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«WE MAKE GUILTY OF OUR DISASTERS THE SUN, THE MOON, AND THE STARS»: A SEMANTIC MAPPING OF SHAKESPEARE'S ASTRONOMICAL LANGUAGE

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Abstract

Shakespeare's language has been studied and analysed for centuries, including monographs on the most disparate semantic fields –such as botany, geography, commerce, etc. In this regard, astronomical language is no exception. However, existing studies of Shakespeare's astronomical language have either leaned towards the field of astrology and the symbolism of the occult or focused on glossing specific passages and terms, usually to disentangle the scientific value of astronomical references. Therefore, there is no systematic account of the semantics of these terms. Thus, the purpose of this study is to provide a holistic analysis of the three most common terms with a strictly astronomical meaning in Shakespeare's lexicon, namely, 'sun', 'moon', and 'star/s'. The analysis here maps the semantics of these terms by looking into the recurring meanings that they take. This, in turn, opens a new avenue of research into the stylistic utilization of astronomical bodies in ways that include character delineation, plot development, dramatic structure, gender characterization, and the role of figurative language at large.

Keywords: Shakespeare, Semantics, Lexicon, Astronomy.

«WE MAKE GUILTY OF OUR DISASTERS THE SUN, THE MOON, AND THE STARS»: UNA CARTOGRAFÍA SEMÁNTICA DEL LENGUAJE ASTRONÓMICO DE SHAKESPEARE

Resumen

El lenguaje de Shakespeare ha sido objeto de estudio y análisis durante siglos, incluso de monografías sobre los campos semánticos más dispares, como la botánica, la geografía, el comercio, etc. En este sentido, el lenguaje astronómico no es una excepción. Sin embargo, los estudios existentes sobre el lenguaje astronómico de Shakespeare o bien se han inclinado hacia el campo de la astrología y el simbolismo de lo oculto, o bien se

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han centrado en glosar pasajes y términos concretos, normalmente para desentrañar el valor científico de las referencias astronómicas. Por lo tanto, no existe un relato sistemático de la semántica de estos términos. Así pues, el propósito de este estudio es proporcionar un análisis holístico de los tres términos más comunes con un significado estrictamente astronómico en el léxico de Shakespeare; a saber, 'sol', 'luna' y 'estrella/s'. El análisis traza aquí la semántica de estos términos indagando en los significados recurrentes que adoptan. Esto, a su vez, abre una nueva vía de investigación sobre el uso estilístico de los cuerpos astronómicos en formas que incluyen la delineación de personajes, el desarrollo de la trama, la estructura dramática, la caracterización de género y el papel del lenguaje figurado.

Palabras clave: Shakespeare, semántica, léxico, astronomía.

1. Introduction

An analysis of the use of astronomical terms in Shakespeare's canon must be introduced by, at least, two previous considerations. These have to do with the presence and utilization of these words a) in the standard language of the period; b) in the literary language of the period and, more specifically, in that of the authors that Shakespeare draws from. In the general context of Elizabethan English, although it is clear from the folklore of the period and popular publications like broadsides (Daston, 1991) that astronomical phenomena captivated the imagination of the popular classes, most of the linguistic uses and constructions that have been documented are found in scholarly or literary language. The *Oxford English Dictionary*, for example, quotes Shakespeare as the primary contemporary source in many of the idioms and expressions containing the terms studied here. In addition, outside literature, there was also an intense scholarly debate about the role of astronomy and the sciences (Popper, 2006). However, it is equally true, as Adamson (1999: 540) puts it, that literary language «is the stylistic sibling of the Standard language-variety». Indeed, many of the astronomical meanings that Shakespeare included in his works are attested in earlier texts and can safely be assumed to belong to *popular culture* and folklore. Furthermore, astronomy at the time cannot be disentangled from sayings and popular myths (Bezzola Lambert, 2002: 78-80). As a general notion, in sum, «we should not underestimate the extent to which Shakespeare's writing itself was created from materials that might genuinely be described as being

'of the people'» (Gillespie & Rhodes, 2006: 1), among which we can single out «a cultural interest in the night sky that was integral to the culture of the day» (Levy, 2011: xix).

As regards the literary language of Elizabethan and Jacobean times, one must always bear in mind the ubiquitous presence of the classical tradition while also acknowledging the fruitful exchange of forms and ideas among the leading authors in England and on the continent. If we circumscribe this strain of intertextuality to the language of astronomy, it is not difficult to pinpoint myriad instances of astronomical language in Shakespeare's oeuvre that can be traced back to different sources. Muir (1977) alone identifies many of them: from (43) the stars as guiding light in voyages, which «seems to have been suggested by [Arthur] Brooke» to (206) «the influence of the stars on human destiny» that echoes Montaigne to (122-125) the use of astronomical phenomena as foreshadowing devices, especially in ominous contexts, following Plutarch, Virgil, and Lucan. The list is long.

Despite the obvious indebtedness to various sources, however, the main thesis in this study is that Shakespeare uses astronomical terms in ways that, however standardized on occasion, are patterned in such a way that allow one to map their semantics within his discourse. As Ravassat (2011: 165) notes, many of the linguistic devices that have been identified in Shakespeare's language as a borrowing or adaptation invariably carry with them the personal mark of Shakespeare as an innovator. In this regard, the cultural context and the literary influences can only partially account for his utilization of astronomical terms, and one must investigate Shakespeare as an individual language user. This endeavor has a long critical tradition that we shall outline in the following paragraphs.

