

The Medical Mind of Shakespeare



Terence Doyle
Department of Medicine

The Medical Mind of Shakespeare



melancholy, ague, rheumatism, plague, infections and contagions, mental illnesses, measles, leprosy, epilepsy, sciatica, palsy, hemiplegia, apoplexy, syphilis, hydrophobia, hysteria, colic, jaundice, heartburn, dropsy, gout, smallpox, poison.

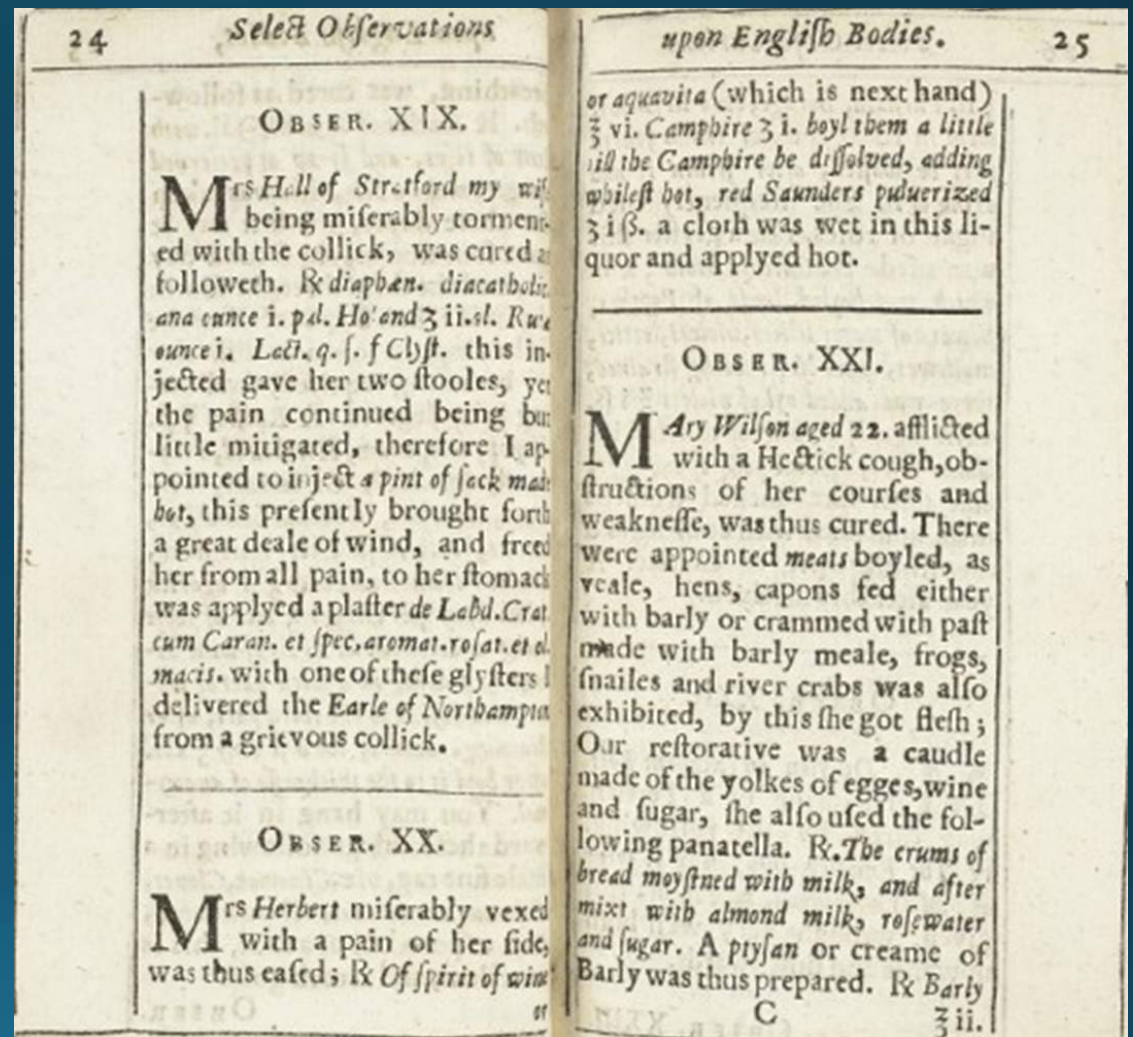
Shakespeare Timeline

- 1494: First outbreak of syphilis in Europe
- 1543: Vesalius *De Humani Corporis Fabrica*
- 1558: Elizabeth I crowned
- 1564: William Shakespeare born
- 1590 – 1665 Plague in London
- 1616: Shakespeare dies
- 1628: Harvey discovers circulation



Shakespeare's Physicians

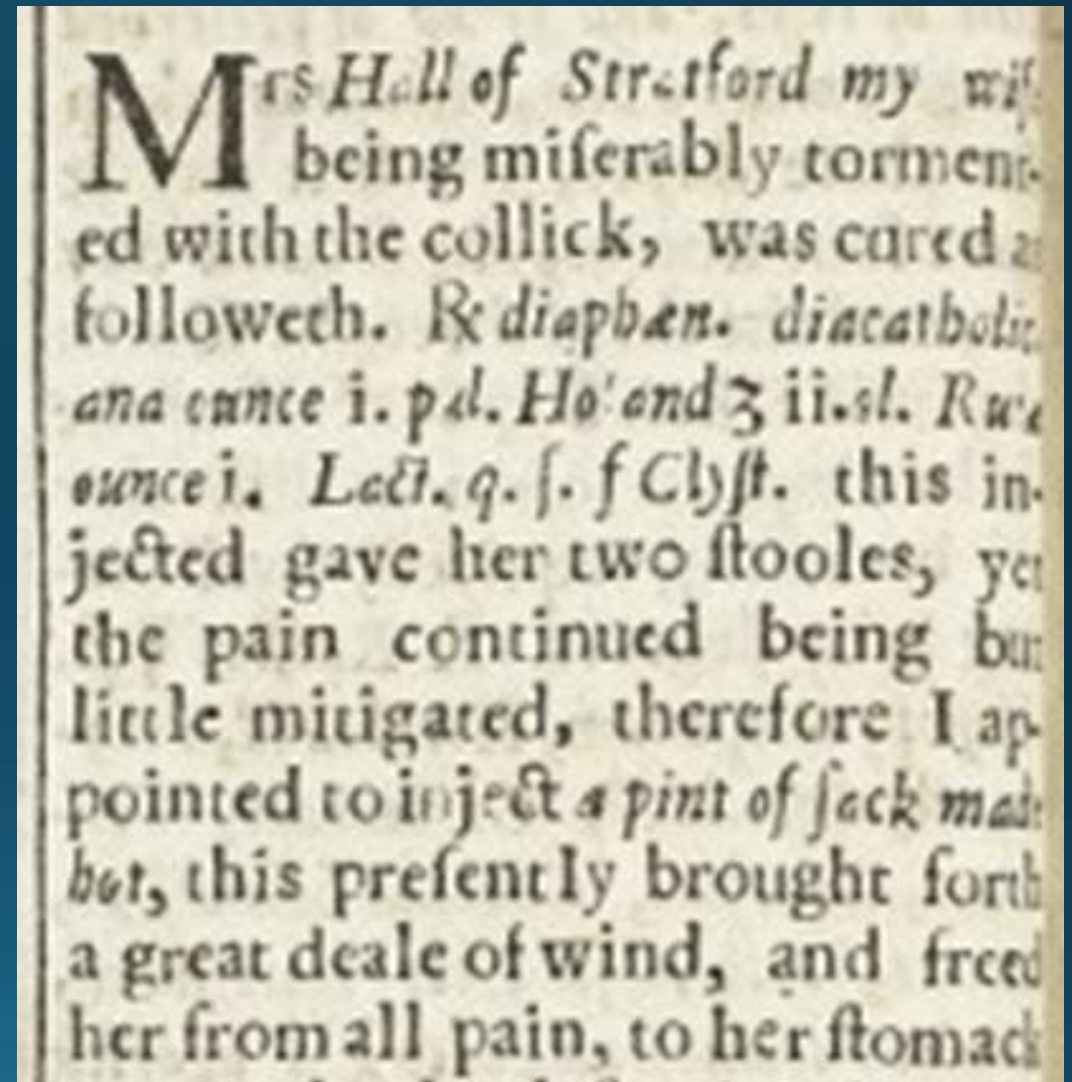
- John Hall 1575-1635
- Queens College Cambridge
- Stratford 1600
- Married Susanna 1607
- Shakespeare already 20 plays



Select Observations on English Bodies
by John Hall, London, 1657

Shakespeare's Physicians

- John Hall 1575-1635
- Queens College Cambridge
- Stratford 1600
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- Shakespeare already 20 plays



M^{rs} Hall of Stratford my wife
being miserably torment-
ed with the collick, was cured as
followeth. R^x diaphan. diacatholice
ana ounce i. p^ol. Ho^o end 3 ii. sl. R^x u
ounce i. Lact. q. s. f Clyst. this in-
jected gave her two stooles, yet
the pain continued being but
little mitigated, therefore I ap-
pointed to inject a pint of sack made
bet, this presently brought forth
a great deale of wind, and freed
her from all pain, to her stomach

Select Observations on English Bodies
by John Hall, London, 1657

THE MERRY WIVES OF WINDSOR



Doctor Caius. Vat is you sing? I do not like des toys.
Pray you, go and vetch me in my closet un boitier vert,
a box, a green-a box: do intend vat I speak?

Mistress Quickly. Ay, forsooth; I'll fetch it you.
[Aside]
I am glad he went not in himself: if he had found
the young man, he would have been horn-mad.



Bertram.

What is it my good lord the King
anguishes of?

Lafeu.

A fistula, My lord.



Helena daughter of a physician



All's Well
That
Ends Well

Page: He said, sir, the water itself was a good healthy water; but for the party that owed it,¹ he might have moe² diseases than he knew for.

Wherein are newly discovered the
old fallacies, deceit, and juggling of the Piss-
for Science, used by all those (whether
Quacks, and Empiricks, or other methodical
Physicians) who pretend knowledge of Dis-
eases, by the Urine, in giving judgement
of the same.

Never heretofore published by any man in
the English Tongue.





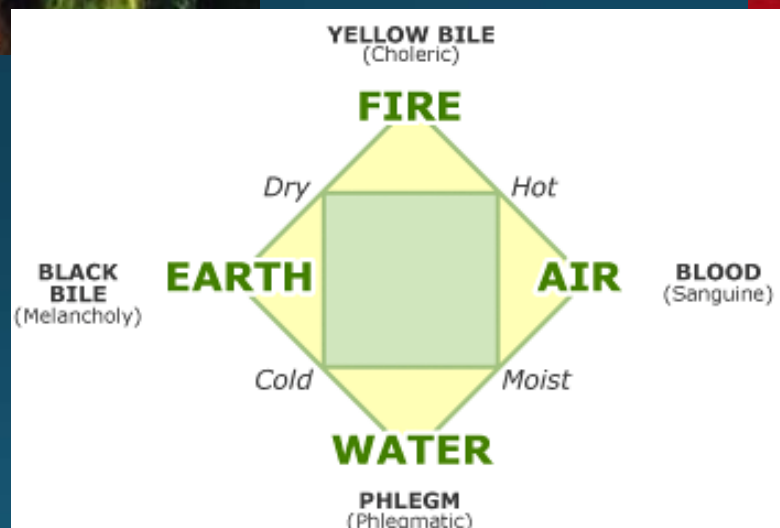
Choleric humour
Lady MacBeth - villainess

- Sanguine humour
- Viola – *Twelfth Night*

Does not our life consist of the
four elements -
Sir Toby Belch *Twelfth Night*



Melancholic humour
Hamlet



Phlegmatic humour
Sir John Falstaff in *Henry IV*



Melancholy



TREATISE OF MELANCHOLIE.

