

The Metamorphosis of Macbeth: A Neuropsychological Approach

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Abstract

This article aims to study the transformation of Macbeth from a national hero who represents the nation's glory into a criminal who becomes the nation's source of evil and peril. It means to trace the metamorphosis in his character from a national hero to an anxious hero, a "hamartiac" hero, an ambivalent hero, a misguided hero, a criminal, an insomniac king, a fallen monarch, and eventually a recidivist criminal king. He experiences a range of neuropsychological and psychoanalytic difficulties while the psychological alterations take place. Anxiety, despair, guilt, terror, insomnia, and a sense of loss are a few of these disorders. The first step in Macbeth's quest is his triumph over the disobedient Macdonwald and his henchmen. When he decapitates the rebel leader and hangs his head at the camp's gate, he signals the successful conclusion of the conflict with the rebels. At this point, Macbeth has earned the title of "national champion," earning the king's adulation in addition to the people's respect and thanks. Order and stability are restored only when Macduff beheads Macbeth and hangs his head at the entrance of the camp of the Scottish forces arriving from England since during his reign he transforms into an evil force and a source of unrest. The tale of Macbeth's transformation can be found between the two acts of decapitation. Between the two incidents, Macbeth goes through several stages of development that will be covered in the discussion that follows.

Keywords: *Macbeth, Metamorphosis, Witches' Prophecies, Ambition, Murder, Insomnia, Divine Right of Kings, Macduff.*

INTRODUCTION

Macbeth is a unique tragedy by Shakespeare. It is different from all the tragedies of Shakespeare in the sense that the protagonist loses his status as a tragic hero and evolves into a number of stages that end up depriving him of that sympathetic status. He evolves from a national hero to an anxious hero, "hamartiac" hero, ambivalent hero, misguided hero, criminal, insomniac king, fallen monarch, and ultimately recidivist criminal king. He turns into a criminal who disturbs his own life and disturbs the whole nation of Scotland. He is deservedly murdered at the hands of Macduff, and his head is hanged at the gates of Malcolm's camp. Shakespeare in this play replaces the protagonist after the second murder he commits against Banquo with Macduff, who is prepared throughout the play to rid Scotland of Macbeth's evil and help Malcolm restore order and stability to the nation after the devastation Macbeth bred during his illegal reign.

Literary critics and scholars from other disciplines have dealt with certain aspects of the character. Notably, neurologists and psychoanalysts have tackled the issues of his psychology and sleep disorders. The sleep disorders of the character have received a lot of attention from neuropsychologists. Christian Churchill (2015), for instance, argues in a study drawing on Freudian ideas of melancholy and grief that Macbeth's sentence "Sleep No More" illustrates how his sense of guilt leads to despair. He contends that Macbeth commits the murder and has mental regret at the same time. In addition, depression is accompanied by an increase in fear and worry. Churchill points out the Macbeth's insomnia results from his psychiatric disorders that prevent sleep from occurring. He argues that the persuasive speech of his wicked, domineering wife causes him to experience consequences he has never experienced before. He adds that Macbeth's words "sleep no more" undoubtedly highlight the condition of neuropsychological sleeplessness he will experience

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for the rest of his life. However, Churchill also explains that the words show the diseases brought on by the crime, specifically fear, despair, and guilt.

According to Freud (1917), the offender's unbalance results from the aftereffects of the act, especially, shame, fear, and melancholy, which cause insomnia. Like many criminals against life, he turns dangerous and becomes a recidivist, according to Freud (1917) and Churchill (2015). In a similar vein, Janowitz (2000) claims in his article on Macbeth and his wife's sleep disorders that Macbeth becomes even more jealous of Duncan after the murder as Duncan has condemned him to an eternity of sleep while he himself cannot fall asleep for fear of terrifying nightmares. Moreover, Janowitz notes that Lady Macbeth herself blames her husband's irrational behavior on not having gotten enough sleep during "the season of all natures, sleep" (3.4.141).

Even though he was not aware of modern neuropsychology, Paciaroni & Bogousslavsky (2013) maintain that Shakespeare was "describing what we know today as diverse neurological symptoms, signs, and courses of disease in modern terms for the aberrant character profile" (4). Shakespeare correctly diagnoses and portrays a number of these neurological disorders in his characters, including insomnia, a sleep disorder that is associated by a host of other psychological issues, such as guilt, dread, melancholy, and regret, among others.

Ihalainen (1989) contends that Macbeth's tears and laughter are unquestionably the result of his confused thoughts. According to him, subconscious desires frequently change how people dream and sleep. Ihalainen goes on to add that recent psychoanalytic research indicates that sleep disorders may be caused by compromised ego functioning. Furthermore, he notes that individuals who commit crimes against human life see God's strength as highly valued and give his power much thought. This contemporary psychoanalytical discovery aligns with the Elizabethan perspective of Shakespeare as it is expressed in Macbeth.

In their 2015 work, Samson Z. Assefa, Montserrat Diaz-Abad, Emerson M. Wickwire, and Steven Scharf discuss a number of ideas on the overall physiological function of sleep as well as some theories about its functions. To better understand the role of sleep, they examine the effects of sleep deprivation on mental, physical, and neurocognitive processes. Additionally, sleep aids in the renewal and restoration of the physiological systems that maintain the body and mind in good health and functioning normally. Furthermore, the recovery from neuronal plasticity related to learning and memory is greatly aided by sleep, which is maintained by functionally integrated patterns of instinctive behavior, as explained by Z. Assefa et al.

