The changing appearance of the physician in the history of opera

<table>
<thead>
<tr>
<th>Century</th>
<th>Role</th>
<th>Character</th>
<th>Role as physician</th>
<th>Basis of knowledge</th>
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scientifically trained physician acting in a more sophisticated manner. The rise of competence, however, is paralleled by a rise in power with its potential to be used detrimentally. In the 20th century, the doctor often has a major role. He usually has high social standing, and, in addition to being a clinician, he is depicted as a researcher. The dynamics of the physician’s role in the history of opera reflect the development of medicine and illustrate the development of the social position of doctors and the public attitude towards the medical profession over the past centuries.

Tonya Hongsermeier, Boston, and Peter Schmiedebach, Hamburg, provided valuable and insightful comments.

Competing interests: None declared.


Faints, fits, and fatalities from emotion in Shakespeare’s characters: survey of the canon

Kenneth W Heaton

Introduction

The diseases mentioned in William Shakespeare’s works have been much discussed, but another category of bodily change of medical interest seems to have escaped comment—the symptoms and signs induced by strong emotion in his characters. My interest in this topic was aroused when, studying Hamlet, I was struck by the violence of the hero’s reaction to his encounter with his father’s ghost on the battlements of Elsinore. Hamlet’s anguished words, “Hold, hold, my heart, and you, my sinews, grow not instant old, but heart, and you, my sinews, grow not instant old, but be my stiffly up” (1.5.94; act, scene, line in Norton Shakespeare), seem to suggest that his heart was palpitating and his knees were buckling. The symptoms suggest a near-syncopal attack or, conceivably, a paroxysmal tachycardia causing a drop in cardiac output. Continuing my studies of Shakespeare’s plays and poems, I came across similar episodes, often involving actual loss of consciousness, and even several cases of sudden death, all occasioned by strong emotion. This prompted me to search systematically for bodily changes induced by emotion in the characters created by Shakespeare in his plays and long narrative poems. To put the findings in context, I examined in the same way some works by other playwrights active in the first half of Shakespeare’s career.

Methods

Using a modern, annotated edition of the complete works of William Shakespeare, plus a monograph of Edward III, I read over a 20 month period every line of the 39 canonical plays and the three narrative poems—Venus and Adonis, The Rape of Lucrece, and A Lover’s Complaint—mostly in chronological order, and systematically recorded every mention of a physical symptom or sign occurring in a character who was clearly experiencing strong emotion. Elsewhere, I have dubbed these phenomena “flags of feeling.” They cover many systems of the body and, between them, attest to the playwright’s acute awareness of the way the human body responds to emotion. Here I report the most dramatic of Shakespeare’s flags of feeling: faints, fits, and death.

Faints, fits, and fatalities from emotion in Shakespeare’s characters: survey of the canon

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Cultural studies

Table 1 Plays in which a character dies from strong emotion*

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<tr>
<th>Play and reference</th>
<th>Character dying</th>
<th>Emotion and its cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Love's Labour's Lost 5.2.14</td>
<td>Catherine's sister</td>
<td>Grief at unrequited love</td>
</tr>
<tr>
<td>Romeo and Juliet 5.3.209</td>
<td>Montague's wife</td>
<td>Grief at his son Romeo's banishment</td>
</tr>
<tr>
<td>Othello 5.2.212</td>
<td>Brabantio</td>
<td>Grief at his daughter marrying Othello the Moor</td>
</tr>
<tr>
<td>King Lear 5.3.196</td>
<td>Gloucester</td>
<td>Mixed grief at his blindness and joy at being reunited with his son Edgar</td>
</tr>
<tr>
<td>King Lear 5.3.309</td>
<td>Lear</td>
<td>Mixed grief at Cordelia's murder and hope that she might still be alive</td>
</tr>
<tr>
<td>Antony and Cleopatra 4.10.52</td>
<td>Emilian</td>
<td>Grief and shame at his desertion of Antony</td>
</tr>
<tr>
<td>Antony and Cleopatra 5.2.283</td>
<td>Iras</td>
<td>Grief at Cleopatra's imminent suicide</td>
</tr>
<tr>
<td>The Winter's Tale 3.2.142</td>
<td>Mamillius (child)</td>
<td>Grief at his mother Hermione's unjust imprisonment</td>
</tr>
<tr>
<td>Cymbeline 3.2.142</td>
<td>Posthumus father</td>
<td>Grief at death of two sons in battle</td>
</tr>
<tr>
<td>Cymbeline 5.6.26.57</td>
<td>Queen</td>
<td>Grief at her son's mysterious disappearance and despair at her own homicidal wickedness</td>
</tr>
</tbody>
</table>

*Plays are listed in order of composition. References (act, scene, line) are to the Norton Shakespeare.