CONTAINING THE CAUSES thereof, & reasons of the strange effects it worketh in our minds and bodies: with the phisicke cure, and spirituall consolation for such as haue thereto adioyned an afflicted conscience.

The difference betwixt it, and melancholie with diuerse philosophicall discourses touching actions, and affections of soule, spirit, and body: the particulars whereof are to be seene before the booke.

By T. Bright Doctor of Phisicke.

Melancholy

'In sooth I know not why I am so sad . . .
But how I caught it, found it, or came by it,
What stuff 'tis made of, whereof it is born'

Antonio

*I hold the world but as . .
A stage, where every man must play a part,
And mine a sad one*



Lunacy

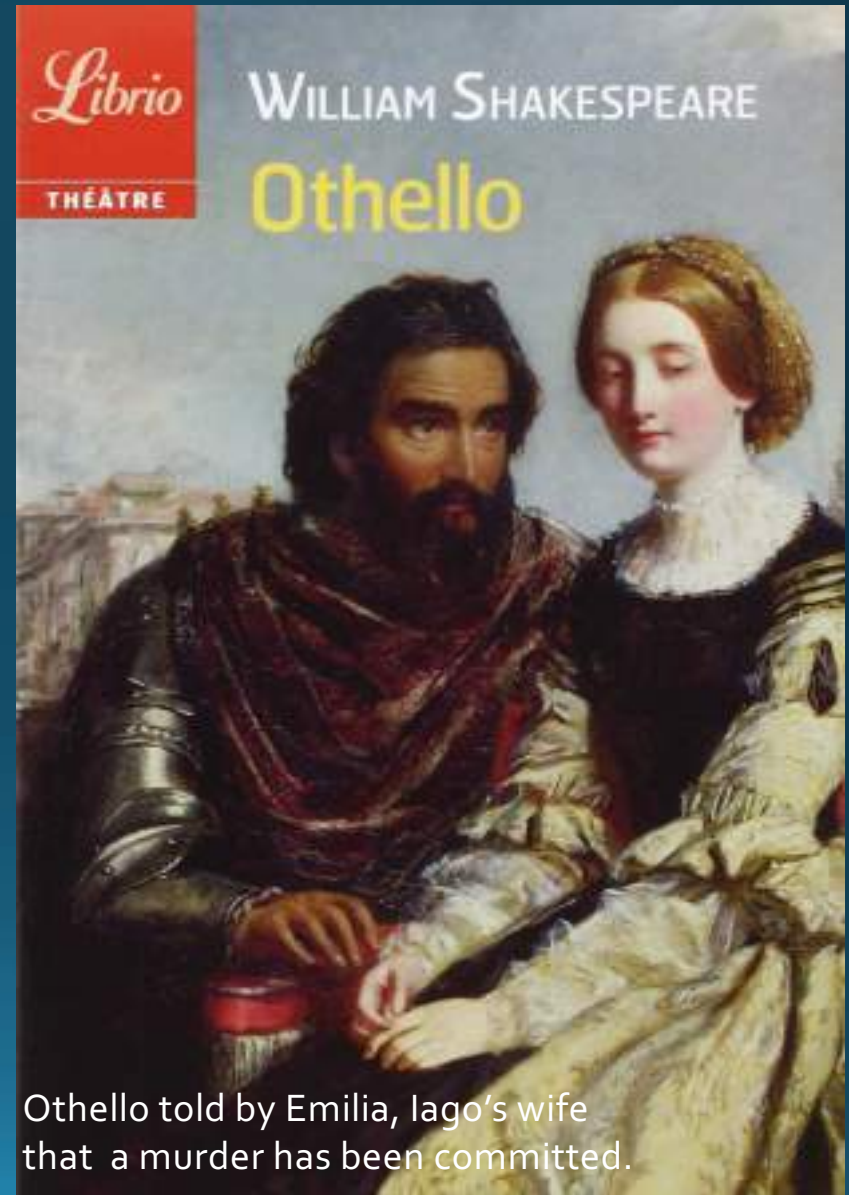
Lovers and madmen have such seething brains,
Such shaping fantasies, that apprehend
More than cool reason ever comprehends.

The lunatic, the lover and the poet
Are of imagination all compact.

Theseus in *Midsummer Nights Dream*



*It is the very error
of the moon;
She comes more
nearer earth than
she was wont,
And makes men
mad*



Othello told by Emilia, Iago's wife
that a murder has been committed.

King Lear



O, let me not be mad,
not mad,
sweet heaven!
Keep me in temper . .



Goneril
Regan
Cordelia

Have more than thou showest
Speak less than thou knowest
Lend less than thou owest



Hamlet – mad??

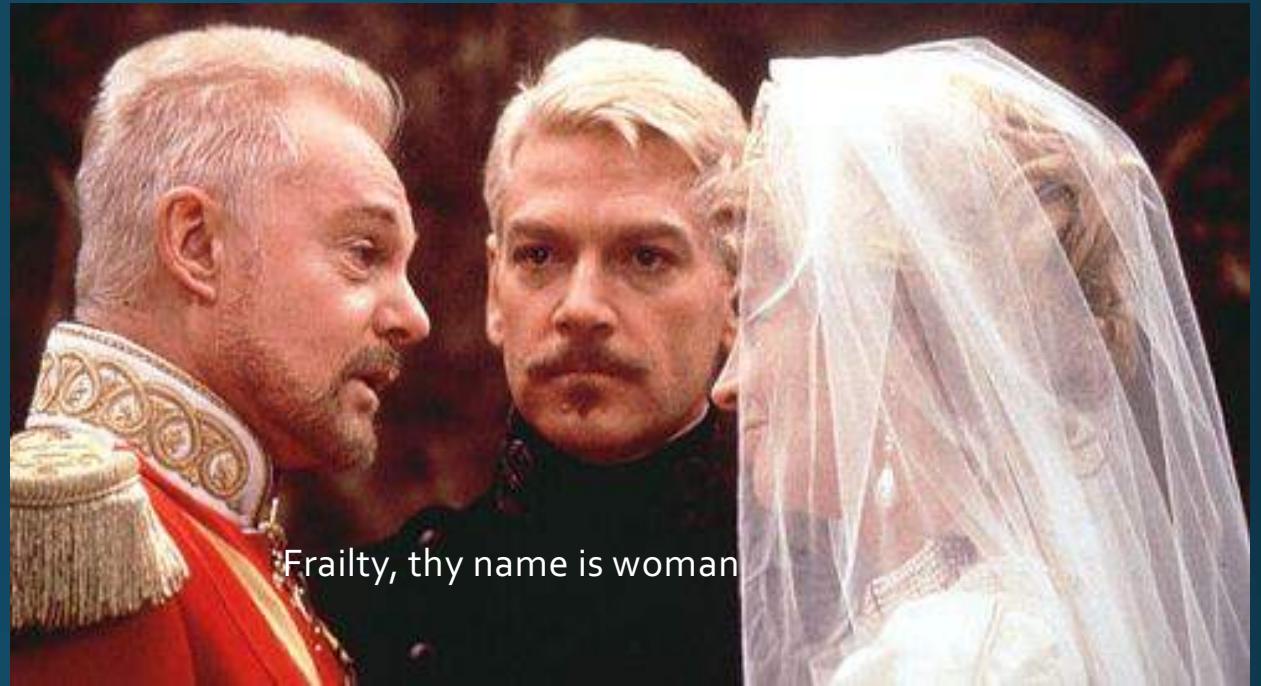
Hamlet condemns Claudius as a “satyr”

*O! most wicked speed, to post
With such dexterity to incestuous sheets!*

1899 *Interpretation of Dreams* Sigmund Freud



I must be cruel to be kind



Frailty, thy name is woman

• Oedipus Complex

- Child's desire for parent of opposite sex
- Hamlet suffers from Oedipus Complex.

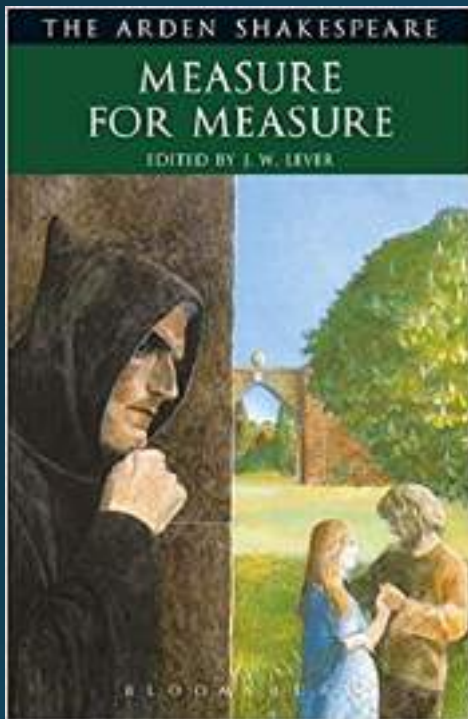
Misogyny

- For his own mother Gertrude
- For his beloved Ophelia
- “Get thee to a nunnery”