In the moments that follow Duncan's death, Macbeth is depicted as being uneasy. He expresses a peculiar and prescient fear that "things terrible started make independent / Themselves by eventually success" (2.2.72–3) in response to the ruler's gatekeepers' murders, saying, "This is a sorry sight" (2.2.19). The witches have given Macbeth blueprints for his future. He finds the information the witches gave him mysterious, and he's started to make plans to come to terms with it. According to cognitive neuroscientist Mark Wheeler (2004), Macbeth begins to exhibit the consequences of frontal lobe damage, which has altered his personality and ability to construct narratives. Wheeler further argues that identity modifications are suggested by the unfortunate victims of frontal lobe damage. Macbeth's future and his identity transformation are fundamentally impacted by this adverse consequence. This particular type of identity confusion, although it may seem like an ethological shift, actually stems from the theory that damage to the brain structures that control typical administration forms is what causes the many negative consequences of frontal lobe injury. As a result of his gradual transformation from an essential hero to an envious madman, Macbeth eventually engages in double management (Rajiva 1987). His shifting of identities has also made him more assertive and straightforward in putting his own goals ahead of any consideration of how they may affect other people or himself (Bočkaj, 2020). Macbeth's subsequent carelessness is a major factor in how his character changes and how much sleeplessness he experiences.

Alexander Borbély (1982) in his study on sleep argues that sleep is regulated by the circadian and homeostatic systems. This method of assessing attentiveness is sometimes referred to as the "two-process model". His ability to maintain a 24-hour rhythm cycle in his sleep propensity, regardless of previous sleep, offers as an example of circadian control.

Wilson Knight, a renowned critic of Shakespeare, stated in 1961 that Macbeth's assassination of the king is a terrible act that transforms him from a brave national hero into an abominable adversary of god and earth. He turns into a post-lapsed sinner. Knight's case was predicated on the Elizabethan belief that assassinating a ruler constituted a transgression against God.

According to Burgess (1992), an act of anger directed towards the king was deemed an act of aggression directed towards God. He continues by saying that Macbeth feels cut off from heaven as a result of killing the king. This is the reason Macbeth does not shout "amen" in the second chamber when one of the two sleepers is there. The article aims to analyze the development of the character of Macbeth in light these studies and other relevant literary and neurological studies.

THEORETICAL FRAMEWORK

The Aristotelian philosophy of tragedy (Aristotle, 2013) forms a major part of the study. Shakespeare does not observe several significant components of the theory, which strips the protagonist of his tragic status. Nonetheless, the dramatist keeps some of these components, like the character's hamartia, or his ambition. Shakespeare ignores the part of Macbeth's guilt acknowledgment and regret found in the tragedy theory. In doing so, he robs the character of the sympathy of the readers—a crucial component of the idea. Unlike all the other tragic protagonists in his drama, the author handles this protagonist in a unique way. In actuality, he replaces him with Macduff, who, like Macbeth did with Macdonwald, the rebel leader against Duncan, ends up chopping off his head and hanging it on the gate of Malcolm's camp.

The article also relies on the neuropsychological and psychoanalytical studies that are informative about the state of mind and insomniac nature of the character after the murder of the King. Studies such as those of Janowitz (2000), who analyzes the insomniac state of Macbeth and the somnambulism and somniloquism of Lady Macbeth. The study also benefits from Christian Churchill (2015) study on the Freudian psychoanalytical analysis of melancholia as it leads to the disorders of sleep and the feeling of despair in the character's life. The purpose of this study is to examine how the character has changed in light of this theatrical context.

DISCUSSION

Macbeth is a national champion who undergoes a series of alterations till he becomes the source of evil and danger for the nation. His metamorphosis develops from a champion of the nation to an anxious hero, a "hamartia" hero, an equivocal hero, a misguided hero, a criminal, an insomniac king, a fallen king, and finally a recidivist criminal king. During the process of the psychological transformations, he suffers a variety of neuropsychological and psychoanalytic disturbances. These disturbances include anxiety, depression, guilt, fear, insomnia, and a feeling of loss. Macbeth's journey starts with his victory over the rebellious Macdonwald and his cohorts. He determines the victorious result of the war with the rebels when he decapitates the rebel leader and hangs his head at the entrance of the camp. At this stage, Macbeth gathers the epithet of the national champion, who reaps the admiration of the people and the appreciation and gratitude of the king. As he turns into an evil force and source of disturbance during his reign, order and stability are regained when Macduff decapitates Macbeth and hangs his head at the gate of the camp of the Scottish forces coming from England. Between the two acts of decapitation lies the story of the transformation of the character of Macbeth. During the span between the two events, Macbeth evolves into different stages that will be the subject of the following discussion.

The Anxious Hero

The play commences with the depiction of Macbeth as a national champion of the Scottish nation. He leads the army of King Duncan against the rebels led by the brutal Macdonwald and his national and regional allies and defeats them despite their innumerable legions. The wounded captain, an eyewitness who took part in the battle, reports this image to the king. His report to the king (1.3. 7–41) is an eloquent narrative focusing mainly on the heroism of Macbeth. The narrative's long flow is interrupted by praising notes expressing the king's gratitude and admiration for Macbeth.

Macbeth's encounter with the witches in Act 1, Scene 3, in which they give blueprints for Macbeth's future as the Thane of Cawder and the king of Scotland. His companion and fellow champion Banquo receives a prophecy that his descendants will produce a line of kings, "Thou shalt get kings, though thou be none:" (1.3. 67) The purpose of pairing Macbeth and Banquo in this scene is to contrast Macbeth's reaction to the predictions with Banquo's in order to further illuminate Macbeth's character as well as to highlight key aspects of Macbeth's personality. The predictions instantly stoked Macbeth's desire for increased power. He tries to stop them to discover more about the future because of this. Banquo, on the other hand, pays little attention and believes that they are nothing more than earthly bubbles. At first, he is astonished that Macbeth takes them seriously. "Good sir, why do you start and seem to fear / Things that do sound so fair?" inquires Banquo (1.3.51-2).

On his part, Banquo assures the witches that he is not afraid of them and is uninterested in what they have to say while addressing them with skepticism and asking if they have any prophecies to share with him. So he goes up to them:

Are ye fantastical, or that indeed
Which outwardly ye show? My noble partner
You greet with present grace and great prediction
Of noble having and of royal hope,
That he seems rapt withal: to me you speak not.
If you can look into the seeds of time,
And say which grain will grow and which will not,
Speak then to me, who neither beg nor fear
Your favours nor your hate.

