

THE VEILED THREAD

STEPHEN
K TWARTZ

We know cannot live in the past, but the past lives in us

CHARLES PERKINS

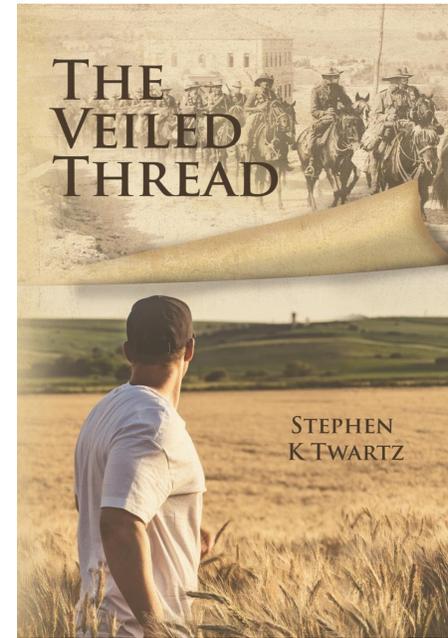
MY BACKGROUND

- ▶ 6th and 7th generation Australian
- ▶ Son of a WW2 Australian veteran and a country girl from NSW
- ▶ Grew up in the affluent 50s and the liberating 60s and 70s
- ▶ Childhood a mixture of city and country living
- ▶ Self admitted surfing tragic
- ▶ Geologist and believer in the philosophy of Gaia
- ▶ Have lived on four continents
- ▶ Regard one of the greatest privileges of my life to have lived in Bangladesh and experienced the wonderful resilience of the Bangladeshies
- ▶ Have recognized behaviours in myself without understanding their origin



THE STORY

- ▶ Inherited trauma
- ▶ A war
- ▶ The lives of two men, generations apart
- ▶ The degradation of one
- ▶ The Struggle of the Other to Understand the Things that Influenced his Approach to Life
- ▶ Action
- ▶ Adventure
- ▶ Drama



Inherited Trauma - 1



- ▶ The idea is:
 - ▶ trauma can leave a chemical mark on genes
 - ▶ Mark passed down to subsequent generations
 - ▶ Mark doesn't directly damage the gene;
 - ▶ No mutation.
 - ▶ Mechanism by which the gene is converted into functioning proteins, or expressed in the body and mind altered
 - ▶ Chemical compounds added to single genes that affect their activity called [epigenetic changes](#).
 - ▶ Chemical compounds attach to the DNA and remain as cells divide - can be passed down through generations.

Inherited Trauma - 2



- ▶ The Greek prefix epi- in epigenetics:
 - ▶ implies features that are "on top of" or "in addition to" the traditional genetic basis for inheritance

Inherited Trauma - 3



- ▶ **Trauma** can be defined as:
 - ▶ a psychological, emotional response to events or an experience that is deeply distressing or disturbing.

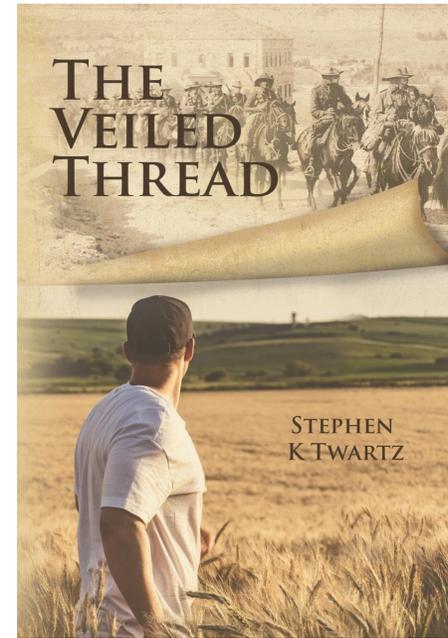
Inherited Trauma - 4



- ▶ **Study of children** still in the womb during the Dutch Hunger Winter at the end of World War II.
 - ▶ “epigenetic signature” on one of their genes linked to health factors later in life.
- ▶ **WWII concentration camp survivors**
 - ▶ Holocaust survivors and their children showed epigenetic changes on gene linked to stress.
 - ▶ Critics of the study