Though this be madness,
yet there is method in't

Polonius

The French Pox = Syphilis



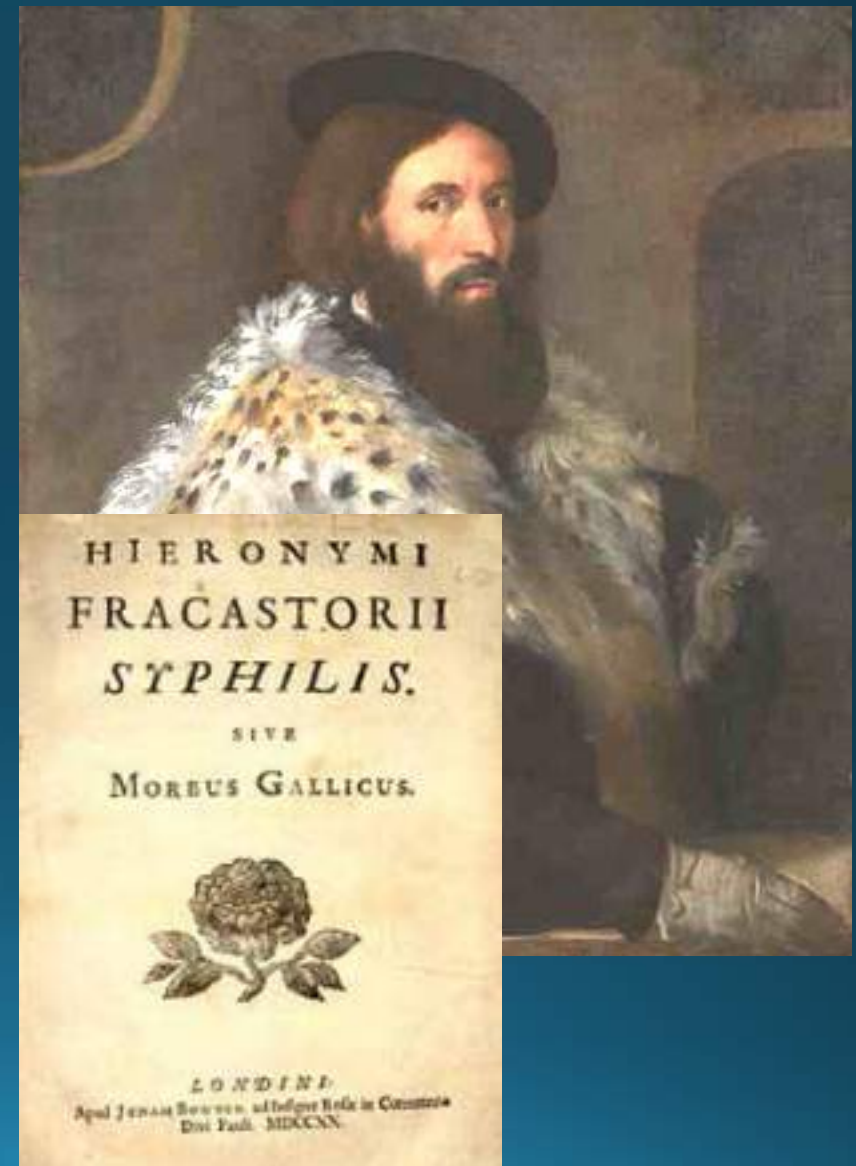
1494 Charles VIII – siege of Naples

1603 London's brothels closed

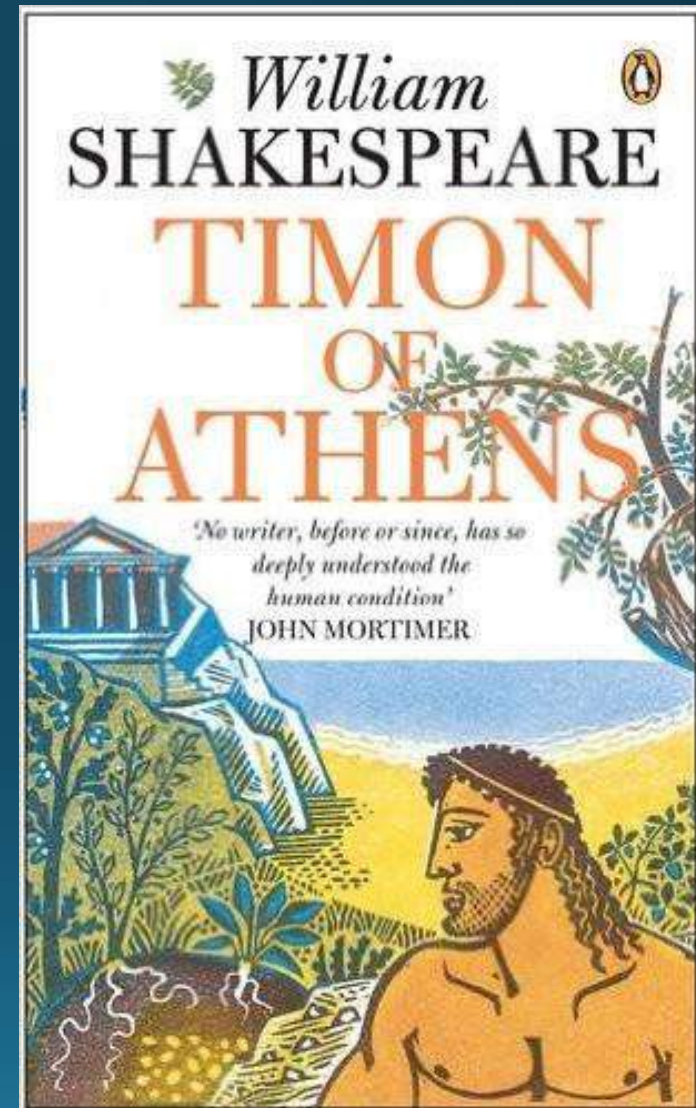
1604 *Measure for Measure*
Timon of Athens
Troilus and Cressida

Lucio, upon seeing a brothel madam approaching
“I have purchased . . . many diseases under her roof”

Girolamo Frascatoro by Titian 1528



Syphilis



'Consumption sow
In hollow bones of man; strike their sharp shins,
And mar men's spurring. Crack the lawyer's voice,
That he may never more false title plead . . .
Down with the nose,
Down with it flat, take the bridge quite away. . .
Make curled-pate ruffians bald,'

Syphilis

Lucio How doth my dear morsel, thy mistress?
Procures she still?

Pompey. Troth, Sir, she had eaten up all her
beef, and she is herself **in the tub.**'

Measure for Measure

"After this, the vengeance on the whole camp!
Or, rather, the **Neapolitan bone-ache!**
For that, methinks, is the curse on those
that war for a **placket,**"

Troilus and Cressida

"Why masters, ha' your **instruments** been in Naples,
that **they speak i' the nose thus.**"

Othello



Cinnabar HgS

Pregnancy and Childbirth

Though this knave came something saucily into the world
before he was sent for, yet was his mother fair, there was good
sport at his making,

Gloucester in *King Lear*

CAPULET She hath not seen the change of fourteen years

PARIS Younger than she are happy mothers made.

CAPULET And too soon marr'd are those so early made

, "I have often heard my mother say
I came into this world with feet forward"

Gloucester In *Henry VI Part III*,

"none born of woman / Shall harm Macbeth"
Macbeth learns that his adversary, Macduff,
"was from his mother's womb / Untimely ripped"





Richard III

How he gave battle in vain

THE EXCAVATION

Leicester car park where the skeleton was found last September



THE SKULL



Scars to the cheek either inflicted after death or after losing his helmet

"One of the Welshmen then came after him, and struck him dead with a halberd, and another took his body and put it before him on his horse and carried it, hair hanging as one would bear a sheep"

French poet Jean Molinet's account of the Battle of Bosworth claimed Richard was killed by a blow to the head



Possibly fatal wound, most likely caused by a halberd or poleaxe, before



Another potential killer blow, a blade penetrating the back of the head

THE SKELETON

"That bottled spider, that foul bunch-back'd toad!"

In Shakespeare's Richard III, the king was a deformed hunchback. The real king had scoliosis of the spine which would have made one shoulder higher than the other

"See how I am bewitch'd: behold mine arm is, like a blasted sapling, wither'd up"

Despite Shakespeare's portrayal, the real Richard was strong enough to lead men into battle and did not have a withered arm

"Killed the boar, he shaved his head"

Guto'r Glynn, Welsh poet, described the death of the "boar" which referred to the king's standard and possibly the desecration of his body. The body shows signs of being stabbed through the buttock after death

THE DESCENDANT

Michael Risen was surprised to learn he was a 17th generation nephew of the last English king to die in battle. His DNA was crucial in establishing a match



But I, that am not shaped for sportive tricks,
Deform'd, unfinish'd, sent before my time
Into this breathing world, scarce half made up,-
I am determined to prove a villain

A horse! A horse! My kingdom for a horse!

Herbs, Potions, Poisons

thy uncle stole, With juice of cursed **hebenon** in a vial,
And in the porches of my ears did pour . . .

HENBANE
Hyoscyamus niger



Romeo and Juliet:

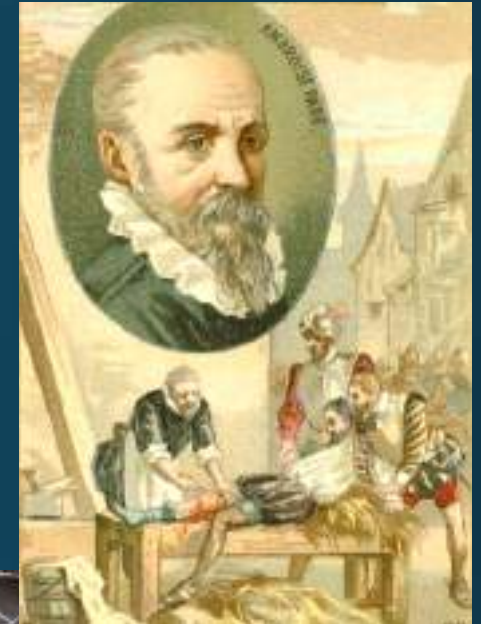
O, mickle is the powerful grace that lies
In herbs, plants, stones, and their true qualities:
For nought so vile that on the earth doth live
But to the earth some special good doth give.

Friar Lawrence (cf Paracelsus)

Poultices



Servant. I'll fetch some flax and **whites of eggs**
To apply to his bleeding face. Gloucester in *King Lear* .



Ambrose Pare

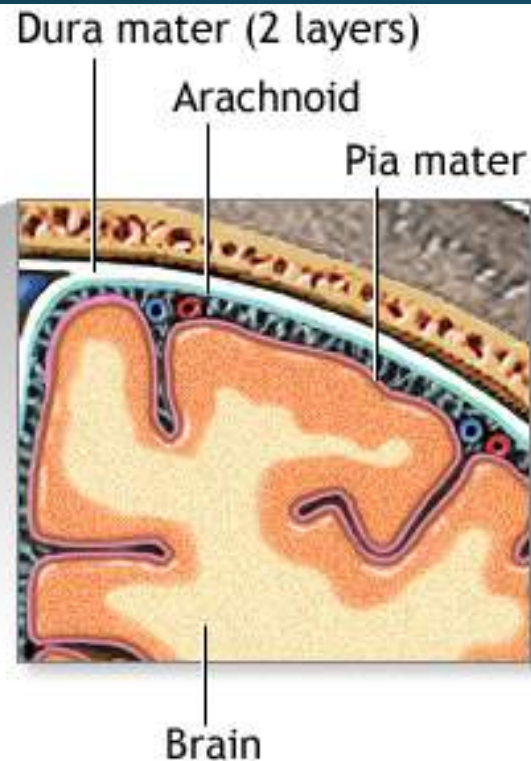
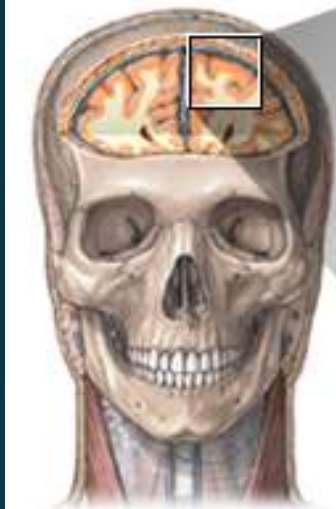
Peaseblossom,
Mustardseed
Cobweb,
Moth,
*fairies attending on
Titania*



I shall desire of you more acquaintance, good Master Cobweb
If I cut my finger, I shall make bold with you.