(1.3.53-61)

Banquo is juxtaposed with Macbeth who is rapt with by their promises. He wonders whether they are fantastical or real and assures them that he does not bother about their reaction to him but wonders what they can tell him about his future, as they have done to Macbeth. They have nothing for him but a big promise for a line of kings from his progeny.

After Macbeth meets the witches which do not belong to this world and acquire their information from the book of fate about his life span and end, his character goes through main alterations. These creatures convey knowledge from a great distance. They either read from the book of fate or from oracles resembling those of the Greek deity Apollo. They resemble the forces that tell Oedipus, the King, and his father what will happen to the Theban King in the future.

The "Hamartiac" Hero

The prophecies of the witches reveal the element of hamartia, flaw in his built-up (Aristotle, 2013). They show him to be ambitious and have greed for absolute power. This frailty is emphasized via juxtaposition with Banquo. The two characters sharing the same experience in close proximity reveals significant disparities between them. It demonstrates that Banquo is grounded in reality whereas Macbeth is somewhat superstitious; and that while Macbeth is wary of paranormal forces, his partner is not. However, a crucial strand of envy for Banquo's offspring emerges naturally in the heart of Macbeth and, later in Act 3, will grow into a deadly and catastrophic action. For the remainder of his life, Macbeth will keep the prophecy regarding Banquo's progeny in mind. At this point, Macbeth is ambitious to fulfill his part of the prophecy and envious of the Banquo children, but he is not yet dangerous and has not considered breaking the law.

The realization of the first prophecy that Macbeth is the Thane of Cawdor endowed upon him by King Duncan as reported by Ross and Angus in their reception at the outskirts of town gives credibility to the prophecies of the witches not only to Macbeth, but also to Banquo, who . wonders, "What, can the devil speak true?" (1.3.7). Most emphatically, the realization of the Cawdor prophecy inflames and intensifies the royal ambitions of Macbeth. He is thrilled at the news: "[Aside] Glamis, and thane of Cawdor! / The greatest is behind" (1.3.117-18). And later in an aside, he is excited to think that "Two truths are told, / As happy

prologues to the swelling act / Of the imperial theme" (1.3.128-29). His excitement is demonstrated by the numerous times his mind wanders and is distracted. These distractions are noticed by Banquo, who keeps tolling Macbeth back to reality, to use Keats' phraseology.

Macbeth's aside (1.3.130-42) demonstrates Macbeth's ambiguous reaction to the witches' prophecy. They are advantageous to him because one prophecy has come true, thus igniting ambition within him. They are also terrifying because he is shaken with anxiety at the mere thought of killing Duncan in order to fulfill the royal prophecy, which is currently just a figment of his imagination. He is therefore uneasy about everything and tends to swing easily between opposing viewpoints. Macbeth's uneasiness results from his lack of motivation to cling to his ambition. Therefore, one thing is crucial in this situation: despite his alluring ambitions, he still has a keen conscience that might sting him if he violates the king's rights. He contemplates:

...why do I yield to that suggestion
Whose horrid image doth unfix my hair
And make my seated heart knock at my ribs,
Against the use of nature? Present fears
Are less than horrible imaginings:
My thought, whose murder yet is but fantastical,
Shakes so my single state of man that function
Is smother'd in surmise, and nothing is
But what is not.

(1.3. 134-42)

The mere contemplation of the crime, which is fantastical at this stage, uproots his being and frightens him. Thus, he reconciles himself with his fate, saying that if "chance will have me king, why, chance may crown me, / Without my stir" (1.3. 144-45). He, however, harps again on the prophecy for Banquo's children:

Do you not hope your children shall be kings,
When those that gave the thane of Cawdor to me
Promised no less to them?

(1.3.117-19)

Banquo, who is the only one aware of the secret of the prophecies, reminds Macbeth that he can read his mind. He contends:

That trusted home
Might yet enkindle you unto the crown,
Besides the thane of Cawdor. But 'tis strange:
And oftentimes, to win us to our harm,
The instruments of darkness tell us truths,

(1.3.120-24)

Banquo can detect Macbeth's mind but attaches an irony that will gather meaning later in Acts 2 and 3. He anticipates negative consequences from the witches' revealed information.

The Equivocal Hero

These moments and incidents indicate that Macbeth's integrity is at stake, and his mind at this stage is a ready platform for manipulation. He can be easily guided in any direction towards his promised future. He ends up laying himself passively in the hands of fate: "Come what come may, / Time and the hour runs through the roughest day" (1.4.47-8). However, the notion that he will rule as king continues to captivate his thoughts. Therefore, Macbeth thinks that he is pushed further away from the throne when King Duncan selects his son Malcolm as a prince of Cumberland. Aside from that, he grumbles: "The Prince of Cumberland! that is a step / On which I must fall down, or else o'erleap, / For in my way it lies" (1.4.48-50). At this point, an evil thought immediately floats to the surface in his aside:

Stars, hide your fires;
Let not light see my black and deep desires:
The eye wink at the hand; yet let that be,
Which the eye fears, when it is done, to see"
(1.4.50-53).

His words embed evil thoughts, and despite his evil intentions, no plan has been crystallized yet. Because of his proclivity for evil, he is willing to pursue any viable strategy in pursuit of his royal ambition.

The Misguided Hero

Shakespeare wastes no time in establishing Lady Macbeth as the mastermind of evil. After receiving his letter in which he informs her of his experience with the witches, she makes use of the situation and formulates the evil plot required. The tenets of her scheme are based on contradicting traits of Macbeth's personality: on the one hand, his drive for success; and on the other, his good nature, which forbids him from resorting to dishonest means to achieve his goals. He "wouldst not play deceitful, / But wouldst wrongfully win," she gripes (1.5.20–1). Lady Macbeth waits impatiently for Macbeth to agree to her plan:

...Hie thee hither,
That I may pour my spirits in thine ear;
And chastise with the valour of my tongue
All that impedes thee from the golden round,
Which fate and metaphysical aid doth seem
To have thee crown'd withal.

(1.5.24-28)

She can't wait to meet him and infect him with her contagious wickedness, in order to get past any resistance, he might have to her wicked scheme to kill King Duncan to gain the crown. When she learns that Duncan will be staying at their castle in Inverness, she becomes even more ravenous. Her zeal for the plot to kill Duncan in order to fulfill the witches' prophecy gains surreal momentum.

