc. Kepler	39th-40th yr	39th-40th yr	acc. Kepler	50th yr	50th yr

Table 4: Overview over key astrological events (aspects) relevant for the directions that are used for the prognoses. SA denotes the solar arc used to determine the years of life in which the aspects become “exact”, hence the constellations are thought to be astrologically relevant for live-events and according to the procedures employed by Kepler. See text and symbol table for further definitions.

that he did not at all believe in the possibility to make such predictions. In Tab. 4 we have summarized some directions that also play a role in the second, rectified horoscope. A comparison of horoscopes WH1 and WH1 BF shows the consequences of Kepler’s error for the predictions. Even without correcting the geographic latitude the directions shift to another year.

Wallenstein-Horoscope 1625

Seventeen years later, the horoscope was returned to Kepler, again via a middleman and with a number of marginal notes added by Wallenstein. As we see below there is nothing exceptional in Kepler’s prognoses, just the usual comments on marriage, disease and profession. A comparison shows that the number of successful predictions equaled zero, c. Tab. 5. As usual at the time, and given such a result Wallenstein asked for a rectification. Such a correction of birth time was done if it was presumed that the birth-time given by the parents could not be cor-

Wallenstein, biographical data	Kepler's prognoses
22th year (January 1605) Hungarian disease and plague	21st dangerous direction
26th year (Mai 1609) Marriage	23rd–24th Marriage
31th year (23 March 1614) Dead of wife	28th year Kriegsbevelch, disease
32th year (1615) Kriegsbevelch	
32nd–33th year (September 1615) Severe disease	33th year Marriage
37th year (April 1620) Podagra (Gicht)	37th year again Weibergunst
37th year (Juli 1620) Severe disease	
40th year (9th June 1623) Marriage	39th–40th year dangerous direction, disease
51th year (Februar 1634) Wallenstein's death	47th–52th year good direction, but Podagra
	70th year four days fever, death*
*... ihne werdt ein Viertäglich Fieber anstoßen, oder ein kalter fluß, wöl- chen er bey diesem Alter schwährlich überwinden wierdt, wann er anderst im 28. oder 40. nit darauffgehet wie droben vermeldet.'	

Table 5: Biographical summary of events in Wallenstein's life that relate to Kepler's horoscope.

rect. The method tries to determine the correct birth time from biographical data. Kepler's task was to determine the 'corrected' birth time from the marginal notes, newly recast the horoscope and produce extensive prognoses for Wallenstein. The method is still practiced today.

We presume that Kepler must have realized his error at the latest at that moment. He had a problem. A rectification was perfectly legitimate, but only if the correctly calculated horoscope did not yield the desired results. The correct procedure would have been to admit the error. In any case he had then the opportunity to calculate the horoscope correctly. We can only speculate about the reason why he did not do that. Direct or indirect inconveniences as a result of admitting a trivial error in such an 'important' issue are at least plausible. It has to be considered, that, as our calculations show, even in the correct horoscope the rate of success of the prognoses would not have increased. That means that it presumably also would not have satisfied Wallenstein. Furthermore Kepler did not only make an error in calculating the horoscope, but also in the process of working out the directions – the method of prognoses used. According to Kepler's wrong

horoscope, the direction Saturn in conjunction with ascendant, e.g., would have fallen into the 22nd year, the year that Wallenstein came down with the plague. Kepler erred again and gave the 21st year for that direction. A believer in astrology, as Wallenstein was, expected of course that such an event is visible in the horoscope. But in the correct horoscope, there is no direction for the 22nd year, that is dangerous from an astrological perspective. This error and the often only approximate date given for other directions in the first horoscope, let us conclude that Kepler possibly did not calculate some of the constellations in detail, but estimated approximated times on the basis of his general knowledge of the earth-motion.

In *Tertius Interveniens* Kepler briefly describes his method of prognostication, which is a variant of so called *primary directions*, that are based on the Earth's rotation-rate.⁵ As a consequence 'hypothetical' astrological constellations, concerning the main-axis of the horoscope, occur within a few hours after birth. But they are ignored.

