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SCIENCE FICTION IN MEDICAL EDUCATION

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MEDICAL FUTURIST



AMEE2018

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SCIENCE FICTION IN



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MEDICAL EDUCATION

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I SAY I AM A FAN OF SCIENCE FICTION...
... MY WIFE THINKS I HAVE AN ADDICTION!

I THINK SCIENCE FICTION...

PREPARES ME FOR THE FUTURE
IT HELPS ME ASK IMPORTANT QUESTIONS
ABOUT THE FUTURE

LIKE... WHAT MAKES US MORE
HUMANISTIC THAN ROBOTS?
... IS EARTH OUR FINAL DESTINATION?

THESE ARE CHALLENGING QUESTIONS, BUT
THESE DISCUSSIONS HELP US PREPARE FOR
WHAT IS COMING NEXT!

LET'S HAVE A THOUGHT EXPERIMENT:

WHAT IF AN ADVANCED ALIEN
CIVILISATION ARRIVED ON EARTH?

WITH AMAZING SPACESHIPS AND
SHINEY ARMOUR,
AND BEASTS..
.. AND SPEAK
UNKNOWN
TONGUES...





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I THINK PEOPLE WOULD BE AMAZED FIRST, THEN FEAR FOR THEIR LIFE!



THIS IS WHAT MOCTEZUMA THE AZTEC LEADER THOUGHT WHEN HE SAW SPANISH CORTÉS SHIPS (IN 1519!) FOR THE FIRST TIME WITH BEASTS (DOGS)

THE INTENTION OF CORTÉS TO GO THERE WAS TO FIND THE FICTIONAL GOLDEN CITY...

... HE BROUGHT MANY BIOLOGIST WITH HIM AND THEY PUSHED THE BOUNDARIES OF SCIENCE FURTHER AWAY...

EVEN THOUGH THERE WAS NO GOLDEN CITY!



THAT IS THE POINT OF SCIENCE FICTION, TO PUSH THE BOUNDARIES.. FURTHER.. AND FURTHER AWAY



WHEN I WAS 6 I WAS READING THE USBORNE CHILDREN'S DICTIONARY.. ABOUT THE HUMAN BODY I THOUGHT OF MOVIES LIKE AND IMAGINED I WOULD LEARN ANATOMY IN 3D...



BUT I BECAME A DOCTOR, AND TRIED TO LEARN 3D MODELS IN 2D!

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ONE DAY I WATCHED A VIDEO ONLINE OF
A HOLOGRAM OF THE HUMAN BODY...



I TRIED IT OUT...
I SAW A 3D HUMAN MODEL,
IT HAD A BEATING HEART.
I COULD REMOVE LAYERS...



IT WAS MINDBLOWING!

THAT IS WHEN I MET
SCIENCE FICTION.



HOPE THAT YOU MEET SCIENCE
FICTION TOO, AT LEAST ONCE IN YOUR LIFE!



TO FEEL THE TECHNOLOGY WAS SUBLIME

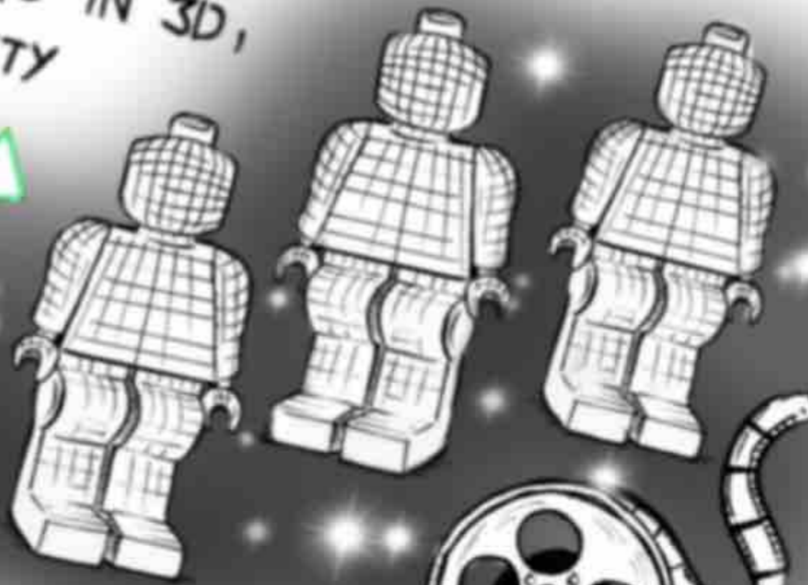
WHAT IS REAL, AND WHAT IS
SCIENCE FICTION?