Bottom in Midsummer Night's Dream,

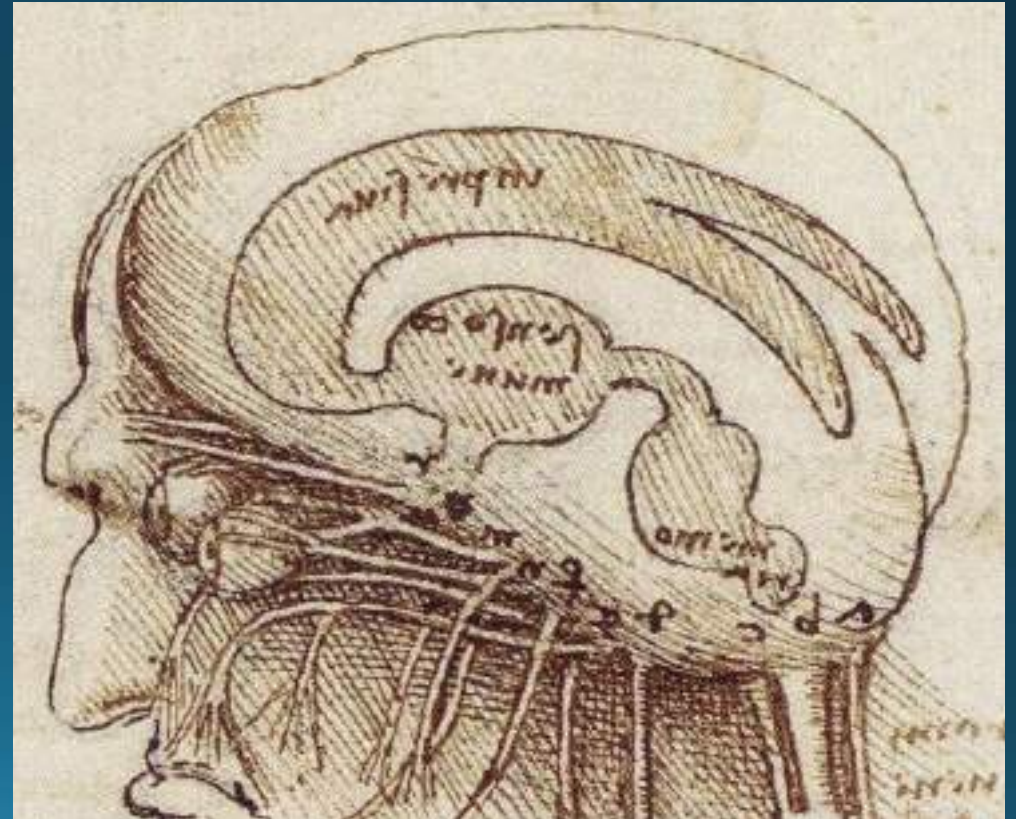
The meninges are the membranes covering the brain and spinal cord



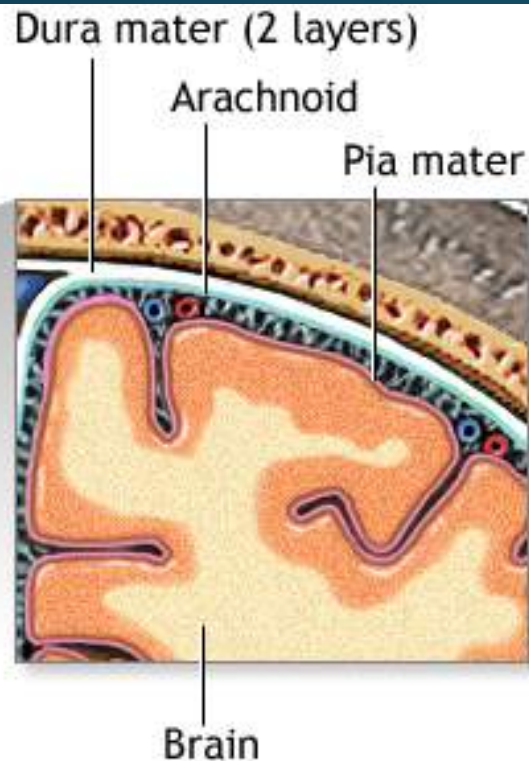
ideas, apprehensions, motions, revolutions : these are begot in **the ventricle of memory**, nourished in the **womb of pia mater**, and delivered upon the mellowing of occasion: *Holofernes. Love's Labour's Lost*

Clown... one of thy kin has a most weak pia mater.
Twelfth Night,

Thersites. I will buy nine sparrows for a penny, and his pia mater is not worth the ninth part of a sparrow.
Troilus and Cressida, II, i, 68



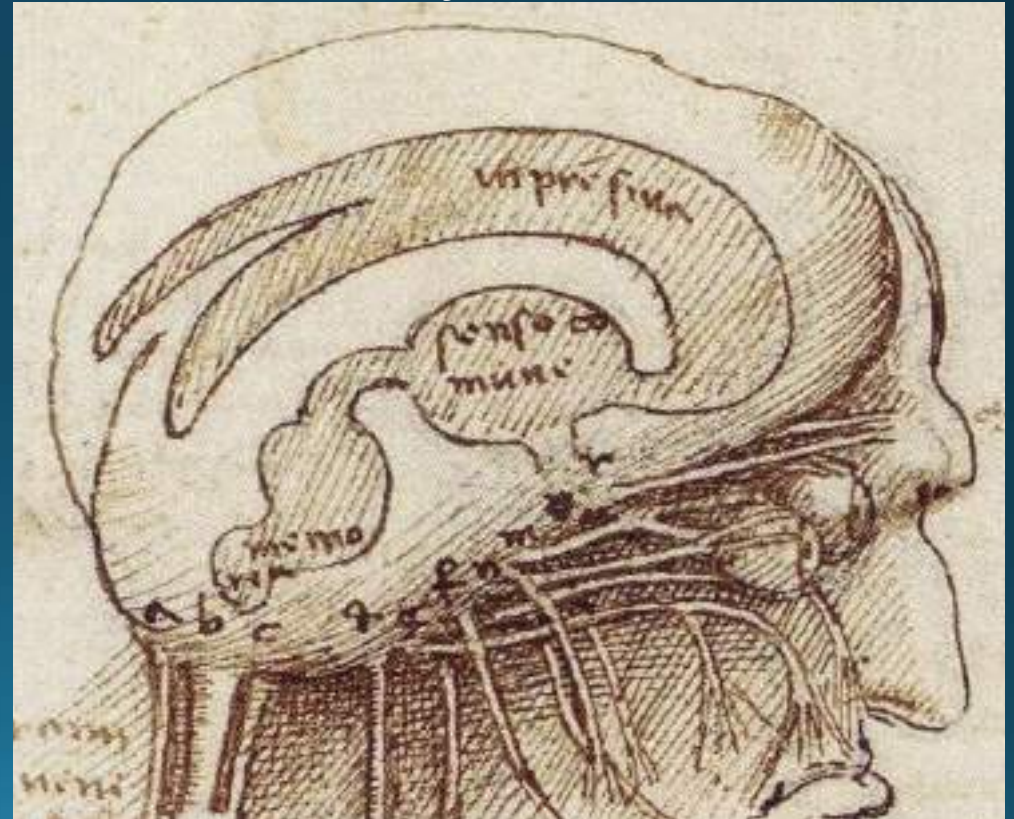
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Troilus and Cressida, II, i, 68



A plague on both your houses

Mercutio in *Romeo and Juliet*

The Plague –
London 1590 – 1665

33,000 deaths in 1603

Berowne. Write 'Lord have mercy on us' on those three;
They are infected; in their hearts it lies;
They have the plague, and caught it of your eyes.

Love's Labour's Lost, V, i



Malaria – Ague - Miasma

He is so shak'd of a burning quotidian tertian
that it is most lamentable to behold

Mistress Quickly – final illness of Falstaff in King Henry V

Worse than the sun in March
This praise doth nourish agues

Hotspur in 1 King Henry IV

The blessed gods
Purge all infection from our air

The Winter's Tale



Rheumatics – due to damp?

Othello asks Desdemona to lend him her handkerchief,
'I have a salt and sorry rheum offends me'

the winds . . . Have sucked up from the sea
contagious fogs . . .

That **rheumatic diseases** do abound

Titania A Midsummer Night's Dream.

A pox of this gout, or a **gout** of this pox
For the one or the other plays the rogue
with my great toe

Falstaff



Rheo – Gk = Flow



Gutta = L. drop



The fringed curtains of thine eye advance,
And say what thou seest yond.

Prospero in *The Tempest*



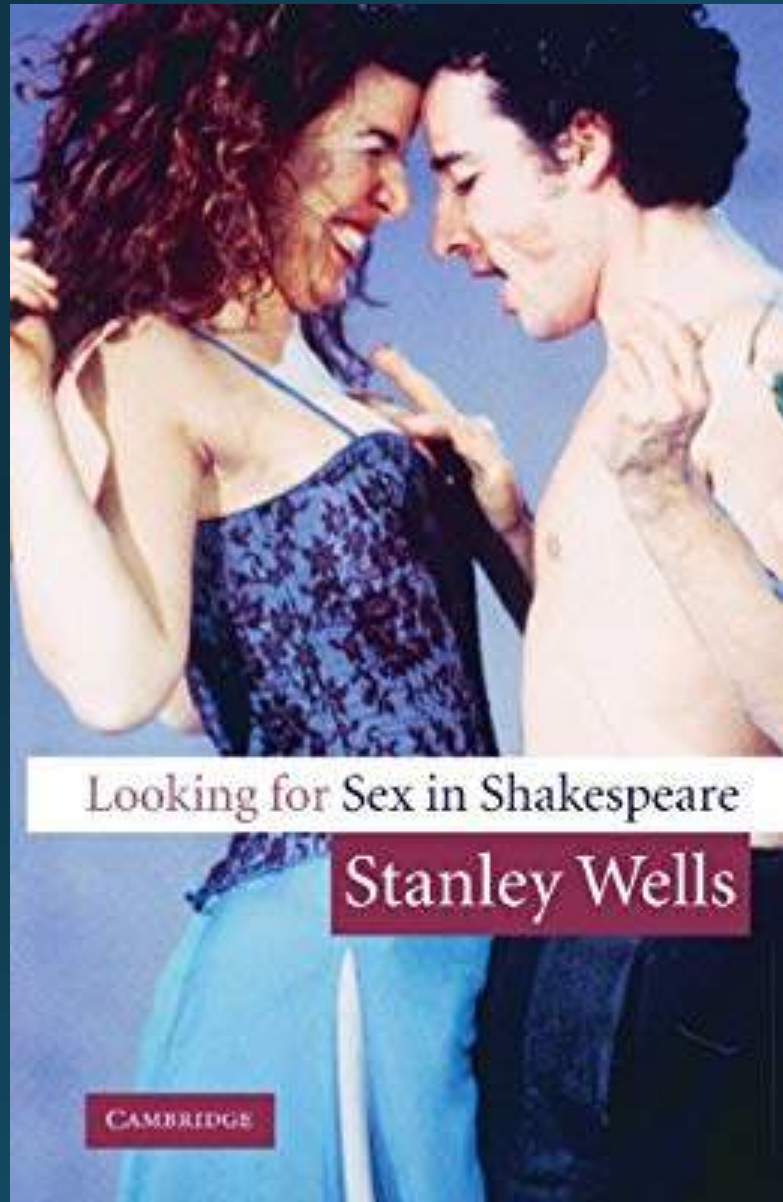
Mine eyes smell onions
Alls Well that Ends Well



