

Decision-making under uncertainty as drama: Keynesian and Shacklean themes in three of Shakespeare's tragedies

***Abstract:** G.L.S. Shackle pointed out that Keynes's main methodological innovation was to approach economic processes through the eyes of agents while orthodox theory assumed the position of the omniscient external observer. It was this demarche that allowed Keynes to understand the full implications of the uncertainty that surrounds decision-making. Keynes proposed that rational calculation can only tell part of the story if the information necessary to allow calculation is not (and cannot be) available. Subjective factors, summarized by Keynes in the expression "animal spirits," are also important. But economic decisions are not unique in being subjected to uncertainty. Examining thought processes involved in decision-making in other dimensions of life can be illuminating. Few authors, if any, have explored this theme as masterly as Shakespeare. The paper focuses on three of his tragedies—Hamlet, Macbeth, and Julius Caesar—to show how intellectual and subjective elements are combined in the decision processes described in each play. Each play illuminates different problems that have to be approached by any meaningful theory of decision-making under uncertainty.*

***Key words:** animal spirits, decision-making, uncertainty.*

Shakespeare and choice

A work of art can be appreciated by a succession of generations either because it addresses fundamental, immutable problems of the human predicament or because it is open enough to be continuously reinterpreted,

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reread, again and again, through the lenses of each time. In a sense, both conditions may be undistinguishable. The ability to read new meanings in a work of art may depend precisely on its own ability to touch on fundamental problems for humankind, for which solutions are sought for now as in the past. Shakespeare's plays touch on many such issues. In particular, a central question present in all his plays, particularly the tragedies, is an exceedingly modern problem: how can any individual control his or her own destiny and give meaning to his or her own existence? The point is choice, of course. But to be able to choose, one must be free. Freedom is the ability to choose, but its price is the responsibility for one's destiny. Freedom is the capacity to *create* one's destiny.

Shakespeare's permanence, of course, also has to do with craft. Shakespeare was an able playwright. His plays are highly entertaining. But one cannot ignore how strong an experience it is *to read* the texts. The always-present issue in the plays is personal responsibility and the consequences of choice. For the Greeks, tragedies revolve around the smallness of human beings, how weak we are when facing gods. For Shakespeare, tragedies are about the greatness of people, how people become able to rise up and meet the challenge of choosing their own destiny, even if they are ultimately to be destroyed by the consequences of their acts. Shakespearean tragic characters are destroyed not because they are manipulated by irrational gods but because people are free to choose their destiny, and destinies freely chosen may clash. Life is uncertain not because one never knows the moods of gods but because one cannot know what goes on in other people's minds. Shakespeare even toys with the idea that there may perhaps be some supernatural power ultimately manipulating human choices, but even then, as in *Macbeth*, manipulation is never direct. It happens through the manipulation of the context in which Macbeth's decisions are made, as we will discuss later in this paper. This construction is probably a key to solve Bradley's puzzle.¹ Bradley wonders how can so many people feel sympathy for Macbeth even after he committed so many heinous crimes. In fact, even if we do feel that his punishment is just and unavoidable, we can understand how circumstances led him astray.

Shackle, who dedicated his life to the study of choice, stated that for choice to be relevant, two conditions must be fulfilled. First, it has to be

¹ Bradley (1978) was notable in Shakespearean criticism for his insistence on analyzing the plays' characters as if they were actual people, trying to reconstruct their biographies prior to the play's action as the key to understanding its meaning.

an uncaused cause; that is, it must be a beginning, free from past history. When one chooses a path, one is looking forward, not merely reacting to past and current stimulus. Thus, the future must be open to be created by the act of choice. Alternative paths of development exist only as potentialities or as figments of imagination. A second condition for choice to be relevant is the existence of an ordered universe. If there is no order, any sequel can follow any decision, and the act of choosing is idle.

Order relies on the existence of rules. There may be rules that result from individuals being consistent in their goals and behaviors, thus being predictable in their reactions to any stimulus. There are also rules of a superindividual nature, created by society itself aiming at imposing order. From traffic lights to a Magna Carta, these are all social rules. And, of course, there are natural rules, the need to conform to the laws of nature. Determinists believe that all these rules assume a life of their own that may be explained by theology or by historical materialism. Individual decisions are immaterial either because individuals are powerless to alter the ways of the universe or because their freedom is only apparent.

On this latter view, order becomes oppressive, and political oppression may ensue if a church or a political party is able to present itself as the embodiment of the universal order. But this totalitarian notion does not exhaust the concept of order. Order is compatible with freedom if it is represented by patterns of reaction, rather than the result of giving an anthropomorphic character to history itself. Order is itself moving. It is established when roles are defined to the members of a given society, but these roles can themselves be changed. Moreover, these social roles do not exhaust the possibilities of individual behavior. It is the variety of individual behaviors that are compatible with a given ordering that allows change and evolution, allowing ever-new possibilities of interaction.

Chaotic states are possible if disturbances are large enough to prevent new rules from being developed when current ones are challenged. But chaos is not the unavoidable consequence of freedom, and to show this is the core of Shakespearean tragedies. Again, in contrast with Greek tragedy, it is not the chaos resulting from the overwhelming but ultimately irrational and largely purposeless power of the gods over humans that is the background for Shakespeare's tragedies and histories, but the interaction among human beings themselves. Order allows one to identify causal relationships that would not exist in chaotic situations. As in the problem of the three bodies, however, ordered states can still be too complex to predict their motion. Social interactions are much more complex than the mere relation between inanimate bodies. This

interaction takes place within social rules, so patterns of interaction are unpredictable but still ordered. This is a very difficult and unstable combination. To show how it is possible is ultimately the source of modern fascination with Shakespeare.

One may think of creative behaviors as encompassing acts that break off with the existing state of things, no matter how undramatic this break may be. Creative behaviors result from decisions that are not endogenously determined. Simply to know current data is not sufficient to allow one to anticipate a given person's decisions because these decisions are being made on the basis of imagined (future) events. One is creating, not merely reacting to events. Some of the decisions that are made can be called, as Shackle does, *crucial*.² A crucial decision is one that changes the course of history, even if small-scale. It cannot, then, by definition, be explicable by experience.

Not all forms of behavior, however, are creative. Society cannot and will not survive in a permanent state of flux. Reactive, or adaptive, behavior, adopted according to rules established by custom or social regulation, allows the development of ordered structures and the establishment of patterns. These patterns allow societies to minimize and digest the disturbances created by creative behavior. Of course, one can never dismiss the possibility that the disturbance may be too large to be absorbed by the stabilizing mechanisms. In this case, chaos would ensue. The possibility of chaos is always present in Shakespeare's tragedies and histories. Chaos is the horror scenario, the worst-case scenario, behind his plays.³ Eventually, it may happen. The situation was chaotic in Scotland after Duncan's murder. Denmark would plunge into chaos if, after Hamlet's death, Fortinbras, a foreigner, did not arrive to assume power.

