

# SCIENCE SHORE

exploring the ocean of life

ONLINE QUARTERLY MAGAZINE

VOL. 1 | MAY 2020

A collaborative platform aimed at kindling the learning process. We aim to provide the perfect space for thoughts to grow and knowledge to flow through science in all its forms.



*Scientific Articles*



*Poetry*



*Short Stories &  
Articles*



*Hobby & Art*

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27<sup>th</sup> April 2020

To

**Dr. Srikala Ganapathy**  
The Founding Editor,  
"Science Shore"

Science has taught us many things in Life; in fact Life itself is a Science. We often try to understand the Science in Life and in that process we misunderstand it and misinterpret it. We fail to realise that the Nature is the Life and Nature alone can teach us the Science of Life. We misconnect this triad and live in chaos. That is what we are learning from the ongoing COVID-19 pandemic. When our Science fails, we listen to the Science of Nature. The search for the true knowledge is a never ending process. In this long journey of quest, we see... we hear... we listen... we explore... many things. Thoughts shared by the enlightened minds from various corners show us the innumerable facets of the Science ... the Life ... and the Nature.

Being remembered by the students is the Success of a Teacher; but a Teacher being remembered for a Student is Achievement. I am proud of my beloved student Dr. Srikala Ganapathy, who gave me such an Achievement. I wish her and bless her for the amazing initiative of launching the online magazine "Science Shore". My hearty congratulations for the entire "Science Shore" team.

Let us walk along the "Science Shore" and learn from every tide that brings in new insights.

Regards,



# From the editor's Desk



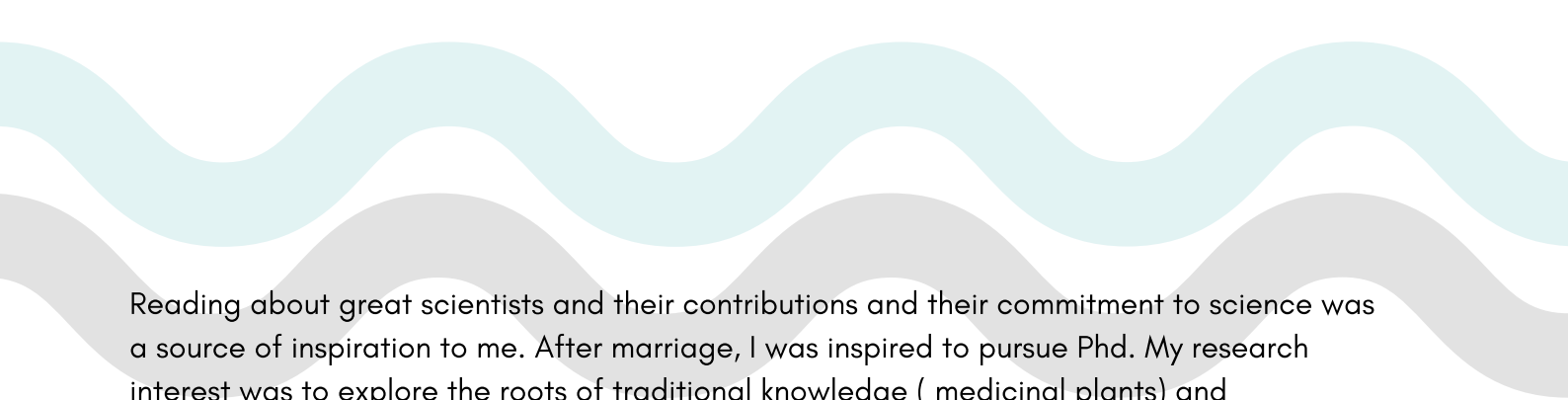
## **Why is Science an essential component in one's life ?**

Science is the backbone of civilization. From the discovery of fire to the present technological advancements, science has played a significant role in progress and betterment of human lives. We can see Science and decode scientific concepts in everyday life. From the earth we live in, food we eat, clothes we wear, transport we use to our brain, an amazing complex thinking organ. For eg. Velocity of light, Solar system, Electrical cells , Gravitation comprises Physical science. Biochemistry is concerned about understanding nutrients in the food, metabolism, digestion, enzymes and hormones. Studying and understanding about cells, structure, organs, genetic blueprint DNA is Biological science. These are just few examples.

Each one of us is aware of , Kolam (the decorative design drawn as lines and curves)-it can be designed using mathematical modeling approach!? Ethnobotany and biodiversity includes studying about variety of plants species depending on geographical location . Phytochemistry is scientific study and investigation of plants and nutritive foods for physiologically active compounds, called phytochemicals for therapeutic potential. So a complete and comprehensive understanding of - Science involves various disciplines. Can Science reach beyond textbooks and theories -? The Goal of any scientific discovery is in application , to solve problems especially in the health and environment sectors considering the challenges faced in the present scenario. Eg. Finding cure for diseases, vaccine development, waste management and clean energy . There are various research activities and initiatives in the field of science and technology by scientists and researchers bringing solutions to problems in the society with a humanitarian approach . Currently Neuroscience and Information technology are exciting research fields to understand brain chemistry , genetics and relating the studies to human behavior. Artificial intelligence is another popular and promising area of research. An awareness about relevance of science and how science has shaped and continues to shape our lives and the world is necessary.

## **My love for science :**

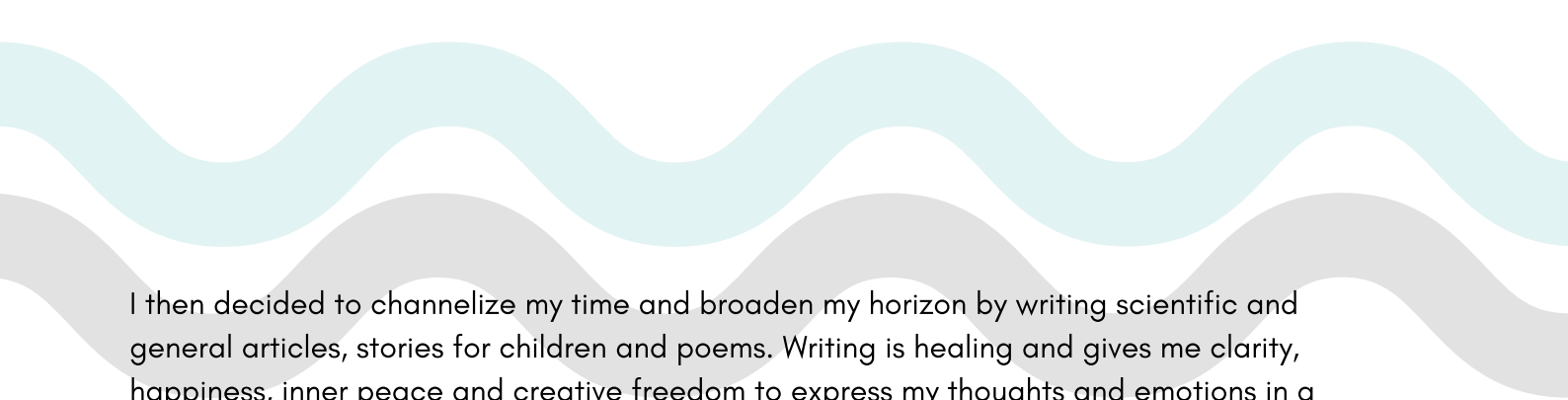
I am grateful to God and opportunities in life and feel happy, content and blessed . I am thankful for all the experiences that has moulded me to what I am today. I was always interested in academics and still love, especially life sciences and have thirst for knowledge, creativity and innovation. Somehow, learning has always inspired and uplifted me. I did B Sc in Microbiology and completed with flying colours with a University Rank. I feel deeply grateful for those moments and grateful to all my teachers, lecturers and Professors for sowing the seeds of love for science, especially -Microbiology in me and further instilled love for learning through their diligent lectures. It gave me impetus and further motivation to pursue M Sc Microbiology .