Harmon, as early as 1898, tried to answer the question «what did Shakespeare know of astronomy?» –and concluded that the astronomical references in his works supported the notion that «Shakespeare's knowledge of astronomy belonged to the old system of Ptolemy, rather than to the new system of Copernicus» (Harmon, 1898: 232-233). Since then, many scholars have followed this path of probing Shakespeare's 'knowledge' of astronomy by examining the evidence in his plays and poems. Thus, Dean (1924: 400) praises his advanced scientific outlook in

that «he did not believe in astrology, when nearly the whole world did». Similarly, Guthrie (1964: 201) analyses a series of passages to demonstrate that Shakespeare's writings «adhere to the Ptolemaic doctrine» –while discussing other astronomical references vis-à-vis common beliefs and superstitions of the times. In more recent times, Usher (2002: 5-6), for example, argues that the «descriptions of solar system objects» in *Hamlet* suggest that «telescopic observations occurred in England, probably in the interval 1563-1576, at least thirty-three years before Galileo first pointed his spyglass at the heavens». Similarly, Levy & Hayden (2016) claim that there are indications of both the Copernican and Ptolemaic theories in Shakespeare's use of metaphorical language. At any rate, Shakespeare scholarship about astronomical bodies has remained, for the most part, fixated on the representation of astronomy, astrology, and related folklore –whether they circumscribe to the text of a particular play or to a specific astronomical theory[1]. At times, authors like Sondheim (1939) neglect the literary nature of the texts they purport to study and try to find in them evidence to ascertain «Shakespeare's own attitude» to astrology (*astrologia naturalis* and *astrologia judicialis*), for example. Indeed, astrology seems to be a focal point in Shakespeare studies in recent times. At least, this is the case in the series of monographs published by Costello (2016: 165), where the author explores the «hidden astrological symbolism that undergirds» Shakespeare's dramatic oeuvre and the folklore of Elizabethan England at large. However, this type of textual exegesis –in addition to the astrological focus– lacks a general semantic scope in that it does not provide a systematic analysis of Shakespeare's distinctive modes of expression.

Certain studies, like McCormick-Goodhart's (1945: 491, 497, 495), make a superficial quantitative analysis of the astronomical vocabulary utilized by Shakespeare, being therefore closer to a holistic semantic study proper. Unfortunately, it does not go beyond reporting that the word 'heaven' «recurs over 800 times» in the plays or that «we find three references to Mars». Even the examples provided to illustrate these figures are almost invariably used to gloss the meaning of certain words ('astronomical' meaning 'astrological', for instance) or to describe

[1] See, for example, Usher (2018) and Campion (2014), respectively.

specific characters or events. In sum, to my knowledge, among the authors who (Olson, 2014: 304) «have surveyed the astronomical passages in all of Shakespeare's works» there is no single study that addresses the meaning and use of astronomical vocabulary. This is the niche that this essay intends to fill, at least partially. It is my contention that there exist certain terms that carry standard meanings in Shakespeare's discourse and are systematically employed to convey specific effects. The mapping of these terms and their meanings in context will hopefully shed light on this area of Shakespeare's discourse and contribute to a better understanding of his literary language.

2. METHODOLOGY

The primary methodological stance of this study is that (Hope, 2010: 92) «ascription of meaning to a word is a process which is embedded in discourse». Thus, following Culpeper (2011: 78), «meanings will not be restricted to semantic or ideational meaning», but rather to distribution patterns and evidence of usage. In order to do so, a qualitative, corpus-based method was employed. First, the complete plays and poems by Shakespeare were digitized into separate .txt files and loaded onto the Wordsmith Tools© software suite[2]. Then, the Concordance tool was used to retrieve the occurrences of the astronomical terms discussed in the literature reviewed above.

However, the results made it clear that some quantitative restrictions were in order –whether because frequency was so small that it did not allow to draw systematic conclusions or because the terms were commonly used in contexts outside astronomy. More specifically, this study focuses solely on the most common astronomical objects in Shakespeare's lexicon that can be observed from the Earth with the naked eye –and their plural forms, where applicable; namely, the Sun, the Moon, and the star(s). Each of these three terms has well over 100 occurrences in Shakespeare's oeuvre, whereas the other observable celestial bodies (i.e., the planets: Mercury, Venus, Mars, Jupiter, and Saturn) only account for a handful of examples in total –and even fewer of those are relevant for this study, for very often they do not designate a

[2] Wordsmith Tools 6.0. Available at <https://www.lexically.net/wordsmith/>.

planet but other entities such as deities of the Roman pantheon. Other terms have been left out because it is difficult to separate their astronomical meaning from other considerations. In this regard, for instance, this analysis deliberately ignores the word 'heaven/s' –by far the most common of the list– as the religious connotations it often carries far outweigh its relevance for this essay. The same applies to other common words whose connection with astronomy is semantically tangential, e.g., 'world', 'night', 'sphere' or 'earth'. In short, the choice of concentrating on the above three terms is not solely based on their accessibility to human sight. Precisely because they had been known for centuries by Shakespeare's time, these astronomical bodies had already become common currency in the English lexicon and, consequently, had developed conventional meanings alongside other nuances and overtones. These results, as we shall see, carry meanings employed by Shakespeare in a systematic manner. This phenomenon deserves special attention whether Shakespeare adheres to or deviates from conventional usage. Furthermore, several astronomical word combinations have become part and parcel of Shakespearean phraseology. These phrases, in turn, reveal themselves as key elements in Shakespeare's phrasicon[3].

Once the relevant results were identified (Table 1), the qualitative part of the study was carried out[4]. The examples were analysed individually in context and then grouped into different semantic sets, according to their meaning in use. Each of these sets is going to be discussed in the following sections to map the meanings of the three astronomical terms selected here: 'sun', 'moon', and 'star', respectively. For ease of reference, the examples are cited following a canonical print edition (Bevington, 1997).

[3] For the use of 'phrasicon' and its stylistic implications, see Gläser (1998).
[4] Table 1 and sample concordance lines are available at: <https://shre.ink/e1G4>.

Table 1

ASTRONOMICAL TERM	FREQUENCY (Singular + Plural)
Sun(s)	255 + 12
Moon(s)	137 + 9
Star(s)	53 + 81
TOTAL	445 + 102
Mercury	15
Venus	30
Mars	43
Jupiter	36
Saturn	6
Heaven(s)	658 + 154
Night(s)	823 + 41
Earth(s)	327 + 0
Sphere(s)	10 +10
World(s)	653 + 6
TOTAL	2601 + 211

3. SUN

It is a fact universally acknowledged that the specific, instantial meaning that Shakespeare –or any author, for that matter– applies to most lexical words varies according to the effect he tries to convey on a given occasion[5]. However, upon closer observation, several recurring patterns begin to emerge. Indeed, Shakespeare's usage of 'sun' almost invariably falls into one of the following semantic categories: a) a symbol

[5] In using the adjective 'instantial' here, I follow Naciscione (2010).

of good or desirable things, such as beauty, good fortune or happiness (especially as opposed to ominous events or negative qualities, usually represented by darkness or clouds); b) a symbol or measure of the passing of time; c) a giver of life that rules nature and the cycle of life; d) a powerful force that is capable of doing much harm; and e) a supreme being, an idea ultimately connected to political power and/or divinity. Let us look at these categories in an orderly manner.