†Faint off stage.

‡Probably grand mal epilepsy; described as foaming at mouth, “falling sickness.”

§Possibly grand mal epilepsy; called such by lago; also occurred the day before.

Table 2 Works in which a character faints from strong emotion

<table>
<thead>
<tr>
<th>Play or poem and reference*</th>
<th>Character fainting</th>
<th>Emotion and its cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Gentleman of Verona 5.4.84</td>
<td>Julia</td>
<td>Grief at lover's betrayal</td>
</tr>
<tr>
<td>2 Henry VI 3.2.32</td>
<td>King Henry</td>
<td>Grief at uncle's murder</td>
</tr>
<tr>
<td>3 Henry VI 1.4.9</td>
<td>Rutland (child)</td>
<td>Fear of being murdered</td>
</tr>
<tr>
<td>3 Henry VI 5.5.43</td>
<td>Queen Margaret</td>
<td>Grief at son's stabbing</td>
</tr>
<tr>
<td>Venus and Adonis, line 645</td>
<td>Venus</td>
<td>Fear of Adonis' being gored</td>
</tr>
<tr>
<td>2 Henry IV 4.4.111</td>
<td>King Henry</td>
<td>Joy at defeat of rebels</td>
</tr>
<tr>
<td>Romeo and Juliet 3.2.56</td>
<td>Nurse</td>
<td>Horror at Tybalt's bloody corpse</td>
</tr>
<tr>
<td>Much Ado About Nothing 4.1.107</td>
<td>Hero</td>
<td>Shock at father's threatening to stab her</td>
</tr>
<tr>
<td>Julius Caesar 1.2.245</td>
<td>Julius Caesar††</td>
<td>Excitement at offer of crown</td>
</tr>
<tr>
<td>As You Like It 3.4.155</td>
<td>Rosalind</td>
<td>Horror at seeing Orlando's blood</td>
</tr>
<tr>
<td>Othello 4.1.41</td>
<td>Othello</td>
<td>Horror at Desdemona's “infidelity”</td>
</tr>
<tr>
<td>King Lear 4.6.41</td>
<td>Gloucester</td>
<td>Belief that he had fallen off a cliff</td>
</tr>
<tr>
<td>King Lear 5.3.217</td>
<td>Kent</td>
<td>Grief at Lear's madness</td>
</tr>
<tr>
<td>Antony and Cleopatra 4.16.70</td>
<td>Cleopatra</td>
<td>Grief at Antony’s “suicide”</td>
</tr>
<tr>
<td>Pericles 22.34</td>
<td>Thaisa</td>
<td>Joy at reunion with husband</td>
</tr>
<tr>
<td>The Winter's Tale 3.2.144</td>
<td>Hermione</td>
<td>Grief at son's death</td>
</tr>
<tr>
<td>The Winter's Tale 5.2.80</td>
<td>Onlooker†</td>
<td>Horror at Hermione's death</td>
</tr>
<tr>
<td>Cymbeline 4.2.334</td>
<td>Imogen</td>
<td>Horror at finding headless corpse wearing husband's clothes</td>
</tr>
</tbody>
</table>

*Plays are listed in order of composition. References (act, scene, line) are to the Norton Shakespeare.

†Faint off stage.

††Grief predominates again, but Shakespeare's characters believe other emotions besides grief to be potentially fatal: fear on two occasions, both in early works; anger on two occasions, both in late works; and even joy on two occasions, also in late works. The cause of this destructive joy, is, in both instances, the recovery by an ageing father of a lost daughter, believed dead.

Table 2 shows the 18 occasions on which a Shakespearean character transiently loses consciousness while under extreme emotion. The incident is most often described—as a stage direction—as a character falling to the ground, with rapid recovery (seven occasions). The word “swooning” is used in six instances, “fainting” in five, and “faint” in two. In five cases, the onlookers at first think the person collapsing has died, but usually the episode is made light of, and twice it is dismissed as “womanish.” In the case of King Henry IV, the faint begins with dimmed vision and giddiness, consistent with simple syncope (but, unlike all the other characters, he had been ill for a long time). With Julius Caesar and Othello, the illness seems to be epilepsy: Julius Caesar is said to foam at the mouth and to be prone to “the falling sickness,” an old name for epilepsy; with Othello, epilepsy is confidently diagnosed by another character (Iago).

Emotion is explicitly blamed for the faint in six cases; with Gloucester in King Lear it seems to be the expectation of death. The responsible emotions vary—grief is the most common (table 2), but positive emotions are present in the list (joy and excitement).