In her monologue, in which she invokes evil forces in nature to come to the support of her scheme, the 'fiend-like' wife (Thompson and Ancona 2005) acquits herself like a sorceress and presents her case very repulsively. She invites the powers of darkness to change her gender-features of kindness, softness, motherhood, tenderness, and gentleness into those of harshness, toughness, and murderousness. She appeals to forces of darkness to block the passage to remorse that she will carry out her plan without and hindrances (1.5.37-53).

Despite her attempts to convince Macbeth to carry out her evil plot through coercion and argument, Macbeth is still unsure and unconvinced. He has the king's honors bestowed upon him, as well as the respect and admiration of the general populace. If he commits the crime, he worries that these will become worn out. He reacts to Lady Macbeth's pressures:

He hath honour'd me of late; and I have bought
Golden opinions from all sorts of people,
Which would be worn now in their newest gloss,
Not cast aside so soon.

(1.7.31-4)

In a previous aside, he assessed the circumstance and listed the advantages and disadvantages of the plan. He enumerates several reasons why he ought not to perform the crime. First, he is related to the monarch, which should deter him from treachery. Second, as the king's subject, he owes the crown allegiance. Therefore, Regicide was a serious transgression against God at the time of Shakespeare, which is more crucial (Burgess,

1992). It is a violation of the so-called divine right of kings. This concept is frequently referred to in Shakespeare's history plays and tragedies, such as *Richard II*, *Henry IV, Parts 1 and 2*, *Henry V*, *Hamlet*, and *Julius Caesar*, among others. This idea holds that only God has the authority to judge, let alone overthrow or eliminate a ruler or a king who is anointed by God. This rule's violation or usurpation constitutes a serious offense against God. Similar to when Henry IV's agents assassinated Richard II, such an act brings about retribution, illness, and societal unrest. Third, Macbeth is Duncan's host and is in charge of ensuring his security. It is inconceivable that he poses a danger to his visitor's life. Fourth, and maybe most significantly, King Duncan is a benevolent man who has been cordial and upright throughout his rule. Thus, killing him will elicit celestial and terrestrial sympathy and compassion. As a result, Macbeth skillfully conveys the compassion Duncan will garner if killed:

So clear in his great office, that his virtues
Will plead like angels, trumpet-tongued, against
The deep damnation of his taking-off;
And pity, like a naked new-born babe,
Striding the blast, or heaven's cherubim, horsed
Upon the sightless couriers of the air,
Shall blow the horrid deed in every eye,
That tears shall drown the wind.

(1.7.18-25)

Ide (1975) best analyzes these lines:

The imaginative process in this passage is similar, yet the visual leap from the weak "new-born babe" to the powerful figure "striding the blast" is elliptical. The babe of pity seems to trigger once again the forensic power of innocence and virtue which in turn recalls the powerful angels with their trumpets of judgment (8).

Ide continues, "Macbeth's imaginative consideration of Duncan's murder gives rise to the dreadful ideas of earthly and apocalyptic punishment" (8). Ide further clarifies that "[t]hese psychological constraints against regicide are precisely what characterize Macbeth's massacre of innocence" (8). Every power in the cosmos will feel sorry for Duncan if he is murdered: God, the angels, people, and nature will all curse the act.

Macbeth's predicament and concern about Duncan's murder are comparable to Brutus' after Cassius persuaded him to join the plot to kill his best friend, Caesar. Despite all of Cassius' accusations, he considers Caesar's character and is unable to come up with a valid defense for his death. In a lengthy speech (2.1.10–34), he reflects on the fact that he has no personal animosity toward Caesar and just acts in the greater benefit of the people. He goes on to say that if Caesar is made king, he might change his character and lose his sense of regret, making him dangerous and inclined to abuse his position. This makes his murder justifiable. He contradicts himself by asserting that Caesar is a smart man whose intelligence has never been swayed by passions and emotions ("... and, to speak truth of Caesar, / I have not known when his affections swayed more than his reason"). Despite having a genuine grasp of Caesar's personality, Brutus gets drawn into the plot. He thinks he will participate in the scheme lest Caesar alters and turn into a dangerous despot in the future as a result of the prospective case of ambition that comes with power.

The four aforementioned arguments challenge the murder. Only Macbeth's "vaulting ambition" serves as a motivator. However, Macbeth's thinking ends up being ambiguous. He is not opposed to murder per se, but he is afraid of the terrible repercussions that could occur. He thinks about how he will end the adventure if the murder succeeds in its goal and grants him the crown without any negative consequences. He worries that by using such extreme tactics to become king, others will be inspired to do the same: "We but give / deadly instructions, which, once learned, return to torment the inventor" (1.7.8-10). All these considerations influence Macbeth's choice to reject his wife's devilish plan.

The assessment Macbeth makes of his wife's plan also demonstrates how clouded his thinking is at this stage, which leads him to waver between acting and abandoning the plan. This further demonstrates that his conscience is capable of stirring him to his original decency. However, the resolutely evil Lady Macbeth

manipulates him back into the intrigue by focusing on his character's hamartia—his confidence in his manhood and bravery. She exclaims:

When you durst do it, then you were a man;
And, to be more than what you were, you would
Be so much more the man.

(1.7.49-51)

According to the injured captain in Act 1, Scene 2, Macbeth is the champion whose bravery, courage, and chivalry were exhibited in combat against the vicious rebel Macdonwald and his adherents, who were backed by the king of Norway and the Scottish conspirators. The domineering Lady Macbeth harshly corrects his concern that they would fail, saying, "We fail! / But screw your courage to the sticking-place, / And we'll not fail" (1.7.59–61). In order to murder king Duncan, Macbeth ought to erase all the logical and negative consequences of the crime. Hence, by making the guards drunk and unable to defend the monarch, Lady Macbeth assists the crime and makes it possible. She also plans to accuse the guards of murder and smear them with Duncan's blood.