As a symbol of beauty, the sun and its attributes stand for beauty itself («Juliet is the sun», *Romeo* II.ii.3). It is the yardstick against which beauty is measured («My mistress' eyes are nothing like the sun», Sonnet CXXX) –not for nothing can the summit of beauty be described as able to «paint the sun» (*Kinsmen* II.ii.139). Also, Shakespeare often mentions the sun alongside the epithet 'fair' –whether literally (*Richard III* I.ii.265, *Lucrece* 1837) or as part of a metaphor (*Lucrece* 1230, *Errors* III.ii.56). This is the first of the several phraseological combinations that surface from this investigation. In a similarly recurrent phrase, the «glorious sun» is akin to «the prime of youth» (*3 Henry VI* II.i.22-3) and a witness to Sebastian's beautiful gifts from a beautiful woman (*Twelfth Night* IV.iii.1). Furthermore, the implications of magnificence and splendour in «glorious sun» are also underscored by contrast with «the meagre cloddy earth» (*K. John* III.i.80), for the sun is synonymous to «glorious…, golden…, celestial, …all-triumphant splendour» (Sonnet XXXIII).

But the sun also highlights the beauty of others by «gazing upon the earth» (*Errors* I.i.88) when it «dost shine» (*LLL* IV.iii.65) on everything that is beautiful. Conversely, a flower bud may «dedicate his beauty to the sun» (*Romeo* I.i.153), while the landscape that receives the sun's light, like «an April day», may be a vicarious manifestation of «all the beauty of the sun» (*Gentlemen* I.iii.85-6). This external beauty sometimes finds a counterpart in other positive states of the human spirit, which are also conveyed through the semantic prosody of 'sun'. Thus, moods can be lifted by the «all-cheering sun» (*Romeo* I.i.134), for «all the world is cheered by the sun» (*Richard III* I.ii.132). Even animals, like snakes, «lie rolled in the cheerful sun» (*Titus* II.iii.13). It is worthy of note that the association between sunshine and good mood has been recorded in

literature and folklore since time immemorial. In addition, it has made its way into the language itself, where 'sunny' can also mean 'cheerful'[6].

Other positive qualities that are represented by the sun in Shakespeare's language include honour (*2 Henry IV* II.iii.18), generous leadership (*Henry V* IV.0.43), virtue (*Kinsmen* II.v.23), and glory (*Henry VIII* I.i.6). These and other examples relate to qualities boasted by noblemen or kings. This common association also attests to the stylistic use of 'sun' for characterization, with a high index of co-occurrence with words belonging to the fields of power and politics. Thus, for example, the French King chooses to describe the Prince of Wales proudly overseeing the Battle of Crécy as being «crowned with the golden sun» (*Henry V* II.iv.58). On a related note, it also becomes apparent that when the sun is equated to beauty it largely collocates with women, whereas it tends to be linked to male characters when it represents power. Indeed, as we shall see, the marking of gender is one of the pervading connotations of astronomical terms in Shakespeare's discourse.

The positive qualities that the sun embodies are often thrown in relief through sharp contrasts with other phenomena that may counteract its actions –usually clouds, which «stain both moon and sun» (Sonnet XXXV) and are responsible for «darkening my clear sun» (*Henry VIII* I.i.226). These antithetical counterparts (sun-cloud) are explicitly acknowledged several times in animistic depictions that mirror the flesh-and-blood antagonists they stand for. For instance, the relationship between Richard II and Henry IV is likened to «the blushing discontented sun» who «perceives the envious clouds are bent / To dim his glory» (*Richard II* III.iii.63-66). Similarly, King Edward speaks of his impending battle with the forces summoned by Queen Margaret in comparable terms (*3 Henry VI* V.iii.4-5). This lexical dichotomy is also linked, as noted below, with the use of the sun to signify the passing of time and, ultimately, life. Thus, Cassius's death means that «The sun of Rome is set!» and this «setting sun» that «sink to-night» makes «clouds, dews, and dangers come» (*Caesar* V.iii.60-64).

[6] According to the *OED*, [Sunny. 4] *figurative*. Expressing, evoking, or characterized by joy or happiness; cheering; bright; (of a person or a person's temperament) cheerful, good-natured. Later developments in evolutionary theory have also attested to this correlation between sunlight and good spirits. See, for example, Kanazawa and Li (2018).

The passing of time and timekeeping, indeed, are common, recurring signifieds for the sun in Shakespeare's oeuvre, a phenomenon that stems from the conventional meanings of the word in the English language[7]. Therefore, Shakespeare may alternatively refer to a day as what happens «twixt sun and sun» (*Cymbeline* III.ii.68) or as «from sun to sun» (*Richard II* IV.i.56). The duration of the day itself is also marked by the sun, from the break of dawn («to-morrow by the sun», *Kinsmen* II.v.51) to sunset («My woes end likewise with the evening sun», *Errors* I.i.27). The movement of the sun is also a way of telling time. So, Achilles knows what Hector intends to do at «the fifth hour of the sun» (*Troilus* II.i.122), although the aid of a dial may be necessary if you are «a motley fool» (*As You Like It* II.vii.12-22). If days are measured by the sun, similarly, years become «courses of the sun» (Sonnet LIX, *Henry VIII* II.iii.6, *Troilus* IV.i.29). In sum, the sun is nature's clock, even in jest (*Shrew* IV.iii.192).

Shakespeare also employs the sun as a giver of life, as the principle behind the cycle of nature –to the extent that where «never shines the sun», «nothing breeds» (*Titus* II.iii.96). Indeed, «other things grow fair against the sun» (*Othello* II.iii.370), as is the case with «honeysuckles, ripened by the sun» (*Much Ado* III.i.8). So, in general, the sun «strengthens what it looks on» (*Kinsmen* III.i.124). This notion is seen in some of the phrases used to describe it, such as «blessed breeding sun» (*Timon* IV.iii.1). Furthermore, the sun punctuates bucolic pastoral scenes of idealized natural landscape (*Winter's Tale* I.ii.67). This works in the negative as well, for nature suffers without the sun. Thus, Buckingham censures Cardinal Wolsey as someone who would deliberately «Take up the rays o' the beneficial sun / And keep it from the earth» (*Henry VIII* I.i.56-7).