Reading about great scientists and their contributions and their commitment to science was a source of inspiration to me. After marriage, I was inspired to pursue Phd. My research interest was to explore the roots of traditional knowledge ( medicinal plants) and scientifically investigate and validate their potential bioactivity. I loved the interdisciplinary approach to learn Microbiology, Botany and Chemistry. My thesis focused on systematic invitro and insilico study of antibacterial and anticancer activities of medicinal plants especially against antibiotics resistant bacteria. Our research led to identification of active phytochemical compounds that has efficacy to inhibit resistant bacteria. Insilico method involves use of computer databases to analyse and interpret interactions of phyto molecules and target proteins in the bacterial cells. Our research studies demonstrated potential binding activity showing insights as lead photochemical molecule for further improvement and structural modification and subsequent rational design of novel drugs in health sector in future. However, animal and invivo studies need to be carried out to assess their safety. The whole research process right from collecting literature data, sampling, experimentation, instrumentation , presentation of research work in various national seminars and conferences for the sheer joy to share and learn , interaction with subject experts and peer research scholars, winning presentation prizes and awards and publication of papers in various reviewed scientific journals to defending Viva was an exciting and a great learning experience. I was also passionately teaching Biology and English in schools and did meaningful voluntary work, conducting science workshops for children to reach out to Science. All this gave me much satisfaction.

Nearing forty, recently my hearing capacities suddenly deteriorated. I was shocked and scared . I sensed door bell sound diminishing. I could not follow TV dialogues and asked people to repeat especially when they speak fast. I started to speak loudly. One to one and small group conversations I manage well enough and phone conversations is a real challenge. Series of visits to expert doctors and audiologists followed. Tests were done and I was informed that I suffered from profound sensory neural hearing loss. Hearing capacities of three frequencies out of six were working and one out of three was deteriorating. Doctors said it could be due to damage to hair cells in the inner ear. Hearing aids came as a solution and I began using them ,though not of much help in terms of clarity. My lowest and frustrating moments are when I faced hearing issues when listening to scientific talks in seminars and conferences (which I love the most)that I participate in. Slowly, I started to let go of negative thoughts and accept and face the challenge with grace. I told myself, let me count on the blessings I have and not focus on what I don't have. I then successfully completed Ph D in Botany (interdisciplinary Microbiology). The journey had been long and challenging but was fulfilling. I am thankful to Almighty that all my persistence, perseverance and will power finally paid off. I am sincerely grateful to my research guide for believing in me and supporting me with her kind understanding, guidance and encouragement.

However, professional and teaching activities considerably reduced due to my hearing issues. I self affirmed, let me not think of what I cannot do but sincerely do the best of what I can do.



I then decided to channelize my time and broaden my horizon by writing scientific and general articles, stories for children and poems. Writing is healing and gives me clarity, happiness, inner peace and creative freedom to express my thoughts and emotions in a meaningful way that can touch reader's minds and I aim to leave some positive impact through my writings. I also teach small group of slow learners, – girls, from economically less background to empower them in basic reading, knowledge and confidence building that will help them ultimately to lead their lives independently and find jobs and financial security.

### **Unfolding of Science Shore :**

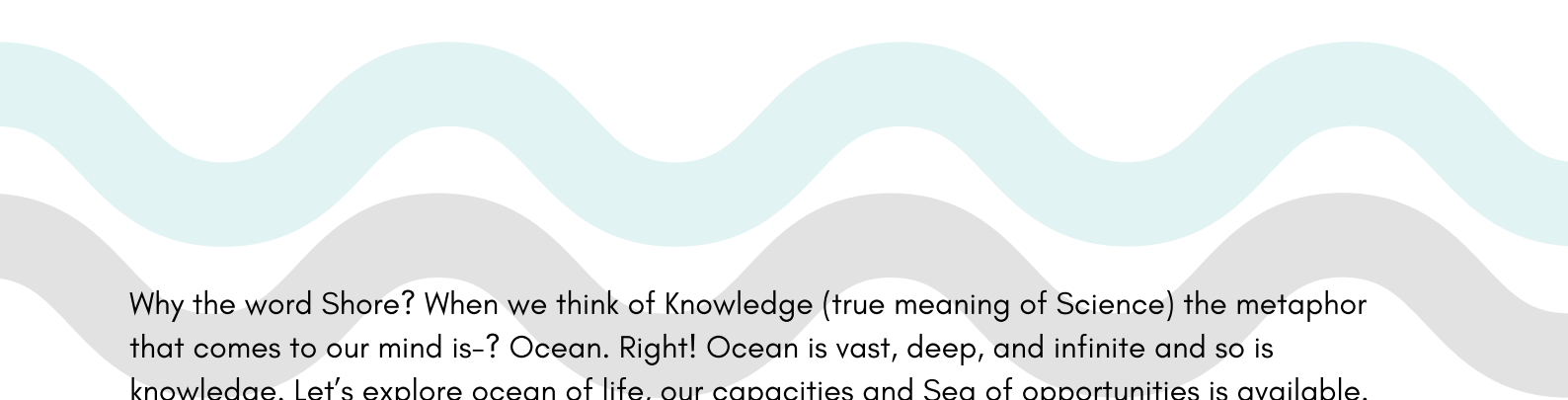
I felt something amiss in my life. I had constant inner drive or passion to create something. I started to think, why not create a learning platform to contribute knowledge and creativity? I discussed this idea with my cousin sister, Sreepradha. She loved the idea and got inspired to join me in the venture. Thus the initiative, Science Shore ( Online website – English multimedia magazine ) unfolded, a collaborative platform for right knowledge and creativity sharing.

### **Why the name Science Shore?**

What is Science? Is Science only Life sciences, Physical science, Chemical science or Biological science or Engineering ? Can we see and think- of Science beyond these definitions ? Yes!

How can we define Science, in true sense –? The word Science is derived from the Latin word “Scientia”- which means “Knowledge”. So, can we embrace science in its real sense which means Knowledge –? Knowledge is beyond borders isn't it? So, can we explore and appreciate science as a wholesome knowledge entity ? Who knows what perspectives we may find?

It could be knowledge about scientific laws, concepts, theories, awareness in medical field, inventions, innovative products, scientists and their contributions, and applications in various fields of Life Sciences. It is about knowledge of words and grammar in literature. We observe and learn from nature. It is about technical skills in art. Mind management is science. Spirituality is science, we observe, question our thoughts, we think with a scientific bent of mind ! So, in every discipline we learn, there is science. That is knowledge. When we are open minded to learn, not only knowledge expands but also deepens with new perspectives, insights , innovative thoughts and creative ideas and gives new dimensions and depth to learning . Awareness about science and technology and also to grow and evolve as better human beings with competency, compassion and creativity is the need of the hour. How inspiring it is to observe life and understand nature and the world and extend our knowledge to life – ! Let us give a try –! That gives some real meaning to our short lives. Let us show our children, our future generation too, this concept and spirit of learning.



Why the word Shore? When we think of Knowledge (true meaning of Science) the metaphor that comes to our mind is-? Ocean. Right! Ocean is vast, deep, and infinite and so is knowledge. Let's explore ocean of life, our capacities and Sea of opportunities is available. Let different waves of knowledge flow in Science Shore.


That's the whole idea of Science Shore , aiming to explore and understand the importance of diversity of knowledge and creativity. It is an integrated approach to learning and development of one's potential by exploring different topics like Scientific/ Medical, Psychological / Self development, Creative (literary or artistic) and Spiritual aspects in a single space , SCIENCE SHORE . It is an approach to bring in various experts from different fields to a common platform so that children and adults can benefit .