Kepler informs us that he is 'directing' MC per right ascension and the ascendant via Ascensio Obliqua (AO = oblique ascension). That means that the difference of AO-ascendant and AO of a luminary gives the so called 'arc of direction'. As is common practice in astrology, Kepler does not take into account the ecliptic latitude in WH1. Hence the calculations refer to particular points in the ecliptic rather than to the positions of the corresponding luminaries themselves, with their generally non-zero latitudes. The so-called *oblique ascension* is given by

$$AO = \alpha - AD, \quad (1)$$

where α is right ascension and AD the *ascensional difference*:

$$\sin AD = \tan \varphi \tan \delta, \quad (2)$$

for geographical latitude, φ and declination, δ of a luminary or reference point (e.g. on the ecliptic). Kepler's directional arc of AO_{AC} and of AO_h presumably is around $19^\circ 16'$ in WH1. This arc is then converted in years by means of a *measure of time*. At least three different keys existed at the time⁶. Kepler's key was defined as follows: The solar arc (SA), of a day, measured in right ascension corresponds to one year. During the time from 24th September to 15th Oktober, i.e. in 21 days, the Sun advances in AR by $19^\circ 11'$. Because this value stands for the end of Wal-

⁵'Da ich dann aus unterschiedlichen Meynungen der fürnembsten Astrologorum diese meine besondere Meynung zusammen gezogen / und in derselben solche authores in modico dissentientes verglichen / daß ein jeder Tag nach der Geburt / ein Jahr bedeute / zween Tage / zwei Jahr / und so fort an. Darauß dann folgt / daß die Sonn per itinera diurna in Ecliptica zu dirigin / medium coeli per ascensiones rectas, ascendens per obliquas, semper additis horis natiuitatis ad ascensionem rectam loci directionis solis, et themate de nouo erecto.' Johannes Kepler, *Tertius Interveniens*.

⁶Henry Coley, *Clavius Astrologia Elimata* or a Key of the whole Art of Astrology; London 1676.

lenstein's 21st year and the arc AC- η is $19^{\circ}16'$, the direction 'is exact' in the 22nd year of Wallenstein's life and not in the 21st as claimed by Kepler.

Kepler found an almost ingenious way out of the dilemma. We know from *Pegius* that a number of methods were in use to perform a birth-time correction. In his astrology-textbook⁷, that appeared in 1570, he already describes 5 different methods. One of them is similar to Kepler's procedure but because of the rather conspicuous differences we can refer to it as a separate method, No. 6. For a better understanding of it we first repeat the description in Kepler's own words:

'Dann weil der Geborene mit eigner handt bey litera Aa, verzeichnet hatt, das er Ao aetatis 22, nemblich Ao 1605 im Januario die Ungerische Kranckheit und Pest gehabt, Gesezet, es sey diß allein ein natürlicher trieb gewest, oder doch meistentheils ein natürlicher Trieb, das die natur des Leibs sich begehret habe deren bößen feuchtigkeit zuentladen, aus welchen außtrieb ein Ungerisch Kranckheit worden, so ist gar vermuetlich die Directio Ascendentis ad Corpus Saturni hab ihr hiezue anleitung geben: dann die natur nimmet ihre modos und leges aus den Directionibus. Hie mueß nun Ascensio Obliqua Saturni gesucht werden sub Altitudine Poli 51° Oriente circiter 22° \times est Angulus. Orientis $15^{\circ}36'$, Latitudo η Meridiana est $2^{\circ}27'$. Differentia igitur coorientaria $8^{\circ}47'$ et Saturnus oritus cum $27^{\circ}47'$ \times circiter. Laboriosus igitur limando hunc coorientem, Angulus apud illum est $15^{\circ}29'$. Itaque Differentia coorientaria $8^{\circ}50'$. Ita η oritur cum $27^{\circ}50'$ \times .

Et quia Jovis latitudo Meridiana est $1^{\circ}37'$ eodem angulo. Ergo Differentia coorientaria fit $5^{\circ}50'$, et Jupiter oritur cum $28^{\circ}33'$ \times . Sic etiam, quia oppositi Mercurio puncti latitudo cit $1^{\circ}46'$ angulo eodem, Differentia ejus coorientaria fit $6^{\circ}23'$ quare occidit, Mercurius cum $28^{\circ}58'$ \mp .

