

Thoughts Transformation and Yoga Philosophy: A Scientific Analysis

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Abstract

Yoga is an ancient Lore, under which many types of yoga methods and techniques; Hathyoga, Rajyoga, Mantrayoga are counted but at present the Yogasutras of Patanjali are known as Yoga philosophy. The traditionally scattered yoga knowledge was collected by Maharishi Patanjali and presented it as Yogasutra. Yoga is taken as the science of chitta or mind. According to Maharishi Patanjali yoga is the cessation of modification of mind (cittavrttinirodha), so in Yoga philosophy the process of social changes begins with the individual thought transformation or modification of chitta. Maharishi Patanjali expressed the thought transformation in human mind as the chittavritis. The fundamentals of Metaphysics and thoughts transformation of Yoga philosophy are there in the three attributes or gunas; sattva, rajas, tamas of Samkhya philosophy. Which attribute or guna dominate the mind, the human nature, behaviour and thoughts change according to this domination. At the time when these trigunas change in the mind, the hormonal and chemical changes in human body also take place. In present research article we shall discuss upon the thoughts transformation during yoga practices and we shall try to develop it as a process of triguna change and biochemical changes.

Keywords: Yoga, Chitta, Trigunas, Sattva, Rajas, Tamas, Hormones.

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Introduction:

Maharishi Patanjali define Yoga as **Yogascittavrttinirodhah**¹ which means to inhibit the transformation of thoughts by the regulation of thoughts and modification of mind. Yoga philosophy analyses the regulation of mind and thoughts. Maharishi Patanjali calls Yogadarshan 'The science of mind'. In Yoga philosophy thought transformation means modification of mind. There are five stages of chitta as told in Yogadarshan; "kshipta, mudha, vikshipta, ekagra and niruddha"². In the process of thoughts transformation trigunas of Samkya philosophy are the fundamentals of mind i.e. sattva, rajas and tamas. Possitive thoughts transformation is possible at primary stage of chitta by practice of yoga. Out of these three gunas one dominates the other two and human nature is formulated according to this domination. Due to active nature of rajas, the person who has kshipta stage of chitta can also have the glimpse of sattva. At primary stage this glimpse may have twice or thrice but later it increase and we got the glimpse of sattva many time and there upon the stage develope from kshipta to mudha and mudha to vikshipta and then continue to upgrade. When tamas dominates the nature of a man the other two gunas rajas and sattva are also present there though active very little and these presence makes the modification of mind possible.

To explain the relation between thought transformation and Yoga philosophy I have divided this article in to three sections. In the first section; 'Philosophical process of transformation of thoughts or modification of mind' I have tried to explain this process is based on trigunas of Samkhya philosophy. In the second section; 'Bio-chemical changes during thought transformation' I have attempted to explain biochemical changes in human mind and body during the thoughts transformation and finally, in the third section, I have concluded.

Section I- Philosophical process of transformation of thought or modification of mind:

Yoga philosophy accepts the metaphysics of Samkhya Philosophy by adding the concept of God in it and by doing so they claim the completion of incomplete samkhya. The noblest condition of chitta is that where the sattva guna is at its extremity (best possible) and other two guna rajas and tamas are miserable (best possible) in it. In the Vyasbhashya of Yogasutra the nobler stage of the chitta is said 'ekagrachitta, noblest stage is said 'niruddha' and the ignoble is said 'kshipta'. In niruddha stage of chitta itself, is dissolved along with its all business and it is said asampragyat Samadhi. It is related to jeevanmukt personality of human. Thus the five classifications of chitta can be found in practical life as follows; kshipta, mudha, vikshipta, ekagra and niruddha. In Yoga philosophy these are five stages of chitta within which human chitta can be developed from the most miserable to the noblest.

The steps of thought transformation process and stages of chitta: -

Yoga practices affect on human's mind or chitta. As more as chitta gets pure and refined, the sattva gets more dominative and the effect of rajas and tamas gets moderate, the human deeds get more accordingly with the humanity and society. We can explain this entire process within these points given below:-

1. The external positive motivation- The most ignoble stage of chitta is kshipta. First of all this kind of person should be tried to motivate by kinds of noble actions, incidents and thoughts. This motivation can be an education, discipline, satsang, incidents, thoughts or any action which can motivate the subject towards the positive thinking. Because this is given externally therefore it is called the external positive motivation.