Near-fainting is described or mentioned on 13 occasions. The causes are again varied: fear (three cases); shame (three); grief (three); and anger, joy, excitement, and sexual desire (one case each). Facial pallor is described in one case (Love's Labour's Lost 5.2.392); in another, people close to others who are fainting are said to change colour (The Winter's Tale 5.2.80).
Endymion from grief and two from sexual desire (those in Hero and Leander). I found three actual faints and one imagined one: two from grief and two from sexual desire (those in Endymion and Antonio’s Revenge). I also found three actual faints and one imagined one: two from grief and two from sexual desire (those in Endymion and Hero and Leander).

Discussion

This study has revealed a remarkable propensity for Shakespearean characters to die or faint, or to speak of these things as likely to happen, as a result of extreme emotion (or passion as it was called then). All but two of the 10 actual deaths, and all three of the staged deaths, occur in plays written towards the end of the playwright’s life. Late plays are the only ones in which a major character dies in this way, and the play containing the most talk of death from emotion is Shakespeare’s last but one solo work (Cymbeline). All this might prompt the speculation that, in his later years, Shakespeare was already contemplating his own demise, even though he was still in his 40s (he died at the age of 52, for unknown reasons).

Besides actual deaths, Shakespeare’s characters often speak of dying from strong emotion as a possibility, even a probability. Did Shakespeare himself believe that people die as a result of intense emotion, especially grief? The speaker in Sonnet 45 clearly does so: “My life... Sinks down to death, oppressed with melancholy,” but a poem’s speaker does not necessarily represent the poet himself. In the person of Rosalind, Shakespeare mocks the idea that a man can die of unrequited love: “The poor world is almost six thousand years old, and in all this time there was not any man died in his own person... in a love cause” (As You Like It 4.1.81). Some of the claims of likely death in the table on bmj.com should be taken with a pinch of salt as poetic hyperbole or the fumes of an overheated romantic brain, but many cannot be so easily dismissed. Sometimes with Shakespeare, grief becomes fatal only when it is intensified by shock or horror, as in the experience of Lear.

The joy of Pericles and Cymbeline on recovering their daughters is so intense that they fear it might kill them. Shakespeare himself had two daughters, whose health must have caused him deep concern after his only son Hamnet died at the age of 11 in 1596. Elsewhere, an excitable young man (Troilus) is portrayed as being so anxious about his first love assignment that he fears dying through excess of pleasure. However, in Elizabethan slang, dying could mean orgasm. Christopher Marlowe is quite explicit that his fully aroused heroine faints at the entrance of her lover (Hero and Leander: Sestiiad 2.2).

Sudden non-violent death does occur in young people as well as older ones. Sometimes a cause is not found at autopsy, but recently a group of diseases has been identified that are believed to explain 30-40% of sudden deaths in young adults. These “ion channelopathies” affect the electrical functioning of a structurally normal heart. One of them, long QT syndrome, can cause sudden death “when a person is startled or suddenly awoken from sleep,” and catecholaminergic polymorphic ventricular tachycardia is liable to occur “while the person is exercising themselves or suffering emotional stress.” Extreme emotion can also lead to sudden death in people with subclinical cardiomyopathy or ischaemic heart disease, probably because of a ventricular arrhythmia caused by an outpouring of catecholamines. Such an outpouring can certainly lead to heart failure from myocardial stunning, even in people with apparently normal hearts.

Knowing none of this, Shakespeare realised that extreme emotion can have powerful, indeed dangerous, effects on the human body. In this respect he was not unique. In Greek mythology, which pervades early modern writings, extreme emotion could lead not only to madness but also to a physical transformation (or metamorphosis), which, arguably, is akin to death. The fatal effects of too much joy, as well as too much fear, were described by the 10th century Arab physician, Haly Abbas. These effects must have been familiar to Elizabethan dramatists because, in Antonio’s Revenge of about 1601, Andrugio is mendaciously reported as dying from the “vast delights of his large sudden joys.” In the play, these supposed joys follow a period of extreme anxiety, a mixture of positive and negative emotions that was considered especially dangerous. A similar mixture kills Gloucester in King Lear, where “his flawed heart—alack, too weak the conflict to support! ‘twixt two extremes of passion, joy and grief, burst smilingly” (5.3.309). Lear himself dies in a state of alternating despair and hope for the life of his beloved Cordelia.