A WAR

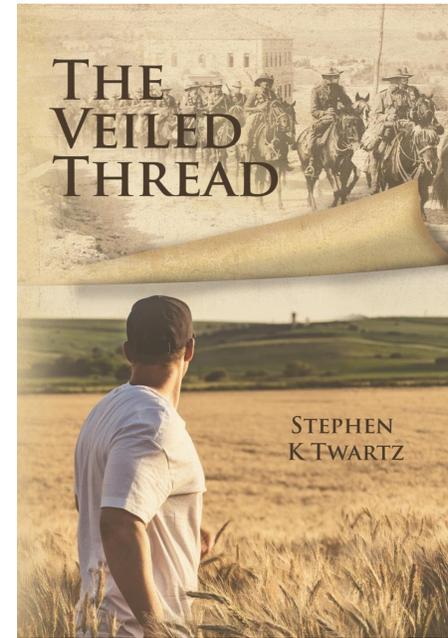
- ▶ World War 1
- ▶ Palestine
- ▶ The Australian Light Horse
- ▶ The Turks



THE LIVES of TWO MEN

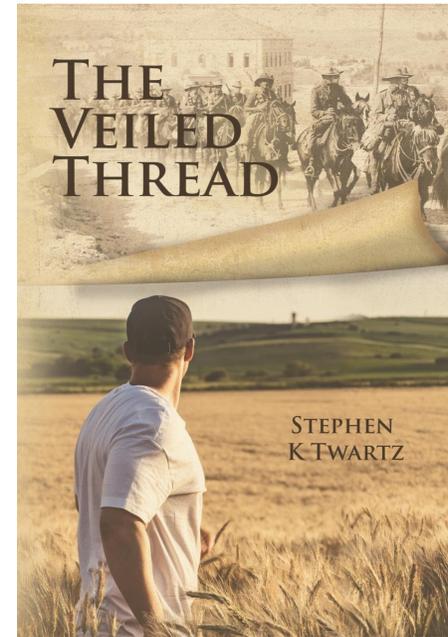
Generations Apart

- ▶ Grandfather
- ▶ Grandson
- ▶ They meet
- ▶ They bond



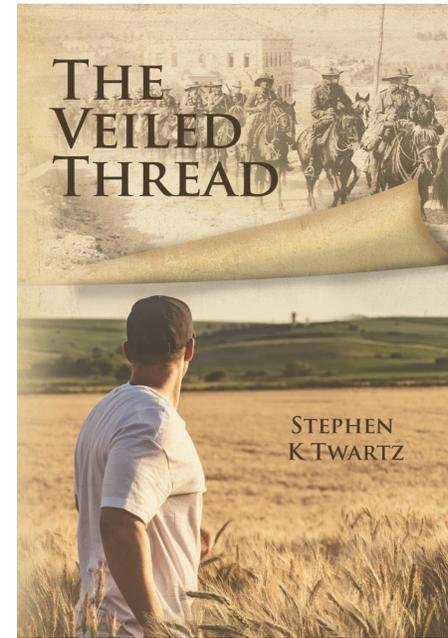
THE DEGRADATION OF ONE

- ▶ The horror of war
- ▶ The Great Depression
- ▶ The descent into a second world war
- ▶ Ruin



The Struggle of the Other to Understand the Things that Influenced his Approach to Life

- ▶ Disfunction - home, work, relationships
- ▶ The question - Why is my life like it is?