Jam Ascensiones Obliquae sunt

Saturni	$359^{\circ} 5'$
Jovis	$359^{\circ}30'$
Oppositi Mercurii	$359^{\circ}34'$

Hiemit fallen alle drey Directiones innerhalb eines halben Jahrs, und die Virtte Ascendentis ad Oppositum Solis auf das nächste Jahr hernach, das ist woll ein selzames. Saturnus zwar schicket sich woll auf die Ungerisch Kranckheit. Mercurius aber auch sehr woll auf die Pest, und Jupiter gibt beider ortten einen guetten mittlern nach der Astrologorum lehr.

Wann dann nun das mittlere genommen wirdt, $359^{\circ}30'$ und Ascensio recta Medii Coeli $269^{\circ}20'$ culminavit ergo $29^{\circ}22'$ \times . Wann nun der lauff der Sonnen von $21\frac{1}{3}$ tagen, das ist $21^{\circ}7'$ gesezt würdt, zue dem Loco Solis auf den Geburtstag und Minuten $0.44\frac{1}{2}'$ $\underline{\text{u}}$ so, würdt locus Directionis Solis $21^{\circ}52'$ $\underline{\text{u}}$.

⁷Martin Pegius, Geburtsstunden Buch, Basel 1570.

Ascensio ejus recta $200^{\circ}12'$ diß von $269^{\circ}20'$ abgenommen, gibt die Corrigirte Geburtstundt $69^{\circ}8'$. Das ist 4 Stundt $36\frac{1}{2}$ Minuten. Also wähe die Geburttsminuten nahendt umb ein Viertel Stundt zuefrüe angezeigt, und das war Medium Coeli in der GeburthsFigur (Additis $69^{\circ}8'$ ad $180^{\circ}44'$ ut fial AR MC $249^{\circ}52'$) khäme $11^{\circ}25'$ ♁, das wahre Ascendens (Asc. Obliqua $339^{\circ}52'$) wurde $17^{\circ}0'$ ♃ Locus Lunae Radicis $7^{\circ}10'$ ♃ Ascendens geradt in Quadrato Veneris.'

Kepler's method had changed in a decisive point. Suddenly he accounts here for the ecliptic latitude of the luminaries, in the birth-chart calculations and in the following directions. Kepler's first method, that ignores ecliptic latitudes, appeared more consistent to us, because in astrology everything is happening on the ecliptic. We could not find out whether Kepler had generally changed his method in the mean time, a thinkable possibility because there was all but consensus about the issue between earlier authors, or this is a masterpiece of deception, only feasible for a person who was not only fluent in the astronomy of the time but also knew all the loopholes of astrology. Fact is that it is the only possibility to put the astrologically important and 'dangerous' direction, AC σ ♄ anew into the 22nd year, and that in face of the corrected birth time. Because the 15 minutes birth-time correction of the horoscope just correspond to the time difference between the rise of the respective ecliptic point, astrologically corresponding to Saturn and the rise of the planet Saturn itself.

This change of method is definitely legitimate from an astrological perspective, especially because then as today there were no generally agreed, committing rules that he would had to use. Because the horoscope also contains other inconsistencies, the obvious interpretation is that Kepler might have consciously taken advantage of the ill-definedness to make Wallenstein believe that the horoscope now fits much better. For example, he claims that the direction AC opposition Mars would now fall into the 32nd year (severe disease), contrary to the fact that it becomes exact not earlier than in the 36th. The latitude would not help in that case since Mars stood almost exactly in the ecliptic in the natal chart. It was impossible to shift the directions by that many years to fit the biographical notes. Either this is another random miscalculation or a systematic deviation.