The concept of a sun that embodies beauty and virtue and the concept of a sun that rules the cycles of nature sometimes coexist. This is the case of Warwick's description of Edward's alleged love for Lady Bona (*3 Henry VI* III.iii.121-6):

[7] According to the *OED*, [Sun. 4.b.] A day. Often with preceding ordinal number in expressions referring to a period of time consisting of a number of days; also more generally in idiomatic phrases denoting a very long period of time, as many suns ago, for many suns, etc.

> Such it seems
> As may beseem a monarch like himself.
> Myself have often heard him say and swear
> That this his love was an eternal plant,
> Whereof the root was fixed in virtue's ground,
> The leaves and fruit maintained with beauty's sun.

Incidentally, in Shakespeare's time there was a widespread belief in the theory of spontaneous generation, which held that living creatures could arise from non-living matter. In this light, Lepidus claims that «Your serpent of Egypt is bred now of your / mud by the operation of your sun; so is your crocodile» (*Antony* II.vii.26-7). By the same token must we understand Hamlet's notion that the sun can «breed maggots in a dead dog» (II.ii.182). In general, Shakespeare had an intuitive knowledge about the influence of the sun in how living organisms react and adapt to its presence –knowledge that has been confirmed by modern science[8]. This explains someone's darker complexion, like the case of the Prince of Morocco in *The Merchant of Venice* (II.i.2-3), whose skin is like «the shadowed livery of the burnished sun / to whom I am a neighbour and near bred».

However, for all the positive qualities associated to it and its role as a source of life, the sun is also capable of doing much harm to the very creatures it 'breeds'[9]. For example, the sun can blind us to the extent that the «fiery-pointed sun, / …bereaves our sight» (*Lucrece* 372-373). Likewise, Katharina's eyes are «bedazzled with the sun» (*Shrew* IV.v.45) –whereas Adonis must seek the shade because «the sun doth burn my face» (*Venus* 186). In some cases, the sun can result in both physical and mental damage, as Shakespeare seems to suggest in the case of Joan, whose sunburnt skin and perhaps her visions, owe much to the «sun's parching heat» (*1 Henry VI* I.ii.77). The sun constitutes as well, perhaps

[8] For an accessible account of how skin pigmentation evolved with our ancestors, see chapter two in Jablonski (2012: 24-33).

[9] On some occasions, Shakespeare focuses on the special effect that the sun has on some living organisms. A case in point is the marigold, a flower «that goes to bed wi' the sun / And with him rises weeping» (*Winter's Tale* IV.iv.105-6). This refers to the Marigold's closing at sunset and opening again with sunrise, full of dew –this botanical phenomenon is also alluded to in other works, since «the marigold at the sun's eye» spreads «their fair leaves» (Sonnet XXV) and «Her eyes, like marigolds, had sheathed their light» (*Lucrece* 397).

more prosaically, one of the climatic factors that can hurt those who work outdoors (*Cymbeline* IV.ii.261). This is why beautiful ladies wear «a platted hive of straw» to protect «her visage from the sun» (*A Lover's Complaint* 8-9)[10].

The role of the sun as a force that can maim and destroy is often taken as a matter of course without any additional emphasis, especially in comic scenes. For example, Falstaff wonders if Ford's «overreaching» comments are the consequence of his having «laid my brain in the sun and dried it» (*Merry Wives* V.v.134-135). The harmful heat of the sun is on occasion utilized in a further metaphorical turn whereby its burning rays stand for some other injury. Thus, Ulysses would rather «parch in Afric sun» than «in the pride and salt scorn of his [*Hector's*] eyes» (*Troilus* I.iii.370-371) and Coriolanus would rather make the wind «Strike the proud cedars 'gainst the fiery sun» (V.iii.60) than see his mother kneel before him. Similarly, some characters make use of this destructive potential of the sun in their imprecations and curses (*Antony* IV.xv.10-11). In general, we can already surmise that Shakespeare actualizes the meaning of 'sun' and the other astronomical terms by means of the situational and paratextual elements present in the dramatic text.

Lastly, the sun functions as the symbolic summit of power and greatness –features that align it with the wielders of earthly (king) or heavenly (deity) power. In this regard, the sun is akin to the god of Christianity in that it is an omnipotent, «almighty sun» (*Troilus* V.ii.177) that is also omniscient and ubiquitous –for the «all-seeing sun» (*Romeo* I.ii.94; *1 Henry VI* I.iv.84), one of the trademark Shakespearean collocations, «shines everywhere» (*Twelfth Night* III.i.39). In addition to godly attributes, Shakespeare underscores the divine nature of the sun through relevant lexical collocates, e.g., 'God' and 'blessed' (*Shrew* IV.v.18-20) –while it is also deemed worthy of 'worship' (*Gentlemen* II.vi.10). On a related note, the sun is associated with heaven through pleonasm on several occasions (*LLL* I.i.84, *Venus* 193, 198). Thus, one can make an

[10] To quote but another aspect of how the «powerful sun» can be dangerous, according to popular belief in Shakespeare's time, the sun extracted poisonous gases from marshes –producing «fen-sucked fogs» in the process (*Lear* II.iv.167).

oath to (*Cymbeline* IV.iv.34-42) or a vow «by the sacred radiance of the sun» (*Lear* I.i.109).

Because of the notion that a monarch receives his power by divine right, Shakespeare also utilizes the sun in his literary discourse as a stand-in for political power. In this regard, the sun is a recurrent symbol for a king or emperor, from the two conflicting suns (Saturninus and Lucius) in *Titus Andronicus* (V.iii.17-18), to *Henry VIII* (III.ii.416), to «the son/sun of England» (*1 Henry IV* II.iv.406). By extension, the metaphor is adjusted according to the specific circumstances of the story by matching the phases and appearance of the sun to concrete events in the reign of a monarch or the life of a powerful man. For instance, a leader in the twilight of his life is a «setting sun» (*Timon* I.ii.144), and Timon himself bids the sun to «hide thy beams» (V.i.222) when he wishes to retire to his cave. Similarly, when Edward sees that, at first, they are losing the battle of Towton, he laments that «Edward's sun is clouded» (*3 Henry VI* II.iii.7). It should be mentioned here that Shakespeare, by parallel with other positive meanings of the sun, often expresses the conflict between opposing political sides by resorting to weather phenomena that challenge the sun's rays. Perhaps the best-known example of this technique occurs in the tense conversation between Queen Margaret and Richard, where Shakespeare deautomatizes the instantial meaning of 'sun' to refer specifically to Richard's personal situation, while extending this semantic network through related lexical items (*Richard III* I.iii.263-269):

Richard	Ay, and much more; but I was born so high. Our aerie buildeth in the cedar's top, And dallies with the wind and scorns the sun.
Queen Margaret	And turns the sun to shade; alas! alas! Witness my son, now in the shade of death; Whose bright out-shining beams thy cloudy wrath Hath in eternal darkness folded up.

