# Tayne Tubb



### ON THE BORDER

Info & insights from the interface between energy healing & science

#### **August 2015**



Welcome to the August 2015 edition of 'On the Border'.

This month many of you (in The Netherlands) are already coming back from holiday and gearing up for the start of the new school year, while others are just starting to leave for other lands. So this month I am looking at the **BRAIN'S HOMING SIGNAL** – could be useful in getting you back home if your SatNav breaks down;=).

On the subject of travelling, our newly started **Self-Healing Circles** are **GOING GLOBAL**. Yes indeedy, see below for more details. Now you can take part even if you

cannot physcially come to Amsterdam. Also a reminder that the **new 'Heal! En jezelf ook' course starts on Sunday 13<sup>th</sup> September**, just in case you missed the first call for registration in last month's newsletter. Again, more details are to be found below.

For those of you new to 'On the Border', this is Jayne's monthly Ezine newsletter about the latest information and insights into energy fields, healing and science. Each month I share with you some of the latest research and how it applies to healing, energy work & (daily) life. There is also a Fascinating Facts section and a 'Freebie' where you get something for nothing, gratis.

## The Brain's Homing Signal

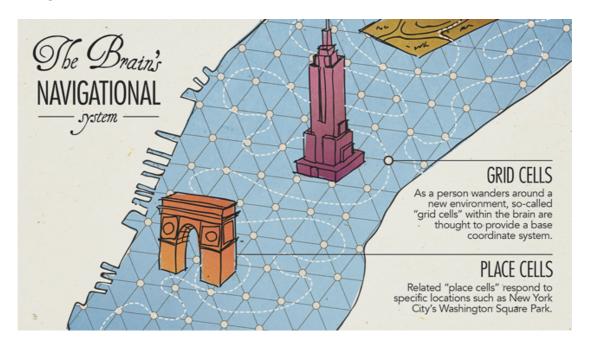
After wandering round a unfamiliar part of town, can you sense which direction to travel back to get to your car or the station? If so, you can thank your entorhinal cortex, a brain area recently identified as being responsible for our sense of direction. Variation in the signal in this area might even explain why some people are better navigators than others.



The new work adds to a growing understanding of how our brains knows where we are. Groundbreaking discoveries in this field won last year's Nobel Prize in

Physiology or Medicine for John O'Keefe, a neuroscientist at University College in London, who discovered 'place cells' in the hippocampus, a brain region most associated with memory. These cells activate when we move into a specific location so that groups of them form a map of the environment.

O'Keefe shared the prize with his former students Edvard Moser and May-Britt Moser, both now at the Kavli Institute for Systems Neuroscience in Norway, who discovered 'grid cells' in the entorhinal cortex, a region adjacent to the hippocampus. Grid cells have been called the brain's GPS system. They are thought to tell us where we are relative to where we started.



A third type – head-direction cells, also found in the entorhinal region – fires when we face a certain direction. Together these specialised neurons appear to enable navigation, but precisely how is still unclear. For instance, in addition to knowing which direction we are facing, we need to know which direction to travel. Little was known about ho or where such a goal-direction signal might me generated in the brain until the new study.

A team of researchers asked 16 volunteers to familiarise themselves with a virtual environment consisting of a square courtyard with a landscape (such as forest or a mountain) on each wall and a unique object in each corner. They then scanned the participants' brains while showing them views from the environment and asking them to indicate in which direction different objects lay.

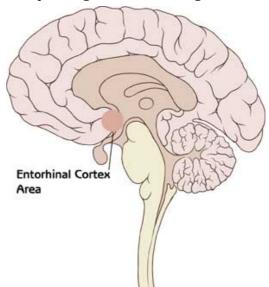
The entorhinal region displayed a distinct pattern of activity when volunteers faced each direction – consistent with how head-direction cells should behave. The researchers discovered, however, that the same pattern appeared whether the volunteers were *facing* a specific direction or just *thinking* about it. The finding suggests that the same mechanism that signals head direction also simulates goal direction. How, exactly, the brain switches back and forth is unclear, but the researchers think the brain probably signal which direction you

are facing until you consciously decide to think about where you want to go, at which point the same cells then run the simulation.

Interestingly, the more consistently the participants' goal-direction signals were,

the better they were able to correctly recall in which direction the target objects lay, potentially offering a brain-based explanation for the differences in navigational ability. Such results should be interpreted carefully, however. There are apparently many ways worse performance can lead to weaker effects; for instance, if a participant's attention lapses, he or she will not only perform worse but also produce less relevant brain activity.

This work may have clinical relevance. The ability to navigate is often an early casualty of dementias such as



Alzheimer's disease because the entorhinal region is one of the first areas to be affected. One group of neuroscientists is now working with doctors to develop tests to help identify deficits and potentially measure disease progression.

## **Going Global: Self-Healing Circles**

Last Sunday saw the launch of the Self-Healing Circles in Amsterdam! Thank you to those of you who came along for a delightful hour of connecting deeply with your inner intelligence in the delicious urban oasis of the Instituut-Amsterdam.

