

Neuro-Camouflaging is an Indicator of Human Camouflage, an Assumption of Brain Engineering for Self-protection against Criminal Attacking

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Abstract

Every animal has camouflage behavior for self-protection against enemies. Neuro-camouflaging is a common behavior of human brain (HB) for personal protection. Neuro-physics and neuro-chemistry relates to neuro-camouflaging and brain engineering of HB. Camouflage physics and camouflage chemistry of HB was assumed and biologically explicated under theoretical and practical observations. The wiring structure of HB-neuron-cerebrospinal fluid is influenced by cortical excitability versus frightened symptom for having an artificial potency of neuro-camouflaging. Hence, neuro-camouflaging response of HB shows a tendency of self-protection behavior; which tends to the action of human camouflaging against criminal attacking.

Keywords: Neuro-Camouflaging, Neuro-physics, Neuro-chemistry, Human Brain, Animal Camouflage, Human-Camouflaging

Abbreviations and glossaries

HB: Human brain

CSF: Cerebrospinal fluid

CT: Computed tomography

HB: Human brain

Cerebrospinal fluid: Existing fluid in tissue surrounds the brain

Cortical: Relates to memory, thinking, problem solving, reasoning and self-protection

Neuro-camouflaging: a neuro-condition of human brain tends to be camouflage in terms of self-protection manner of human being

Amygdala: Neuro response relates to fearing and threatening tend to neuro-camouflaging

Lateral ventricles: Relates to the production of CSF

Dopamine: Relates to neuro-chemistry of brain act as neurotransmitter; release by brain neuron for good feeling

Melatonin: Relates to hormone produce by pineal gland in brain

Serotonin: Relates to hormone and neurotransmitter of brain

Oxytocin: Relates to hormone and neurotransmitter of brain

Endorphin: Relates to hormone and neurotransmitter of brain for sense of well-being

Camouflage physics: Neuro-physics relates to neurotransmitter

Camouflage chemistry: Neuro-chemicals relates to neurotransmitter

Choroid plexus: Network of blood vessel in the ventricles of brain

Spinal cord: Relates to connection with whole body

Cerebral hemisphere: Two major part of brain such as right and left

Arachnoid: Protective membrane that covers the brain and spinal cord; and functioned as CSF metabolism

Neuron: Nerve cell/unit of brain transmits signal to other nerve cell immediately

Background

The philosophy of camouflage technique has been applied by many animals in nature. The natural color of animals and their surrounding backgrounds displays almost matching color for self-protection against enemies, cited in figure 1. Wild animal species have different ways of camouflaging throughout evolution in nature. Physiology and behavior of the animal, animals surviving environment and the possible killers may influence the categories of camouflage technique for self-protection. The most common instance of camouflage is chameleon. There is also furry animals and birds may lose their feathers and hair completely. These animals replace their feathers and hairs for surviving of new season. 'Hedgehog' shows camouflage against green leafy background, color matched with feathers; stripe of 'giraffe' skin has color matching against woodland background of tree bark and dry leaves in terms of color

patterning; camouflage 'owl' has confusing background of grey color stone against enemies; 'katydid' has self-protection with color matching against green leaves; 'great potoo' and 'frog' has exact color matching against dry tree bark; 'stone flounder' and 'spider' have camouflage nature when color matching against stone background and reddish stripe 'snake' has also surviving environment with reddish soil background; accordingly mentioned in figure 1[1-3]. Hence, every wild animal is assumed the biological technique of neuro-camouflaging in addition to the physical technique of camouflaging against surrounding living areas. Similarly human behavior and psychology also practices versatile technique of camouflage which is also biologically assumed as neuro-camouflaging. A concept of neuro-camouflaging has been represented here in terms of biological physics and chemistry of human brain (HB).