I , sincerely thank my teacher, Dr Joseph C Daniel , Associate Professor and Head, Department of Microbiology, St. Joseph's College of Arts and Science, Cuddalore and Dr Sultan Ahmed Ismail , Managing Director, Ecoscience Research Foundation, Chennai for consenting to share their valuable messages and precious wishes for a memorable magazine.

**Science Shore** Magazine features rich variety of content on a range of subjects from contributors from different backgrounds and from different age groups across the world . It is a beautiful feeling that the magazine has appealed to both young and old. We have received huge response from Academicians, Scientists, Doctors, Writers , Poets , Professionals from various fields- , children and students.

Amazing scientific articles with simple explanation of science concepts substantiated with visual representation covering various topics is one interesting and informative section. Other sections include collection of original poems, short stories, thought provoking articles on interesting and wide range of themes . Beautiful art work from young and old demonstrating creativity is another feature. To provide platform to children to express their creative thoughts and ideas, we have included their poems, art work and puzzles. Besides, poetry audio clips and demonstration videos and presentations covering medical field, time management and puzzle solving are also included and available on the website. We wish to thank all the contributors for their enthusiastic contributions to the magazine.

My sincere gratitude and appreciation to Science Shore team members. By Divine Will - right people have joined. I take this opportunity to thank Sreepradha Venkatramanan, Managing editor and Web designer, for her generous time and sincere, selfless efforts to compile and beautifully design the website and Advisors A Annapurna Sharma and Malathi and Editors, Giti Tyagi and Dr K. Veena Gayathri for their unconditional help, valuable inputs, constant support and encouragement.



How to stay inspired? Let us remember each one of us have a unique potential. Each one of us can contribute in our own little ways. Let us be inspired to be lifelong learners. Let us remember right knowledge is empowering and creativity is awakening. Let us have eternal love for learning and willingness for sharing. Let us learn, sometimes unlearn and learn, share, grow and evolve! Let us gift knowledge to our own selves and to the world. Let us give ourselves first a better future and then to society and to the world!

To tide over the current crisis of COVID – 19 pandemic, as responsible citizens let us apply scientific principles and follow right precaution guidelines. Let us not panic , at the same time not be careless. In this uncertain times, let us take care of our mental health with positive mode of thinking. Worldwide, research is going on to deal with the pandemic. Let us keep ourselves updated with information on scientific progress, R and D ,innovation from credible sources.

Stay safe!

Enjoy Science! Enjoy knowledge and creativity !

I am delighted to present to you all the first issue of Science Shore.

Happy reading, listening and watching !

Do share your thoughts!

Best wishes ,

- Dr K Srikala Ganapathy.

Founding Editor

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# THE GOODNESS OF DIETARY FIBERS

## Dr GEETHABALA

Since the birth of 21st century, India has grown to be an epidemic with the increase in the rate of metabolic disorders like Diabetes, Cardiovascular disorders, obesity and cancer. The unhealthy eating habits, sedentary life style and physical inactivity has lead to a rapid Nutrition transition which is considered as the main drivers of this epidemic.

*What do you mean by this new term, which the scientists and nutritionists are trying to break through?*

It basically refers to the changes in the composition and consumption pattern of the diet that results from improvement in socioeconomic status and physical inactivity levels. Nutrition transition leads to a diet high in refined carbohydrates, sugar, saturated fat, processed foods while ignoring coarse grains, cereals, legumes, vegetables/fruits and dietary fiber. The diet of Indians consists predominantly of refined cereal grains (like white rice or refined wheat), which contribute to half of the daily calories.

**“We are what we eat - Anthelme Brillat-Savarin, 1826”**

The food you eat can affect your health and your risk for certain diseases.





Eating a healthier diet includes the consumption of whole grains, fibre rich fruits and vegetables and antioxidants. We have forgotten the goodness of our traditional and fermented foods that are rich in nutrients. A wide interest towards health promoting functional foods (foods that can aid in healing ailments) is increasing with the need and exploration for new sources expanding as well.

The present article focuses on the goodness of dietary fibre that can improve the symptoms of metabolic syndrome (diabetes, arteriosclerosis hemorrhoids, diverticulitis and colon cancer). Dietary fibre is a type of carbohydrate that cannot be digested by our body, instead the good microbes in the gut metabolize them. It is found in edible plant foods such as cereals, fruits, vegetables, dried peas, nuts, lentils and grains.

Research has strongly linked high-fibre diets with longevity and healthy lives. As early as in the 1960's, studies by Dr. Burkitt of United Kingdom, found that Ugandans who ate high-fibre vegetable diets avoided many of the common diseases of Europeans and Americans, however, only recently we have gained a deeper understanding of why fibre is so vital to our well-being (1).

In a latest report in 2017, researchers have found that the importance of fibre is connected with the importance of our gut microbes. A proper fibre diet literally feeds and makes these bacteria thrive. In turn, they increase in number and kind. The more microbes we have in our intestines, our immunity is increased, helps in enhanced metabolism and related disorders thereby creating a dual benefit (2).

A prominent example of the connection between fibre, intestinal bacteria, and health are the Hazda, the tribal community based in Tanzania, the last remaining hunter-gatherer communities in the world. They eat a spectacular 100 grams of fibre a day, all from food sources that are seasonally available. As a result, their gut biome is packed with diverse populations of bacteria, with the changing of the seasons and the changes in their diet (3).

The Food and Drug Administration (U.S. FDA) recommends an intake of dietary fibre, 38g/day for men and 25 g/day for women. Foods containing fibre can provide other health benefits as well, such as helping to maintain a healthy weight and lowering your risk of diabetes, heart disease and some types of cancer.

Soluble fibre is found in foods like fruit, oats, beans and barley. When it dissolves in water it forms a gel-like substance. Soluble fibre helps to support the growth of friendly bacteria needed to help maintain a healthy gut, reduce cholesterol absorption by binding to it in the gut etc.

Insoluble fibre does not dissolve in water and is found in foods like wholemeal bread, wheat bran, vegetables and nuts. Insoluble fibre adds bulk to stools by absorbing water and helps in regular bowel movements. It is important to increase fluid intake when fibre consumption is increased.

Without fluid, the fibre stays hard, making it difficult to pass and causing constipation.

# BENEFITS OF A HIGH-FIBRE DIET

## Gastro-intestinal health

- Promotes regular bowel movements
- Prevents constipation
- Reduce the risk of developing colitis and hemorrhoids
- Reduce the risk of colon cancer

## Diabetes and cholesterol

- Soluble fibre— can slow the absorption of sugar and help improve blood sugar levels.
- Improves glucose tolerance and insulin response
- Lowers "bad," cholesterol levels
- Reduces blood pressure and inflammation

## Obesity

- High-fibre foods are energy dense
- eat less and stay satisfied longer
- reduced risk of dying from cardiovascular disease and all cancers

## ***FIBRE FACTS***

- ✚ Fibre is of two types: soluble and insoluble.
- ✚ Dairy products and white bread have little to no fibre.
- ✚ Cereal grains, seeds, vegetables, and fruits are good sources of fibre.
- ✚ Most fibre is contained in the outer layers of grains; the refining process removes these layers. Seeds and nuts can be a good source of added fibre.
- ✚ Fibre helps speed up the elimination of toxic waste through the colon.
- ✚ If you are not used to eating a high fibre diet, you may have problems with gas in the beginning. Start slowly and be sure that you are drinking 6 to 8 cups of water per day.