If chaos is always the biggest fear, it is not a common situation. Moreover, it is never the result of conscious choice. Chaos is always the unpredicted result of large disturbances. One cannot strive rationally for chaos, but chaos can ensue when personal choices collide. The uncertainty as to keeping change under control is a central theme in Shakespeare's tragedies. Particularly in the political tragedies, one challenges order because one aims at something. But to aim at something one is counting on the prevalence of order, which can connect cause and effect. Chaos implies failure to achieve any goal: the disturbance instead

² "A course of action . . . declares itself to be a *crucial*, indeed a *self-destroying*, experiment, an inherently and essentially once-for-all, all-or-nothing throw of the die" (Shackle, 1979, p. 58, emphasis in original).

³ Cf. Tylliard (1986).

of creating new possibilities for a character ends up destroying all possibilities for everybody.

Thus, freedom is the central theme of Shakespeare's texts. Freedom, however, entails two questions, one related to ethics, the other to efficacy. Ethics refers to measuring up the chosen action against some external standard of desirability (whether it is "good" or "bad," for example). It is an assessment of ends. Efficacy measures up the action against an internal standard: the relation between means and ends. It is an assessment of means.

Order is a prerequisite for efficacy, because it has to do with the predictability of sequels. Ethics, on the other hand, has to do with personal responsibility. It is thus related to the *feeling* of vindication or failure, of justice or remorse, of euphoria or despair. In Shakespeare, these feelings are present because choice involves personal responsibility. A character feels responsible for the developments it induces, and the confrontations between ethics and efficacy are particularly dramatic moments of the plays.

Again, one can only feel personal responsibility for sequels that follow a behavior if decisions are creative, but the universe is ordered so one can identify cause and effect relationships so as to assume responsibility for final outcomes. Tragedy is often rooted in the contradiction between efficient means and unworthy ends.

Shakespeare is the playwright of nondeterminism. His art is particularly compelling in times of uncertainty. His plays were composed in times in which faith in the Roman Catholic Church was shaken by reform and the rise of Protestant religions that made impossible the survival of the kind of medieval determinism described by Tylliard.⁴ When the new forms of semi-theological determinism proposed by twentieth-century Marxism also collapsed, Shakespeare becomes again more compelling than ever. This is so because decision-making under uncertainty is his central theme, and that is why one can attend his plays in 2002, as in the past four centuries, and feel them to be livelier than ever.

All of Shakespeare's tragedies deal with unintended or unexpected consequences of one's acts and the need to take responsibility for them. This is so in *Hamlet* and *Julius Caesar*; as much as it is the issue in either youthful plays like *Romeo and Juliet* or mature ones like *Othello*. Some of the plays actually detail the thought processes that are going on in the character's mind when a decision is made, allowing us to learn how we

⁴ Tylliard (1986, ch. 1).

ourselves think. To be able to follow a character's footsteps establishes an immediate empathy between the characters and the audience (or the readers). Shakespeare describes developments as they are seen and felt by the characters, not by gods.

In what follows, we intend to show how Shakespeare deals with the decision-making problem by focusing on three of his political plays—*Hamlet*, *Macbeth*, and *Julius Caesar*.⁵ To call them political plays is justified on the grounds that all three center around the death and succession of rulers, which, in Shakespeare's time, were probably the most dangerous events possible—the edge of the cliff of chaos and disorder. In a picture like this, acts of revenge against kings had to be the most fateful acts imaginable, surrounded by great, perhaps even unbearable, uncertainties. In all three plays the right of succession is involved, even if it may not be the only, or even the main, motive for action. In all three plays the permanence of the murder of kings and their fundamental unnaturalness were represented by the apparition of ghosts. Finally, in all three plays the whole society is shaken by the regicide. In *Hamlet*'s case, the reign is even taken over by a foreigner, an enemy of Denmark, Fortinbras. Shakespeare does not solve the puzzle of whether Destiny is absolute and immutable or if human action is creative. To some extent this is not known and is possibly unknowable. If it is unknowable, it is irrelevant for decision-making. This is the focus of the three tragedies.

Hamlet

*Hamlet*⁶ is, among the three plays under analysis, the one in which decision-making is most clearly at the center of Shakespeare's concerns. Hamlet learns from the ghost of his father that the latter was poisoned by his brother Claudius, who not only usurped the throne but also married the king's widow, Gertrude, Hamlet's mother. The ghost demands that Hamlet avenge his murder. The rest of the play shows us Hamlet's misgivings as to his mission and the consequences of his delaying taking action against Claudius.

⁵ The expression "political plays" is used here in the sense explained in the text in contrast with the traditional usage to refer to Shakespeare's histories.

⁶ The quotations are taken from the text established by John Dover Wilson for the Cambridge University Press (Shakespeare, 1984). The new Oxford edition, prepared by S. Wells and G. Taylor, was used to check them (Shakespeare, 1988). There are a number of discrepancies between them, but only the major ones that could substantially change the interpretation proposed here are reported.

More than in any other play, *Hamlet* is about one character, its protagonist. Many events take place during the play, but they are not only secondary to the understanding of the text but their presence serves mostly to show the consequences of the prince's acts and behavior for others and how they affect the prince in return. Hamlet hesitates to act, and, because of his hesitation, many characters in the play die, caught in the cross fire between the prince and his own predicament: the need to decide between acting and remaining inactive.

Some students of Shakespeare, like Bradley,⁷ attribute Hamlet's hesitations to his personal nature. Others see him as a coward. Being an intellectual, Hamlet is seen as somebody more prone to think of excuses than to take action. The common thread linking most of these views is the assumption that Hamlet becomes convinced of the need to act when the ghost first appears and that he just keeps putting off the moment of revenge. Bradley argued in favor of a kind of mystic solution in which Hamlet finally recognized that Providence rules all, that Destiny has already set its path and nothing is left but to deliver himself to the hands of God. So *Hamlet* would illustrate Shakespeare's view that Providence runs everyone's fate, much in the way the Greeks conceived tragedy.

Of course, there is no point in disputing whether this mystic view was actually Shakespeare's or not. However, we do try to argue in favor of a different interpretation.

We should begin by noticing that, in contrast with other plays in which Providence has a larger and more definite role in the plot, in *Hamlet* the actual intervention of supernatural forces is in fact very limited. King Hamlet's ghost does appear to Hamlet twice. The ghost was reported to have appeared once before the action begins. But it only speaks to the prince. The ghost tries to move the prince to take revenge, but it does not promise any help in achieving it. There is no supernatural intervention to consummate the act of revenge itself and only the prince is a witness to the ghost's commandments. In fact, the ghost tries to move Hamlet to act by stirring his soul with the villainy of Claudius's alleged crime:

So art thou to revenge, when thou shalt hear. (I, 5, 8)⁸

⁷ Bradley (1978, ch. 4).

⁸ The location of all texts by Shakespeare are identified by the triplet (i, j, k), where "i" means the act, "j" the scene, and "k" the first line. The text used for localization purposes is Wilson's (see note 6).