Since we first announced the Self-Healing Circles there have been inquiries from around the world if it would be possible to participate at distance. It seems that many of you are wanting to take part but can't physically be present in Amsterdam. So **YES** we are delighted to announce that we are **GOING GLOBAL**:=) As of now, you are welcome to participate in the Self-Healing Circles under the same terms, conditions and price as if you were physically present. We are updating the website in the next week to incorporate this change, but please know that you can start the registration process already. No need to wait!

Interested in starting your journey to your next level of well-being? Please visit <a href="http://www.TheSelf-HealingWorks.com">http://www.TheSelf-HealingWorks.com</a> for more details, the dates and the link to the registration form.

## Heal! En jezelf ook

Yes indeedy, this popular course is back for its yearly appearance! The dates for you to note in your diaries (all on Sundays, and all in Dutch):

Sunday 13<sup>th</sup> September Sunday 4<sup>th</sup> October Sunday 25<sup>th</sup> October Sunday 8<sup>th</sup> November

Each Sunday class will take place between 10-16u in 'De Ruimte' (Weesperzijde 79A, Amsterdam), and includes a fabulously lekkere lunch.

Price: €445, incl. btw and coffee/tea/lekkere dingen/lunch

For more information please see <a href="http://www.jaynejubb.com/heal2015.htm">http://www.jaynejubb.com/heal2015.htm</a>

#### **Fascinating Facts**

Did you know that......

- Scientists used electrical stimulation to make sleeping mice associate a certain location with positive feelings? When the mice woke up, they chose to spend more time there.
- The street drug Molly (the crystal form of MDMA, known in pill form as ecstacy) may help people with PTSD learn to be less afrais of their memories?
- A series of studies reveals a growing 'health gap' between poor and rich teenages, with poorer teens suffering from more physical and mental illnesses?
- An over-the-counter antifungal medicine used to treat athlete's foot may reverse the damage multiple sclerosis causes to nerve-insulator myelin?

#### **August Freebie**

In this section you get the chance to get something for nothing. Helemaal gratis. Always a pleasure!

This month a set of Brain Puzzles to keep your grey matter active. This is pasted at the end of the newsletter because it would not fit on this page. I have deliberately NOT included the answers, so that you can't cheat;=)

Please feel free to email me if you want the answers and I shall happily send you them!

#### **Contact Details**

Email: jayne@jaynejubb.com Website: www.jaynejubb.com

Telephone: 020-6206680, or from outside The Netherlands ++31 20 6206680.

#### **Back Issues**

If you have missed any of the previous issues, then the main articles and full newsletter pdf links can be found at <a href="https://www.jaynejubb.com/backissues.htm">www.jaynejubb.com/backissues.htm</a> The Freebies each month are only valid for that month....

## **Subscription Management**

On The Border is a monthly Ezine/Newsletter published the second Tuesday of each month. This Email was sent to you because you are on my mailing list and/or have subscribed directly to it. If you no longer wish to receive this then

please unsubscribe by clicking either clicking on the link at the end of the original Newsletter Email, or send me directly an Email – and I'll unsubscribe you immediately.

If you have received this Ezine Newsletter from a friend because you are not on my list, but would like to be, then please send me an Email and I can get you signed up immediately.

# 1 FAUX QUOTE

An imaginary quote from Napoleon is coiled in the grid below. To spell it out, start with an "I" and move to an adjacent letter in any direction. Two letters will not be used. All the others will be used exactly once.

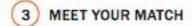
(Hint: The enumeration is 1'1, 5, 2, 6, 8, 5.)

0	S	R	0	M	1
E	н	A	T	G	0
S	V	E	L	E	1
X	٧	E	N	T	N
X	N		0	T	G

# 2 INTERLETTERED

Find the names of three countries intermixed below. The letters are in the correct order.

#### A L U H R U X N G E M E B N O U T R I G N G A R A Y



Arrange the nine matchsticks below to make "ten."



# 4 WORD SQUARE

Complete the word square by inserting the nine letters below into the grid, one per square, to create the same English words reading across and down.

C	0	M	E
0			
M	7/	2.3	
E	1 %	- 8	
	0 M	0 M	0 M

# 5) FILL IN THE BLANKS

All the following words contain the letters JUN. Using the definitions, fill in the word

A lower professorial rank, also an addition to: \_ \_ J U N \_ \_

A person not legally an adult: J U \_ \_ N \_ \_ \_

A kind of berry or shrub: J U N \_\_\_\_

A diary, a record of daily events: J \_ U \_ N \_ \_

# 6 WORD WHEELS

Find the eight-letter word spelled out in each box below by beginning with the correct letter and moving clockwise or counterclockwise around the box, using each letter only once. The question mark represents a letter that you must supply, which is the same for both words.





# 7 DO YOU KNOW DICE?

There are three dice shown below. One of them is not a genuine die. Which one is it?







# 8 PUZZLING PATTERN

The center number in each square is the result of following a mathematical formula involving the numbers on the outside of that square. Figure out the formula to determine the number that should be in the center of the last square.





Use only four straight lines to divide the petri dish below into nine segments such that one area has one microbe in it, another area has two microbes, another has three, and so on, up to nine.