## ***DIETARY FIBRE CONTENT OF VARIOUS FOOD SOURCES***

<b>Source</b>	<b>Dietary fibre (g/100 g edible portion)</b>		
	<b>Total</b>	<b>Insoluble</b>	<b>Soluble</b>
<i>Grains</i>			
Barley	17.3	—	—
Corn	13.4	—	—
Oats	10.3	6.5	3.8
Rice (dry)	1.3	1.0	0.3
Rice (cooked)	0.7	0.7	0.0
Wheat (whole grain)	12.6	10.2	2.3
Wheat germ	14.0	12.9	1.1
<i>Legumes &amp; pulses</i>			
Soy	15.0	—	—
Kidney beans, canned	6.3	4.7	1.6



Lentils, raw	11.4	10.3	1.1
Lima beans, canned	4.2	3.8	0.4
White beans, raw	17.7	13.4	4.3
<i>Vegetables</i>			
Bitter gourd	16.6	13.5	3.1
Beetroot	7.8	5.4	2.4
Fenugreek leaves	4.9	4.2	0.7
Eggplant	6.6	5.3	1.3
<i>Nuts and seeds</i>			
Almonds	11.20	10.10	1.10
Coconut, raw	9.0	8.5	0.5
Peanut, dry roasted	8.0	7.5	0.5
Cashew, oil roasted	6.0	–	–
Sesame seed	7.79	5.89	1.90
Flaxseed	22.33	10.15	12.18

(Source : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3614039/>)

Killing the processed foods and eating whole foods rich in dietary fiber is the best direction towards a healthy lifestyle. Eat wisely, stay healthy.

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# SCIENCE OF WATER DROPS, SOAP BUBBLES & SURFACE TENSION

## S. JOSEPH WINSTON

### Introduction

Have you wondered why a drop of water is always spherical when tossed on the air as seen in Fig.1? Plants do not have their water pumps to draw water from soil and raise it up the ground through their stem to their stalk and leaves several feet above ground unlike us having the sump pump to pump water to the overhead tanks.



**Fig.1 Spherical water droplet**

How are the plants pumping the water from the ground soil to the stem and to the leaves? Everything seem to be a magical event until the basic science concepts are well understood.

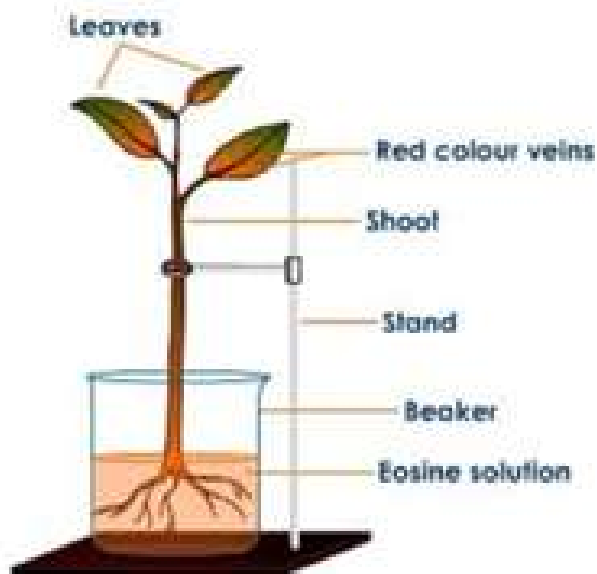
To answer all these questions, one has to have a good understanding of surface tension. It becomes increasingly important to understand the science to justify the natural phenomenon and also to engineer such mechanisms for the invention of the new things in the world to ease lives on the planet. Let us try to know more about the plant's way of water management for survival, understanding the flow of the water molecules in the plant root, stem and to the stomata of the leaves. During the evaporation of the water molecules from the leaves to the air, will pull the adjoining water molecule to the space that the evaporated molecule left. Just as we notice a queue in a cinema theater ticket counter move forward, each of the water molecule will be pulled up against gravity by the cohesion force between the water molecules.

This makes a chain of water molecules moving up against the gravity as shown in Fig 2. Further in the stem, the xylem which holds the water also due to the adhesion pulls the water up in the stem of the plants. This is how the plants do water management for its survival. However it is the water that propels itself through the stem and to the leaves by a force helping the plants to survive. Just to know more about these forces, it is better to understand them as inter molecular forces which is by cohesion and adhesion.



**Fig.2 Water flow path to the leaves**

Fig. 3 shows the common experiment often on balsam plant how, the water is drawn up into the stem and leaf veins.



**Fig. 3 Balsam plant experiment showing how water is drawn upwards**

Let us try to understand these forces. This entire process is called as transpiration. Now to understand the forces that work against gravity, it is better we look into those cohesive forces and the surface tension.

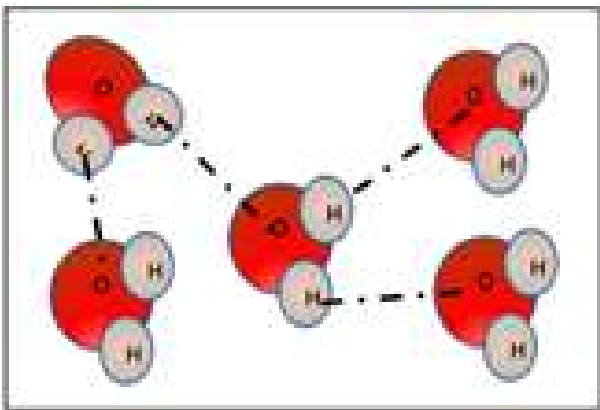


## What is cohesion and adhesion?

The intermolecular attraction within the liquid molecules is called as cohesion and the intermolecular attraction between liquid molecule to the interacting material molecule in contact is called as adhesion. In simple words, water sticking to itself is cohesion and water sticking to any other material is called adhesion. Fig. 4 schematically explains the cohesion and adhesion. Where does the cohesion force come from?



**Fig. 4 cohesion & Adhesion**



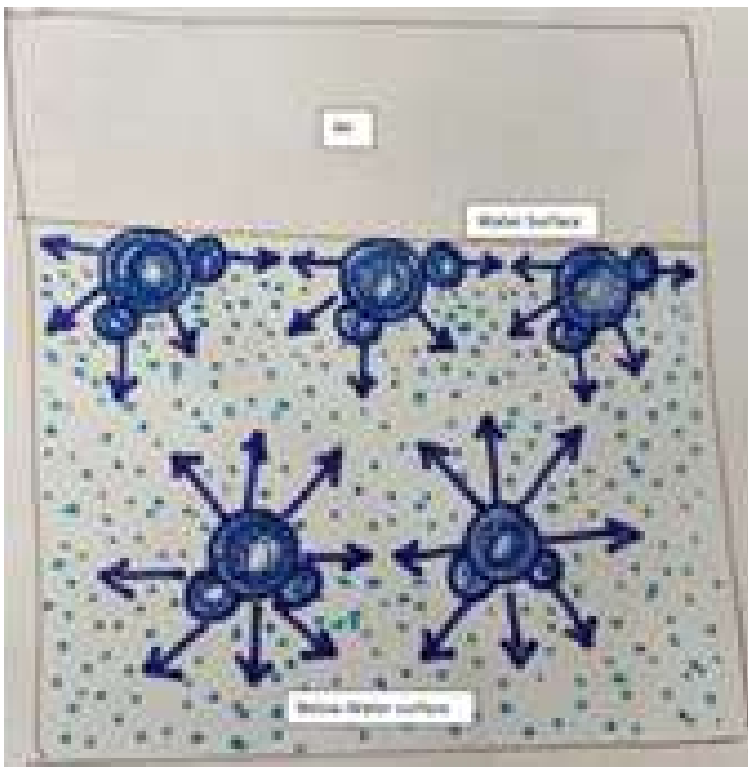
**Fig.5 Water molecules**

To understand how these cohesion forces originate, one must look into the chemical formula of water. Water comprises of two atoms of hydrogen combined with one atom of oxygen.

The hydrogen atoms move towards one side leaving the oxygen atom on other side. The side near the hydrogen atom has a partial positive charge and the side near the oxygen atom shows partial negative charge. When the hydrogen atom of a molecule comes near the oxygen atom of another molecule they start attracting each other pulling them together. Due to this pulling force at the molecular level, the water in the space clump together to form a drop. These forces give water a sticky nature. Fig.5 shows the molecular attraction which manifests in the form of forces.