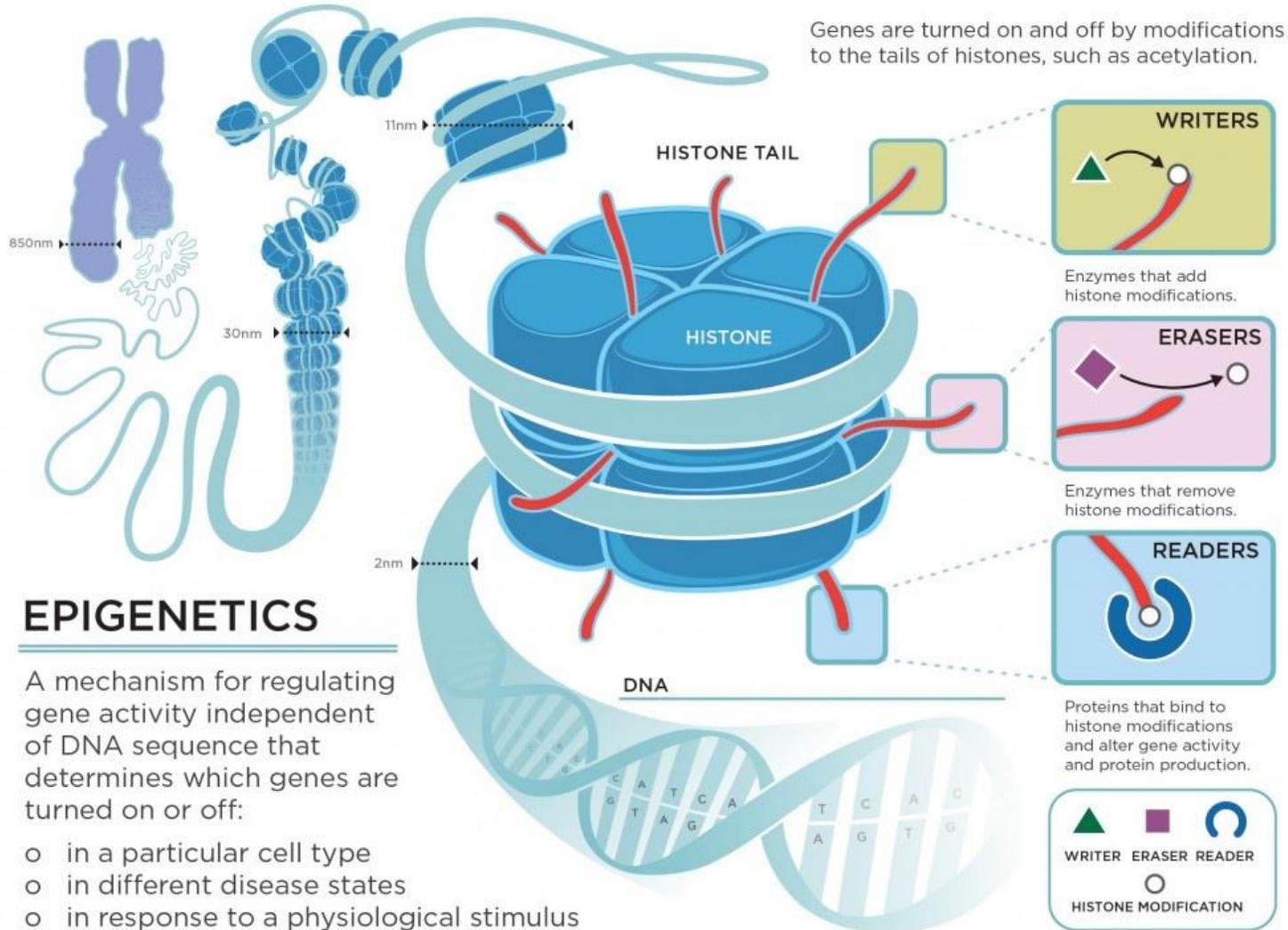


EPIGENETICS

CHROMOSOME

CHROMATIN FIBRE

NUCLEOSOME



EPIGENETICS

A mechanism for regulating gene activity independent of DNA sequence that determines which genes are turned on or off:

- o in a particular cell type
- o in different disease states
- o in response to a physiological stimulus

References

Epigenetics explained:

- ▶ https://www.youtube.com/watch?v=_aAhcNjmvhc
- ▶ <https://www.youtube.com/watch?v=JTBg6hqeUTg>
- ▶ <https://www.youtube.com/watch?v=Udlz7CMLuLQ>
- ▶ <https://www.youtube.com/watch?v=f1Pf5S8Nbfk>
- ▶ <https://www.youtube.com/watch?v=OkAMHQhabkU>
- ▶ <https://www.youtube.com/watch?v=SrqmuYvk3iQ>

Light Horse

- ▶ <http://www.lighthouse.org.au/>
- ▶ <https://www.youtube.com/watch?v=rn-7t4fXX7E>