Within this strain of figurative language that draws parallels between the course of the sun and the life of a ruler, there exists a specific simile that underscores the difference in status between the king and the rest. Specifically, the notion that «gnats fly to the sun» reveals itself as a recurring phrase to express how 'the common people' pester their

monarchs. To wit, Clifford in his dying agony laments that «whither fly the gnats but to the sun?» (*3 Henry VI* II.vi.) –a situation that parallels *Titus* IV.iv.82 and *Errors* II.ii.30. On a related metaphorical note, a ruler who is magnanimous and allows for good-humoured satire behaves like the sun, «Who doth permit the base contagious clouds / To smother up his beauty from the world» (*1 Henry IV* I.ii.192-193).

This is not to imply, however –as the foregoing examples also point out– that lack of respect and obedience to the king is not seen as an act of selfish, vain pride. As Hero puts it (*Much Ado* III.i.8-11):

> …honeysuckles, ripened by the sun,
> Forbid the sun to enter, like favourites,
> Made proud by princes, that advance their pride
> Against that power that bred it.

Although the purpose of this section (and of this essay at large) is to provide a general account of the semantics of the sun and other astronomical terms in Shakespeare's discourse by looking into their recurring patterns of meaning, it is also worth noting that these meanings may also serve to structure the plays and poems in which they occur. For example, *3 Henry VI* is framed by a conflict that reaches a turning point when Edward sees «three suns» (*3 Henry VI* II.i.25-40) at the battle of Mortimer's Cross and decides to emblazon his shield with what he believes is a good omen. This phenomenon, a parhelion documented in the chronicles of the event (Ross, 1974: 31-32), punctuates a series of exchanges in pivotal scenes that hinge on the different uses of the sun as a stylistic device, at least in part. A similar case can be made for *Hamlet*, which contains a network of lexical nodes among which 'sun' is one of the most prominent –especially in punning combination with 'son'. Thus, the play begins with the 'disasters in the sun' that Horatio believes the Ghost forebodes (I.i.122)[11]. Later, the events of the plot unfold under the extended metaphor that the sun is a symbol of the king and that Hamlet is (or may be) both –'son' and 'sun'[12]. The eponymous protagonist of *Timon of Athens*, in turn, expresses his ideas and circumstances through sun metaphors –while at the same time we can see a sharp contrast

[11] This phrase has been ascribed to various sources, not mutually exclusive for some. See, for example, Conley (1915).

[12] See how being «in the sun» (I.ii.67 and II.ii.184) is never used denotatively.

between the light of the sun and the darkness of his chosen retire in a cave, as well as other references to 'black-cornered' night.

4. MOON

The moon also carries a series of recurring meanings in Shakespeare, although two of the most common usages of the word overlap to some extent with those of the sun. More specifically, the moon is also associated with the passing of time and with a positive concept of light or brightness –akin to beauty. In addition to these domains, Shakespeare uses the moon, on the one hand, as a symbol of change –be it the changing nature of fortune and fate or the volubility of human character. Finally, the moon is also portrayed as the epitome of femininity.

Just like different phraseological combinations made the sun nature's clock for Shakespeare, the moon may fulfil an analogous function. More specifically, a moon –i.e., a lunar or synodic month– in Shakespeare's discourse often constitutes a standard measure of time. Sometimes it conveys the feeling of time passing slowly, like in the opening lines of *A Midsummer Night's Dream* (I.i.1-6)[13]. Similarly, the King and Queen in the play-within-the-play (*Hamlet* III.ii.155-159) measure their long marriage in «thirty dozen moons» and wish «So many journeys may the sun and moon / Make us again count o'er ere love be done!». Conversely, a short period means «not many moons» (*Antony* III.xii.6), with room for slight lexical variation –e.g., a 'moonshine' to refer to a month (*Lear* I.ii.5). In this regard, it is of special interest that the use of the moon for timekeeping seems to be associated with foreshadowing and prophecies. For instance, the news that Thaisa «One twelve moons more she'll wear Diana's livery» (*Pericles* II.v.10) foreshadows her betrothal. Likewise, the set-up for Act III (30-31), which is ultimately the cause of Pericles' tribulations, derives from a threatening deadline –«twice six moons». Along similar lines, a major subplot in a play can be anticipated by setting a deadline («by the next new moon», *Dream* I.i.83) for the denouement.

[13] The role of the moon in this work has been a major focal point for Shakespeare scholars. It would be redundant, therefore, to focus on these aspects explicitly. See Schanzer (1955: 238 ff.), Paolucci (1977) or Smidt (1986: 129 ff.).

The same happens when Gaunt foresees that he will not live to see his son return from exile (*Richard II* I.iii.219-222)[14].

The moon often takes its natural role as a source of light as well, usually with positive and lyrical overtones. Thus, the light of the moon is likened to silver –note the «silver moon» in *Love's Labour's Lost* (IV.iii.27) and *The Rape of Lucrece* (371). Unsurprisingly, both occur in poetic contexts –for in the first case the King is reading a sonnet. Furthermore, the moon is associated with the colour of silver or a similar lustre in other analogous, lyrical contexts –hence the moon «That tips with silver all these fruit-tree tops» (*Romeo* II.ii.108). There exist even more symbolic exploitations of the trope, like the description of the course of the Trent flowing east, which robs Hotspur of «a huge half-moon» of good land. This half-moon is cut out by a river that is subsequently described as «smug and silver» (*1 Henry IV* III.i.97-99). A derivative chromatic depiction of the moon includes colour terms denoting pale or whitey hues. Among these we find the «pale-faced moon» (*1 Henry IV* I.iii.202; *Richard II* II.iv.10) –or simply, the «pale moon» (*Winter's Tale* IV.iii.16). This paleness is not merely descriptive, for it is often transferred or personified for stylistic effect. To wit, the untimely death of Emilia's 'playfellow' made the moon look «pale at parting» (*Kinsmen* I.iii.53); the pale light of the moon that shone on Bassianus' dead body resembles that which confused the mythical Pyramus (*Titus* II.iii.231). This paleness is said to stem from grief and envy of the sun's rays (*Romeo* II.ii.4-6).