In support of this scheme, Macbeth commends his wife's tenacity and will by saying, "Bring forth men-children only; / For thy undaunted mettle should compose / Nothing but males" (1.7.73-5), and succumbs to her satanic design:

I am settled, and bend up
Each corporal agent to this terrible feat.
Away, and mock the time with fairest show:
False face must hide what the false heart doth know.

(1.7.79-82)

Macbeth's mind begins shaping reality as he gets ready to commit regicide. His mind is clouded as it absorbs the uncertainty brought on by the witches' confusing proclamation that "fair is filthy" and the hazy recollection of wars lost and triumphed. He notices a dagger hurtling in his direction. His imagination begins to create images, a sign of stress and worry. His thoughts turn evil when his mind becomes agitated. In contrast, Duncan sleeps deeply and is at total rest, as Banquo relates to Macbeth.:

What, sir, not yet at rest? The king's a-bed:
He hath been in unusual pleasure, and
Sent forth great largess to your offices.
This diamond he greets your wife withal,
By the name of most kind hostess; and shut up
In measureless content.

(2.1.12-7)

He notices that Macbeth is still awake, while the noble king has gone into a deep sleep with total happiness and satisfaction. Shakespeare multiplies the indictment of Macbeth as he is ready to kill Duncan, who has sent a big diamond to Lady Macbeth out of gratitude for her hospitality. Shakespeare juxtaposes Macbeth and Duncan. One is anxious and stressed; the other is relaxed and peaceful in his delta sleep. Duncan thanks the Macbeths for their efforts in hosting him and his train, and they pay him back with regicide.

Banquo also notices that nature also corresponds to the situation. It converges with the state of the king:

Hold, take my sword. There's husbandry in heaven;
Their candles are all out. Take thee that too.
A heavy summons lies like lead upon me,
And yet I would not sleep: merciful powers,

Restrain in me the cursed thoughts that nature
Gives way to in repose!

(2.1.4-9)

Heaven's lights go out, and the stars stop shining, signaling that it is time to go to bed or, more likely, to be sorrowful about what is ahead. Additionally, despite Banquo's exhaustion, he is unable to sleep due to his misgivings about Macbeth's intentions. His mind is occupied with doubtful ideas concerning Macbeth's conceivably unlawful behavior.

The endurance of the motif of sleep at this period is what is most amazing, though. The king is dozing off in Delta, Banquo is trying to sleep but can't, and Macbeth is wide awake. Each of the three characters' emotional states can be related to these levels of sleep and sleep deprivation. The king has a clear conscience, which is the best pillow for sleep (Ihalainen, 1989). Besides, the king has no input about the aspirations of Macbeth, which can confuse his mind with worries and fear, a state that can lead to insomnia. In contrast, Banquo, who is aware of the prophecies and the aspirations of Macbeth, is worried about the possible dangers against Duncan, which is why he cannot sleep though he is somnolent. On the other hand, Macbeth, who is ready to commit his crime, shows no sign of slumber. His mind, however, is confused and imagines intangible things under the stress he suffers. His "heat-oppressed brain" (2.1.39) imagines the dagger (2.1.32) with "gouts of blood" (2.1.46) on its blade, marshalling him to his murder. He is aware that it is "the bloody business which informs/ Thus to mine eyes" (2.1.48-9). The remainder of the soliloquy describes a realm of evil that prevents sleep, one filled with witchcraft, terrible nightmares, and transgressions. This sounds a lot like the statement his wife made when she first began to consider the idea of killing Duncan for the throne (1.5.38-53).

He thinks of darkness and the forces that dominate nocturnal life. Interestingly, he projects himself as a wolf, striding carefully like a stealthy ghost towards its victim, invoking the earth not to issue any noise in order to be able to commit his crime in silence. He finds himself being dragged to his crime as if by fate. He does notice, however, that too much thinking and contemplation can dampen his desire to act: "While I threaten, he lives: / Words to the heat of deeds too cold breath gives" (2.1.60-1). He rushes and commits his crime. Things drastically changed after the crime.

The Criminal Hero

Macbeth's murder of Duncan posits a turning point in Macbeth's life. Feelings of guilt and disconnection from God's blessings flood his mind. These feelings incur many ailments, including sleeplessness, fear, hallucinations, depression, isolation, and uncertainty.

Due to the concept of the divine right of kings at the time of Shakespeare, an aggression against the king was considered an aggression against God (Burgess, 1992). After murdering the king, Macbeth feels disconnected from heaven. He fails to say "amen" when one of the two sleepers in the second chamber

... cried 'God bless us!' and 'Amen' the other;
As they had seen me with these hangman's hands.
Listening their fear, I could not say 'Amen,'
When they did say 'God bless us!'

(2.2.26-9)

Macbeth is afraid of his inability to say "amen" in response to an invocation to God for a blessing. He realizes his role as a criminal and pities himself as he fails to utter the word. He wonders: "But wherefore could not I pronounce 'Amen'? / I had most need of blessing, and 'Amen' / Stuck in my throat" (2.2.30-2). Later in Act 3, he expresses his awareness of the eternal damage he has inflicted upon himself and his soul by killing Duncan. He recognizes that his deed has disturbed his peace and allotted his "eternal jewel" to "the common enemy of man" (3.1.67-8).

This disconnection with heaven increases the psychological effect of guilt on the conscience of the criminal Macbeth. He starts hearing sleepers cry "murder" or laugh in their sleep. His crime has sneaked into the souls of others:

There's one did laugh in's sleep, and one cried 'Murder!'
That they did wake each other: I stood and heard them:
But they did say their prayers, and address'd them
Again to sleep.

(2.2.21-4)

These sobs and giggles are unmistakably the product of Macbeth's perplexed mind. Subliminal urges can often alter dreaming and sleeping, according to Ihalainen (1989). He continues by saying that current psychoanalytic studies suggest that impaired ego functions can result in sleep disturbances. He also observes that those who perpetrate crimes against human life place a high value on God's strength and give his power great consideration. The Shakespearean Elizabethan view expressed in *Macbeth* converges with this modern psychoanalytical finding.