The Merchant of Venice Act

THE
And others, when the bagpipe sings i' the nose,
Cannot contain their urine: f

VENICE
William Shakespeare



Ambiguity and Double Meanings

Congress	Male Genitories	Female Genitories
Execution	Lance	Lap
Horsemanship	Instrument	Cut
Groping	Prick	Medlar
Foining	Tail	Venus Glove
Pricking	Three inch fool	Pillicock Hill
	Dribbling dart of love	Nothing



Lady, shall I lie in your **lap**?
No, my lord.
I mean, my head upon your **lap**?
Ay, my lord.
Do you think I meant **cuntry matters**?
I think **nothing**, my lord.
That's a fair thought to lie between maids' legs

By her fine foot, straight leg and quivering thigh
And all demesnes that there adjacent lie,

Mercutio



Viola's letter in *Twelfth Night*



- **Malvolio**. By my life, this is my lady's hand
- these be her very C's, her U's 'N her T's
- and thus makes she her great Pee's.

death,
The **undiscovered country** from whose bourne
No traveler returns, *Hamlet*

Shakespeare's burial place



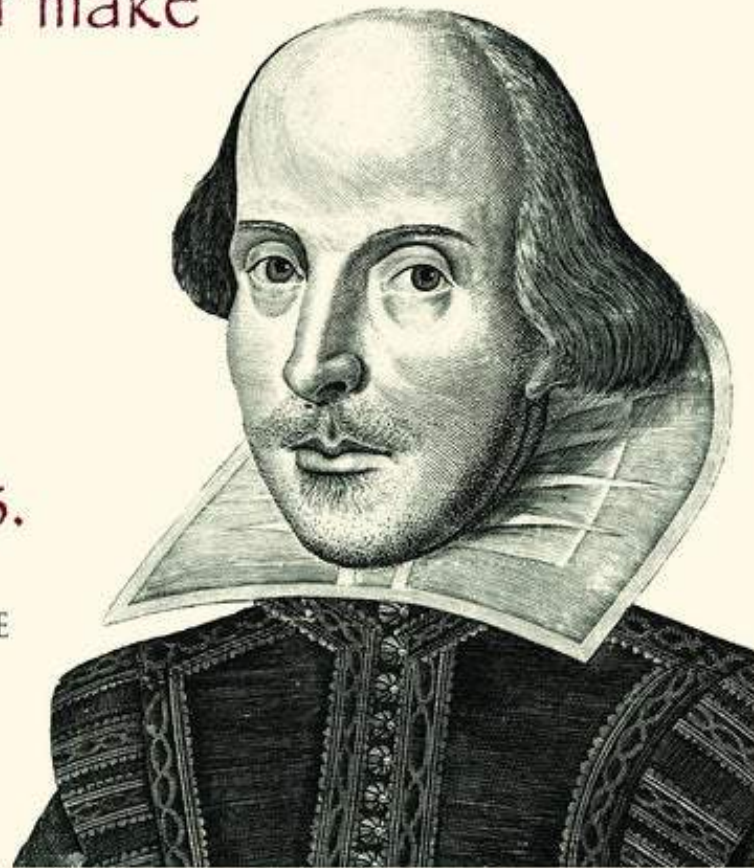
Holy Trinity Church in Stratford-upon-Avon

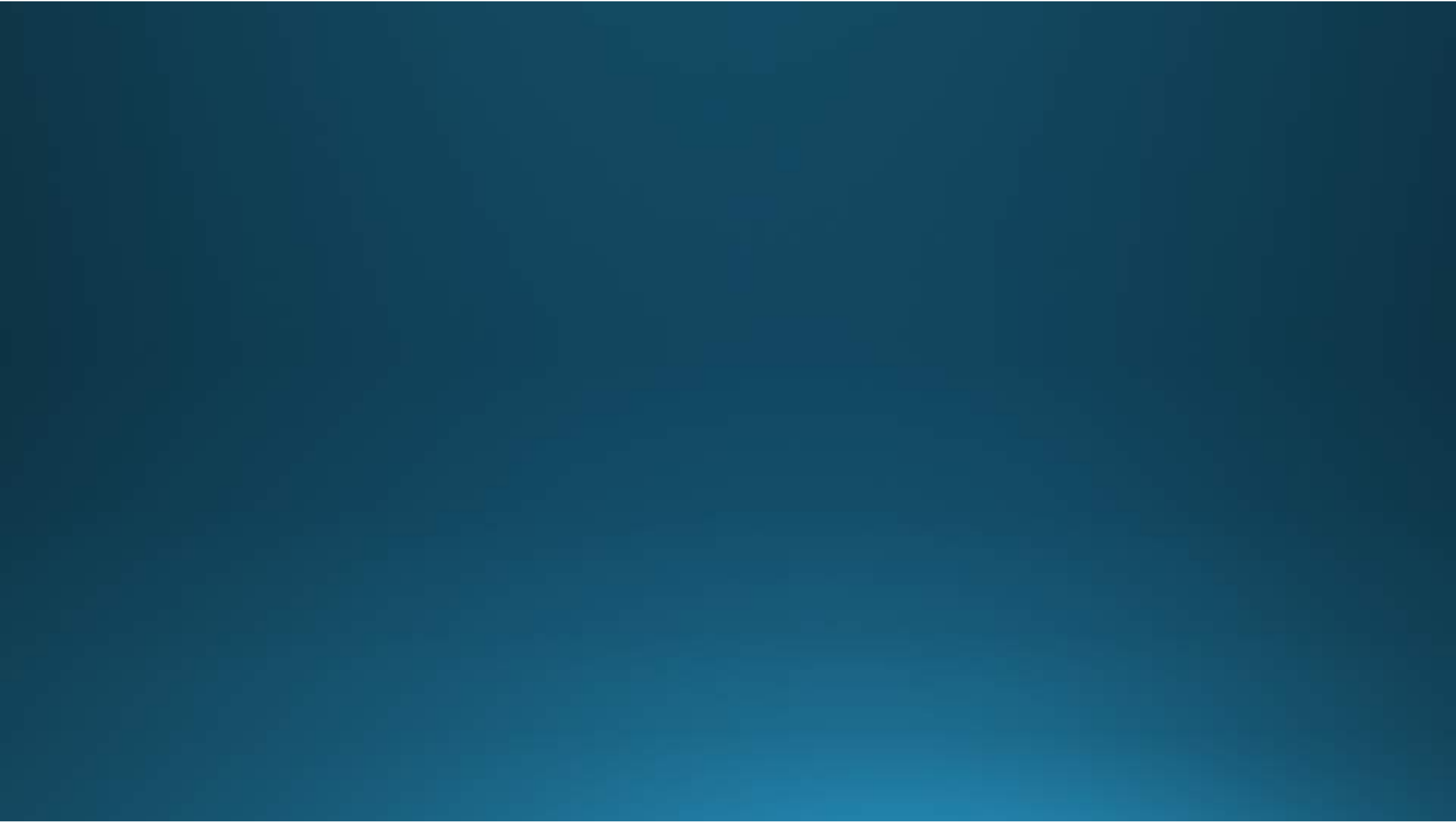


Good friend, for Jesus' sake forbear
To dig the dust enclosed here.
Bless'd be he that spares these stones
And curs'd be he that moves my bones

I can no other answer make
but thanks,
and thanks,
and ever thanks.

TWELFTH NIGHT, SHAKESPEARE
ACT III, SCENE 3





Caduceus or Rod of Aesculapius ?

- lose all the serpentine craft of thy **caduceus**, if ye take not
- that less-than-little wit from them that have it .
 - Thersites in *Troilus and Cressida*

now this matter must be look'd to,
For her relapse is mortal.

And **Aesculapius** guide us!

Cerimon in *Pericles, Prince of Tyre*



IN THE RED CORNER



THE HOUSE OF LANCASTER



Henry IV



Henry V



Henry VI

IN THE WHITE CORNER



HOUSE OF YORK



Edward IV



Edward V



Richard III

OBSER. XIX.

Mrs Hall of Stratford my wife being miserably tormented with the collick, was cured as followeth. *Rx diaphan. diacatholici ana ounce i. p℥. Ho' and ʒ ii. sl. Rwa ounce i. Lect. q. s. f Clyst.* this injected gave her two stooles, yet the pain continued being but little mitigated, therefore I appointed to inject a pint of sack made hot, this presently brought forth a great deal of wind, and

or aquavita (which is next hand) ʒ vi. Camphire ʒ i. boyl them a little till the Camphire be dissolved, adding whilest hot, red Saunders pulverized ʒ i ʒ. a cloth was wet in this liquor and applyed hot.

OBSER. XXI.

Mary Wilson aged 22. afflicted with a Heetick cough, obstructions of her courses and weaknesse, was thus cured. There

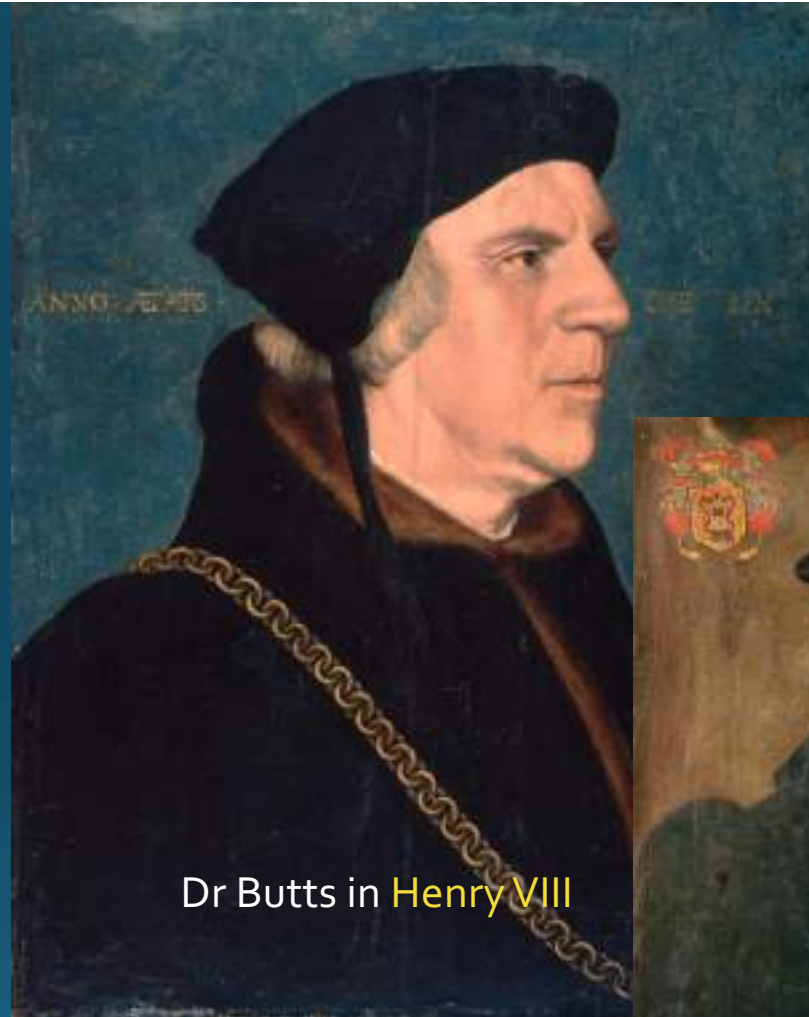


In Shakespeare's *King Lear* III.iv (the storm scene) Edgar, disguised as "poor Tom", responds to Lear's "'twas this flesh begot / Those pelican daughters" with the enigmatic jingle: "Pillicock sat on Pillicock hill: / Alow, alow, loo, loo!" (74-77). Most editors, including