2. Experience- Motivations are taken through both kinds of sensibilities whether physical or mental and it is called experience.

3. The activity of chitta sattva- The intuitions which are given through motivations make the sattva active with the help of rajas.

4. Analysis and synthesis- Because of the activity of sattva, as it is the nature of sattva, Chitta uses analysis and synthesis for the formulation of knowledge. During the process, there rise a kind of dialectic of thoughts in chitta and it adds and abstracts the facts.

5. Formulation of Judgments/ Knowledge- By doing synthesis and analysis of the facts and thoughts chitta arrives at a conclusion because of the activity of sattva and this conclusion is called judgment.

6. Good will- On the basis of achieved knowledge human gets determined for organising the action or karma. Nature of his knowledge decides the nature of his will. Here sattva is the prime factor which enlightens the object or it uncovers the ignorance therefore whatever 'Will' is made here will be goodwill. We can also call it intention.

7. The performance or execution of the action- Human accomplishes his work according to his will. If there is good intention behind the action the execution will be good as well and if there is bad intention behind the performance the execution will be bad and deplorable. Here because of the domination of sattva the action will be favourable with the humanity and society.

8. Outcome- The outcome of the performance decides further impacts. There may be two impacts:-

I. Negative Impact: If against the will the result is harmful and unsocial then there can be three further possibilities:-

A. The negative result will motivate the person towards negativity and his performance and actions will be opposite to the device of thought transformation. His mind can come again under the domination of tamas and the development of the chitta would be stopped.

B. The second possibility is that where he will try again towards the development of the chitta with patience and will look for the positive results.

But this activity might be the result of vikshipta personality.

C. Third possibility is that where the person may be motivated again with the same process though there is negativity in his nature. The sattva could be active again.

Both the above A and C, stages of kshipta chitta for those, the motivation is required again. The performance is given from the good will and good intention, the positive result is best possible. We can explain the positive outcomes in this way.

II. Positive outcome: If the outcome is according to the good intention and those outcomes are in favour of self, society and humanity then there can be two effects upon human chitta.

A. In spite of positive result the person may also require motivations because anyone who is motivated by external causes, it is not necessary that he will do all deeds with goodwill. He may also require the motivations as former till he gets self orientated. This stage can be said mudha chitta. There the person does not concern about the human welfare but he acts for his own well being and advantage. Here he again gets inspired by the external motivations.

B. Human also thinks for the welfare of others along with his own good. He also thinks about social good. It can be said vikshipta chitta. Most of the people in the society are of this kind. After getting positive impact he does not expect the external motivation but the person at this stage where he has got external motivation previously, the impacts and results of his actions work for him as motivations whether the impacts are positive or negative. The abhyasa are the relevant factor here. Now we shall try to explore the importance of abhyasa (practice).

9. Importance of Abhyasa (practice) and Nishkam Karma: We are already aware about the 'Abhyasa' and the concept of 'Nishkam Karma' in Gita. When an action, task or thought is repeated frequently, it is said the abhyasa and the action without any expectation and it is called Nishkam Karma or Duty. At every stage of chitta, abhyasa is relevant but due to positive

results when it becomes internal motivations for the sake of further development of chitta, practices become inevitable. At this stage a person, motivated internally, practices of yoga again and again and when his practice gets determined, dedicated, stable and mature his downfall to the lower stages becomes impossible and it is called ekagra stage of chitta or the samprajnat Samadhi. By the determination of the practices his performance becomes his duty. At this stage man does not care about the result but he does his works, being motivated by the inspiration of duty. He does good works being motivated by the goodwill and this is the condition of a Nishkam Karmayogi which is called the fully developed position of the personality and the noblest condition of the chitta. Sattva is at peak and the tamas is at bottom at this stage. In Yogsutra it is also called the **Ritambhara prajna**³. This prajna explored the truth completely before us.