Another statement may show more clearly the 'seriousness' that Kepler employed when actually preparing to work out such prognoses:

'Nun schreibt der Gebohrne ad marginem Er hab Ao 9 geheuratet. Ich begehre mich nicht dahin zuestreckhen, das ich diese Will Churliche, oder doch an vill Irdische Politische Umbständt gebundtne sach per forza an die himlische gezeitten restringirn möge: aber doch schickhet sich diese Directio nach beschehener Correction besser zue den verzeichneten 1609 Jahr dann zuevor. Dann es seindt verflossen gewest $25\frac{2}{3}$ Jahr, Nemb ich nun den motum Solis von so will tagen, das ist $25^{\circ}26'$ und seze es zue dem loco Solis $0^{\circ}44'$ \triangle so

Direction Time (LMT) polar height AO AC	WH1 16 ^h 13 ^m 00 ^s 51°00' 336°01'07"	WH1 BF 16 ^h 22 ^m 00 ^s 51°00' 338°16'33"	WH1 K 16 ^h 22 ^m 00 ^s 50°22' 338°16'45"	WH2 16 ^h 28 ^m 30 ^s 51°00' 339°52'00"	WH2 K 16 ^h 28 ^m 30 ^s 50°22' 339°54'19"
AC ♀ ♀	23th yr	21th yr	21th yr	22th yr	22th yr
AC ♀ ♀	48th yr	46th yr	47th yr	41th yr	42th yr
AC ♀ ♂	39th yr	37th yr	37th yr	36th yr *	36th yr
AC ♂ ♃	23th yr	21th yr	21th yr	22th yr	22th yr
AC ♂ ♃	22th yr	19th yr	19th yr	22th yr	21th yr

Table 6: A comparison of directions in the 1608 an rectified versions of the Wallenstein horoscope For the direction marked with the asterisk * Kepler writes in the text that it would fall into the 32nd yr.

khombt Locus Directionis Solis 26°10' ♁ und neherit sich die Sonn dem Cor-
pori ♂. Ejus Ascensio recta 204°16' mit 69°8' vermehrt, macht 273°24' das
zeigt 3°8' ♃. Das ist zwischen Quadrato Solis et Corpore Lunae, Ascensio
Obliqua vero 3°24' zeigt 8 ♃ das ist ipse Quadratus Lunae Ao 1609 zue
anfang des Jahrs, das Medium Coeli aber khombt Ao 1606 zu endt ad Qua-
dratum Solis und Ao 1612 ad Corpus Lunae.'

Kepler shows a sense of humor. Apparently there was no direction to find for
the particular year that would allow an astrological prediction of a marriage. Very
skillfully the impression is created, that there would be a plenty of constellations
that point to the event. Only the square AC-Moon (Ascensio Obliqua vero 3°24'
zeigt 8 ♃ das ist ipse Quadratus Lunae) is becoming exact at the beginning of
the year. All other directions that are mentioned actually fall in different years.
One of the 'constellations' is even freely invented: 'Das ist zwischen Quadrato
Solis et Corpore Lunae', an 'aspect' unknown to astrology, it does not exist.

Interestingly, Kepler is pointing to his error himself. He concludes his descrip-
tion of the birth-time correction by the words: 'Also wäre die Geburtsminuten
nahendt umb ein Viertel Stundt zuefrüe angezeigt'. Strictly speaking it is impos-
sible to talk about a quarter of an hour here. Wallenstein was born at 4^h30^m and
the corrected time read 4^h36^m30^s. But a quarter of an hour de facto separates the
wrong time, that was the basis of Kepler's first horoscope, and the corrected birth-
time. In any case, and setting aside the error in the polar height, also the second
horoscope is wrong. Since none of the two horoscopes was calculated for the
birth-time that was communicated by Wallenstein, there is no correct Wallenste-
in-natal chart erected by Kepler.

The errors in Kepler's Wallenstein-horoscopes nicely demonstrate the astrono-
mical problems of historical horoscopes in general. Especially devastating effects

originated from the errors in the calculation of the solar position. For the construction of an ingress-horoscope (Aries-ingress-chart) as, e.g. is common in mundane astrology, it is necessary to know the exact time of the equinoxes. It is the moment the horoscope is calculated for. In Kepler's Wallenstein horoscope, the error on the solar position is roughly 7 arc-minutes. Measured in time, that corresponds to an error of 3 hours. In his prognoses for the year 1605⁸, in which he was also off the true equinox by 3 hours, Kepler noted that other would even fail by 15 hours.