Figure 1: camouflage techniques of different animals against surrounding living areas in nature when each invention of camouflage engineering is being supported by natural surviving of animal camouflage which is existing in nature

Research on animal camouflage, camouflage chemistry, camouflage physics and its different branches of applied technologies are being rapidly upgraded; but neuro-camouflaging of HB is presently in very early stage of research and invention which is directly focused to the action of human-camouflaging nature for personal protection[4-14]. HB has an exceptional nature of camouflage physics & chemistry relates to neuro-camouflaging and brain engineering. Structure of neuro-wiring of HB narrates to the physics of brain-nerve. HB may act as artificial camouflage nature when brain acts for enemy protection. Two lateral ventricles of the HB contains cerebrospinal fluid (CSF) relates to camouflage chemistry of HB. Each cerebral hemisphere contains a lateral ventricle, termed as the left or right ventricle. CSF found within the brain tissue that surrounds the brain and spinal cord of brain. CSF is produced by specialized ependymal cells in the choroid plexus of the ventricles of the brain, and captivated in the arachnoid. CSF controls the whole mechanism of electro-physics, neuro-physics, neuro-blood flow, dopamine and melatonin of HB which is focused to neuro-response in multidimensional direction of human behavior. Neuro-signal is one of the vital responses for self-protection of HB. Every signal of neuro-camouflaging is related to the exciting of nerve wiring and the temporary moderation of CSF which leads the camouflage nature of HB. Synapse is a neuro-bridge of neuron. Neuron of HB is functioned by neuro-physics and neuro-chemistry. Movement of brain signal is functioned by basal ganglia. Hence, neuro camouflaging is also one action of neuro transmitter controlled by the brain chemistry of dopamine and melatonin when good feeling is the core requirement of releasing dopamine, melatonin, serotonin, oxytocin, endorphin of HB. Good feeling relates to neuro-camouflaging versus personal protection[15]. Hence, human behavior is also controlled by the simultaneous action of neuro-physics and neuro-chemistry[16].

1. Methodology and Ethics of Approval for Diagnose and Asssuming of the Action of Neuro-Camouflaging of HB

Neuro-camouflaging of HB was approached under practical incident of registered Doctor of Philosophy (PhD) researcher on “camouflage textiles with technical coloration incorporating illumination under multidimensional combat backgrounds” at school of Fashion and Textiles, RMIT University, Melbourne, Australia. The brain of author was scanned by computed tomography (CT) machine when the author was seriously afraid by life-threatening of criminal target and attacking during his PhD research, 2021-

2022 and the action of neuro-camouflaging was assumed to protect from criminal attacking. Fig. 2, CT scanning of author brain was studied accidentally, hence ethics approval of human research was not taken officially. This work was accidentally generated during conspiracy of critical life-threatening done by a ‘Professor’ when author, Md. Anowar Hossain served as PhD researcher in the field of camouflage textile & color engineering. The name of ‘Professor’ has been kept anonymous due to the highest honour of ‘Professor’ designation all over the world.

2. Results and Discussion

Fig. 2, neuro-assembly is a natural combination of oriented tissue of HB located under the hard skull. Neuro-camouflaging is an action HB which is almost impossible to signify by the way CT imaging analysis. CSF-melatonin-dopamine has presence in neuro-assembly which may corresponds with the signal processing of whole body for good feeling and decision making. Every tissue of HB has unknown number of electro-sensor which are individually responsible for the mechanism of neuro-physics and electro-physics of HB[17] deprived of interfering others, without which brain nerve may tend to exciting of neuro-wiring/neuro-signal relates to psychiatric disorder of long terms/short terms. Frightened nature of HB is influenced by cognitive action of neuro-excitability. The symptom of fear may vibrate blood pressure via blood vessel of HB which is also related to the disorder of neuro-chemistry-CSF. Hence, it is being assumed that neuro-excitability is correlated with neuro-camouflaging. During the moment of artificial frightened, brain nerve may have lacking of melatonin and dopamine which may impact for temporary brain disorder. Afraid symptom of HB is normally controlled by amygdala. HB chemistry is also managed by amygdala[15]. In general, the neuro-chemistry of melatonin and dopamine assumed as natural ‘cooling agent’ of HB. CSF-melatonin-dopamine may also be functioned as natural ‘air-conditioning’ of HB for good feeling, thinking, performance, decision making, personal protection and adaptation. Naturally melatonin and dopamine may be the output of disciplined lifestyle related to routine sleeping, routine exercise, fooding, sex; and correlated to good feeling, thinking, decision making and self-protection[18, 19]. This theory of neuro-camouflaging may be aligned for defence professional who are always struggling for protection against opposition team.

