Presentation for Consultant Oncologists – Birmingham 7th July 2003

B. Trower

Genotoxicity *"... ...Many studies have shown that radiofrequency microwave radiation and extremely low frequency fields cause increased DNA strand breakage and chromosome aberrations... "*

Prof. N. Cherry, Lincoln University

Many papers today report either chromosome/DNA or gene damage. In this presentation I have tried to follow the path to cancer from these damaged areas. It is possible that other factors may be necessary as well to induce cancer, such as environmental/industrial carcinogens: although these are absent in the laboratory experiments.

Microwave/radiofrequency radiation may also affect the "make up" and "balance" of cells by:

- Changing the blood-brain barrier.
- Producing heat-shock proteins.
- Changing cell potential – signal transduction – cell cycle timing – interference to the ATP double bond at the mitochondria DNA site.
- Reduce night time Melatonin (via small currents from calcite crystals in the pineal gland).
- Effect white blood cell function.
- Damage stem cells (which absorb radiation).
- Interfere with water bound layers around cells/tissue.

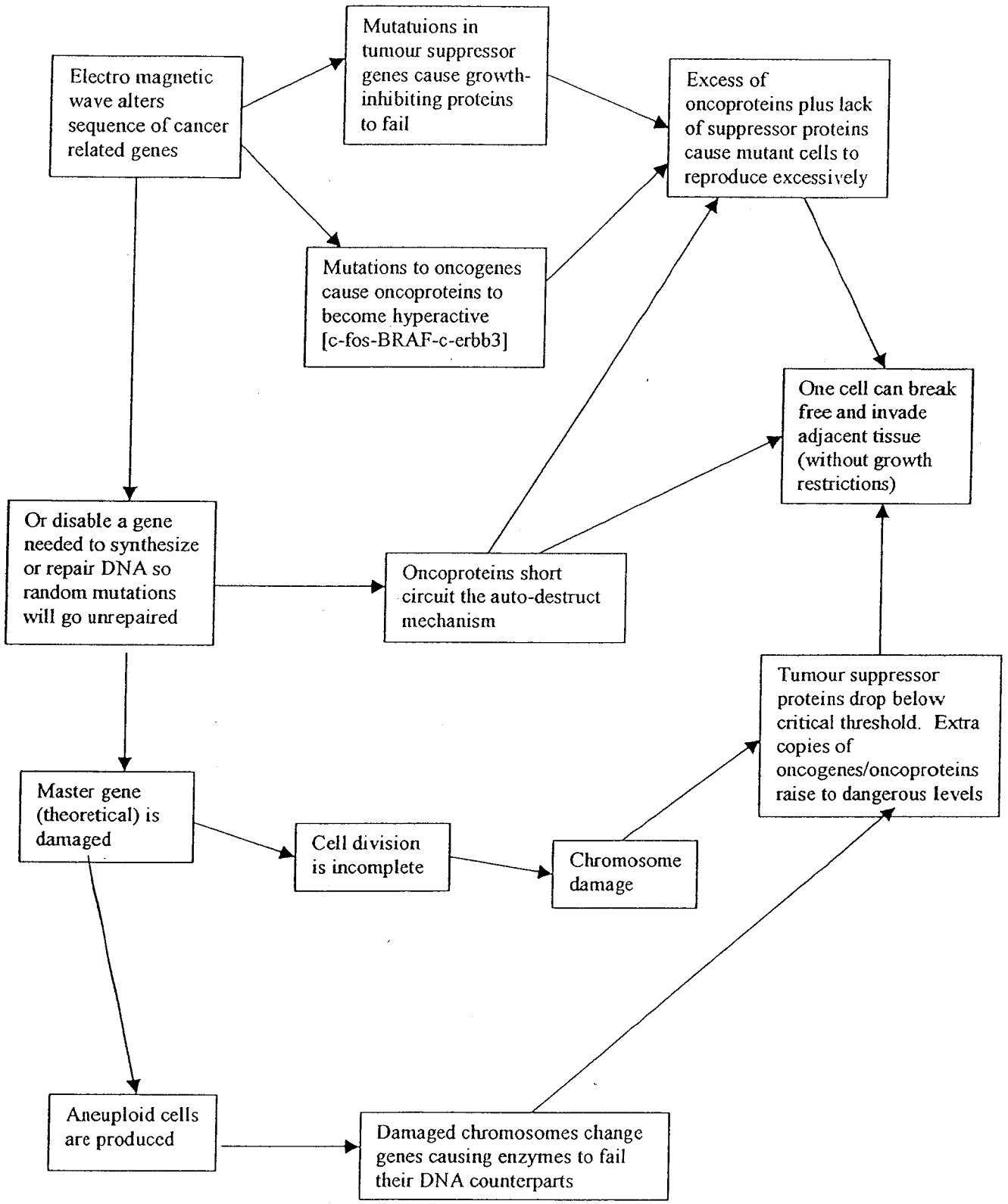
All of the above are reported in papers

Persons who sleep in a microwave field may have up to 1.8 thousand million waves passing through each cell each second

In my flow chart I have tried to show how from a damaged gene/chromosome/cell caused by electromagnetic interference, cancer may ensue.