We may assume that Hamlet is psychologically inclined to act with violence even before the ghost actually tells him his story, merely by indicating murder:

Haste me to know't, that I with wings as swift
As meditation or the thoughts of love
May sweep to my revenge. (I, 5, 29)

In fact, Hamlet was already predisposed against Claudius, as he exclaims when the ghost discloses the name of his murderer:

O my prophetic soul
My uncle? (I, 5, 40)

The prince was predisposed against his uncle, first, because he had married his mother, Gertrude, less than two months after his father's death. Hamlet was so angry at this marriage that he considered (as he did on other occasions) suicide:

O, that this too sullied flesh would melt,
Thaw and resolve itself into a dew,
Or that the Everlasting had not fixed
His canon 'gainst self-slaughter. O God, God,
How weary, stale, flat and unprofitable
Seem to me all the uses of this world!
Fie on't, ah fie, 'tis an unweeded garden
That grows to seed, things rank and gross in nature
Possess it merely. That it should come to this,
But two months dead, nay not so much, not two,
So excellent a king, that was to this
Hyperion to a satyr. (I, 2, 129)

The unflattering comparison between King Hamlet and Claudius is repeated by the prince to Gertrude, later, after which he cries to her:

Have you eyes?
Could you on this fair mountain leave to feed
And batten on this moor? Ha! Have you eyes? (III, 4, 65)

Revulsion at his mother's marriage was not, however, the only motive for Hamlet's anger against Claudius:

He that hath killed my king, and whored my mother,
Popped in between th'election and my hopes. (V, 2, 64)

The king of Denmark was chosen by election, and Hamlet clearly indicates that he expected to succeed his father. Claudius's election instead disappointed his expectations.

In a situation like this, one cannot discard the possibility that the ghost may have served as a pretext to Hamlet to stage his revenge against the king, since the mere disgust at the double usurpation, of the queen and of the throne, both of them legal acts, could not justify any further action against Claudius. It is not Hamlet's sincerity of feelings that is in question. In fact, as we will see, Hamlet does feel these doubts himself. Shakespeare is subtler than simply suggesting a hoax. It is impossible to establish the reality of the ghost's words.

Be it as it may, Hamlet, even under psychological stress, needs to calculate in order to act. Despite his eventual outbursts of anger, the prince remains a very rational decision-maker until the very end of the play. Moreover, he does not seek merely the acknowledgment that he was wronged; he seeks redressing. The ghost's story gives him the chance of transforming a personal settling of accounts into something greater, a legitimate correction of History's ways. In a powerful verse, Shakespeare synthesizes Hamlet's view that History had taken a wrong turn and that it was his duty to set things right. When the conversation with the ghost is over, Hamlet closes the scene by saying:

The time is out of joint, O cursed spite
That ever I was born to set it right. (I, 5, 188)

In sum, the ghost offers Hamlet the greater meaning he needed to justify an action against the king. It allows Hamlet to substitute a positive course of action for the feeling of loss and defeat, leading to melancholy resulting from the simultaneous loss of his father and the throne. That this dimension of "setting things right" was important to Hamlet is evidenced by his concern with the legitimacy of the act of revenge. The circumstances in which the act itself was to be performed were crucial, since

there is nothing either good or bad, but thinking makes it so. (II, 2, 254)

Hamlet's awareness of the need to act in a legitimate fashion is made explicit when the Prince has the chance to kill Claudius while the latter is absorbed in prayer. Very little risk to the prince is involved in attacking the king when he is alone praying. Nevertheless, Hamlet cannot do it because by being killed while praying the king would be absolved of his sins. The circumstances were not right:

Now might I do it pat, now a' is a-praying,
And now I'll do't—and so a' goes to heaven,
And so am I revenged. That would be scanned:
A villain kills my father, and for that,

I his sole son do this same villain send
To heaven. (III, 3, 73)⁹

There can be no doubt that the ghost, although a powerful influence on Hamlet, is not enough to explain his acts. Well into the play, Hamlet stills has second thoughts about its true nature:

The spirit that I have seen
May be a devil, and the devil hath power
T'assume a pleasing shape, yea, and perhaps,
Out of my weakness and my melancholy,
As he is very potent with such spirits,
Abuses me to damn me. (II, 2, 612)

In fact, the ghost itself has to visit Hamlet a second time to compel him to act:

Do not forget! This visitation
Is but to whet thy almost blunted purpose. (III, 4, 110)

Thus, the ghost, albeit important to determine Hamlet's motives, changing his perspective from one of despair to one of actively seeking reparation, is not Providence. It is not Destiny *forcing* Hamlet to act. At most, it offers Hamlet an *ethical* justification for action (as well as offering some glimpse of the possibility of ascending to power, since Hamlet could aspire to the throne by proving the king to be a murderer). But Hamlet *calculates*. He wants his action to also be efficient besides being ethically justifiable. He wants to succeed. He wants his act to be recognized as legitimate. He wants to control the circumstances within which revenge would take place.

One should notice that if the ghost does not represent Destiny, then the latter is absent from *Hamlet*. Fate has no explicit role in any part of the play, certainly not in the coincidences to which Shakespeare sometimes appealed in this as in other plays. They are just playwright's tricks to simplify the intricacies of a complex plot devoid of deeper meanings. Whatever happens happens because characters decide to act in certain ways at certain times. They were free to choose their actions and the

⁹ The Oxford edition, in fact, supports more emphatically the interpretation advanced here. It includes stage directions showing that after the line "And now I'll do't," Hamlet actually draws his sword, but then he thinks again and concludes that revenge in that particular moment would be self-defeating since it would send Claudius to heaven.

moment to act, and history is the result of the specific decisions each one made. If Hamlet had acted sooner, perhaps Polonius, Ophelia, Laertes, the queen, and the Prince himself would not have had to die. Had not Rosencrantz and Guildenstern accepted to execute the king's plot against Hamlet, they could perhaps have survived, and so on.

Of course, Hamlet seems to identify Providence in action when he tells Horatio how he managed to escape from being delivered to the English authorities for execution, by saying,

There's a divinity that shapes our ends. (V, 2, 10)

Later, when he decides to face Laertes in a duel, he again tells Horatio

There is special providence in the fall of a sparrow. (V, 2, 222)

In both cases, however, Shakespeare is telling us Hamlet's *theory* about how things have developed. But we (and Shakespeare) know better because we are external observers, able to follow the actual development of the plot and the uncertainties plaguing the central characters' decisions. Hamlet's statements actually refer to his state of mind rather than to the hand of God.

In our view, the question of why the prince took so long to act is answered by appealing not to Providence but to his own decision-making process. We should dispute the usual assumption that Hamlet was convinced of the legitimacy of revenge. In fact, Hamlet was inclined to commit suicide for despair and lack of perspectives. The ghost could raise new possibilities, but Hamlet remains in doubt, as we saw, that it actually represents his deceased father. Besides, even after he accepts taking revenge, Hamlet is paralyzed by the need to calculate, to devise all the possible sequels to the act of revenge so as to profit from the act.

There can be no doubt that Hamlet's decision to kill Claudius was a crucial decision. But, as Shackle has argued, to make a crucial decision, very specific states of mind have to be reached.¹⁰ One has to feel strongly the expected benefits to result from the chosen path of action. Moreover, the feeling of in-advance satisfaction has to be intense enough as to overcome the perceived uncertainty that surrounds the achievement of success. In a crucial decision, animal spirits, as much as calculation, have to play a decisive role.

As we follow Hamlet through the five acts of the play, we realize that after meeting the ghost, he goes through two different stages of conscience.