In more general terms, the moon becomes a bright source of light –the light of the moon is one of the few things worth paying tributes for (*Cymbeline* III.i.40-45) and if the «moon shines fair», it facilitates travel by night (*1 Henry IV* III.i.138). The moon shines particularly bright «in water seen by night» (*Venus* 492) and it does «o'ershine» the stars (*2 Henry IV* IV.iii.50-52) with its «watery beams» (*Romeo* I.iv.65). Perhaps Pyramus' words best summarize the semantic range that can be associated with the moon's light: «Sweet Moon, I thank thee for thy sunny beams; / I thank thee, Moon, for shining now so bright; / For, by thy gracious golden, glittering gleams» (*Dream* V.i.268-270).

[14] Similarly, see how the time Othello has spent in Venice relieved from his military duties, is described as «some nine moons wasted» (I.iii.86).

Moonlight also possesses magical qualities that reconfigure and reify anything that happens under it. Thus, «warranting moonlight» may turn a kiss into everlasting love (*Kinsmen* I.i.177); while a murderer in the dark may «conjure the moon» to shine a light on his bloody deeds (*Lear* II.i.38) and vegetation needs the light of the full moon to grow healthily (*Troilus* III.ii.176)[15]. Similarly, herbs gathered «under the moon» were believed to have heightened magical or healing powers (*Hamlet* IV.vii.145-146).

The light of the moon can also serve as a structuring device for a whole act. Specifically, the moon that «shines bright» underscores the pleasure of lovers in the final scene of *The Merchant of Venice* (V.i.1&54). In addition, the tone of the whole act can be better understood by analysing the references to the moon that are interspersed in the dialogue. Thus, the associations with lovemaking and pleasure are reinforced by Portia's call to silence in a pivotal moment of the act, which she phrases as a reference to the mythical love between the moon and Endymion (V.i.109). Furthermore, the denouement of the play is triggered by the revelation of the identity of the disguised benefactors of the story (Portia and Nerissa), who did «a good deed in a naughty world». Here the moon's outshining a mere candle (V.i.89-96) plays a key role in the theatricality of the scene. Unsurprisingly, then, the quarrel about the rings that leads to the final revelation begins with an oath on the moon (V.i.142).

When Shakespeare makes use of the moon as a symbol of change, he sometimes does so by alluding to its changing appearance. To wit, during Duke Vincentio's apology of death, he mentions that «thy complexion shifts to strange effects, / After the moon» (*Measure* III.i.24-25). But the moon changes not only in appearance, but also in position –note how Cleopatra speaks of the «visiting moon» (*Antony* IV.xv.70) to emphasize its mobile nature. Thus, it would be utterly shocking if the moon would go «five weeks without changing» its orbit (*Tempest* II.i.185).

However, most examples that refer to change pivot on tropes that connect the moon to traits of a character's personality –usually inconsistency of character. Thus, Juliet fears that Romeo's oath of love

[15] Gerard (1636: 307) already claimed that the growth of certain plants can be modified by «having a regard to the Moone and other circumstances».

may not be true if he swears by «th'inconstant moon» (*Romeo* II.ii.109-111). Similarly, Othello wonders if Iago wants him «To follow still the changes of the moon / With fresh suspicions?» (III.iii.192-193). On a humorous note, Katherina –in a passage laden with wordplay that hinges on 'sun' and 'moon'– jests that «the moon changes even as your [*Petruchio's*] mind» (*Shrew* IV.v.20). Equally ironic is Hyppolita's «I am aweary of this moon: would he would change!» (*Dream* V.i.247-248). Conversely, Cleopatra verbalizes her unwavering resolution by claiming «…the fleeting moon / No planet is of mine» (*Antony* V.ii.240-241). On occasion, the moon may even become, by extension, the very reason for the infirmity of human character, since it «makes men mad» (*Othello* V.ii.112-114). In sum, perhaps the most comprehensive review of everything that is 'moonish' comes from the mouth of Rosalind (*As You Like It* III.ii.399-401), who equates this adjective with «changeable, longing and liking, proud, fantastical, apish, shallow, inconstant, full of tears, full of smiles».

The moon may also be the epitome of changing fortune –«for the fortune of us that are the moon's men doth ebb and flow like the sea, being governed, as the sea is, by the moon» (*1 Henry IV* I.ii.26-33)– as it is usually in a constant state of change and renovation (*LLL* IV.ii.34-48). However, changes in the moon tend to have a negative semantic prosody and be associated with bad luck or fate –in accordance with astrological superstition. Thus, Gloucester is afraid that «These late eclipses in the sun and moon portend no good to us» (*Lear* I.ii.106-7); whereas Hecate links the appearance of the moon (*Macbeth* III.v.23-24) to ominous consequences (III.v.30-31).

One of the defining semantic associations of the moon in Shakespeare's discourse has to do with the feminine. The metaphorical application of the moon's light and other related qualities makes this heavenly body a recurrent symbol of womanly beauty, especially among women who combine beauty (e.g., Sonnet XXI) and virtue, as when Menenius commends «my as fair as noble ladies» by comparing them favourably to the moon (*Coriolanus* II.i.96-98). In many cases, the moon owes this association of beauty and virtue to its being one of the iconographic attributes of Diana/Artemis, goddess of chastity. Indeed, Coriolanus regards Valeria as «The moon of Rome, chaste as the icicle» (V.iii.65); whereas Laertes expresses his strict standards of modesty for

women thus: «The chariest maid is prodigal enough / If she unmask her beauty to the moon» (*Hamlet* I.iii.37)[16]. By contrast, Desdemona's impudence, according to Othello, would make the moon avert its eyes (IV.ii.79). On a related note, Romeo wishes that Juliet «Be not her [the moon's] maid» so that she does not have to wear «Her vestal livery», which would prevent her from accepting Romeo's advances (II.ii.6-7). One may also find the occasional example where the moon is used as a trope for modesty in relation to men, like in Scinius's censure of Marcius (*Coriolanus* I.i.258). Again, the word 'modest' takes on a different meaning when it applies to men, which reinforces the role of astronomical terms as gender characterizing devices. Indeed, there are occasional uses of the moon as a symbol of male beauty (*Antony* V.ii.78-80) but, curiously enough, all the cases where traditionally female qualities are associated with a man through an astronomical trope belong to plays set in classical antiquity. I would contend that Shakespeare had fewer constraints for these cross-gender stylistic devices when the framework of the Judeo-Christian tradition is absent.