I would also argue that the interference is continuous and accumulative, not from one single moment.

Pathways for Damaged Genes to Induce Cancer



Researched or Theoretical Cancers from Damaged Genes/DNA

Problems

- Cells ignore "stop dividing" commands.
- Cells avoid the autodestruct mechanism and persuade nearby tissue and blood vessels to supply them.
- Problems with DNA.
- Telomers can seem to divide indefinitely.
- The ability is gained to invade nearby tissue (metastasize).

Causes

- Damage to cell delets or disrupts a tumour suppressor gene (RB.p53.APC).
- Mutations may increase oncogenes whose proteins stimulate cell to reproduce (BRAF.c-fos.c-erbb3).
- A mutation to just one allele is enough to activate an oncogene permanently; both alleles of a tumour suppressor gene may be affected.
- A mutation in the right gene can transform any cell.
- Approx 100 genes mutated to cause cancer (theory) [re- A Subway Map of Cancer W.Hahn – R. Weinberg].
- M.Al-Hajj – identified a rare subset of cells within cancer (breast), these cells could produce cancer in mice where the other cancer cells could not. Also identified for Leukaemia. Implications – small groups of cells = total metastasis.
- C-fos, c-erbb3 are less active in cancer cells than ordinary tissue.
- RB is hyperactive in colon cancer.
- Haploin sufficiency ~ some tumour suppressors are not mutated, just reduced enough to cause malignancy.

Other Considerations

- Loss or Gain of part of chromosome.
- Changes in concentration of proteins that regulate the gene transcribing DNA – RNA – translated into protein.
- Cancer related mutations affect more than 100 oncogenes and approx. 15 tumour suppressor genes.
- A benign growth can be converted to invasive malignancy through genetic damage (C. Lengauer).
- Also, 90% of benign polyps had a missing piece of a chromosome (usually 5) – the arm containing the APC tumour suppressor gene. Other researchers show similar in precancerous growths in breast/stomach/oesophagus.
- Normal cells stop dividing until DNA is repaired, genetically unstable cells do not (Breivik).

NORMAL BRAIN FUNCTION

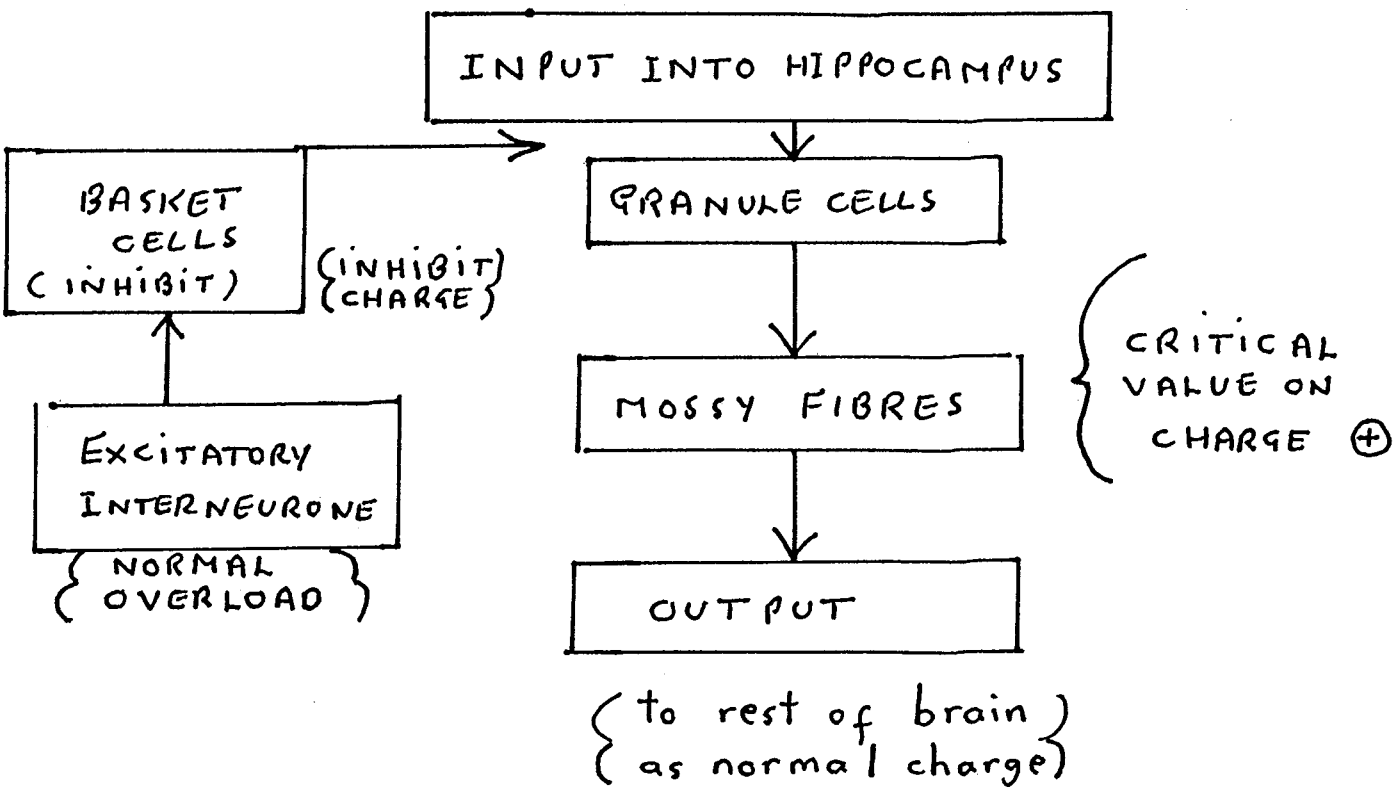
Neurotransmitters pass 'messages' to all parts of the brain. The hippocampus has a 'feed back' system to prevent abnormal charge going to the rest of the brain / body. The basket cells inhibit excess charge.