¹⁰ Cf. Shackle (1979).

In the first, he shows himself to be unable to *feel* the desirability to act with the necessary intensity. He is still dominated by a negative feeling of disgust and despair. Suicide is still apparently the dominant strategy. His inability to feel the urge to act is admitted by Hamlet twice. Melancholy, rather than animal spirits, prevails. Sadness, not rage, dominates his state of mind. In one of his best-known soliloquies, Hamlet feels envious of actors who are able to live so intensely other people's dramas. He feels guilty because he mistakes his inability to act for an inability to feel:

O, what a rogue and peasant slave am I!
 Is it not monstrous that this player here,
 But in a fiction, in a dream of passion,
 Could force his soul so to his own conceit
 That from her working all his visage waned,
 Tears in his eyes, distraction in his aspect,
 A broken voice, and his whole function suiting
 With forms to his conceit; And all for nothing?
 For Hecuba!
 What's Hecuba to him, or he to Hecuba,
 That he should weep for her? What would he do,
 Had he the motive and the cue for passion
 That I have? He would drown the stage with tears,
 And cleave the general ear with horrid speech,
 Make mad the guilty and appal the free,
 Confound the ignorant, and amaze indeed
 The very faculties of eyes and ears; yet I,
 A dull and muddy-mettled rascal, peak
 Like John-a-dreams, unpregnant of my cause,
 And can say nothing; no, not for a king,
 Upon whose property and most dear life
 A damned defeat was made: am I a coward?
 Who calls me villain, breaks my pate across,
 Plucks off my beard and blows it in my face,
 Tweaks me by the nose, gives me the lie i'th' throat
 As deep as to the lungs? Who does me this?
 Oh, vengeance!
 Why, what an ass am I! This is most brave,
 That I, the son of the dear father murdered,
 Prompted to my revenge by heaven and hell,
 Must like a whore unpack my heart with words,
 And fall a-cursing like a very drab;
 A scullion. (II, 2, 563)

Hamlet voices strong feelings, indeed, that are insufficient, nevertheless, to make him act. Hamlet is not a coward and his revulsion is deep. What holds him back? A later soliloquy gives us a clue. After meeting soldiers going to war “against some part of Poland,” Hamlet again addresses his own attitude:

How all occasions do inform against me,
 And spur my dull revenge! What is a man,
 If his chief good and market of his time
 Be but to sleep and feed? A beast, no more,
 Sure he that made us with such large discourse,
 Looking before and after, gave us not
 That capability and god-like reason
 To fust in us unused. Now whether it be
 Bestial oblivion, or some craven scruple
 Of thinking too precisely on th’event—
 A thought which quartered hath but one part wisdom
 And ever three parts coward—I do not know
 Why yet I live to say “This thing’s to do,”
 Sith I have cause, and will, and strength, and means
 To do’t. Examples gross as earth exhort me.
 Witness this army of such mass and charge,
 Led by a delicate and tender prince,
 Whose spirit with divine ambition puffed
 Makes mouths at the invisible event.
 Exposing what is mortal and unsure
 To all that fortune, death and danger dare,
 Even for an egg-shell. . . . Rightly to be great
 Is not to stir without great argument,
 But greatly to find quarrel in a straw
 When honour’s at the stake. How stand I then,
 That have a father killed, a mother stained,
 Excitements of my reason and my blood,
 And let all sleep, while to my shame I see
 The imminent death of twenty thousand men,
 That for a fantasy and trick of fame
 Go to their graves like beds, fight for a plot
 Whereon the numbers cannot try the cause,
 Which is not tomb enough and continent
 To hide the slain. O, from this time forth,
 My thoughts be bloody or be nothing worth. (IV, 4, 32)

Hamlet is actually opposing his “scruple of thinking too precisely on th’event” to the ability of the warring prince to be “puffed” by “divine

ambition,” fighting “for a fantasy and trick of fame.” Hamlet acknowledges that the need to calculate paralyzes him. He envies the *animal spirits*¹¹ of those who are moved by feelings of honor, when he seems to be incapable of reacting even after having his father murdered and his “mother stained.” Hamlet can’t avoid being rational, but being rational stands in the way of making crucial decisions because these cannot be reduced to calculable risks. It is almost impossible for Hamlet not to “think too precisely,” or not to look for “great argument,” but to accept instead “to find quarrel in a straw.” Hamlet is simply unable to act like Prince Fortinbras who, although “delicate and tender,” “makes mouths at invisible events,” despises calculation, and faces “what is mortal and unsure.”

What Hamlet fails to see is that while he waits for the right circumstances, the world is moving on, creating ever-new circumstances. Wishing to play safe, to avoid all risks, Hamlet not only wastes time but he actually warns the king of his disposition through the repetition of small provocations, like the play he stages in the king’s palace to observe Claudius’s reactions. While Hamlet hesitates, the king takes the initiative. Because his enemies will themselves act, Hamlet’s inactivity does not prevent the environment from changing to his disadvantage. Trying to control circumstances, he contributes to creating circumstances that are evermore adverse to him. While Hamlet cannot make up his mind, history still moves on through the decisions and actions of others. The essentially useless provocation represented by the play Hamlet stages leads to the death of Polonius, followed by Ophelia’s, alienating Laertes and making him a new enemy for Hamlet. Meanwhile, Hamlet is still musing with the idea of suicide. Always reflecting on his inability to take action, Hamlet finds out that suicide demands animal spirits too. This, in fact, is the theme of perhaps the most famous soliloquy ever written:

To be or not to be, that is the question—
Whether ’tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,

¹¹ “[A] large proportion of our positive activities depend on spontaneous optimism rather than on a mathematical expectation, whether moral or hedonistic or economic. Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as a result of animal spirits—a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities. . . . We are merely reminding ourselves that human decisions affecting the future, whether personal or political or economic, cannot depend on strict mathematical expectation since the basis for making such calculations does not exist” (Keynes, 1964, pp. 161–163).

Or to take arms against a sea of troubles,
 And by opposing, end them. To die, to sleep—
 No more; and by a sleep to say we end
 The heart-ache and the thousand natural shocks
 That flesh is heir to; 'tis a consummation
 Devoutly to be wished to die, to sleep!
 To sleep, perchance to dream, ay there is the rub,
 For in that sleep of death what dreams may come,
 When we have shuffled off this mortal coil,
 Must give us pause—there's the respect
 That makes calamity of so long life:
 For who would bear the whips and scorns of time,
 Th'oppressor's wrong, the proud man's contumely,
 The pangs of disprized love, the law's delay,
 The insolence of office, and the spurns
 That patient merit of th'unworthy takes,
 When he himself might this quietus make
 With a bare bodkin; who would fardels bear,
 To grunt and sweat under a weary life,
 But that the dread of something after death,
 The undiscovered country from whose bourn
 No traveler returns, puzzles the will,
 And makes us rather bear those ills we have
 Than fly to others that we know not of?
 Thus conscience does make cowards of us all,
 And thus the native hue of resolution
 Is sicklied o'er with the pale cast of thought,
 And enterprises of great pitch and moment
 With this regard their currents turn awry
 And lose the name of action. (III, 1, 56)

Suicide is a crucial decision. It demands animal spirit because nobody returns from the afterlife to give the necessary information about it. Facing the “undiscovered country,” the key realization is that “conscience makes a coward of us all.”