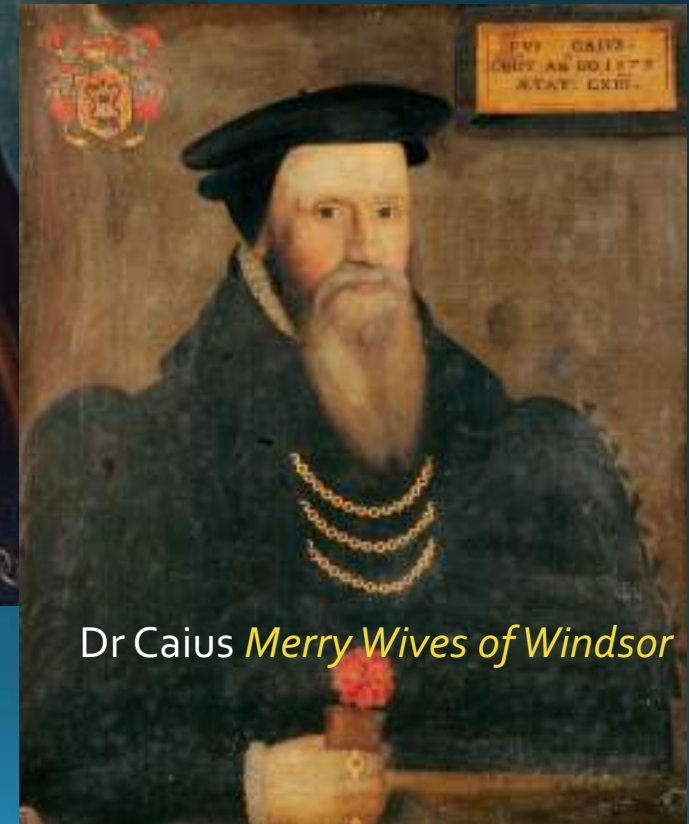


Shakespeare's Physicians

- Doctor in *King Lear*
- English doctor in *Macbeth*
- Scots doctor in *Macbeth*
- Cornelius, physician in *Cymbeline*
- Cerimon, a lord of Ephesus and physician in *Pericles Prince of Tyre*
- Gerard de Narbon in *All's Well That Ends Well*,
 - dead but represented by clever daughter Helena



Dr Butts in *Henry VIII*



Dr Caius *Merry Wives of Windsor*

Melancholy



TREATISE OF MELANCHOLIE. 7C.a

CONTAINING THE CAUSES thereof, & reasons of the strange effects it worketh in our minds and bodies: with the phisicke cure, and spirituall consolation for such as haue thereto adioyned an afflicted conscience.

The difference betwixt it, and melancholie with diuerse philosophicall discourses touching actions, and affections of soule, spirit, and body: the particulars whereof are to be seene before the booke.

By T. Bright Doctor of Phisicke.

*x. dona:
ff:
Amo dom
1628.*



*Surpys
non tunc lumen
plectari sinu
R*

Imprinted at London by Thomas Vautrol-
lier, dwelling in the Black-
friars. 1586.

Neurosis / hallucination



- Will all great Neptune's ocean wash this blood clean from my hand?



Is this a dagger which I see before me,
or art thou but a dagger
of the mind,
a false creation,
proceeding from the
heat oppressed brain.

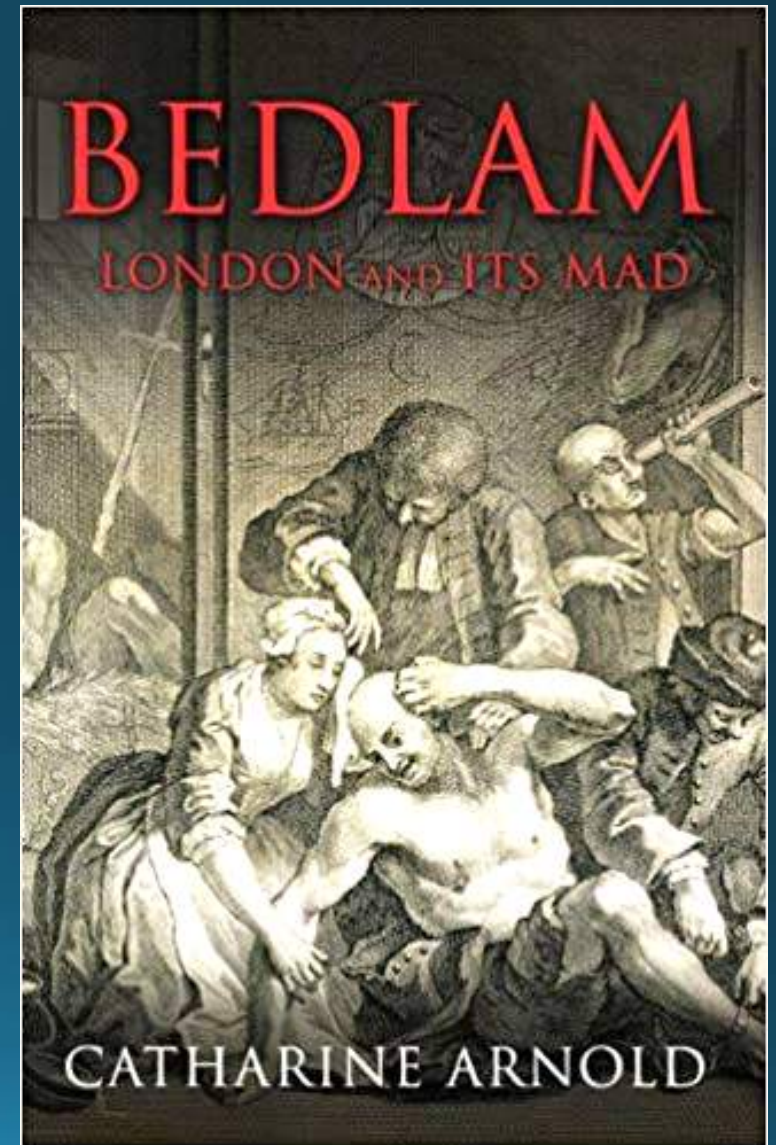
King Lear



Have more than thou showest
Speak less than thou knowest
Lend less than thou owest



The country gives me . . . precedent
Of **Bedlams** **beggars**, who, with roaring voices
Edgar in *King Lear*



Hamlet – mad??

As I perchance shall think it meet
to put an antic disposition on't

Hamlet

- Though this be madness, yet there is method in't
Polonius



Syphilis

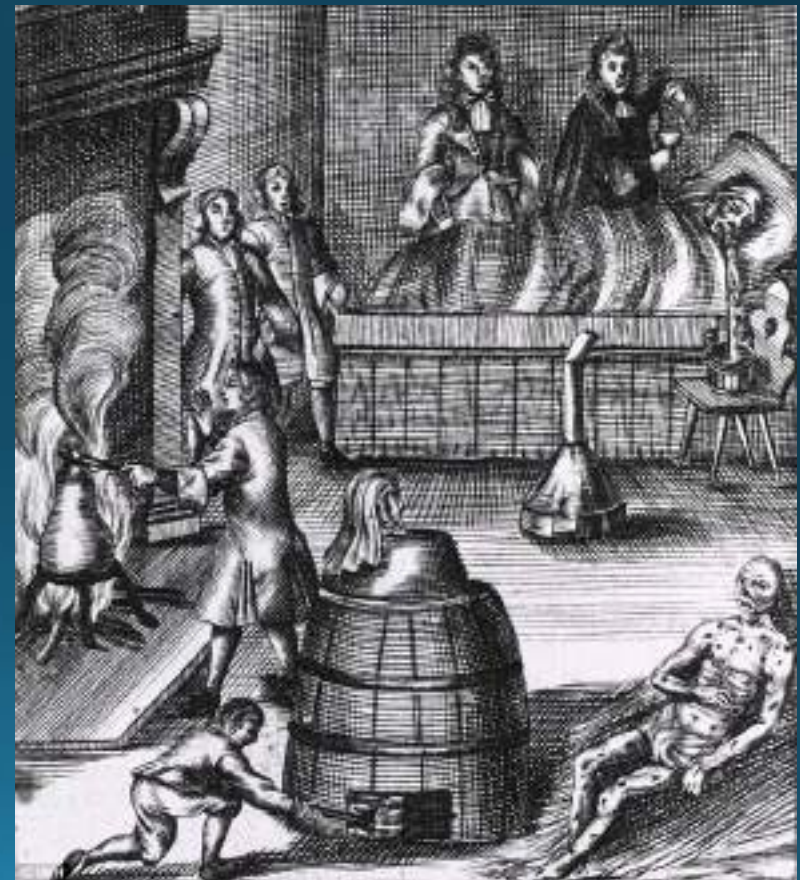


“After this, the vengeance on the whole camp!
Or, rather, the **Neapolitan bone-ache**!
For that, methinks, is the curse depending on those
that war for a **placket**,”

Troilus and Cressida

“Why masters, ha’ your **instruments** been in Naples,
that **they speak i’ the nose thus.**”

Othello



Epilepsy

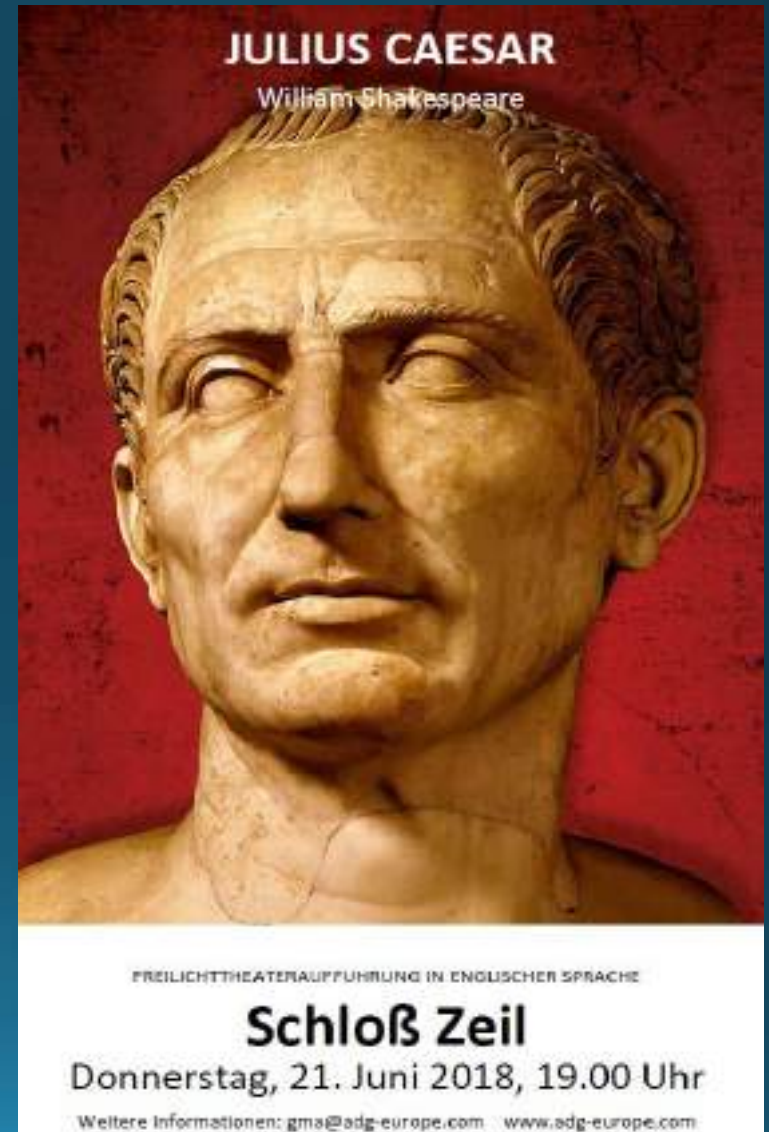
Julius Caesar
Othello
MacBeth

Casca: He fell down in the market-place, and foamed at mouth, and was speechless.