ABNORMAL BRAIN FUNCTION

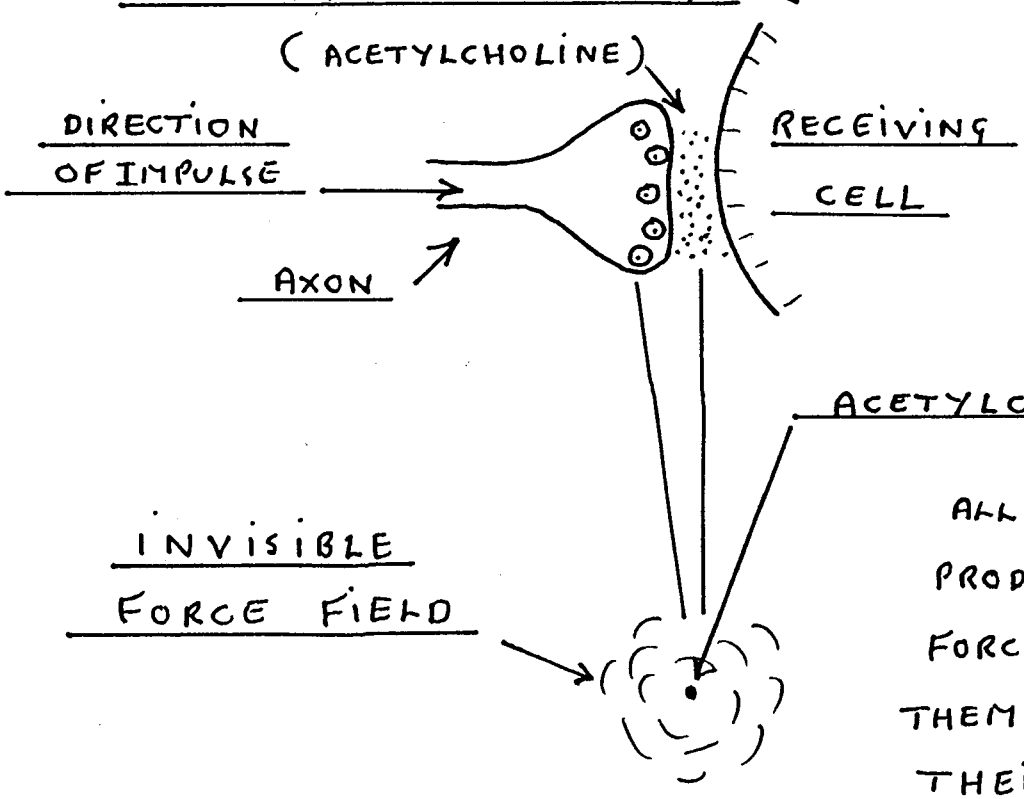
Excess charge 'destroys' the interneurone / basket cell 'feed-back loop'; hence, excess charge is released to the rest of the brain / body.
This is further exacerbated by the increase in the force-field from the higher rotational atomic spin of the atomic particles.
The consequence of this may be status epilepticus once the threshold is passed:
and / or dysfunction of the other chemical neurotransmitters e.g chlorine. calcium. potassium. sodium. etc. leading to dysfunction of other areas of the brain / body.