That is why Hamlet is led by events while clinging to the illusion that he is in control of events. Circumstances are in fact being shaped despite Hamlet's inaction, and he is increasingly put in a defensive position. Hamlet will only abandon the urge to calculate, to predict, to control, when he finally realizes that history moved ahead of him and that the initiative is no longer his. In fact, Hamlet will act when *challenged* to act by Laertes, who is seeking his own revenge agenda, an unknowing instrument of Claudius. Having to react to circumstances that were not of his own making, Hamlet gives up on calculation. When advised by

Horatio not to face Laertes in a duel, Hamlet recognizes the futility of calculation:

Not a whit, we defy augury. There is special providence in the fall of a sparrow. If it be now, 'tis not to come—if it be not to come, it will be now—if it be not now, yet it will come—the readiness is all. Since no man, of aught he leaves, knows, what is't to leave betimes, let be. (V, 2, 222)

But if in fact readiness is all, Hamlet was never ready. It is too late, and Hamlet is not ready because he lacks animal spirits. Providence cannot be blamed for his fate because he had a choice, but he was not ready to face the irreducible uncertainty that surrounded this choice. Animal spirits cannot simply be invoked whenever one needs it. The tragedy was that Hamlet could not really accept that precise calculation is not possible when dealing with crucial decisions. In an uncertain world

Our wills and fates do so contrary run
That our devices still are overthrown;
Our thoughts are ours, their ends none of our own. (III, 2, 217)

Macbeth

From the point of view explored in this paper, if *Hamlet* goes deeper in its examination of thought processes involved in crucial decision-making, *Macbeth* sets up a more complex environment within which characters can exercise their will powers. First, now characters face Destiny, who is an active participant of the plot. Whereas Providence in *Hamlet* is just a theory, Destiny is a fact in *Macbeth*. The future is already decided at the outset, and the play is the story of its discovery. All the essential details are already designed, including Macbeth's rise and downfall. Shakespeare is still subtler than the Greeks: gods do not act directly on the characters. In *Macbeth*, Destiny manipulates the characters. It does not resort to supernatural forces beyond its knowledge of what the future will bring. Characters have to act out their roles in order to fulfill the plans Destiny reserved for each one of them. In particular, Destiny has to *trick* Macbeth into thinking he is exercising his free will, whereas he is in reality merely fulfilling the role attributed to him. In the opening scenes of the tragedy, Macbeth still thinks that Destiny could act by itself, allowing him to preserve his moral ground and still be king, as the witches (Destiny's voice) predicted:

If chance will have me king, why, chance may crown me,
Without my stir. (I, 3, 144)

Shakespeare will not allow Macbeth to escape taking responsibility for his crimes by blaming fate itself. Destiny is the power behind his action, but the play shows how he willingly accepted what was reserved to him, prizes *and* crimes. Shakespeare's point seems to be very complex: Destiny is a fact, but it depends on the adhesion of human beings. Fate does not absolve human beings of moral responsibility. Powerlessness will not relieve guilt because it does not erase the human capacity to tell right from wrong.

The puzzle of the audiences' empathy with a criminal like Macbeth is solved precisely because we realize that we feel that we could perhaps act in the same way under the same circumstances. We are sad for Macbeth's fate for the same reason we are not sad for what happens to somebody who is arrogant and self-righteous, albeit honest, like Coriolanus. The empathy emerges out of the perception that Macbeth is a normal, potentially honorable man caught in exceptional circumstances against which no normal human being can be expected to react. In a sense, Shakespeare is anticipating Arendt's *banality of evil* thesis.¹² Macbeth is morally mediocre, unable to refuse a great benefit presented as an inevitable result of a historical process that would unfold with or without his help. One may also feel sympathy for Macbeth because, as in Greek tragedy, Destiny is equally capricious. It traps and destroys Macbeth for no identifiable reason. Macbeth is led to believe that he is invulnerable through an ingenious, and therefore deliberate, trick: all he had to fear were two apparently impossible events: that the forest of Birnam would come to Dunsinane and that only a man not born of a woman could be able to kill him. Macbeth is not a morality play. It is about the intrinsic imperfection of human beings, their inability to deal with extreme situations in a moral way. If flesh is weak, only supermen could resist choices such as those offered to Macbeth. Macbeth is actually no worse than Duncan, Banquo, or MacDuff. Who in the audience could throw the first stone?

Shakespeare, however, remains a humanist. He is not presenting the thesis that humankind is inherently corrupt. In fact, much before Macbeth actually faces the possibility of defeat, he begins to be corroded by guilt. It is equally guilt that kills Lady Macbeth. In the end it is disillusionment and guilt that make Macbeth wonder whether it was all worthwhile. It is

¹² Arendt (1994).

not fear (since he is still oblivious of the actual risks of the situation) that leads to these words:

I have lived long enough: my way of life
Is fall'n into the sere, the yellow leaf;
And that which should accompany old age,
As honour, love, obedience, troops of friends,
I must not look to have; but, in their stead,
Curses, not loud but deep, mouth-honour, breath
Which the poor heart would fain deny, and dare not. (V, 3, 22)

It is also *before* the realization of incoming defeat comes to Macbeth that he sees through it all, how Destiny plotted all of his actions, how everything he had done was, in the end, so completely meaningless:

To-morrow, and to-morrow, and to-morrow,
Creeps in this petty pace from day to day,
To the last syllable of recorded time;
And all our yesterdays have lighted fools
The way to dusty death. Out, out, brief candle!
Life's but a walking shadow, a poor player
That struts and frets his hour upon the stage,
And then is heard no more: it is a tale
Told by an idiot, full of sound and fury,
Signifying nothing. (V, 5, 19)

If, in *Hamlet*, the human predicament was the need to make meaningful choices, in *Macbeth* the predicament is to feel moral responsibility (and guilt) for choices that are, after all, illusory.

Shakespeare approaches humankind's Destiny in a way that is closer to the Greek view of fate being ruled by irrational gods than to the view of Providence. In *Macbeth*, all characters suffer their Destiny for no apparent purpose. If there is a superior order, it is not accessible, it is impenetrable and unintelligible. There is nothing to learn from *Macbeth* in moral terms. Punishment is not the retribution of crime, because both are preordained. Punishment does not restore order, it is only the last event of a disorderly process.

Destiny in *Macbeth* is undoubtedly real. Whereas in *Hamlet*, the ghost only interacts with the Prince (being debatable its actual reality), in *Macbeth* the three witches actually talk to him and to Banquo. Second, the ghost in *Hamlet* is powerless: it can only exhort Hamlet to act. In *Macbeth*, the witches actually tell Macbeth what is going to happen—how and when. The coming of the forest of Birnam to Dunsinane is not a metaphor, it is an actual description!

One can see *Macbeth* more as a debate on moral responsibility than the presentation of a specific thesis about it. Shakespeare adds all the dimensions necessary to show the complexity of what is involved, but the fundamental appeal of the play is rooted in our identification with Macbeth's plight as we recognize that he is being pushed to act under extreme circumstances.