10. Nirmanchitta and the jivanmukta personality: In Indian philosophy the central point of the personality is soul (purusa). The entire development of personality is concerned according to it. The personality of a jivanmukta purush is accepted as most developed and noblest. At this stage the soul is exposed fully through the body and acts. Jivanmukta personality can be seen in two stages of the chitta; ekagra and niruddha. This highest position is not achieved suddenly. There are many stages of chitta between the ekagra and the niruddha till we get liberation. These stages are said in the form of Samadhi and prajna. When chitta, through the concentration or many other Samadhis, achieves ritambhara Samadhi there through this prajna chitta arrives at **Vivekakhyaati** “(the difference of chitta and purusa)”⁴. At this stage of chitta man is taken as jivanmukta because from here chitta compulsory gets its purn kavailya till the parlay. The prajna which is born at this stage demolishes the possibilities of purush of being him in the limitations or bandhan. When vivekakhyaati is all aware then it is called **‘Dharmamegha Samadhi’**⁵. In dharmamegha Samadhi, through the **‘Saptadha prantabhumi prajna’**⁶ means seven types of prajna, the chitta, also get

completely free from the kleshas and the karma **‘(kleshas aur karma se bhi purnataya nivrat)’**⁷. The seventh type of prajna is the noblest prajna where chitta having neutral from quality & relations (gun-sambandh), gets enlightened. This is not kaivalya but it is the noblest prajna to the kaivalya. After this the niruddha stage or nirodha Samadhi or asamprajnat Samadhi or nirbij Samadhi begins.

Nirodha stage or nirodhakshna avastha is the harmonious stage of chitta. Nirodha stage of chitta is the impressionful stage of jananavritti. When these sanskar or impression of chitta demolished and all impression of merged chitta also demolished and that is the state of purna asamprajnat Samadhi or purna kaivalya. Yogi can achieve catastrophe of his chitta for sometime or forever. Those who achieve catastrophe of their chitta forever, their nirmanchitta can never be formulated. But those who achieve catastrophe of their chitta for limited time they can uplift their nirmanchitta again after that period. Jivanmukti is there in both samprajnat and asamprajnat Samadhi. Chitta exists till the samprajnat Samadhi so jivanmukt personality can be there till this stage. But when chitta is resolved in the condition of nirodha and there in that asamprajnat Samadhi the activities of body in the absence of chitta are not possible and how then the jivanmukta personality is possible? Patanjali said the body and action of this kind of personality as motivated by the nirmanchitta-**‘Nirmanacittanyasmitamatrat’**⁸. In other words after the achieving of the kaivalya because of the absence of the **‘Dagdhbeej kalp chitta’** and its impressions, chitta never rises again. In this condition Yogis who has got kaivalya, for the sake human welfare, works with the chitta which is created through the **‘Buddhitva swaroop asmitta’** and which has no impression anymore. This is the **nirmanchitta**. The impression of ignorance remains no more therefore the actions of nirmanchitta never become the cause of bondage. “After getting vivekakhyaati when present remained impression in chitta and Yogi concentrate on prantbhumi prajna then they called jivanmukta, because they can be attached with any subject without affecting and suffering due to the cause of vivekadarshan. When a Yogi

is in the stage of jivanmukta without chitta then he can live with the help of nirmanachitta, as a result they live beyond sufferings and to be capable of videhamukta.”⁹ In this way the personality with the nirmanchitta is said the noblest personality in the Yogadarshan.

Section II- Bio-chemical changes during thought transformation%

When somebody repeats frequently any thought, yoga practice or any action with whole hearted, then the hustle-bustle of thoughts gets cool down and concentration is centered upon the repeated thought or action. We can experience it in our daily life. Through the yoga practice the modification of mind and several kinds of biochemical changes occurs in human brain and body. Among these biochemicals some neurotransmitters and hormones are important which affect the mind and body.