B. TROWER 04

NORMAL BRAIN FUNCTION ①



TRANSMITTING SUBSTANCE (CHEMICAL NEUROTRANSMITTER)

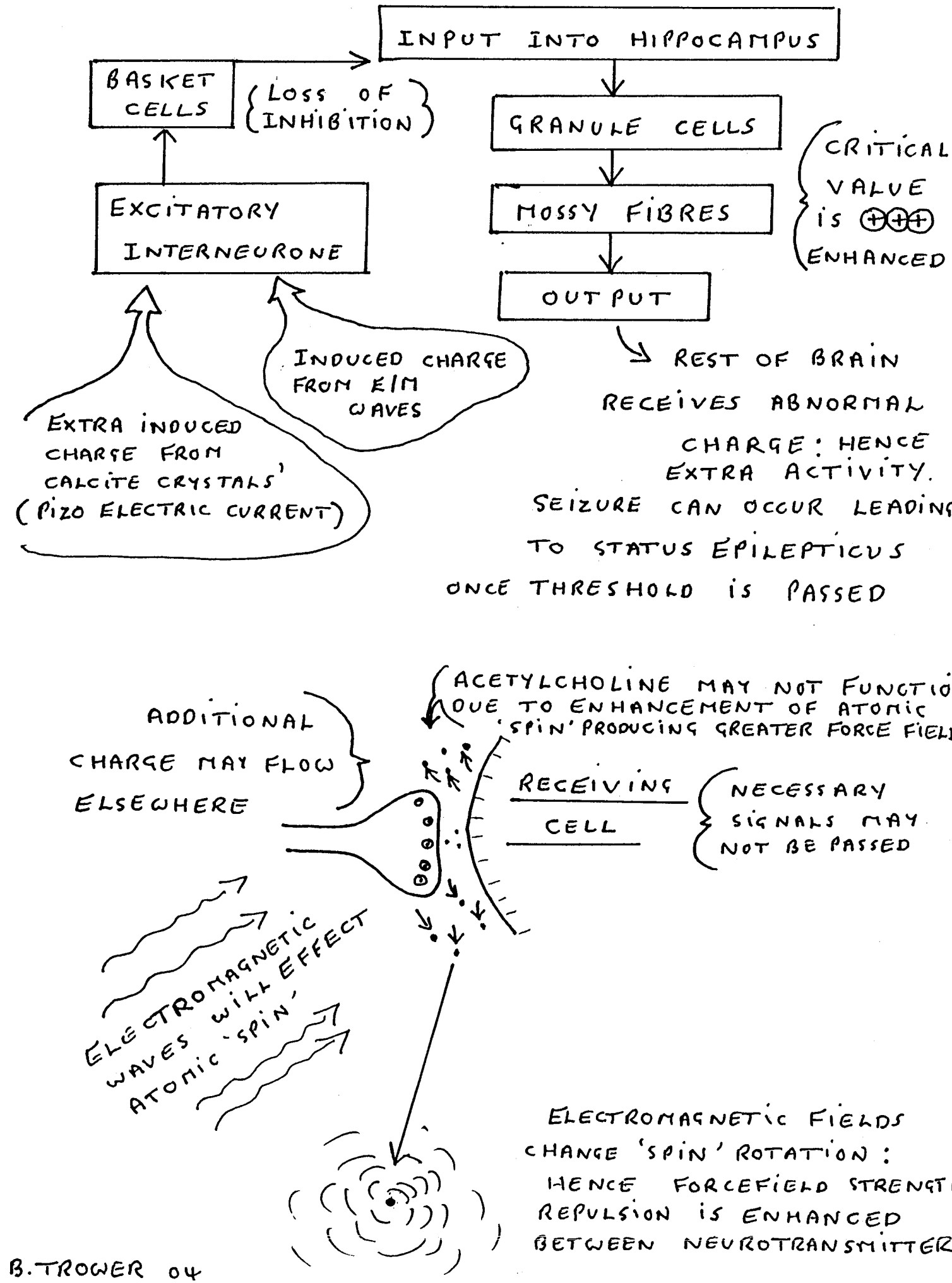


ALL ATOMIC STRUCTURES PRODUCE AN INVISIBLE FORCE FIELD AROUND THEM BECAUSE OF THEIR 'SPIN'

THIS FORCE FIELD DOES EFFECT THE SYNAPTIC JUNCTION BUT ONLY VERY SLIGHTLY

B. TROWER 04

SUBJECTED TO ELECTROMAGNETIC WAVES MAY PRODUCE 'ABNORMAL BRAIN FUNCTION' ②



B.TROWER 04