It is very important that we realize that Macbeth is fundamentally a decent person. A sign of Macbeth's humanity is his hesitation in fulfilling what is presented to him as a prophecy. He is obviously attracted by the payoff, but his hesitation does not spring exclusively from the fear of failure:

We will proceed no further in this business:
 He hath honoured 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. (I, 7, 31)

Macbeth is not merely afraid of punishment. It is the regicide in itself (which was considered a much worse crime than mere homicide because of its potential to induce chaos) that is being judged in its moral dimension:

Then, as his host,
 Who should against his murderer shut the door,
 Not bear the knife myself. Besides, 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:
 And pity, like a naked new-born babe,
 Striding the blast, or Heaven's cherubin, horsed
 Upon the sightless couriers of the air,
 Shall blow the horrid deed in every eye,
 That tears shall drown the wind. I have no spur
 To prick the sides of my intent, but only
 Vaulting ambition, which o'erleaps itself
 And falls on th'other— (I, 7, 14)

Macbeth is hosting King Duncan at his castle. He agonizes between his "vaulting ambition" and his honorable duties to a good king. Even after committing the crime, his conscience makes one last appearance:

Methought I heard a voice cry, "Sleep no more!
 Macbeth does murder sleep."—the innocent sleep. (II, 2, 36)

Sound sleeping is, of course, an age-old symbol of both safety and clear conscience. Both fear and guilt are enemies of good sleeping. By killing Duncan while he was asleep, Macbeth killed the sleep of the innocent but also killed the sleep of murderers like himself and his wife.

Shakespeare enhances the feeling of horror at the murder of Duncan by stressing the fairness of the king, who was planning to acknowledge and reward Macbeth's valor. Duncan says to Malcolm about Macbeth:

There's no art
To find the mind's construction in the face:
He was a gentleman on whom I built
An absolute trust. (I, 4, 11)

And later in the same scene:

True, worthy Banquo, he is full so valiant,
And in his commendations I am fed;
It is a banquet to me. Let's after him,
Whose care is gone before to bid us welcome:
It is a peerless kinsman. (I, 4, 54)

Other lines spread throughout this act further stress Duncan's trust of and good feelings toward Macbeth. This, of course, serves to heighten the revulsion the audience should feel at Macbeth's treasonous behavior. On the other hand, Lady Macbeth represents the voice of his ambition. Macbeth will oscillate between considering the goodness of the king (his good conscience) and the prospective gains insisted upon by Lady Macbeth (his bad conscience). But in the end, ambition will be shown to be closest to his own nature and will prevail.

It is interesting, though, that having a motive (ambition), as in *Hamlet*, is not a sufficient inducement to act. It is still necessary to weigh costs and benefits, to assess probabilities of success, to plan. It is at this point that Destiny intervenes decisively.

Let us remember that Macbeth's first encounter with Fate happens in the third scene of the first act, when Macbeth is greeted by the three witches who address him by titles he still does not possess, Thane of Cawdor, King (I, 3, 48/50). Macbeth dismisses the prophecies at first, but moments later he learns that he had actually become Thane of Cawdor.

To Banquo's question, however,

What, can the devil speak true? (I, 3, 107)

the answer given stresses doubts as to the real meaning and aim of the prophecy:

And oftentimes, to win us to our harm,
 The instruments of darkness tells us truths,
 Win us with honest trifles, to betray's
 In deepest consequence. (I, 3, 123/5)

Like Hamlet, Macbeth feels unsure about the real intentions of the witches. He is suspicious and does not show any inclination at first to take any action to reach the second prophecy, to become king. Time will show whether the prophecy was accurate:

Come what come may,
 Time and hours runs through the roughest day. (I, 3, 146)

The meeting with the witches is not forgotten though. Expecting the king's visit to his castle at Inverness, Macbeth reports the prophecies to his wife, indicating to her that he believed that the witches "have more in them than mortal knowledge" (I, 5, 2). Macbeth still does not want to take action and says that chance will have to make him king without his help if this is what is preordained. It will not be long before he realizes, however, that it will not be so simple. Duncan nominates his son Malcolm to be his successor to the Scottish crown. If Macbeth is to become king, he will have to somehow fight for it. Macbeth must be the instrument of his own fate:

The Prince of Cumberland! that is a step
 On which I must fall down, or else o'er-leap,
 For in my way it lies. 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. (I, 4, 48)

Macbeth feels that he cannot wait and see, since History seems to be moving in an unfavorable direction without his intervention. Chance alone will not give Macbeth the power of which he had a glimpse with the witches' prophecies. Nevertheless, his mind is not yet sold to the need of committing murder. To move against the king is dangerous and can trigger developments that Macbeth is not even able to imagine. Both in *Hamlet* and in *Julius Caesar* nature itself signals how unnatural a regicide is. In *Macbeth*, omens of impending tragedies are recognized by the characters even before they learn of Duncan's assassination:

The night has been unruly: where we lay,
 Our chimneys were blown down, and, as they say,
 Lamentings heard i' the air, strange screams of death,
 And prophesying with accents terrible

Of dire combustion, and confused events,
 New hatched to th' woeful time. The obscure bird
 Clamoured the livelong night: some say the earth
 Was feverous, and did shake. (II, 3, 56)

Macbeth is not moved by any feeling of hatred against Duncan. In fact, in personal terms, Macbeth's feelings should be of gratitude, as he himself recognizes. Duncan's murder is not caused by emotional distress but by the expectation of gain. Therefore, it must involve a calculation of success probabilities. To overcome his hesitations, Macbeth counts on Lady Macbeth to represent his pure ambition and to reproach him for his softness that could stand in the way of success:

Glamis thou art, and Cawdor, and shalt be
 What thou art promised: yet do I fear thy nature,
 It is too full o' th' milk of human kindness
 To catch the nearest way. (I, 5, 15)

Lady Macbeth embodies Macbeth's darkest side. Until the murder takes place, she is the embodiment of blind and unprincipled ambition, although after the assassination Shakespeare redeems her by allowing her to go mad because of guilt. It is Lady Macbeth who will actually push Macbeth into acting. Particularly remarkable is the continuous and unrelentingly violent language employed by Lady Macbeth until she goes mad. Her wild ambition prevails over Macbeth's softer nature and ultimately leads him to commit murder.

Being motivated by ambition, Macbeth calculates the probabilities of success. It is at this point that Destiny, after firing his ambitions, sets its fatal traps. The evidence for the high probability of success is actually given by the past record of accuracy of the witches' predictions. After all, Macbeth did become the Thane of Cawdor as they predicted. Banquo, unknowingly, a few moments before the murder is consummated, strengthens Macbeth's perceptions that it was his destiny to become king (II, 1, 21). It is Lady Macbeth that shows that it is the intensity of present enjoyment of future outcomes that is required, according to Shackle, to make crucial decisions:

Thy letters have transported me beyond
 This ignorant present, and I feel now
 The future in the instant. (I, 5, 54/6)

At last, the deed is done. The natural order of things is violated, and history is set moving beyond Macbeth's powers of understanding and control. As in *Hamlet*, "Time is out of joint," and strange things take

place (II, 4). Macbeth is chosen king after Malcolm's flight, but he cannot forget that the witches said that Banquo, not Macbeth, was to be the begetter of kings. Macbeth is obviously worried by the perceived threat represented by Banquo (III, 1, 47) and decides to challenge Destiny by having both Banquo and his only son killed. He is only partially successful because Banquo's son manages to escape the attempted assassination. But all that was useless anyway, another trick Destiny played on Macbeth. The real threat to Macbeth was not Banquo's son, but Malcolm, Duncan's son. Killing Banquo only added to Macbeth's list of enemies and brought his downfall closer.