Some of Shakespeare’s deaths were not sudden. Leonides attributes the fatal illness of his son Mamillius to shame at the “dishonour” of his mother, but the royal servant is surely nearer the truth when he speaks of the child’s fear for the fate of his unjustly imprisoned mother (3.2.144). In the other delayed deaths, the grief is explicit. Its cause is always the loss of a loved one and this loss is occasioned by rejection, banishment, imprisonment, and disappearance, as well as by bereavement.

Modern research has proved that mortality is increased among recently bereaved people. Whether emotional upset or the stresses of life without the loved one matters more is debated; Shakespeare seems to have had no doubt on this score. For example, a doubly bereaved father “took such sorrow that he quit being” (Cymbeline 1.1.38). Psychologists speak of the broken heart hypothesis, and bereaved people are indeed especially liable to a cardiac death. One argument for the broken heart hypothesis is the increased incidence

King Lear, about to be overwhelmed by Cordelia’s death

Among the 18 works by Shakespeare’s contemporaries, I found one actual death and seven imagined deaths from emotion. These are mostly from grief but also from fear and anger and, in two cases, from excessive joy (in Endymion and Antonio’s Revenge). I also found three actual faints and one imagined one: two from grief and two from sexual desire (those in Endymion and Hero and Leander).
of suicide after bereavement and here, again, Shakespeare has something to contribute, in the reported fates of Lady Macbeth and Lady Constance (table 1).

Shakespeare recorded fainting under strong emotion on 18 occasions. Nowadays called vasovagal syncope, this often causes myoclonic jerks, easily misdiagnosed as epilepsy. Emotional fainting is quite common, and its mechanisms are familiar—vagal bradycardia and hypotension from peripheral vasodilatation. In Marston's *Antonio's Revenge*, the Duchess of Genoa swoons when she hears that, contrary to what she had just been told, her missing husband is dead (another case of contrary emotions in dangerously quick succession). In the same play, the heroine Mellida swoons at the (false) news of her beloved Antonio being succession). In the same play, the heroine Mellida swoons when she hears that, contrary to what she had 

journal were planning a reading of Nothing so mundane. He announced that he and the chairman of NICE phoned I assumed he'd had appeared in—or, more often, stood in the prompt corner during—professional productions of half a dozen Shaw plays. I even starred in the *Dilemma* as the waiter who appears for 30 seconds at the end of act two and delivers the heart stopping line, “Yes, sir.”

Seven weeks later, and dangerously close to the centenary date, my humble rural cottage was linked by conference call to two of the nation’s medical power-houses, the *BMJ* and NICE Supreme Command. Like the man in Mission Impossible, I was told that a theatre had been booked—well, a lecture theatre at the Royal College of Physicians—and my mission, if I was prepared to accept it, was to “adapt” the five act play for a new medium. I accepted the mission with delight. Before, and indeed during, the years I spent as a part time medical student I had appeared in—or, more often, stood in the prompt corner during—professional productions of half a dozen Shaw plays. I even starred in the *Dilemma* as the waiter who appears for 30 seconds at the end of act two and delivers the heart stopping line, “Yes, sir.”

Listening from the wings to every scene, night after night, taught me that Shaw was a gifted master of plays. I've little time for critics who dismiss him as a propagandist who used the theatre to broadcast social and political ideas. Of course the plays promulgate ideas but they are crafted so well and so wittily that they rarely fail to do what plays should do—engage the minds and emotions of an audience.

I decided to adapt the play as if for radio. We cut all but the long speeches, of which there were many—though there were before my “adaptation.” Some members of the cast who could tear themselves away from busy lives for a moment or two of rehearsal.

I accepted the mission with delight. Before, and indeed during, the years I spent as a part time medical student I thought he does: never underestimate the power of the emotions to disturb bodily functions.

Competing interests: None declared.


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1 The night Bernard Shaw taught us a lesson

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When the chairman of NICE phoned I assumed he'd called to confirm that I was no longer cost effective. Nothing so mundane. He announced that he and the editor of this journal were planning a reading of Bernard Shaw’s *The Doctor’s Dilemma* to celebrate the centenary of its first production. The performers would be medical persons of irrefutable distinction. Would I help?

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I decided to adapt the play as if for radio. We cut all theatrical “business” and the performers read their scripts from a row of lecterns. In rehearsal I didn't dwell on technique—or as doctors prefer “communication skills”—but encouraged the performers to do their stuff in their own way, intervening only to suggest a change of delivery to emphasise meaning or to inject variation into the long speeches, of which there were many—though not as many as there were before my “adaptation.”

We had so little rehearsal I had doubts we'd get away with it. But doubt started to melt when we launched the first scene and I felt the audience respond. True they were a sympathetic bunch, and we