Brutus: 'Tis very like: he hath **the falling-sickness**.

And when the fit was on him I did mark
How he did shake. 'Tis true, this god did shake.

Cassius to Brutus



Pregnancy and Childbirth

CAPULET

My child is yet a stranger in the world;

She hath not seen the change of fourteen years,

Let two more summers wither in their pride,

Ere we may think her ripe to be a bride.

PARIS Younger than she are happy mothers made.

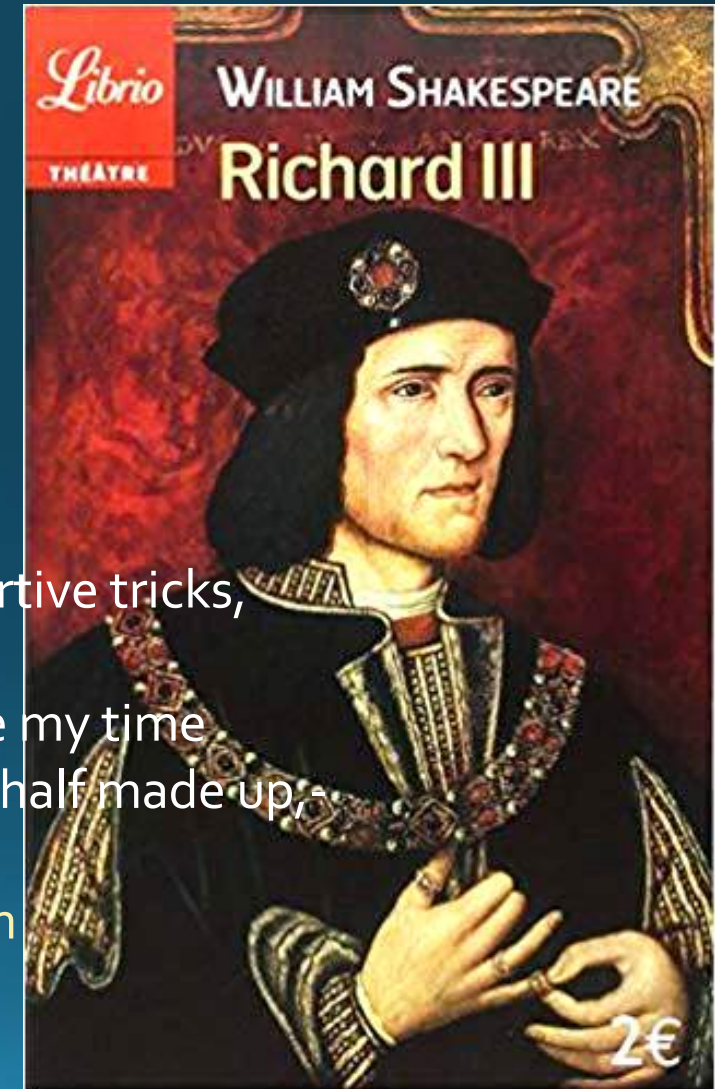
CAPULET And too soon marr'd are those so early made



A horse! A horse! My kingdom for a horse!



But I, that am not shaped for sportive tricks,
Deform'd, unfinish'd, sent before my time
Into this breathing world, scarce half made up,
I am determined to prove a villain



'Oh beauty
Till now I never knew thee'

- 1509 Henry 18, marries Katherine of Aragon 24
- 1510 Stillborn daughter
- 1511 Son lived 2 months
- 1513 Child died at birth
- 1514 Premature delivery died
- 1515 Princess Mary – large projecting forehead,
thin hair, grating voice
- 1517 Child stillborn
- 1533 Anne Boleyn delivers Elizabeth
- 1534 Miscarriage
- 1535 Stillborn boy



WILLIAM SHAKESPEARE
HENRY VIII



Henry's 'sore legge'

Herbs, Potions, Poisons

Romeo and Juliet:

O, mickle is the powerful grace that lies
In herbs, plants, stones, and their true qualities:
For nought so vile that on the earth doth live
But to the earth some special good doth give.

Friar Lawrence (cf Paracelsus)

Apothecary: Put this in any liquid thing you will
And drink it off; and, if you had the strength
Of twenty men, it would dispatch you straight.

Romeo: There is thy gold, worse poison to men's souls,
Doing more murders in this loathsome world
Than these poor compounds.



Herbs, Potions, Poisons

Upon my secure hour thy uncle stole

With juice of cursed **hebenon** in a vial,

And in the porches of my ears did pour . . .

That swift as quicksilver it courses through

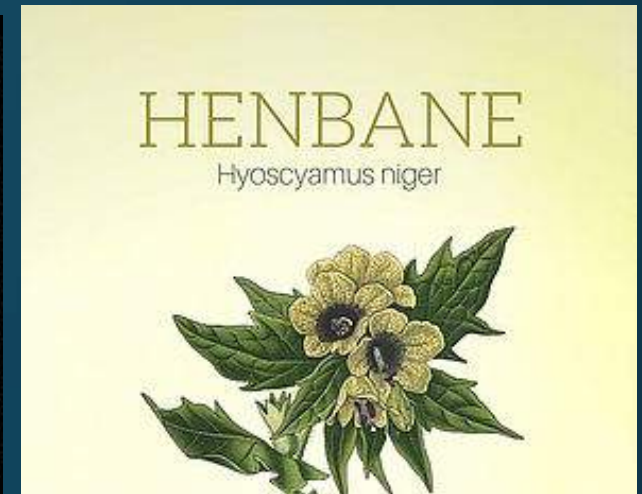
The natural gates and alleys of the body

And with a sudden vigor doth posset

And curd, like eager droppings into milk,

The thin and wholesome blood. So did it mine.

The Ghost in Hamlet



*For **Hamlet***

Pansies - thought

Rosemary – remembrance

*For the **King***

Fennel – flattery

Columbine – thanklessness

*For the **Queen***

Rue - for sorrow (aka herb of grace)

Daisy – light of love.

*For **neither King nor Queen***

Violet – faithfulness

Ophelia John Everett Milais



The Seven Ages of Man

"All the world's a stage,
And all the men and women
merely players,"



Adam

Though I look old, yet I am strong and lusty;
For in my youth I never did apply
Hot and rebellious liquors in my blood,
Nor did not with unbashful forehead² woo
The means³ of weakness and debility;
Therefore my age is as a lusty winter,
Frosty, but kindly.

Laurence Olivier Elisabeth Bergner

William Shakespeare's

As You Like It



The Undiscovered Country - Death



Conscience makes cowards of us all . . .
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?

Hamlet

Antipholus What's her name?

Dromio Nell, sir; but her name and three quarters, that's **an ell and three quarters**, will not measure her from hip to hip.

Antipholus Then she bears some breadth?

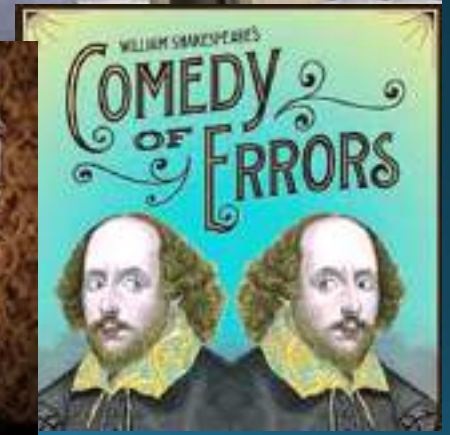
Dromio No longer from head to foot than from hip to hip: she is spherical, like a globe; I could find out countries in her.

Antipholus In what part of her body stands Ireland?

Dromio Marry, in her buttocks: I found it out by the **bogs**.

Antipholus Where stood . . . , the **Netherlands**?

Dromio Oh, sir, I did not look so low.



A prostitute Doll Tearsheet checks that Falstaff is dead



I put my hand into the bed and felt them, and they were cold as any stone; then I felt to his knees, and so upward and upward, and all was as cold as any stone.

King Henry V, II, iii, 24

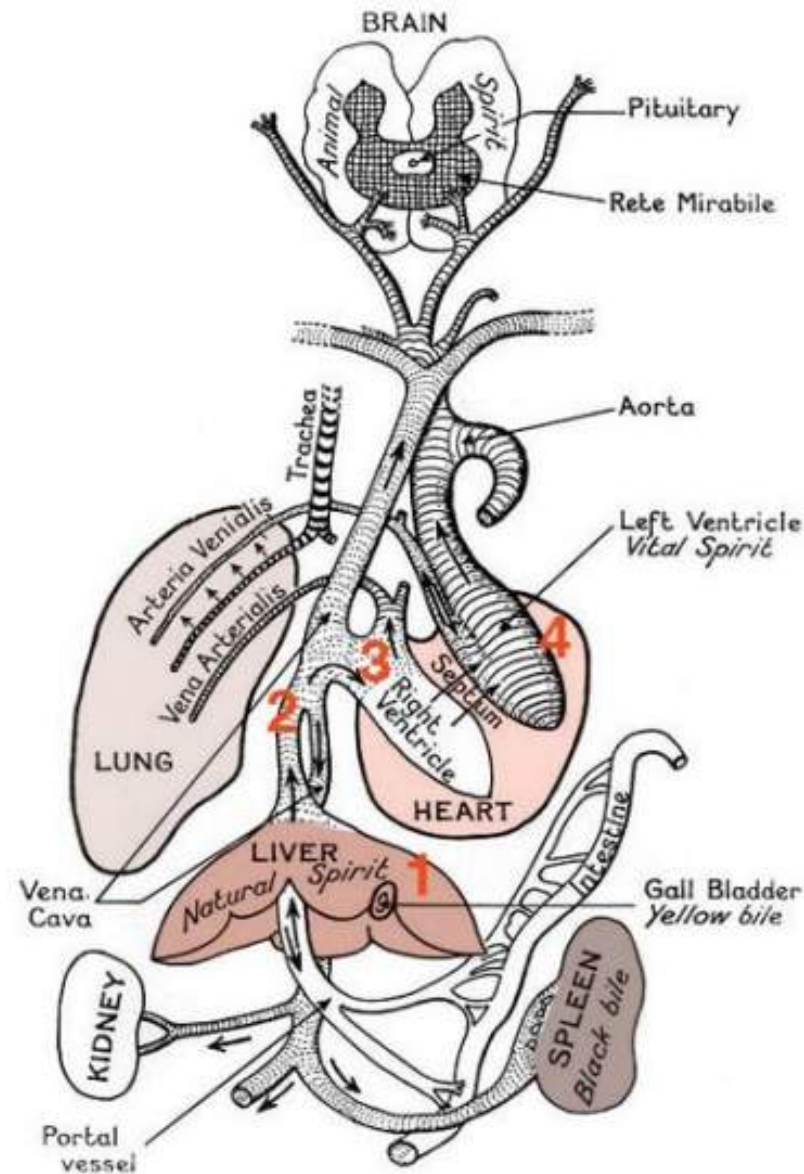
Capulet to his weepy daughter

What, still in tears?
Evermore show'ring? In one little body
Thou counterfeit'st a bark,⁶ a sea, a wind;
For still thy eyes, which I may call the sea,
Do ebb and flow with tears. The bark thy body is,
Sailing in this salt flood; the winds thy sighs,
Who, raging with thy tears, and they with them,
Without a sudden calm will overset
Thy tempest-tossed body.