1. Dopamine: “Dopamine neurotransmitter is released from Ventral Tegmental Area of brain. In our life this chemical helps us to keep away the tension and helps us to learn how to react with negative and positive experience.”¹⁰ “Dopamine signals salience and makes the brain paying attention to biological relevant stimuli may provide an interesting framework for explaining addictive behaviours.”¹¹ Dopamine make the man active towards those kinds of desires and activities which are linked by him and repeated by him with complete attention. Thus regarding the yoga practice the first condition is to get active or in other words enthusiasm is motivated by the secretion of this chemical in appropriate amount. The hobbies whether they are good or bad, this chemical makes man active towards them. “The dopaminergic system, via the basal ganglia, is involved in cortical subcortical interactions and a PET (Monkeys) study on the dopaminergic tone in Yoga Nidra meditation using 11 C-raclopride showed significant increase of dopamine during practice of meditation. During this type of meditation, 11C-raclopride binding in ventral striatum decreased by 7.9% and simultaneously 65% increases in endogenous dopamine release.”¹² Therefore at the time of yoga practices

the motivation in mind, excitement in body are increased because of the secretion of dopamine.

2. Serotonin and Norepinephrine: “80-90 % serotonin release by digestive system and some release by central nervous system and blood platelets. The function of this chemical is make active or inactive to animal and human by controlling of mood.”¹³ The effect of norepinephrine chemical is similar to the serotonin. There are many tasks are taken by serotonin and norepinephrine in human body directly and indirectly. Due to the lackness of these chemicals the man gets depressed and hypersecretion of these chemicals increase the anxiety and through it excitement is revoked. In human life both these conditions are harmful. “Serotonin plays so many different roles in our bodies that it is really tough to tag it. For the sake of practical application I call it ‘The Confidence Molecule’. Ultimately the link between higher serotonin and a lack of rejection sensitivity allows people to put themselves in situations that will bolster self-esteem, increase feelings of worthiness and create a sense of belonging. To increase serotonin, challenge yourself regularly and pursue things that reinforce a sense of purpose, meaning and accomplishment.”¹⁴ During the yoga practice the level of serotonin is balanced and this balance increases the self-confidence. Patience and self-confidence is the second condition of the yoga practice or Abhyasa. The serotonin chemical is said ‘The Confidence Molecule’ because of its quality to carry the confidence in human beings. “A study has found that serotonin levels during practice of yoga poses, appropriate awareness of breathing, and 10-minute relaxation and meditation. Serum serotonin maintained in the yoga group, while it reduced in the control group. The depression level maintained in the yoga group, where as it tended to increase in the control group.”¹⁵ Yoga practice, by patience and confidence motivate the human mood towards the positive approach. Necessary patience and self-confidence motivate the man to the success.

3. GABA and Melatonin: These both chemicals are called sleep and stress regulative

chemicals. GABA makes the mood better by diminish the tension. GABA is released from hypothalamus of brain. **“GABA (Gamma Aminobutyric Acid) is the ‘Anti-Anxiety Molecule’ and** is an inhibitory molecule that slows down the firing of neurons and creates a sense of calmness. You can increase GABA naturally by practicing yoga, meditation or The Relaxation Response.”¹⁶ “Melatonin is produced by various tissues in the body, although the major source is the pineal gland in the brain. Melatonin has often been called a **‘sleep hormone’** - although it is not essential for human sleep, we sleep better during the time that melatonin is secreted.”¹⁷ It is also affected by the darkness and light in the atmosphere. In various studies it is found that these chemicals are also released during the yoga practice and meditation. “A study via magnetic resonance spectroscopy scan found 27% increase in GABA levels among yoga practitioners after a 60-minute yoga session (Yoga Posture) when compared against participants who walking exercise for 60 minutes. The study suggests practice of yoga posture might increase GABA levels naturally.”¹⁸ Through the yoga practices the secretion of these chemicals is balanced and then they help in producing the voluntary sleep, decreasing the tension and increasing the concentration.