MY SMART WATCH
HAS BETTER COMPUTING
POWER THAN THE APPLE
SPACESHIP HAD THAT BROUGHT
PEOPLE TO THE MOON
(AND I USE IT TO COUNT STEPS)



CHILDREN BUILD LEGO IN 3D,
IN AUGMENTED REALITY



I CAN BUY A TICKET TO MARS
(STILL SCIENCE FICTION, BUT THE
FIRST MARS MISSION IS IN 10 YEARS)

WE WILL BECOME A MULTI-PLANETARY
SPECIES!

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BUT THERE IS NO SCIENCE FICTION
WHEN YOU GO TO SEE THE GP/DOCTOR



THESE OFFICES
USE POST-IT
NOTES & STAMPS!



PATIENTS USE SCIENCE FICTION
TECHNOLOGIES AT HOME...

BUT NOT IN THE MOST IMPORTANT
INDUSTRY OF ALL... HEALTHCARE

THERE IS NO SCIENCE FICTION
IN HEALTHCARE:

1. HEALTHCARE IS NOT OPEN
TO INNOVATION

2. WE ARE THE BOTTLENECK OF
INNOVATION



↳ WE ARE SLOW!

DR LAENNEC (FRENCH PHYSICIAN 1800's)
INVENTED THE STETHOSCOPE... IT TOOK
30 YEARS TO SPREAD THIS IDEA

IT IS NOW THE SYMBOL OF MEDICINE...
NOW THERE ARE DIGITAL STETHOS



LISTEN AND RECORD
LUNG AND HEART SOUNDS
FROM A CONTINENT AWAY
(AND IT'S HALF THE COST)

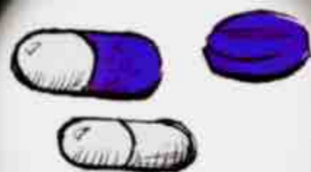
DIGITAL HEALTH:

1. EQUAL PATIENT DOCTOR
RELATIONSHIP

2. A RE-ORGANISATION OF
HEALTHCARE
.... YOU NEED TO BECOME THE
POINT-OF-CARE!

A CULTURE OF TRANSFORMATION,
WHERE DATA FROM DISRUPTIVE
TECHNOLOGY LEADS TO..

e.g DRONES DELIVERING
DRUGS (RWANDA)



3D PRINTED
DRUGS!

TECHNOLOGY
AND SENSORS
IN HOMES e.g CAR EARLY
WARNING LIGHTS



3. WE ARE AFRAID OF THE UNKNOWN

ROBOTS WILL NOT REPLACE US, BUT
MAY ENHANCE US!



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THE BEST SCIENCE FICTION
MOVIE IS... '2002 A SPACE ODESSY'

PLEASE WATCH IT,
IT IS ONLY 3 HOURS.

IT WAS SHOT 50 YEARS AGO,
YET STILL LOOKS SO FUTURISTIC



KUBICK WAS A GENIUS, HE DIDN'T
LOOK TO HOLLYWOOD, TO CREATE THE
FUTURE..

... HE LOOKED TO THOSE WORKING
ON THE FUTURE - NASA, IBM

FIRST COMPUTER, FIRST SPACE SHIP

THE SAME APPLIES TO PATIENT DESIGN

WE WANT TO TEACH STUDENT
HOW TO CARE FOR E-POWERED PATIENTS

BEING DIGITALLY LITERATE

- BRING TECH TO THE CLASSROOM

VR, HEALTH SENSORS = LET THE STUDENTS
EXPERIENCE THE FUTURE IN THE PRESENT

★ GAMIFY EDUCATION ★

EVERYONE LOVES PLAYING
GAMES, WHICH IS A CONCEPT
WHICH CAN BE USED IN EDUCAT.

THE WRITER OF 2002 SPACE ODESSY
GREW UP ON A FARM OVER 50 YEARS AGO..

HE ASKED HIMSELF 'WHAT IF'

YOU COULD BE THE NEXT
IT IS ABOUT THE URGE TO ASK

WHAT IF I COULD CHANGE THAT?



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