## What is surface tension?

Now that we have understood how the molecular forces manifest, it is quite interesting to understand why does a water sprayed from a garden hose or any tube form a spherical shape. If we look at the water in a beaker, the molecules inside are surrounded by other molecules and experience a uniform attraction force around the molecule from the neighboring molecules as seen from the Fig.6. However, the molecules which are on the water surface, due to the loss of continuity of water molecules further, experience attraction forces along the water surface. However, all these surface molecules experience an attraction forces into the water side and also along the surface but not on the air side. This force continues to interact on the water surface and this force is called the surface tension.



**Fig.6 Cohesion forces**

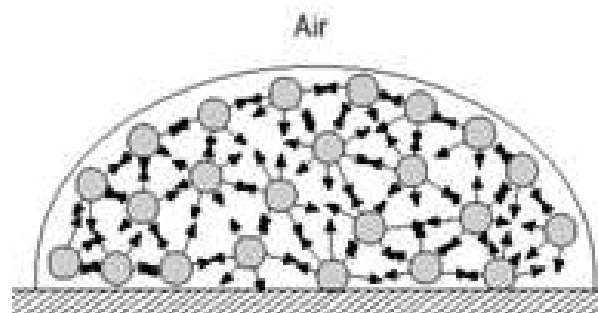
This continuous process tends to curl the surface area minimizing it, as all the molecules tend to go inside thereby building up the inside droplet pressure. The surface forces slowly form the spherical shape to the drop in the air. However, the inertial forces and the gravity try to squeeze the spherical ball which often tend to change its shape and the surface tension tries to bring them back to spherical shape.

## Why spherical shape of water drop in air?

Now it is easy to understand the behavior of water turning into a spherical shape when thrown on air which is due to the surface tension. The water has cohesion and tends to stick to its molecules and the molecules on the surface try to create the surface tension and keep pulling the molecules inside.

As the molecules possess mass and water as a whole has a mass the clumped water molecules possess a mass which in the gravity field will get pulled downwards. Further due to the motion of the drop in the air also gives the mass the inertial forces which based on the accelerations tend to squeeze the water ball in many ways.

In order to quantify these forces for the computation, it is imperative to measure them and quantify them and develop the property table for each of the fluids so as to easily use them for all the practical purposes. How to quantify the surface tension? How to arrive at the coefficient of surface tension property?



**Fig.7 Water drop on a surface**

How to measure surface tension and what are the various applications of surface tension? continuation of this article in the next issue...

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# BEWARE OF LIFESTYLE STRESS

## Dr NITHYAKALYANI

PCOS? Have you heard about it? If the answer was no, well I am surprised because it has been the latest buzzing word in the medical field when you are faced with challenges in having a child. I am not a medical doctor or a dietician, hence will not be detailing on the medications and diets required to manage the disorder. But my birthright as a woman has given me an opportunity to share my insights on this platform on the PCOS syndrome with my fellow counterparts. Okay, coming straight, there are lots of synonyms for the PCOS such as polycystic ovarian disorder, polycystic ovarian syndrome, fertility disorder, etc. Simply put, the ovarian follicles are not developing fully and rupturing in a regular fashion as it occurs during the menstrual cycle, instead there is immature development and no rupturing or simultaneous rupturing of all the immature follicles. These changes are primarily due to changes in the hormone cycle which are ultimately governed by the master pituitary gland. When the players (i.e. hormones) participate in an organized fashion, a beautiful orchestra is played out resulting in the monthly periods, while being played in a non-synchronous fashion results in generation of noise as the PCOS symptoms such as irregular menstrual cycle, amenorrhea (absence of menstrual bleeding), heavy blood flow, continuous spotting, mood swings, weight gain and depression.





Are you stressed reading the above symptoms due to the little mishap caused by hormones or by any other way? Well, do not get stressed as it is the reason in the first place for the appearance of PCOS in our lives. Modern times requires women to be efficient not only at homes as a housekeeper serving healthy tasty foods and taking care of people around but it has placed additional weights on them as an educator, reformer, social activist and many more. Though women had accepted all the responsibilities with pride in their hearts, balancing all these vital roles has placed quite a tremendous pressure on them which had inturn caused a lot of mental stress. Stress signals the body to go into survival mode thereby completing the tasks at hand but at the same time ignores body's message to the brain to nourish and take care of itself, which under long periods of time expresses itself as symptoms to get treated to return to its natural relaxed state. So, women take pride for doing all the things you are doing now and continue to do so with calmness in your heart and mind to prevent and manage such lifestyle disorders.

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# NUTRI TIPS

## Dr A SADHANA RAJKUMAR

### **Eat on Time**

It's very important to have regular time schedules. First and foremost, it is necessary to break the fast as early as possible. Remember it's a long gap after dinner. People with predisposition to diabetes should follow regular eating time as this will ensure normal blood sugar levels. Frequent fluctuations in blood sugar levels can trigger diabetes. Delaying breakfast is as bad as not eating breakfast. All the metabolic processes will function optimally and thereby ensure wellness when one follows a regular time schedule.

### **Chew like a Cow**

In today's fast paced lifestyle most of us really don't find time to chew food. Rushing through food before the next appointment is foolishness. We have been blessed with a good set of teeth for the sake of aiding the process of breaking food and thereby helping in assimilation. The best of nutritious food too goes to waste when not broken down well. Stomach can only act as a churning machine and doesn't really break those large chunks of solid food. The body derives all the nutrients from the food when you chew well. What more, the pleasure of taste is also achieved!

### **Drink Adequate Water**

Water the elixir of life is very important for the various benefits it delivers. From transportation of nutrients to helping in temperature maintenance water has so many nutrition benefits. Your intake of water should depend on the urine colour. If your Urine is dark coloured, then it's a strong indicator that you need to increase your water intake. Water is very important for skin health too. Go ahead and drink enough water and stay hydrated for dehydration is a bad sign.

### **Include Green Leafy vegetables every single day.**

Green leafy vegetables can't be excluded from the diet. One has to take at least 40 grams of this micronutrients rich fibrous vegetables every single day. Apart from the rich source of vitamins and minerals they provide, they are a rich source of fibre which plays an important role. From, delaying the absorption of glucose and thereby helping in controlling blood sugar levels to keeping the fat in check, and in preventing anaemia. Their benefits far outweigh the cumbersome task of cooking. Eat greens to stay in your teens bubbly and energetic.