In short, all of these ingress-charts but also the solar-horoscopes of individual astrology were astronomically wrong. Considering that many people did not know their birthday, not to mention the birth-time, an error of a few hours seems not worth mentioning at first glance. But the equinox-error renders one of the most important astrological tools of interpretation, the astrological houses ad absurdum. Especially when considering the claim that astrological statements have been confirmed by experience again and again. The statements and predictions are essentially useless for deducing regularity from the comparison of predictions and experience because the luminaries in this horoscopes were almost always in completely different houses than the formalism would make the astrologer believe.

Why especially the horoscope of 1608 still is used in astrological propaganda can be traced down to three reasons. (1) Apparently it was unknown that the horoscope is wrong, despite the fact that a search to confirm our result brought up that already Henseling⁹ remarked that the horoscope is erroneous in some aspects and speculated that therefore it may not be due to Kepler. (2) The unawareness of the relevance of local apparent time by modern astrologers, and (3) the widespread opinion (in astrological literature and circles) that Kepler had no knowledge about Wallenstein when casting the horoscope and nevertheless had delivered a particularly correct description of Wallensteins character and correct predictions. We already discussed the number of successful predictions that is limited to a couple of sentences and concerning the characterization we must note that there is practically no way to check that conjecture. But the cipher, at center of the horoscope with the addition 'a Stromero' was decoded as the word 'Waitstein' long ago. Many interpret this also as an indication that Kepler, already in 1608, could have received information about the name and details to Wallenstein's personality directly from Stromayr, despite the warlord's efforts to remain incognito. That he nevertheless pretended not to know anything appears plausible to protect his source. But since, to our knowledge, up to now it has not been dated when the annotation was written, the entry is rejected as a proof by others, in particular

⁸Frisch, Ch., Kepler Opera Omnia I, pp. 451.

⁹Robert Henseling, *Umstrittenes Weltbild*; Verlag Philipp Reclam Jun., Leipzig 1939.

because many consider it inconceivable that Kepler could do something so ‘dishonest’.

From a letter from the year 1611, to a person in the environs of emperor Rudolph II¹⁰ it is evident however that Kepler did not always remain close to the charts content and it shows what Herz (1895) pointed out: ‘Die Astrologen waren die Orakel des Mittelalters; sie waren sich ihrer Macht bewusst und nützten diese auch aus’¹¹. In this letter, that is first and most importantly a warning of the power of the astrologers, and that they could cause great damage to the credulous emperor, Kepler confesses, that he predicted inconveniences for (the competing) Matthias, despite the fact the he had favorable astrological constellations, but only bode well for emperor Rudolph despite of astrologically bad constellations.

The analysis of the Wallenstein horoscopes does not only provide a glimpse into the astrological practice of Kepler’s time, it also sheds more light on Kepler’s attitude towards astrology. That attitude apparently not only reflects in his astrological disputations, but also in his astrological practice.

¹⁰O. Struve, Beitrag zur Feststellung des Verhältnisses Kepler’s zu Wallenstein, Memoiren der Petersburger Akademie der Wissenschaften, VII. Serie, II. Bd. Nr. 4, p. 11.

¹¹Dr. Norbert Herz, Kepler’s Astrologie; Wien 1895, S. 82.