To become king is the climax for Macbeth. Afterward, it is all downhill. Macbeth is cornered into a permanently defensive position. He begins by fighting his potential or imagined enemies, leading them to form a coalition against him. Power will be less a source of enjoyment than of disquietude. Having ascended to power through illegitimate and unnatural means, Macbeth has now to face the fate of the damned.

Surrounded by enemies—concentrating his attention on the wrong opponents, seeing his ambition fade out as Lady Macbeth goes mad, being overtaken by fear and suspicion—Macbeth appeals once more to the witches. Once again he is tricked into miscalculating his chances of success. In the meeting, the witches invoke three apparitions, the second of which says:

Be bloody, bold and resolute: laugh to scorn
The power of men; for none of woman born
Shall harm Macbeth. (IV, 1, 79)

And the third apparition:

Be lion-mettled, proud, and take no care
Who chafes, who frets, or where conspirers are:
Macbeth shall never vanquished be, until
Great Birnam wood to high Dunsinane hill
Shall come against him. (IV, 1, 90)

The assumption that these were impossible conditions makes Macbeth confident enough to dismiss the siege of his castle by Malcolm, son of Duncan (V, 3, 1). This was precisely the effect desired by the witches as agents of a perverse Destiny. It was revealed by Hecate, the goddess of witchcraft, who knows that

Security
Is mortals' chiefest enemy. (III, 5, 32)

Macbeth loses his humanity. Unlimited cruelty is let loose because the balance of arguments was tipped in favor of his darkest inclinations. The certainty that he could get away with anything because defeat could only be the result of impossible circumstances decides the struggle between the remnants of decency and overpowering ambition, the craving for power. Shakespeare seems to suggest that the main feature of a normal human being's behavior is balance. Man is neither good nor bad. He is moved by ambition, but also by loyalty. He is restrained by fear as well as by sense of duty. When the balance between these opposing forces is violated, a normal man can lose his humanity and perform acts of an almost limitless evil nature. At the end of the day, evil is done because it becomes the rule of the game. Macbeth realizes that no pleasure or happiness can be derived from power alone, but he does not have any choice but to fight to the end.

Macbeth feels safe against Malcolm's siege for the same motive that led him to murder Duncan. Success is assured in both cases by partial information, interpreted in the light of Macbeth's ambition that gives greater weight to favorable than to unfavorable arguments. It is Macbeth's final lesson that MacDuff, against whom he was dueling, was a premature baby, "not of woman born," that shows him how completely misled he had been. He still fights for his life but knows that his defeat was consummated (V, 8, 17).

Julius Caesar

Julius Caesar is also a play about miscalculation. All the main characters in the play have to make decisions under uncertainty. There are omens, but it is far from clear whether Shakespeare intended them to signal the action of Destiny, as in *Macbeth*. In contrast to *Macbeth*, there are no prophecies, only warnings:

Beware the Ides of March. (I, 2, 18)

To which Caesar says in reply to his companions:

He is a dreamer, let us leave him: pass. (I, 2, 24)

More traditional omens (I, 3, 5) are equally dismissed by other characters. When Casca mentions them:

When these prodigies
Do so conjointly meet, let not men say,
"These are their reasons: they are natural,"

For, I believe, they are portentous things
 Unto the climate that they point upon, (I, 3, 28)

Cicero replies:

Indeed, it is a strange-disposed time:
 But men may construe things, after their fashion,
 Clean from the purpose of the things themselves. (I, 3, 33)

Cassius is also skeptical about omens. To the frightened greeting by Casca (“Cassius, what night is this”), Cassius replies,

A very pleasing night to honest men, (I, 3, 43)

indicating that nature is not to blame for interferences with the affairs of men. Finally, in a dialogue with Brutus, Cassius is even more direct:

Men at some time are masters of their fates:
 The fault, dear Brutus, is not in our stars,
 But in ourselves, that we are underlings. (I, 2, 139)

Julius Caesar is a play about men who are free to make their choices, although they prove to be far from “master[s] of their fates.” Nevertheless, they are not masters because history does not depend solely on the decisions of any one of them, but on the interactions between all of them. To be efficient in terms of one’s goals, a chosen behavior has to be consistent with other people’s choices. This is the theme of *Julius Caesar*: how mistakes, miscalculations, unpredicted events, and interactions can thwart everybody’s paths toward unexpected trails with consequences that the characters could never forecast and, thus, could never prepare to face. The main characters of the play are not slaves of Destiny, as Macbeth is, but they are not masters of their fates either.

Cassius and Brutus make a miscalculation when they allow Mark Antony to speak at Caesar’s funeral. Caesar miscalculates when he decides to go to the Senate in the Ides of March. Caesar dies because of his animal spirits. It was a bad decision not because omens advised against going to the Senate, but because Caesar failed to take into account all the indications that something was being plotted against him. If Hamlet’s problem was the complete absence of animal spirits, Caesar’s was the opposite: too strong animal spirits that led him to overestimate his ability to face and defeat threats:

The things that threatened me
 Ne’er looked but on my back; when they shall see
 The face of Caesar, they are vanished. (II, 2, 10)

When Calpurnia, his wife, pleads with him not to go to the Capitol, Caesar again shows the contempt for the results of an action that actually define animal spirits: it is the action itself that matters, not what comes out of it:

Cowards die many times before their deaths;
The valiant never taste of death but once.
Of all the wonders that I have heard,
It seems to me most strange that men should fear,
Seeing that death, a necessary end,
Will come when it will come. (II, 2, 32)

Caesar concludes at last, defying augury:

Caesar should be a beast without a heart
If he should stay home to-day for fear. (II, 2, 42)

Caesar had a choice and he decided to go. He was then murdered by the conspirators led by Brutus and Cassius because he did not take precautions, confident no one (or nothing, for that matter) would be bold enough to dare attempt to take his life. He had to go to the Senate, because it is there, not because anything useful or important had to be decided that morning that could not have been decided on some other occasion. It was the act of defiance that mattered. Echoing Hecate, in *Macbeth*, stating that “security is mortals’ chiefest enemy,” Calpurnia laments:

Alas, my lord,
Your wisdom is consumed in confidence. (II, 2, 48)

Was it Caesar’s destiny to go to his murder, or was it a proof of his free will? To answer this question it may be interesting to contrast the roles of the witches in *Macbeth* and of the soothsayers in *Julius Caesar*. All of them represent, of course, a potential bridge to the supernatural, some of those things that exist between heaven and earth that are undreamt of by our vain philosophy (*Hamlet*). The witches were capable of describing the future-to-be in detail, since they already knew it. The soothsayer limits himself to pointing out to Caesar that an undefined but dangerous event could take place in the Ides of March, hardly something to move a man like Caesar. When questioned by Portia, Brutus’s wife, the soothsayer replies:

None that I know will be, much that I fear may chance. (II, 4, 32)

It seems obvious that some degree of discontent had to be visible in the Roman society since even some of Caesar’s closest collaborators

were conspiring against him. The soothsayer never seems to know more than what could be learned by any interested observer.