## **Fruits our Immunity Boosters**

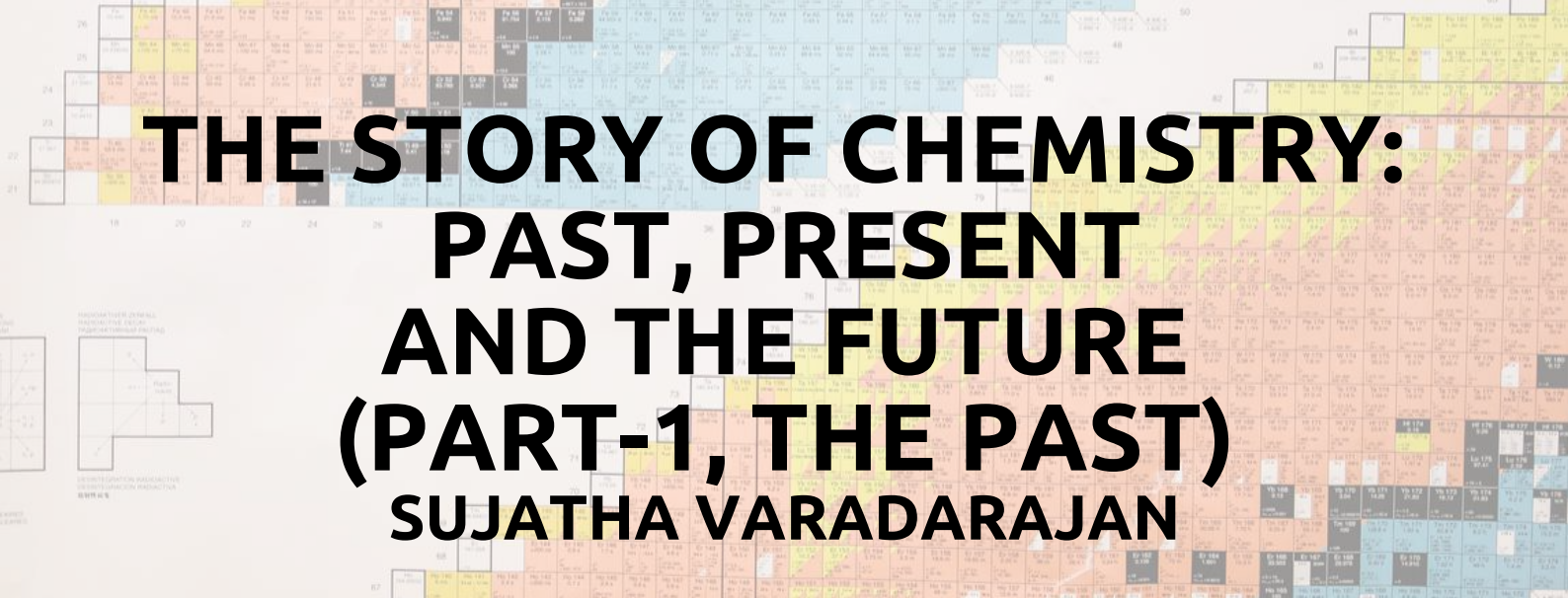
### **An apple a day keeps the Doctor away!**

Yes absolutely, but definitely not if one is a fan of imported fruits from all over the globe. Go desi as far as fruits are concerned. And these imported fruits if I can claim with authority, are nothing but a cocktail of chemicals, wax coated and coloured to prolong their shelf life and to make it more appealing. They also say never trust a handsome man for looks are very deceptive. Sorry about this analogy though weird, stands good in our choice of fruits too. Eat fruits which are indigenous to your place (grown within a radius of 100 km). Eat them every day and eat that which is in abundance in that particular season.

More tips to follow. Meanwhile put these to practice as I compile more for the future.

**Eat Sensibly Health is Achievable.**





# **THE STORY OF CHEMISTRY: PAST, PRESENT AND THE FUTURE (PART-1, THE PAST) SUJATHA VARADARAJAN**

Chemistry plays an important role in understanding life whether on the earth or of the wide blue yonder. One always looks for  $\text{H}_2\text{O}$  (water),  $\text{NH}_2\text{C}=\text{O}$  (protein), etc. or simply stated carbon, hydrogen, oxygen, sulfur, nitrogen, phosphorus. Chemistry is intricately connected with the physical, biological, and social aspects of life.

Be it  $\text{Li}^+$  ion in the battery of cell-phones or magnesium in chlorophyll, nucleic acid in DNA or helium in the Sun, chemistry prevails in the mysterious existence of each and everything in the universe providing a vast scope of understanding nature through various lenses. We need to connect these seemingly disconnected things as all are made up of chemical elements.

This article navigates the history of chemistry to the present and extrapolates it to the future scopes. The article includes a narrative on the influence of chemistry in our culture and education. And finally, it suggests the future prospects for chemistry students, catering even to those who have their hearts lying in literature or astronomy.

## **Did Universe come to existence first or Chemistry?**

It is stated that the Universe is a result of primordial nucleosynthesis which is nothing but a combination of protons and electrons to form a nucleus. Does it suggest something? Yes, that the particles considered fundamental to chemistry were existing even before the formation of the universe. With the formation of hydrogen and helium as a result of nucleosynthesis, lot many more elements started getting formed during the process of cooling of the universe. It is estimated so far that 94 elements have occurred naturally and it is the intellectual inquiry for geo-chemists to research and trace the details of how these elements came into existence!

## **History of Chemistry**

Most of us must be knowing that the advent of Chemistry started with alchemy. And, we are aware of the attempts by the alchemists to invent elixir of life (for youth and longevity) and philosophers stone (transmute base metals to gold). Many discoveries happened during the alchemical time period, such as –porcelain, phosphorus, metallurgy, ink, dyes, paint, cosmetics and many more...Yet alchemy is not classified under chemical sciences. Why?

## **Why alchemy is not a chemical science??**

Core aspects of alchemy such as spirituality, incoherence, secrecy, experiments not in the true sense and illogical interpretations snatched its right to be a part of the sciences. However, alchemists were masters in generating procedural understanding of distillation, smelting, glass blowing, etc. and had set up a solid ground for the development of modern chemistry.

Alchemy was prevalent in India right from the Vedic-period. Vedic literature mentions about the usage of mercury in medicines. The chemistry was then known by many names such as Rasayan-Shashtra, Rasa-Vidya, Rasa-Tantra. Rasa implied mercury. Use of copper and iron currency right from the Vedic-period, colored cave paintings, usage of colorful beads and pottery indicate a chemical understanding of the people from ancient times because all of these involve chemical changes. Nagarjuna was one of the famous alchemists in ancient India whose work is documented and quoted even today. He mentions in his literature that only those metals should be used for cooking purposes which are free from "Dosha", meaning, not all metals are suitable and we know the reason today to be the possible chemical activity of the reactive metals. What is interesting is, since all of these efforts by alchemists did not offer any scientific explanation and was more a procedural understanding, it continued to remain within the realm of alchemy.



## Evolution of Modern Chemistry

What is Modern Chemistry? Modern Chemistry considers the presence of atoms and subatomic particles. Have you wondered how did we ever arrive at an understanding of the existence of atoms?

The story goes like this. 2000 years back, there was a Greek philosopher Democritus. He was wondering while lying on the beach as to what would happen if he continued breaking the sand particles into further and further pieces. Suddenly, it occurred to him there might be a point beyond which it may not be feasible to break it any further. This idea made him name such a tiny part as Atomos. Subsequently, he wrote some books and mentioned his views on Atomos. But then making copies in those days meant writing the whole text again, few copies were made and that got lost. One of it fell into the hands of a great poet of his time Leucritus who was fascinated by this idea and he too wrote a number of books in which he mentioned the atomist's idea of Democritus. Almost all of these works were lost but for a badly damaged copy which was found thousands of years later. With the advent of press more copies of this book were made available. That is how we came to know about Democritus and we do give credit to his original idea of the existence of atoms.

However, many people still were not convinced of the existence of atom and they continued their focus on understanding more about metals.

## **Atoms in Boyle's J tube**

Do you know about the first ever experiment that resorted to explanation based on the existence of atoms?

Atomists Boyle was experimenting with mercury and J tube. He sealed one end of this tube and poured mercury through the other end. He noticed that mercury in the other end rose. A common man would think the possible reason to be the empty space getting occupied by the extra mercury we pour. The scientist's insight said that the space is occupied by air and the distance between atoms of the air is compressed, thus, creating more space for the extra mercury. This thoughtful explanation was not sufficient for people to believe in the theory of invisible particles. Hmm, convincing the scientific community is not all that easy.

Then, how could existence of an invisible particle be ever proved without any sophisticated gadgets like what we have today?

## **Weighing scale and Atoms**

Though weighing scales are known to be used from the very early days of Egyptians, modern chemistry evolved with the discovery of weighing balance. Antoine Lavoisier (1776) could talk about the conservation of mass and the process of combustion (which finally replaced the Phlogiston Theory) based on this powerful tool. A new era started from here where chemists were not only performing experiments but were also trying to explain the observed phenomenon.