Section III- Conclusion:

In this way we can conclude that psycho-philosophical process of thought transformation expresses yoga practices, a kind of therapy which can increase the effect of sattvaguna and decrease the effect of tamoguna. If a scientific analysis is made of this process the chemical changes in the human body and brain can be examined which are released from the different endocrine glands and brain, when the behaviour and chittavrittis are dominated by sattva. For example the balanced level of serotonin, dopamine, melatonin, GABA etc. can be examined by the blood. In the volatile stage of chitta or when it is dominated by tamas these chemicals are found in the blood imbalanced. During the purification of chitta or while it is dominated by

sattva these chemicals creates their common effects according to their balanced level.

In psychological language reasoning, emotions, motivations, imagination, memory etc. are come under the chittavrittis. In Yogasutra Mahrishi Patanjali has analysed that when the vrittis take the man to the concentration then they are aklista (non-sufferable) otherwise they are klists (sufferable). Body makes the mind healthy and mind makes the body healthy. There they both are inter-related. During the yoga practice the mind is affected by activities of body and behaviour and there upon when the vrittis of chitta are raised by this process which perform the action and behaviour. The yoga science of Patanjali is based on chitta. The purpose of all yoga practices and activities is to make the mind stable and concentrate by increasing the domination of sattvaguna that is why Patanjali Yogasutra is called science of mind. When one gets enlightenment by demolishing his chitta and chittavrittis then other kind of chitta which is called by Patanjali nirmanchitta, gets active. This chitta is not affected and harmed by any kind of impression and it expresses that chitta in Yogsuatra is a very deep and sharp scientific theory. In the condition of Jivannmukta the utility of chitta is remained. Behaviour of man is affected by the nature of chitta and his nature is affected by his behaviour. Mind and behavior both affect is each other. That is why in yoga the most difficult task is to regulate the mind. Outcome of chitta is based on its concentration. Yoga aims to promote the domination of sattvaguna in chitta and it is expressed in the rational judgements taken by man. Therefore yoga first of all develops the rationality or reasoning by steadying the chitta in human and other effects and benefits are based on reason (viveka). Social harmony and loving affections in human are developed by reason and according to them the behaviour purified. The individual benefit of reason is the concentration. Therefore for the solution of the problems of human and society the thought revolution is necessary. The purification of thoughts results in the purification of behaviour and vice-versa. Thus in process of development of thought transformation and social harmony the cycle of

the thought and behaviour purification should be carried without obstruction then and only then the expected goal can be achieved.

References:

1. Yogasutra, 1/2
2. Yogasutra Vyasbhasya, 1/1
3. Yogasutra, 1/48
4. Yogasutra Vyasbhasya, 2/26
5. Yogasutra, 4/29
6. Yogasutra, 2/27
7. Yogasutra, 4/30
8. Yogasutra, 4/4
9. Yogasutra and Vyasbhasya commentry, 2/27, (Patanjal Yogadarshan, Explained by Shrimat Swami Hariharanand Aranya), Motilal Banarsidas Publication, Delhi, 2003, page no. 238
10. <https://www.psychologytoday.com/blog/mouse-man/200904/what-is->
11. https://www.researchgate.net/publication/7511034_The_role_of_dopamine_in_human_addiction_From_reward_to_motivated_attention
12. Kjaer TW, Bertelsen C, Piccini P, Brooks D, Alving J, Lou HC. Increased dopamine tone during meditation-induced change of consciousness. *Cognitive Brain Research*. (2002);13(2):255-259 [PubMed]
file:///C:/Users/user/Downloads/Meditation%20Dopamine_0.pdf
13. www.medicalnewstoday.com/articles/232248.php
14. <https://www.psychologytoday.com/blog/the-athletes-way/201211/the-neurochemicals-happiness>
15. Evidence-Based Complementary and Alternative Medicine Volume 2014 (2014), Article ID 203173, 7 pages
<http://www.hindawi.com/journals/ecam/2014/203173/>
16. <https://www.psychologytoday.com/blog/the-athletes-way/201211/the-neurochemicals-happiness>
17. www.yourhormones.info/Hormones/melatonin.aspx
18. The journal of alternative and complementary medicine, Volume 16, Number 11, 2010, pp. 1145-1152
<http://online.liebertpub.com/doi/pdf/10.1089/acm.2010.0007>

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