Brutus and Cassius, in contrast to Caesar, measure probabilities and calculate costs and benefits throughout the whole play. It is a significant feature of this play that right at its opening scenes we see Cassius plotting to mislead Brutus to have him join the conspiracy against Caesar, after Brutus leaves the stage:

Well, Brutus, thou art noble; yet I see
 Thy honourable metal may be wrought
 From that it is disposed. Therefore it is meet
 That noble minds keep ever with their likes;
 For who so firm that cannot be seduced?
 Caesar doth bear me hard, but he loves Brutus:
 If I were Brutus now and he were Cassius,
 He should not humour me. I will this night,
 In several hands, in at his windows throw,
 As if they came from several citizens,
 Writings, all tending to the great opinion
 That Rome holds of his name, wherein obscurely
 Caesar's ambition shall be glanced at:
 And after this let Caesar seat him sure;
 For we will shake him, or worse days endure. (I, 2, 310)

Once Brutus is persuaded to join the conspiracy, he and Cassius plan in detail Caesar's assassination. When they come to debating whether Caesar's followers, particularly Mark Antony, should also be eliminated, they make their fateful mistake, a fatal miscalculation of the damage that Mark Antony could cause them:

If he love Caesar, all that he can do
 Is to himself, take thought and die for Caesar. (II, 1, 186)

In fact, this was Brutus's decision, against the wiser advice of Cassius. Equally serious a mistake was to allow Antony to speak at Caesar's funeral. Brutus and Cassius are betrayed by their feeling of safety after successfully murdering Caesar and having Antony to accept the conditions they impose on the terms of his eulogy. The plotters did not expect that Antony would still find ways to stir the masses with the restrictions imposed on his speech. But stirring the masses was precisely Antony's intention: he would inflame the people to

Cry "Havoc," and let slip the dogs of war;
 That this foul deed shall smell above the earth
 With carrion men, groaning for burial. (III, 1, 274)

Antony then delivers his famous speech “to bury Caesar, not to praise him” (III, 2, 75), which turns the people against the conjurors and initiates a civil war that will ultimately end up with Brutus and Cassius’s defeat.

The central developments of the play are precisely how Brutus and Cassius at first, and later Mark Antony, are able to trigger processes, the conclusion of each no one was capable of controlling or even predicting. In Shakespeare’s terms, when Brutus and Cassius conspire against Caesar they are actually attacking the order of the Roman Empire. As Caesar put it:

But I am constant as the northern star,
Of whose true-fixed and resting quality
There is no fellow in the firmament. (III, 1, 60/2)

Their act disturbs the social order to an extent much beyond what they could expect and prepare for. This is precisely what uncertainty is about: processes the conclusion of which one can only know when it is too late to prepare for it. Brutus sees it clearly on the eve of his final battle against his opponents:

O, that a man might know
The end of this day’s business ere it come!
But it sufficeth that the day will end,
And then the end is known. (V, 1, 122)

Both Brutus and Cassius are led to commit suicide; Cassius, ironically, again, because he misinterprets what he sees in the battlefield. In any case, Titinius’s cry for him describes very well his, and Brutus’s, path:

Alas, thou hast misconstrued everything! (V, 3, 84)

But if Brutus and Cassius did not know how the events they triggered would develop, Antony was equally ignorant of the extent of what he initiated. His decision to arouse the masses was due to his revulsion at the murder itself, not from an attempt at triggering a popular revolt. He was moved by his desire to avenge Caesar, not from a plan to ascend to power himself in the place of Brutus. After delivering his eulogy, when the plebeians leave the stage and leave Antony alone, he utters:

Now let it work. Mischief, thou art afoot,
Take thou what course thou wilt. (III, 2, 263)

To promote mischief, not revolution, was Antony’s goal.

Conclusion

What is tragic in these plays? Tragic is choice, or the responsibility of those who make choices. Choice, particularly crucial choice, triggers changes that often transcend what was expected, or could be expected, by a decision-maker. Tragedy is always the perception of the measure of man, which may be big enough to initiate a process of change, but is seldom ready to control its developments. Shakespearean tragedy is always about choice, effectiveness, and moral responsibility.

The aim of this comment, however, is not to add to Shakespearean comment but to draw on Shakespeare to formulate appropriate hypotheses with which to model human behavior. Social sciences have often adopted deterministic approaches to conceive of human action. Destiny comes in the guise of forces of production or market rationality. The end result is similarly deterministic and mechanistic approaches to human behavior. As determinism crumbles, one has to search for new assumptions, new hypotheses to model behavior. One can try to start from direct empirical observation. One can start from one's own intuitions. As Richard Feynman once remarked, it does not matter where one gets one's hypotheses.¹³ What matters is how fertile they are to inspire experiments and how they perform in those experiments. The point raised in this paper is that Shakespeare is an exceptional source of hypotheses for modern social sciences. As the three plays referred to show, Shakespeare can offer brilliant examples of the nuances and mental anguish involved in the decision-making process under uncertainty as conceived of by Shackle, for example, in the plays *Hamlet* and *Julius Caesar*. *Hamlet* shows not only how crucial decisions simply cannot be made on the basis of mere rational calculation. It also shows that one has to feel the enjoyment of an expected outcome with such a strength that the conscience that hard information is missing cannot become an obstacle to the actual decision-making. *Hamlet* also shows how history develops and continuously changes circumstances, making efforts to control these same circumstances completely useless and irrelevant. Lacking animal spirits, Hamlet can only procrastinate, ending up being caught by surprise by events in a paradoxical outcome. The more he tries to prepare and control, the more Hamlet becomes vulnerable to developments beyond his purview. *Julius Caesar* explores how animal spirits in excess

¹³ Feynman (1967, p. 156).

can blind characters to avoidable risks and expose them to ultimate destruction. It also shows how history is nonlinear, where some relatively small acts can end up generating huge consequences, as in the case of Antony's eulogy. *Macbeth*, on the other hand, raises very intriguing possibilities, particularly related to how to process and interpret information. All three tragedies revolve around great men and how the fate of their whole societies depends on their decisions. Crucial decisions, however, are eventually made by all of us at any given time. There is no reason to doubt that the thought processes involved in crucial decisions, even if of a much smaller relevance to society, are essentially different. This is the assumption, at least, of thinkers like John Maynard Keynes and George Shackle.

The author is, of course, fully aware that these comments do not even begin to scratch the surface of these plays. The greatness of Shakespeare's works is independent of what they may inspire along the lines explored in this paper. As was said before, the comments are mostly directed to suggest what a great companion to works from Keynes, Shackle, and others, Shakespeare's tragedies may be, in addition to the deep personal experience that reading them signifies to begin with.

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