Let me pose a question. In an experiment, if we take 5gm of copper, 4 gm of oxygen and 1 gm of carbon and we end up with 10 gm of copper carbonate. And suppose in the second run, if we take 7 gm of copper, 4 gm of oxygen and 1 gm of carbon, and observe that here again we get 10 gm of copper carbonate. What inference could be drawn?

In one such effort to explain his result on the identical yields of copper carbonate in the combination reaction of copper and carbonate, Proust came up with the idea of constant proportion. He inferred that copper carbonate is made up of a fixed part of copper, oxygen and carbon. These parts are nothing but today what we know of as atoms.

Further study by Dalton led him to understand that the compounds need not always be made up of definite proportion. They are always in proportion but this proportion may be a multiple. For example, 12 parts by weight of carbon can combine with 16 parts by weight or 32 parts by weight of oxygen giving rise to carbon monoxide or carbon dioxide respectively. Dalton took a leap to equate this proportions by weight to numbers. He suggested that 1 atom of carbon combines with 1 atom or 2 atoms of oxygen giving rise to carbon monoxide or carbon dioxide. That was the researcher's insight!

This is how Daltons' atomic theory originated. He did not stop at this. He tried to explain all the reactions then known to him using this theory. He also tried to explain the reaction using the Law of Conservation of Mass or Law of Definite Proportion. These are now taught in Modern chemistry classes.

## **History of Chemistry in India**

While Alchemy prevailed in the whole of the world, formal chemistry education was introduced in the United States, to be a part of medicine and pharmacy by Prof. Rush who conducted lectures talking about findings of Lavoisier. He also realized the need for experimentation as chemistry is an experimental science, meaning, the facts emerge more from experimentation. Alternatively, the ideas need to be proved by experimentation than by logical reasoning. Experimentation in chemistry is as old as chemistry itself.

Liebig, Eliot, and Storer have made a major contribution to laboratory chemistry. Liebig would take five students annually for intense training. Under the mentorship of the senior students, these students would synthesize and analyze some 100 compounds before they would be directly under Liebig for research work. Most of the organic chemistry that we read today is from the labs of Liebig.

(While some may condemn chemistry for the damage it potentially does to the environment creating enormous public fear about chemistry, ironically, it is only chemistry that can solve the problems of the world be it energy crisis, incurable ailments, biodegradables. How?)

Let's read it in the next issue...

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# LET US UNDERSTAND DIGESTION TOSHINI

As we know food we eat daily is digested and ejected out regularly. Food we take daily is first broken down into smaller particles in size and then absorbed in as glucose molecules by every cell of our body.

There are two kinds of digestion: mechanical and chemical. Mechanical digestion involves physically breaking the food into smaller pieces. Food we eat is first chopped and well grinded and mixed with saliva in our mouth forming a bolus called chyme. During mechanical digestion, large pieces of food are ground and crushed into smaller pieces. This action increases the amount of surface area available for chemical digestion where digestive enzymes break down complex molecules such as carbohydrates into simple molecules such as glucose. Each organ contains enzymes which break down specific food types. Different foods in the same meal were found to empty at different rates. [1]

Ingestion of food and distention of the stomach induce secretion of gastric juice. Stomach secretes 2 to 3 L of gastric juice/day. The rate of secretion may increase from 1 mL/min under fasting conditions to 10 to 50 mL/min immediately after food ingestion. Increase in food amount, protein content, and meal viscosity increases secretion. Principal components of gastric secretion include hydrochloric acid (HCl), pepsinogens, mucus, and water. Food composition and quantity play a major role in deciding the time required to complete the digestion. When the meal has finished emptying from the stomach, the fasting motility pattern is resumed. [4]



Food structure and texture have been found to affect stomach emptying. On ingestion of a mixed meal, the pattern of contractions changes to digestive motility pattern, The chyme is thus squirted back into the stomach, an action called retropulsion. Retropulsion is responsible for drastic mixing and emulsifying the food with gastric juices, causing grinding and rubbing between food particulates and/or stomach wall. Repeated propulsion, grinding, and retropulsion reduce the size of food particles into a softer consistency in a suspension form. Food particles with large size and density need more time for size reduction. This breakdown allows the nutrients from foods to be absorbed into our bloodstream so that they can support the functioning of all of the cells in our bodies. [4]

Among the major components of foods, fat is emptied more slowly than carbohydrates and proteins. Emptying 4 g of fat emulsion takes the same time as for a solution of 9 g of carbohydrate or protein. Digestion of solids is markedly delayed when meals are fried. Different sugars empty from the stomach at different rates. Complex interactions occur when different types of solids and liquids are consumed simultaneously. Increasing the viscosity of liquid meals delays digestion. The mechanisms governing delayed stomach emptying/digestion with increased viscosity of meal are thought to be related to the negative feedback from the intestine.

Thus good, normal solid food takes 77 minutes and liquid consumes 38 minutes for its complete digestion. Once food reaches the small intestine, intestine continues to move and helps the food particle get exposed more to enzymes and move to large intestine. [3]

## Chemical digestion:

Chemical digestion takes place in several organs of the digestive system. Chemical digestion involves breaking down the food into simpler nutrients that can be used by the cells.

Chemical digestion involves the secretion of enzymes throughout the digestive tract. These enzymes break the chemical bonds that holds food particles together. This allows food to be broken down into small, digestible parts.[3]

S.no.	Name of the Enzyme/ Hormones	Secreted at	Functions
<b>Enzymes</b>			
1	Amylase	Mouth	break down large starch molecules into smaller sugar molecules.
2.	Pepsin	Stomach	break down proteins into amino acids.
3	Trypsin	Pancreas	breaks down proteins
4	Pancreatic lipase	Pancreas	break apart fats
5	Deoxyribonuclease and ribonuclease	Pancreas	break bonds in nucleic acids like DNA and RNA.
<b>Hormones</b>			
1	Ghrelin/hunger hormone	Small intestine, pancreas, brain	which signals when you are hungry
2	Gastrin,	Stomach	signals the secretion of gastric acid.
3	Cholecystokinin	mucosal epithelial cells in the first segment of the small intestine (duodenum)	stimulates delivery into the small intestine of digestive enzymes from the pancreas and bile from the gallbladder
4	Secretin	peptide hormone produced in the S cells of the duodenum, which are in the intestinal glands.	regulates water homeostasis throughout the body and influences the environment of the duodenum by regulating secretions in the stomach, pancreas, and liver.

After breaking the food into molecules of glucose using above enzymes and hormones, Glucose is absorbed by the intestinal epithelium cells and then released in the blood flow of the portal vein (liver) .At tissue level the gastrointestinal tract continuously communicates with the brain, especially with the hypothalamus, via the gut-brain axis by sending signals to peripheral tissues (entire body) via the autonomous nervous system., thus detection of glucose in the whole body, including the hypothalamus is done and any disturbances in the gluco sensing process may lead to metabolic disorders such as type 2 diabetes. These glucose molecules utilized in every activity (including digestion) of all the cells in our body as energy source. Once the food is completely digested appetite symptoms begins. [4]

To conclude as our ancient time practices avoid taking liquid during solid food, have half- a- stomach of food, followed by one-fourth of liquid/ water with one-fourth of air in stomach to initiate good and complete digestion. Have good food for healthy life.

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# THE SHELL

## GEETHA NAIR G

It was soon after Ahmed passed his tenth class at the second attempt that his father told him to attend a recruitment rally being held on the main island. Ahmed and a few of his companions who had cleared the tenth class crossed over and participated. Two months later, when Ahmed and his friends were swimming in the lagoon, his little sister, Amina, came running towards him, her arms waving wildly, shouting, "A letter ! A letter has come! Ikka, come out and come home fast." The post arrived only twice a week; it was brought along with other cargo on the ancient ship that plied between the mainland and the Lakshadweep Islands. Ahmed raced home with Amina trotting behind him.