The Insomniac Hero

Shakespeare was, according to Paciaroni & Bogousslavsky (2013), "describing what we know today as diverse neurological symptoms, signs, and courses of disease in modern terms for the aberrant character profile," despite the fact that "he did not utilize modern terms for the abnormal character profile" (4). Insomnia, a sleep condition that is accompanied by a variety of other psychological problems, including guilt, fear, depression, and regret, among others, is one of these neurological ailments that Shakespeare diagnoses and displays accurately in characters.

An early warning Macbeth gets is that he will not sleep after the crime. He tells Lady Macbeth that he heard a voice shouting, "Sleep no more! / Macbeth does murder sleep!" (2.2.34-5). He adds that the cry is still being heard shouting: "Sleep no more!" to all the house: / 'Glamis hath murder'd sleep, and therefore Cawdor / Shall sleep no more; Macbeth shall sleep no more (2.2.40-2). This state is anticipated and predicted by the First Witch, who does something similar to the merchant in Aleppo:

Sleep shall neither night nor day
Hang upon his penthouse lid;
He shall live a man forbid.
Weary sev'n-nights nine times nine,
Shall he dwindle, peak, and pine:
Though his bark cannot be lost,
Yet it shall be tempest-tost.

(1.3.19-25)

She prohibits the merchant to rest at any time of day or night until his life is lost in a state of weakness and agitation. She curses him to find his way through storms and difficulties. This is a sneak peek into the Macbeth case following the regicide. Psychoanalysts and neuropsychologists have taken notice of the phrase "Macbeth does murder sleep." According to Janowitz (2000), Macbeth gets even more envious of Duncan after the murder because he condemned him to an eternity of slumber while he is unable to go asleep without fear of horrifying nightmares. According to Janowitz, even Lady Macbeth attributes her husband's frenzied conduct following the sight of Banquo's ghost to a lack of "the season of all natures, sleep" (3.4.141).

In a study based on Freudian theories of melancholy and sorrow, Christian Churchill (2015) contends that Macbeth's line "Sleep No More" shows how his sense of guilt causes despair. The act of murder and Macbeth's mental awakening to remorse happen simultaneously. Furthermore, anxiety and terror increase

along with depression. There is no sleep as a result of these psychological disorders. These mental health issues are reasonable outcomes of a man who is preoccupied with the murder before it happens. He suffers results he has never felt before as a result of his dominant evil wife's effective rhetoric. His phrase "sleep no more" gathers a lot of meaning. It most certainly points out the state of neuropsychological insomnia that he is going to suffer throughout his life. But it also indicates that the disorders incurred by the murder, namely guilt, depression, and fear, according to Churchill.

However, the metaphoric expression "Macbeth does murder sleep" (2.2.34), is loaded with more meaning than the pure medical diagnostic implications. With the metaphor, Shakespeare identifies Duncan with sleep, and murdering Duncan automatically means murdering sleep. This identification of the tenor and the vehicle in the metaphor is inextricably connected. This is carried further in an analogy in the following lines by Macbeth: "Methought I heard a voice cry 'Sleep no more! / Macbeth does murder sleep', the innocent sleep" (2.2.35). Here, Shakespeare modifies the vehicle 'sleep' as innocent, thus implying modification of the tenor as well as innocent. This modification of the tenor and the vehicle is meant to intensify the brutality of the crime. A crime against human life is brutal in all cases, but it is especially brutal when committed against an innocent victim. The brutality of murdering the innocent Duncan is described by Macduff:

Confusion now hath made his masterpiece!
Most sacrilegious murder hath broke ope
The Lord's anointed temple, and stole thence
The life o' the building!
(2.3.62-5)

The orderly masterpiece of the body of Duncan is 'perfectly' distorted. A number of indications and metaphors are at play here. The body is the temple of God, the body is a building, the crime is a sin against God himself; the murder is a theft of the soul out of the building of the body; the gashes on the body serve as doors to let the soul out of the building. Thus, what Hamlet marvels at as a masterly "piece of work" is totally distorted at the hands of Macbeth.

The comparison between the murdered Duncan and the murdered sleep gathers momentum throughout the play. Macbeth's sleep is going to be badly distorted like the body of the king. He suffers the sleep disorder of insomnia, and in case he falls asleep his mind is crowded with nightmares to the extent that he envies Duncan's peaceful stay in his grave:

Duncan is in his grave;
After life's fitful fever he sleeps well;
Treason has done his worst: nor steel, nor poison,
Malice domestic, foreign levy, nothing,
Can touch him further.
(3.2.22-6)

The first victim of the oppressed mind of a criminal is his sleep. Indeed, Macbeth has not only murdered King Duncan but has also murdered sleep. He says, "Methought I heard a voice cry 'Sleep no more! Macbeth does murder sleep', the innocent sleep" (2.2.34-5). Macbeth identifies innocent Duncan with innocent sleep. His perception of the virtuous Duncan prior to the crime is very complimentary and affirmative:

This Duncan
Hath borne his faculties so meek, hath been
So clear in his great office, that his virtues
Will plead like angels, trumpet-tongued, against
The deep damnation of his taking-off.
(1.7.16-20)

He has a favorable opinion of the phenomenon of sleep as well. He makes a point of saying that humans need this circadian activity. Neuropsychologists think there are still unanswered questions regarding the value and importance of sleep. There have been several well-liked theories, nevertheless, regarding why people need to sleep. Connecting the sparse descriptions of sleep's roles in *Macbeth* to current sleep theories can help us understand them better.

In their article on the functions of sleep, Samson Z. Assefa, Montserrat Diaz-Abad, Emerson M. Wickwire, and Steven Scharf (2015) cover various concepts regarding the general physiologic function of sleep and give some theories regarding its roles. They analyze the impacts of sleep deprivation on physical, neurocognitive, and mental function in order to better comprehend the purpose of sleeping.

According to Alexander Borbély (1982), circadian and homeostatic systems control sleep. The phrase "two-process model" is frequently used to describe this approach to alertness assessment. As an illustration of circadian regulation, he preserves a 24-hour rhythm cycle in his sleep inclination that is independent to past sleep. The brain's natural cycle, according to him, is somewhat longer than 24 hours, but blue light exposure every day "resynchronizes" it. As a result, a normal circadian rhythm makes sure that people are alert during the day (often in the morning) and tired at night.