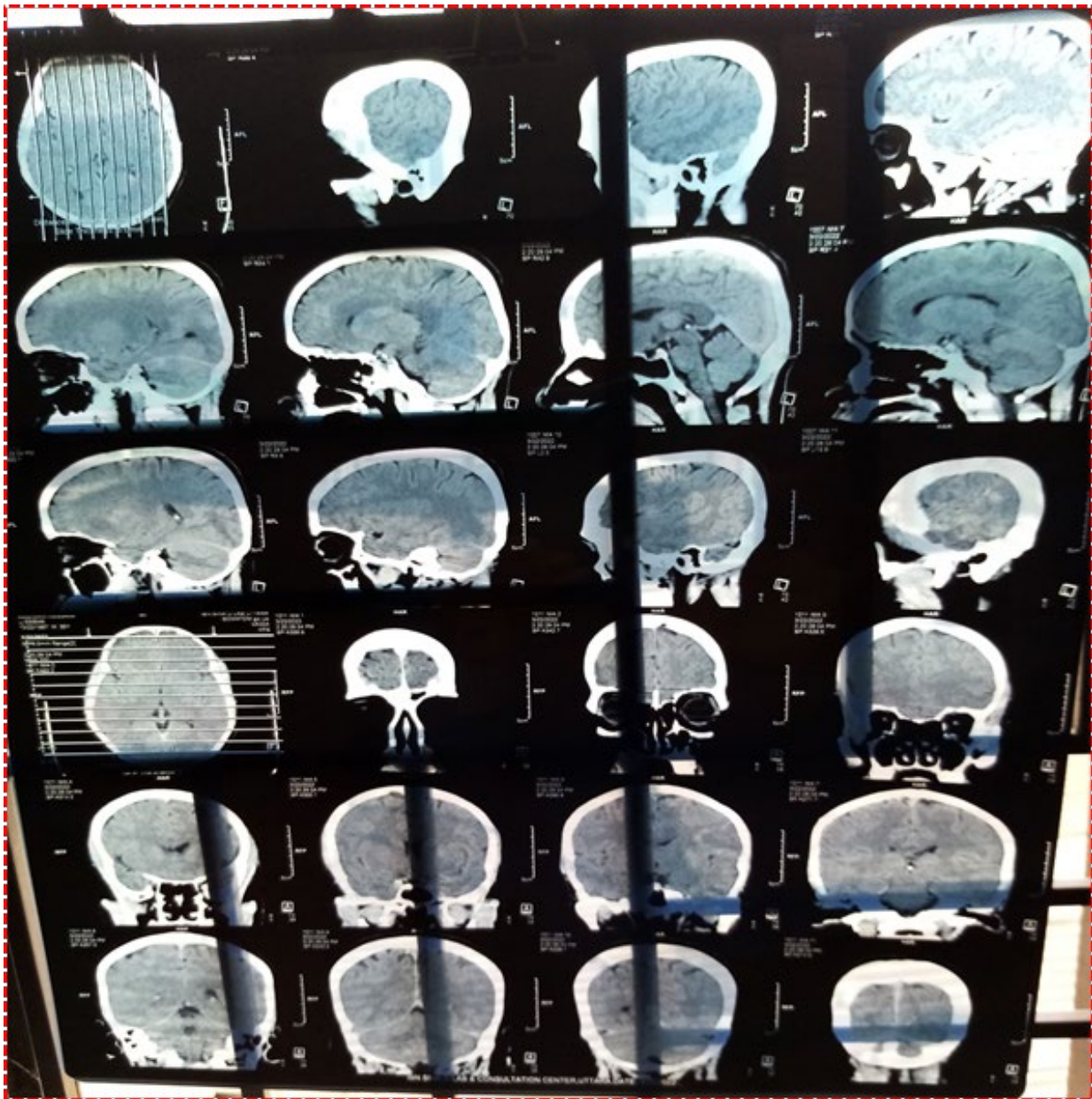


Figure 2: computed tomography (CT) imaging of human brain under natural illumination, sunlight.