The meanings and undertones that Shakespeare applies to the moon are rarely used in isolation. As the exchange between Rosaline and the King demonstrates (*LLL* V.ii.204-216), practically all the notions discussed hitherto can be combined successfully, which buttresses the hypothesis that Shakespeare's meanings in this field are largely systematic.

5. STAR/S

By parallel with astrological folklore and the conventional meaning of the word in contemporary English, Shakespeare uses stars as an equivalent of luck or fate[17]. Equally rooted in traditional wisdom is the utilization of the stars as a guide, whether for navigation or course of action. Another meaning that stars take in Shakespeare's discourse has

[16] It is interesting that Laertes should describe Hamlet's advances and erratic behaviour by using words like 'crescent' and 'waxing' –both with entries in the *OED* that refer to the moon exclusively. In light of this, the subsequent use of the moon as a symbol of chastity overlaps with Hamlet's embodiment of change, also an attribute of the moon.

[17] As the *OED* confirms, Star: 3**c.** In *plural*. With possessive adjective: the predictions given for a person's star sign in a horoscope in a newspaper, magazine, etc. Also, with *the*: horoscopes of this type.

to do with light, where these astronomical objects serve to illuminate dramatic action in a literal or figurative way. However, most often, as it also happens with the sun and moon, the light of the stars is a symbol of beauty –particularly as a metaphor of the eyes. Finally, Shakespeare resorts to the stars as the epitome of height or distance –specially to mark differences in social class and dignity.

Shakespeare employs the stars as a symbol of fortune and fate –and, by extension, the traits of one's personality. Indeed, some may be influenced favourably by «a charitable star» (*All's Well* I.i.190-191) or «a most auspicious star» (*Tempest* I.ii.182-183), while others fall into disgrace by the «dimming of our shining star» (*Richard III* II.ii.102) and would like to «shake the yoke of inauspicious stars» (*Romeo* V.iii.111)[18]. Along these lines, characters thank the stars for a strike of luck (*Twelfth Night* II.v.166-169) and it is wise to take a break «Until our stars that frown lend us a smile» (*Pericles* I.iv.109). In general, the prevailing use of this symbol suggests that «The stars above us, govern our conditions» (*Lear* IV.iii.34) and that the world is but a stage «Whereon the stars in secret influence comment» (Sonnet XV). There is even a certain animistic element in some cases, where the stars become active agents of fate by pouring «down plagues for perjury» (*LLL* V.ii.395). This notwithstanding, characters may challenge the role of stars in their fate, for Cassius believes that «The fault, dear Brutus, is not in our stars, / But in ourselves, that we are underlings» (*Caesar* I.ii.140-141). Similarly, Edmund derides those who blame their «goatish disposition» on «the charge of a star» (*Lear* I.ii.130-131). This would suggest that there is also a characterizing element in the deviation from the conventional meaning of these astronomical bodies.

Stars also constitute a «guiding light» by metaphorical extension of their use for navigation. Thus, trustworthy leaders with strict principles are as «constant as the northern star» (*Caesar* III.i.61). The reverse may also be true, for lacking principles can be equated to the absence of a guiding star that one may 'sail by' (*Much Ado* III.iv.52-53)[19]. These astronomical bodies guide a character's thoughts and actions, although

[18] A favourable turn of events can be brought about by «a happy star» (*Titus* IV.ii.32).

[19] Note how a treacherous character like Brutus «cannot, by the progress of the stars / Give guess how near to day» (*Caesar* II.i.2-3).

Shakespeare seems to prefer using this trope in the negative –akin to the negative semantic prosody of the moon as a symbol of fortune. To wit, Antony complains about his ill fortune and describes his present state as «When my good stars, that were my former guides, / Have empty left their orbs and shot their fires» (III.xiii.148-149) –while the poetic persona in Sonnet XIV takes pride in that «Not from the stars do I my judgement pluck».

The stars also commonly represent a source of light. Thus, we find collocations such as «bright star/s» (*All's Well* I.i.88-90; *Venus* 815) and «shining star/s» (*Richard III* II.ii.102; *Venus* 861) –as well as other explicit combinations within that semantic field (*LLL* I.i.88-89; *Lucrece* 164). Thus, when Macbeth wants to hide his plans, he asks stars «hide your fires; / Let not light see my black and deep desires» (I.iv.50-51) –whereas Lepidus wishes Caesar safe travels thus: «Let all the number of the stars give light / To thy fair way!» (*Antony* III.ii.68-69). As we can see, it is difficult to disentangle notions of luck, guide, and light on occasion. However, as noted earlier, Shakespeare uses the light of stars as an image of (typically female) beauty. Indeed, most of these metaphors of beauty include terms in their surrounding lexical context that belong to the onomasiological field of light. For example, Palamon praises Emilia's fairness as that of a «fortunate bright star» (*Kinsmen* III.vi.146) and the beloved addressed by the poetic persona in Sonnet XXVIII «gild'st the even» when «sparkling stars twire not». Likewise, beautiful female guests at a soiree are «Earth-treading stars that make dark heaven light» (*Romeo* I.ii.25). But Shakespeare also allows for creative variation in the cognitive metaphor starlight=beauty. To wit, other astronomical bodies may also enter the expression, as when Proteus compares his love for Julia and, later, for Sylvia: «At first I did adore a twinkling star, / But now I worship a celestial sun» (*Two Gentlemen* II.vi.8-9). There is even room for bawdy puns whereby star-like beauty sometimes lacks the desired chastity –hence 'falling' stars (*Henry VIII* IV.i.53-54). It is also worth mentioning that, as was the case of the moon, stars can occasionally refer to male beauty, like Romeo's (*Romeo* III.ii.21-23). This is again a specific deviation that configures the character of Romeo, in view of the distribution of this stylistic association, as somewhat androgynous –an aspect that has been attested elsewhere and included in several

productions and adaptations[20]. In fact, the notion that this trope is almost exclusively associated with femininity is corroborated by the fact that other instances with men tend to be elicit laughter –like when Petruchio, in his feigned madness, takes Vincentio for a woman (*Shrew* IV.v.31-32).