We can see foreshadowing traces of theories about the functions of sleep advanced by modern empirical neurology in Shakespeare's lines on murdering innocent sleep:

Methought I heard a voice cry 'Sleep no more!
Macbeth does murder sleep', the innocent sleep,
Sleep that knits up the ravell'd sleeve of care
The death of each day's life, sore labour's bath,
Balm of hurt minds, great nature's second course,
Chief nourisher in life's feast,--
(2.2.34-9)

Shakespeare uses metaphors to express his ideas. He compares the exhausted body functioning during the day to a worn out knitted sleeve of a sweater that needs to be reknitted in his line, "Sleep that knits up the ravell'd sleeve of care." Giuseppe Moruzzi's "Protective and Restorative theory" (1966) effectively describes that sleep helps the neurological system recover from use so that we do not become overly weary. This metaphor's metaphorical depiction of the need for sleep corresponds to that theory. Additionally, sleep aids in the renewal and restoration of the physiological systems that maintain the body and mind in good health and functioning normally. Furthermore, the recovery from neuronal plasticity related to learning and memory is greatly aided by sleep, which is maintained by functionally integrated patterns of instinctive behavior, as explained by Z. Assefa et al. (2015).

Shakespeare also makes reference to regaining emotional health in addition to mental and bodily health. Sleep, in his words, is the "[b]alm of broken brains." This supports the claim made by Francis Crick and Graeme Mitchison in 1983 that REM sleep functions as a memory purifier, deleting or at the very least reducing memories of negative behaviors.

The metaphor of sleep as "sore labor's bath" highlights how important sleep is for the body's cleansing and renewal. Actually, the body—which includes the brain—goes through a process of self-purification from the toxins and waste accumulated during awake. The body's organs go through a "workshop" of cleaning and approval. A noteworthy study conducted in 2013 by Maiken Nedergaard and her associates at the University of Rochester Medical Center answered this question. These researchers only uncovered the system that removes waste from the brain. They contend that sleep allows the brain to detoxify, releasing toxins and other waste products produced throughout the day. This facilitates mental clarity and the feeling of regeneration that comes with a good night's sleep (Wakefit, 2020).

Shakespeare's reference to sleep as "the death of each day's life" suggests that a natural and healthy life has a rhythmical cycle of awake and sleep that occurs on a daily basis. A life that is unnatural and unhealthy results from losing this perfect, healthy rhythm. His health, sanity, and psyche will suffer as a result of his insomnia, just as they did for Macbeth following the murder. Furthermore, Lady Macbeth borrows the Platonic notion that sleep is a sort of death when she states, "The sleeping and the dead are but as pictures" (2.2.53-4).

The Fallen Hero

A close examination of the protagonist's character development reveals that Macbeth begins as a benevolent national hero who subdues the rebellious Macdowald and his henchmen and allies. The captain praises his performance as heroic and exceptionally brave. He informs the king as follows:

For brave Macbeth--well he deserves that name--
Disdaining fortune, with his brandish'd steel,
Which smoked with bloody execution,
Like valour's minion carved out his passage
Till he faced the slave;
Which ne'er shook hands, nor bade farewell to him,
Till he unseam'd him from the nave to the chaps,
And fix'd his head upon our battlements.

(1.2.16-23)

He gains the respect and admiration of the Scottish nobles and populace in addition to the king's appreciation, presents, and the title of Cawdor. He maintains a prelapsarian state of innocence and benevolence. The witches' forecasts taint this generosity, especially in the wake of the fulfillment of Cawdor's initial prophecy. These forecasts serve as his future's blueprints at that very moment. On the other hand, these predictions highlight a significant hamartia in Macbeth's character, especially his ambition. The fulfillment of the first prophecy also highlights the character's lack of logical consistency, which is another hamartia. He just selectively accepts the predictions' veracity. He strives to fulfill his own prophecy, notably that he would become king, but he wants to stop the fulfillment of the prophecy regarding the descendants of Banquo. So, Macbeth argues:

For Banquo's issue have I filed my mind;
For them the gracious Duncan have I murder'd;
Put rancours in the vessel of my peace
Only for them; and mine eternal jewel
Given to the common enemy of man,
To make them kings, the seed of Banquo kings!

(3.1.65-70)

His reasoning is flawed and unbalanced in this regard since if he accepts the accuracy of the predictions, then the same holds true for the prophecies regarding the offspring of Banquo.

Knight (1961) argues that Macbeth's murder of the king is a heinous crime that causes him to decline from a heroic national hero to a vile foe of heaven and earth. He turns into a postlapsarian sinner. He joins forces with Satan, the common enemy of mankind. His offense against the king is a sin against God, and he is doomed to spend eternity in hell. He experiences psychological difficulties and sleep issues, as was previously mentioned. Macbeth's thoughts of scorpions are constantly present in his awake state (3.2.36-7) due to his terror.

The Criminal Recidivist Murderer

According to Freud (1917), the consequences of the crime—namely, guilt, dread, and depression, which generate insomnia, lead to the offender's unbalance. Observe early responses to events that followed the crime:

Whence is that knocking?
How is't with me, when every noise appals me?
What hands are here? ha! they pluck out mine eyes.
(2.2.56-61)

What a change in personality! The nation's hero is terrified of all noises and horrified by all movements. The man tells his wife that he is terrified to go back to the crime scene to lay the daggers in accordance with his wife's plan even though he has the courage of a man:

I'll go no more:
I am afraid to think what I have done;
Look on't again I dare not.
(2.1.49-51)

After being crowned at Scone, Macbeth experiences depression and severe anxiety. These psychological conditions, coupled with insomnia, result in a character who isolates himself and becomes a danger to others. His psyche is a mishmash of cunning goals that make him a careless recidivist. He starts to think about settling scores with anyone he thinks might threaten his claim to the kingdom. He separates from his wife at the same time to plot other crimes.