Galen's Physiological System

- Three primary organs: liver, heart, brain
- Pneuma: life forces
 - Animal Spirit/brain
 - Vital Spirit/heart
 - Natural Spirit/liver



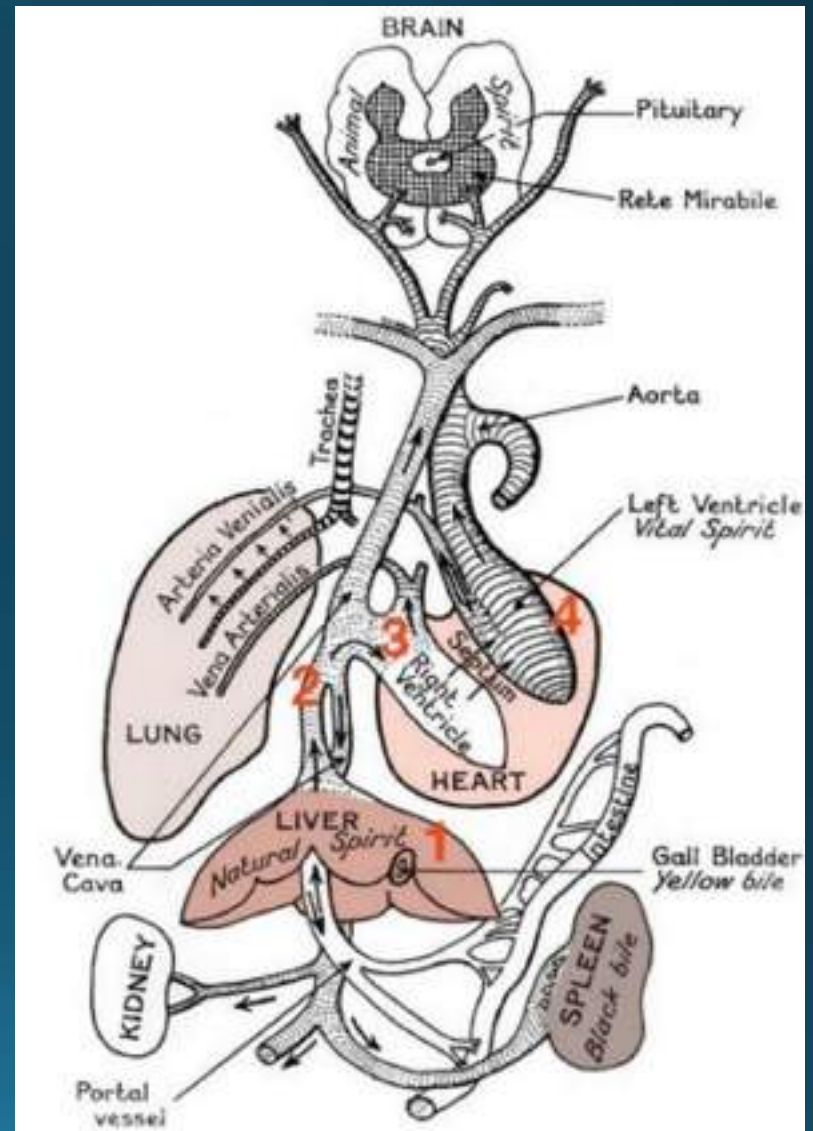
The Sovereign Thrones – the liver

How many cowards, whose hearts are all as false
As stairs of sand, wear yet upon their chins
The beards of Hercules and frowning Mars;
Who, inward search'd, have livers white as milk!

Bassanio in *Merchant of Venice*

Thou lily-liver'd boy ...
... Those linen cheeks of thine
Are counsellors to fear.

Macbeth



Galen's theory of circulation

Scrofula = Tb The King's Evil



Angel – Henry VIII - 1509

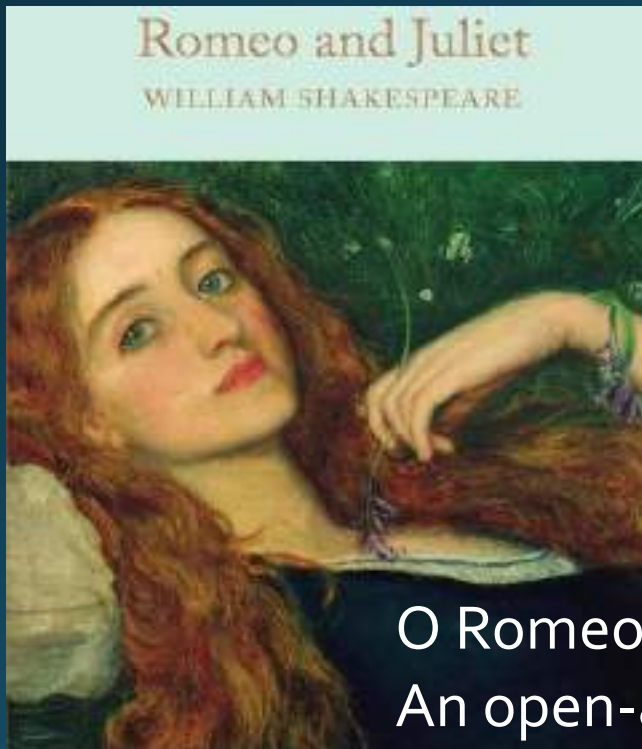
Himself best knows; but strangely-visited people,
All swoln and ulcerous,¹⁷ pitiful to the eye,
The mere despair of surgery, he cures,
Hanging a golden stamp about their necks,
Put on with holy prayers; and 'tis spoken,
To the succeeding royalty he leaves
The healing benediction.

Malcolm in *Macbeth*



MERCUTIO

If love be blind, love cannot hit the mark.
Now will he sit under a **medlar** tree
And wish his mistress were that kind of fruit
As maids call **medlars**, when they laugh alone.



O Romeo, O, that she were
An open-arse, thou a pop'rin pear.



'Fondling,' she saith . . .

I'll be a park, and thou shalt be my deer;

Feed where thou wilt, on mountain or in dale:

Graze on my lips; and if those hills be dry,

Stray lower, where the pleasant fountains lie . .

·
Sweet bottom-grass and high delightful plain,

Round rising hillocks and . . . (*censored*)

Venus and Adonis



Shakespeare, William



Herbs, Potions, Poisons

Lafeu: They say that miracles are past; and we have our philosophical persons to make modern and familiar things **supernatural** and **cause less** . . .

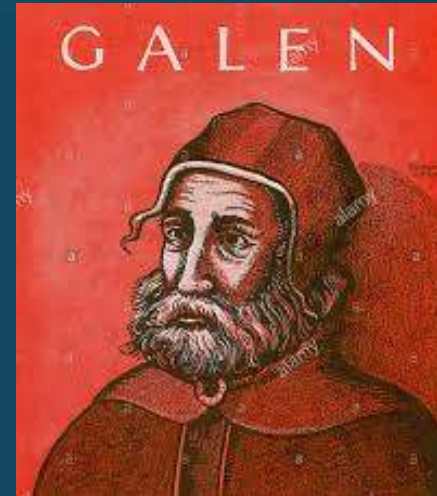
Paroles: Why, 'tis the rarest argument of wonder, that hath shot out in our latter times.

Bertram: And tis so.

Paroles: So I say, both of **Galen** and **Paracelsus**.

Lafeu: Of all the learned and authentic fellows . . .

All's Well That Ends Well

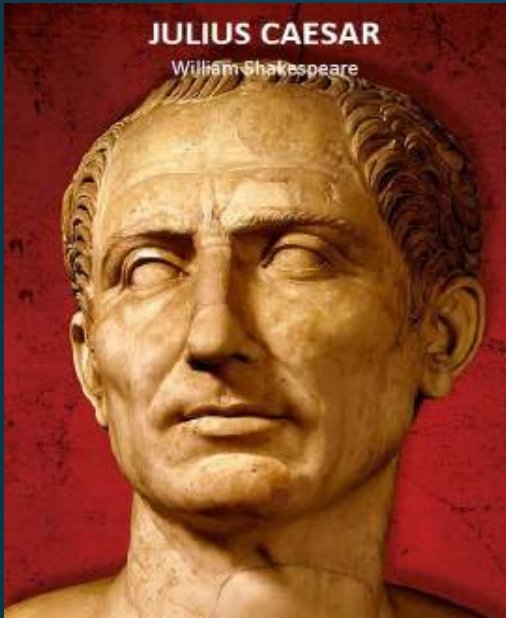


Elizabethan CT scan ?



Macbeth. Strange things I have in head that will to hand,
Which must be acted ere they may be scann'd.

Macbeth, III, iv, 139



Casca: He fell down in the market-place, and foamed at mouth, and was speechless.
Brutus: 'Tis very like: he hath **the falling-sickness**.

My lord is fallen into an **epilepsy**
This is his second fit. He had one yesterday

Rub him about the temples

No, forbear
The lethargy must have his quiet course
Iago and Cassio



The Pulse and Palpitations

Leontes. I have tremor cordis on me; my heart dances,
But not for joy, not joy.

The Winter's Tale, I,

Hamlet. Sir, in my heart there was a kind of fighting
That would not let me sleep.

Hamlet,



Pinch. Give me your hand, and let me feel your pulse.
Antipholus. There is my hand, and let it feel your ear.
Comedy of Errors, IV,





When daisies
pied and violets blue,
And lady-smocks all silver-white,
And cuckoo-buds of yellow hue,
Do paint the meadows with delight

Love's Labour's Lost V ii



If music
be the food of love, play on; . . .
Oh, it came o'er my ear like the sweet sound,
That breathes upon a bank of violets,
Stealing and giving odour!

Twelfth Night I i