3. Conclusion

Neuro-camouflaging is a natural protection signal of HB which may be controlled by the continuous balance of CSF-melatonin-dopamine; and neuro-wiring relates to electro-physics & neuro-physics. Therefore, the engineering of neuro-camouflaging is aligned with the combination of applied technology relates to camouflage physics and camouflage chemistry of HB. The philosophy of neuro-camouflaging can be studied and extended for defence soldier, criminal protection and psychological disorder.

Declaration

Ethical Approval and Consent to Participate

Not applicable

Consent for Publication

Not applicable

Competing Interests

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Author Contribution

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References

1. Kawai, N., & He, H. (2016). Breaking snake camouflage: Humans detect snakes more accurately than other animals under less discernible visual conditions. *PLoS One*, 11(10), e0164342.
2. Alec. Animals that you don't think you can see them. 2015 [cited 2020 14 May 2020];.
3. D, L. and B. Staff. Animal science, 20 amazing examples of camouflage.
4. Hossain, M. A. (2021). Adaptive Camouflage Textiles with Thermochromic Colorant and Liquid Crystal for Multidimensional Combat Background, a Technical Approach for Advancement in Defence Protection. *American Journal of Materials Engineering and Technology*, 9(1), 31-47.
5. Hossain, M. (2022). Camouflage Assessment of Aluminium Coated Textiles for Woodland and Desertland Combat Background in Visible and Infrared Spectrum under UV-Vis-IR Background Illumination. *Defence Science Journal*, 72(3).
6. Hossain, A. (2021). Concealment, Detection, Recognition, and Identification of Target Signature on Water Background under Natural Illumination. *International Journal of Science and Engineering Investigations*, 10, 1-11.
7. Hossain, M. A. (2021). Evaluation of Camouflage Coloration of Polyamide-6, 6 Fabric by Comparing Simultaneous Spectrum in Visible and Near-Infrared Region for Defense Applications.
8. Anowar Hossain, M. (2022). Simulation of chromatic and achromatic assessments for camouflage textiles and combat background. *The Journal of Defense Modeling and Simulation*, 15485129211067759.
9. Hossain, A. (2022). Spectral simulation and method design of camouflage textiles for concealment of hyperspectral imaging in UV-Vis-IR against multidimensional combat background. *The Journal of the Textile Institute*, 1-12.
10. Hossain, M. A. (2023). Ecofriendly Camouflage Textiles with Natural Sand-based Silicon Dioxide against Simultaneous Combat Backgrounds of Woodland, Desertland, Rockland, Concreteland and Water/Marine.
11. Hossain, M. A. (2023). Cr oxide coated woodland camouflage textiles for protection of defense target signature in UV-Visible-IR spectrum opposing of hyperspectral and digital imaging.
12. Hossain, M. A. (2023). UV-Visible-NIR Camouflage Textiles with Natural Plant Based Natural Dyes on Natural Fibre against Woodland Combat Background for Defence Protection.
13. Hossain, M. A. (2023). Advancement in UV-Visible-IR Camouflage Textiles for Concealment of Defense Surveillance against Multidimensional Combat Backgrounds.
14. Hossain, M. (2023). Spectral simulation and materials design for camouflage textiles coloration against materials of multidimensional combat backgrounds in visible and near infrared spectrums. *MRS Communications*, 1-14.
15. Breuning, L. G. (2015). Habits of a happy brain: retrain your brain to boost your serotonin, dopamine, oxytocin, & endorphin levels. Simon and Schuster.
16. Hossain, M. A. (2023). Neuro-camouflaging is an Indicator of Human Camouflage, an Assumption of Brain Engineering for Self-protection against Criminal Attacking.
17. Weinberg, I. (2011). *Neurophysics*.
18. Escames, G., Ozturk, G., Baño-Otálora, B., Pozo, M. J., Madrid, J. A., Reiter, R. J., ... & Acuña-Castroviejo, D. (2012). Exercise and melatonin in humans: reciprocal benefits. *Journal of pineal research*, 52(1), 1-11.
19. Pobocik, K., Rentzell, S., Leonard, A., Daye, A., & Evans, E. (2020). Influence of aerobic exercise on sleep and salivary melatonin in men. *Int J Sports Exerc Med*, 6, 161-7.

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