In order to settle down and be able to sleep, he thinks of removing Banquo and his children from his way. As a fellow warrior, Banquo proves himself to be brave, daring, and efficient in the battlefield. He distinguishes himself from Macbeth, however, in the encounter with the witches. He presents himself as stable, daring, realistic, and rational, unlike Macbeth, who appears superstitious, ambitious, and afraid of these unearthly creatures. That impression Banquo carves in Macbeth's mind scares him, and he perceives Banquo as a source of threat to his rule. He contemplates the attributes of Banquo's nature that make him dangerous, namely his wisdom, royal nature, strong will, and valor (3.2.48–56). He concludes that "There is none but Whose being I do fear: and, under him, / My Genius is rebuked" (3.2. 55-7).

What makes the case worse is that the children of Banquo are promised by the witches to be kings. This causes Macbeth's calm to be disturbed, his existence to be restless, and his nights to be sleepless. According to Freud (1917) and Churchill, he becomes dangerous and a recidivist, as criminals against life frequently do (2015). He makes plans with murderers to have Banquo and his son Fleance killed in order to feel better and regain balance. However, they are unable to kill Banquo's son. Fleance's escape from the assassins' ambush increases Macbeth's concern. The goal of committing more murders is to relieve the offender of the agony of ongoing remorse. Guilt causes terror and insomnia.

According to Churchill (2015), successive crimes create a temporary mania that can produce a brief release from the state's incessant disturbance. This view converges with the Knight's perception of Macbeth's state of fear. He argues that in *Macbeth* "[w]e are Knight writes, in *Macbeth* "[w]e are confronted by mystery, darkness, abnormality, hideousness: and therefore by fear. The word 'fear' is ubiquitous. All may be unified as symbols of this emotion. Fear is predominant. Everyone is afraid ... There is no nearer equivalent, in the experience of a normal mind, to the poetic quality of *Macbeth* than the consciousness of nightmare or delirium" (Knight, 1961, 146–147).

But let the frame of things disjoint, both the worlds suffer,
Ere we will eat our meal in fear and sleep
In the affliction of these terrible dreams
That shake us nightly:
(3.2.16-9)

He intends the murder to relieve himself of the guilt he feels as a result of Duncan's murder. He even envies the murdered Duncan for the peace and sleep he has in his grave when he suffers from "restless ecstasy."

... better be with the dead,
Whom we, to gain our peace, have sent to peace,
Than on the torture of the mind to lie
In restless ecstasy. Duncan is in his grave;
After life's fitful fever he sleeps well;
Treason has done his worst: nor steel, nor poison,
Malice domestic, foreign levy, nothing,
Can touch him further.

(3.2.19-26)

His confusion and turbulence increase as a result of his failure to take Banquo's son with him. He turns to paranormal forces for assistance. He receives false assurances in Act 4, Scene 1 that he will not be in danger from a man who was naturally born of a woman or that he will not disappear till Birnam Wood goes to Dunsinane Hill. He feels secure as a result of these forecasts, which motivates him to act aggressively, recklessly, and carelessly toward other people. Macbeth is forewarned about Macduff by the Apparitions. They lead him in this direction so that he might commit the subsequent atrocity against the Macduff family, who escapes to England to join Malcolm Levey's army in their struggle to defeat Macbeth and free Scotland from his horrors.

The parade of eight Scottish monarchs, led by the ghost of Banquo, who claims that prior prophecies concerning Banquo's offspring are about to come true, severely enrages Macbeth during this session with the witches. Macbeth stands horrified and profoundly disappointed by this dreadful sight. He enters the realm of the paranormal to put his fears to rest, but he leaves feeling confused and anxious instead.

Macbeth's life will be dominated by insomnia, which will drive him insane. He only realizes the hollowness of his situation after the pointless murder of Duncan after the suicide of his wife. In his most well-known speech, "[t]omorrow, and tomorrow, and tomorrow" (5.5.19-28), where he presents the most dismal perspective of the pointlessness and fleeting nature of life, henceforth, he decides to act without weighing upon consequences. His brutality is stripped of craft and imagination in the same manner he killed king Duncan.

From this moment,
The very firstling of my heart shall be
The firstling of my hand. And even now,
To crown my thoughts with acts, be it thought and done.

(4. 1. 146-149)

His insane and reckless courage at the end brings him face-to-face with Macduff, who will kill him and decapitate him. The death of Macbeth puts an end to the national nightmare that has plagued Scotland since Macbeth's coronation. His death puts an end to the national horrific insomnia and horror that has gripped Scotland since his crime against Duncan. The crime will turn his glorious heroism against the enemies of the king into acts of treason and national treachery (Thomson and Ancona, 2005). He kills to put a crown on his head, but ends up losing his head for the crown.

CONCLUSION

Shakespeare demonstrates how Macbeth's character changes under varied conditions from a heralded national hero into a global and societal source of devastation. He reaps respect, acclaim, and royal praise when he beheads the evil Macdonwald. However, when he violates the strongly ingrained Divine Right of Kings in Renaissance Europe by smearing the king's blood on his hands, he is cursed by celestial and terrestrial forces. Following his horrific crime against Duncan, Macbeth degenerates. He had trouble

sleeping. In addition to insomnia, he also draws serious psychological disorders including dread, despair, and solitude. His inability to fall asleep turns into a personal bane. When he kills the king, he also kills that slumber.

The assassination of the terrible monarch at the end enables the country of Scotland finds peace and slumber once more because the nation's problems under his rule are no longer present. Ironically, Macbeth's murder of Duncan in order to obtain a crown for his head leads to the loss of his head that wears the crown. Shakespeare highlights the fact that Macbeth never benefits from a good night's rest in between the two incidents. Throughout his reign, he lives as a hopeless sinner who cannot sleep because he is terrified, miserable, lonely, and afraid of both this world and the hereafter. Like many of Shakespeare's plays, Macbeth continues to be a treasure trove for psychological research and application. Here, Macbeth appears to have undergone a profound metamorphosis that is deserving of acknowledgement and additional research due to its sound neuropsychological foundation.

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