To follow on the last example, Shakespeare often resorts to the traditional association of the stars with the beauty of someone's eyes –an image that can be traced back to Petrarchan poetry at the latest. This parallelism (typically associated with female characters) can be made by conspicuous comparison, as when Romeo metaphorically claims that «Two of the fairest stars in all the heaven, / Having some business, do entreat her eyes / To twinkle in their spheres till they return» (*Romeo* II.ii.14-19). Similar occurrences include admiration for Hermia's (*Dream* I.i.183), Paulina's (*Winter's Tale* V.i.67-68), Venus's (*Venus* 1031) and Lucrece's (*Lucrece* 13-14) eyes. In addition, as noted earlier, it is not unusual for different astronomical terms to be utilized together. For instance, Rosaline's face is a «clouded moon» because she is taken aback by the king's praise, who asks her to make «thy stars…shine» (*LLL* V.ii.205-207).

The last of Shakespeare's stylistic usages of the word 'star' has to do with their height (the literal height of these astronomical bodies being a metaphor for height in rank or dignity). This accounts for Benedick's hyperbolical complaint about Beatrice's foul mouth –as he claims that if it her breath were «as terrible as her terminations», it would «infect the North Star» (*Much Ado* II.i.237-239)[21]. Nevertheless, in general, stars tend to signify stature, especially by comparison with others who are below someone's status. In this light, we can read the Duke's rebuke of Valentine («Wilt thou reach stars, because they shine on thee?») when he tries to court Sylvia; or Florizel's lament that he cannot marry Perdita because they have widely different social statuses (*Winter's Tale* V.i.205-207). This is indeed a common stylistic expression of social differences between lovers –especially if their love is forbidden or likely to be fateful–

[20] See, for example, the reviews of different productions like <https://www.theguardian.com/stage/2023/oct/29/romeo-and-juliet-review-royal-exchange-theatre-manchester-nicholai-la-barrie> or <https://theconversation.com/shakesqueer-in-love-exploring-the-bards-queer-themes-98220>.

[21] The North Star was believed to be the most distant to Earth.

as in the cases of Helena and Berthram (*All's Well* I.i.87-91) or Hamlet and Ophelia (II.ii.141).

In most other cases, stars symbolize nobility and social rank –often in combination with positive personal traits. For instance, Cymbeline's sons are deemed worthy «to inlay heaven with stars» (V.v.354-356). Along the same lines, Coriolanus, when his mother kneels before him, humbly compares himself to «the pebbles on the hungry beach» trying to «Fillip the stars» (V.iii.57-59). The link between stars and 'nobleness' is more explicit when Duncan extends the praise of his son Malcom to all the other allied noblemen by saying that «signs of nobleness, like stars, shall shine / On all deservers» (*Macbeth* I.iv.41-42). Of a similar nature is the example in *I Henry IV*, where Prince Harry chastises Hotspur for his ambition and argues that «Two stars keep not their motion in one sphere, / Nor can one England brook a double reign» (V.iv.65-66).

As the foregoing pages have sufficiently evidenced, it is not uncommon for different astronomical terms to appear in combination. In the case of stars, they usually pale by comparison, literally and figuratively, to the sun or the moon. A case in point is Lucrece's claim that dishonour is a much greater blemish in a noble man than in ordinary people, for «The moon being clouded presently is missed, / But little stars may hide them when they list» (*Lucrece* 1007-1008). Another relevant example occurs when Pericles reminisces about his father's former glory, who «Had princes sit like stars about his throne, / And he the sun for them to reverence» (*Pericles* II.iii.41-42). Shakespeare may also use a single astronomical term with a combination of two or more of their common meanings. For instance, when Maria plants a forged letter so that Malvolio thinks Olivia is in love with him (*Twelfth Night* II.v.140-143), the text of the letter uses the trope of stars as a symbol of both nobility –Olivia is above Malvolio in social class («In my / stars I am above thee»)– and fate, as if to suggest that their love is destined to succeed despite their social differences («Some are born great, some achieve greatness, and / Some have greatness thrust upon 'em»).

6. Conclusion

As has been elucidated, this study provides relevant insights into the role of astronomical terms in Shakespeare's discourse. First, because the abundance of examples attests to their significance in merely quantitative terms. A thorough analysis of the meanings in context, however, has allowed us to map key patterns on Shakespeare's use of these terms.

First, we can conclude that Shakespeare was aware of the meanings of astronomical bodies in the popular culture of his time, as seen in references to myths and folklore (e.g., herbs picked under the moon for magical philtres; stars as guides for navigation). This also applies to his knowledge of the role of the sun, moon, and stars in the classical literary tradition and among his contemporaries. The former can be seen, for instance, in the use of the moon as the epitome of female chastity –whereas the latter may be illustrated by the utilization of the trope stars = beautiful eyes.

In addition, it becomes apparent that Shakespeare combines conventional meanings with creative adaptations, extensions, and manipulations. Even in cases where Shakespeare resorts to conventional usage, by crafting fixed combinations (e.g., 'fair moon', 'glorious sun') he manages to establish his own personal astronomical discourse. In addition, Shakespeare can combine the meanings of two or more of these astronomical terms to weave an intricate network of figurative language. This can be seen in the comparative use of the sun and the stars to gauge relative status, for example.

Perhaps most importantly, this study demonstrates that Shakespeare makes use of astronomical lexis in ways that go beyond the denotative and buttress his stylistic toolkit. Of special interest are the uses that function as a characterizing device (e.g., the sun for powerful men; the stars to denote social status). Much the same can be said of those instances that reveal fundamental differences between the genders in the collocational patterns of these terms: the sun alludes to beauty among women and to power among men. Likewise, the 'modesty' of the moon takes on different meanings among male and female characters. Finally, references to astronomical bodies may also constitute a framing device for entire scenes,

acts, or plays –as exemplified by the discussion of relevant passages in *Hamlet* (sun-son) or *The Merchant of Venice* (moon).

As can be seen, there is a network of astronomical terms in Shakespeare's canon that reveals itself as proof of their ubiquitous and methodical nature –be it as instantial tropes, as characterizing devices, as phraseological 'catchphrases', or as the structural scaffolding for the plot. Indeed, by mapping these examples one can identify recurring patterns that attest to the systematic use of astronomical terms in Shakespeare's discourse.

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