Wallenstein-Horoscope 1608				
Natal chart and direction data				
Horoscope	orig.	WHI	WHI BF	WHI K
Medium Coeli	8°00' ♊	7°49' ♊	9°56' ♊	9°56' ♊
ecl. long.	248°00'	247°49'	249°56'	249°56'
AR	16 ^h 24 ^m 54 ^s	16 ^h 24 ^m 07 ^s	16 ^h 33 ^m 08 ^s	16 ^h 33 ^m 08 ^s
=	246°13'	246°01'	248°16'	248°16'
Ascendant	10°00' ♋	10°23' ♋	14°11' ♋	15°03' ♋
ecl. long.	310°00'	310°23'	314°11'	315°03'
AR	20 ^h 49 ^m 50 ^s	20 ^h 51 ^m 23 ^s	21 ^h 06 ^m 39 ^s	21 ^h 10 ^m 06 ^s
=	312°27'	312°50'	316°39'	317°31'
AO	335°47'	336°01'	338°16'33"	338°16'45"
Sun	0°45' ♌	0°44'30" ♌	0°51'32" ♌	0°51'32" ♌
ecl. long.	180°45'00"	180°44'30"	180°51'32"	180°51'32"
AR	12°02 ^m 45 ^s	12°02 ^m 43 ^s	12°03 ^m 09 ^s	12°03 ^m 09 ^s
=	180°41'	180°40'	180°47'	180°47'
AO	181°03'	181°02'	181°12'37"	181°12'03"
Moon	7°03' ♌	7°03' ♌	6°55'17" ♌	6°55'17" ♌
ecl. long.	277°03'00"	277°03'00"	276°55'17"	276°55'17"
AR	18 ^h 30 ^m 43 ^s	18 ^h 30 ^m 43 ^s	18 ^h 30 ^m 10 ^s	18 ^h 30 ^m 10 ^s
=	277°40'	277°40'	277°32'	277°32'
AO	309°48'	309°48'	309°41'13"	308°53'15"
Mercury	22°35' ♍	22°35' ♍	22°59'20" ♍	22°59'20" ♍
ecl. long.	172°23'	172°23'	172°59'20"	172°59'20"
AR	11 ^h 32 ^m 46 ^s	11 ^h 32 ^m 46 ^s	11 ^h 34 ^m 16 ^s	11 ^h 34 ^m 16 ^s
=	173°11'	173°11'	173°33'	173°33'
AO	169°32'	169°32'	170°06'58"	170°11'35"
Venus	16°50' ♎	16°50' ♎	16°49'08" ♎	16°49'08" ♎
ecl. long.	226°50'	226°50'	226°49'08"	226°49'08"
AR	14 ^h 57 ^m 25 ^s	14 ^h 57 ^m 25 ^s	14 ^h 57 ^m 22 ^s	14 ^h 57 ^m 22 ^s
=	224°21'	224°21'	224°20'	224°20'
AO	246°23'	246°23'	246°22'28"	245°51'30"
Mars	27°59' ♏	27°59' ♏	27°59'48" ♏	27°59'48" ♏
ecl. long.	207°59'	207°59'	207°59'48"	207°59'48"
AR	13 ^h 43 ^m 55 ^s	13 ^h 43 ^m 55 ^s	13 ^h 43 ^m 58 ^s	13 ^h 43 ^m 58 ^s
=	205°58'	205°58'	205°59'	205°59'
AO	219°34'	219°34'	219°35'51"	219°17'18"
Jupiter	22°43' ♐	22°43' ♐	22°32'57" ♐	22°32'57" ♐
ecl. long.	352°43'	352°43'	352°32'57"	352°32'57"
AR	23 ^h 33 ^m 16 ^s	23 ^h 33 ^m 16 ^s	23 ^h 32 ^m 39 ^s	23 ^h 32 ^m 39 ^s
=	353°18'	353°18'	353°09'	353°09'
AO	356°53'	356°53'	356°49'31"	356°44'36"
Saturn	19°00' ♐	19°00' ♐	19°01'28" ♐	19°01'28" ♐
ecl. long.	349°00'	349°00'	349°01'28"	349°01'28"
AR	23 ^h 19 ^m 34 ^s	23 ^h 19 ^m 34 ^s	23 ^h 19 ^m 40 ^s	23 ^h 19 ^m 40 ^s
=	349°53'	349°53'	349°54'	349°54'
AO	355°17'	355°17'	355°18'28"	355°11'14"
Lunar node	16°03' ♏	16°03' ♏	16°10' ♏	16°10' ♏
ecl. long.	256°03'	256°03'	256°10'	256°10'
AR	16 ^h 59 ^m 23 ^s	16 ^h 59 ^m 23 ^s	16 ^h 59 ^m 53 ^s	16 ^h 59 ^m 53 ^s
=	254°51'	254°51'	254°58'	254°58'
AO	286°02'	286°02'	286°11'39"	286°25'22"
AO = Ascensio Obliqua (oblique ascension) Here the AO of the corresponding ecliptic point AR = Ascensio Recta (right ascension) Here the right ascension of the corresponding ecliptic point				

Table 7: Reference data for the analysis of Kepler's Wallenstein horoscope.