His father was waiting on the verandah, a proud smile on his sunburnt face. The letter was in his hand; Ahmed had been selected to join the Indian Army as a jawan. What Ahmed felt first was a stab of fear at the thought. All his 17 years he had lived in Kalpeni, one of the beautiful Lakshadweep Islands. He had gambolled in the benign waves, played football on the white beaches, gone swimming in the incredibly blue lagoon. He had eaten with relish the coconut rice and tuna curry that his Umma made every day. How could he leave behind all of that? How could he leave behind Yusuf and Ali, his bosom friends? And Amina, his little sister; wouldn't she weep if her Ikka left her side, crossed the sea and became a soldier? Ahmed's own eyes filled at the prospect.



Two months later, after a rough three-day voyage, Ahmed reached the mainland. He had just a few glimpses of novel sights like towering buildings and surging traffic before he and five others were put on a train that took them through undulating terrain to their destination, the Regimental Centre where their training was to be. Then it was that life turned into a nightmare. He shared his living quarters with a hundred or more young men like him. It wasn't exactly living quarters, as from dawn to dusk they underwent training. It wasn't even fully their sleeping quarters as they snatched just a few hours of sleep each night. Bullying, harshness, downright cruelty made up their daily fare. All this was meant to toughen them up, to make them indomitable soldiers, the bewildered boy was told by his training instructors. Each day was a challenge to his physical endurance as well. In addition to arduous drill on the parade ground, there were route marches, rope climbing, firing practice – the list was a very long one. And wrapping every minute like a grey cloud was near-intolerable homesickness. How he yearned for his family, his friends, the blue sea and the bluer lagoon ! Amina skipped through his dreams often and sometimes he came awake imagining for a second that he was back in his home until he saw the outlines of the bunker and his sleeping fellow-recruits.

One day, he caught sight of himself in the rear view mirror of the parked Brigadier's car. A gaunt, brown face, topped with a near-shaven head was what he saw. He was glad that only his letters and not his photos reached Kalpeni every week. His mother and sister would have wept otherwise.






That day, the recruits had been assigned a new task. They had to clear the ground and lay a new road leading up from the Officers' Quarters to the Mess. It was back-breaking work. Shovels and pickaxes grew more and more slippery with sweat as the day wore on.

It was when Ahmed was taking a break, resting under a jacaranda tree, that he saw a little figure approaching from the Officers' Quarters. For a moment he thought he was hallucinating and that it was Amina who was skipping up to where he sat. No; this was not Amina though she did resemble his little sister in size and appearance. This little girl carried a basket. "I have come to gather these flowers," she said. He was pleased that she spoke his language. "I am Mili. What is your name?" She started picking up the fallen purple blooms of the jacaranda tree that were strewn all around Ahmed. She was a curious child and rapidly asked him many questions about his home and family. She was specially intrigued by Amina and the sea. He was only too glad to answer.

"I have seen hundreds of recruits but this is the first time I am talking to one," she said with satisfaction. He learned that Mili was the only child of the Major Saab who stayed in the house nearest to them in the row. Ahmed had heard him spoken of as a kind man with an unconventional attitude and a ready smile.

It was time for Ahmed to resume his work. "Let me get you some Kissan orange squash," said the child. She was back in no time with a full water-bottle.






Ahmed was uneasy about accepting the drink but at the child's insistence he drank the welcome, cool juice, sharing it with the comrades next to him. Then, he took up his pick-axe and swung it with renewed energy. The sharp edge landed on the big toe of his right foot. Through a fog of pain, Ahmed remembered the Major Saab appearing and two comrades half-carrying him to the verandah of the house while Mili hovered around him, her face pale with distress.

It took three weeks for Ahmed's toe to heal. Every Sunday afternoon, after this, he paid a visit to Mili's house. The two friends would sit on the lawn and talk about a thousand things. To Ahmed, these visits were balm that soothed his lacerated, home-sick heart. He spoke often of his happy life on Kalpeni. Mili had seen the sea only a couple of times. When Ahmed described the shells of many sizes and colours that washed up on the beaches every day and Amina's awesome collection of them, Mili's eyes filled with longing. "My training ends in another two months. When I go home and return, little one, I shall bring you pretty shells," he told her and saw those eyes sparkle.

True to his word, he was back after a few weeks with a packet in his hands. Mili opened it and found a treasure trove of shells. They ranged from tiny to huge, from milk-white to deep brown. Ahmed picked up a big, orange-coloured one and said, "Amina sent this, her favourite, especially for you." Mili went in at once and brought him a pretty little doll that opened and shut its eyes. "This is for Amina," she said, giving it to him.



"I shall keep it safely in my trunk till I go home next, little one, though that is a long way off," smiled Ahmed, slipping the doll gently into the pocket of his shorts. He bid her good-bye; the batch of brand-new jawans was leaving soon on their first posting.

Mili's family went home on annual leave late every November and returned in time for the new school year in January. But that year, they had just reached their ancestral home when her father was summoned back. He bid his family a quick goodbye. In a week, the country was at war. Mili remembered those days as filled with news bulletins, black-bordered newspapers, temple visits and tension. There came a day quite soon when everyone rejoiced; the war had ended. Her father was safe and would arrive to take them back in a week's time.

While on the train taking them back to the Centre, Mili's eyes rested on her father's black trunk stowed under the berth. She voiced a question that had been haunting her for days. "Daddy, do you know if Ahmed is safe? I have been praying for him as well."

"I don't know, my dear, so many Ahmeds, so many of them..." her father did not answer her question; he held her very close instead.

Back home, she carefully dusted the shells she had left artistically arranged on her table. She picked up the orange one and hoped that Amina would get her doll soon.

Mili did not know that her wish was being granted. The black trunk with the doll in a corner was accompanying the coffin draped in the tricolour on its long voyage to Kalpeni.

# WALKING ON THE TRAILS

## HEMA RAVI

**"Give me at sunrise a garden of beautiful flowers where I can walk undisturb'd"**

These lines on a piece of rock at an immaculate demonstration garden in Bellevue pulsates magic from within, elevates even the prosaic person into moments of ineffable tranquility. With roots in a tropical climatic zone, I cannot stop admiring the kaleidoscopic changes of this verdant landscape day after day, while, as fly on the wall, I hear residents talk about the unequivocal climate changes, the increasingly hot, sweltering summer, et al.

On clear days, watching the picturesque 'beautiful views' of Bellevue (as its name means in French) from strategically positioned landmarks is sheer bliss.

Notwithstanding the burgeoning populace and increasing urbanization of this global city that is home to innovative corporate giants, it exhibits a fairy-tale charm with its renowned lakes, creeks, water bodies and queer trails in the pristine forests that are havens of numerous bird species; locating them amidst shrubs, perches and on the tall evergreens is an engaging activity, more gratifying is capturing them with a high-quality lens.

ohema ravi



A walk on the trails around Larsen lake offers breathtaking sensorial delights; not just this, it instills love and appreciation for all life forms, decreases isolation, negative thoughts, and visibly enhances the quality of life. Relaxing on the benches along the trail as the tangerine sun casts its spell on the waters of the lake and its vegetation is soul-elevating.

One regularly encounters the sharp-shinned hawk, the large heron, the Mallard ducks and the elusive sun-bathing turtle. While the robins and the hummingbirds are domesticated enough to enter human habitat with much boldness, the wrens, towhees, and stellar jays are still elusive. Blueberry farms beside the lake attract the dark-eyed Juncos, Cedar waxwings and chickadees in large numbers, the chickadees are distinctly popular with their amusing 'dee dee' calls.

With autumn around the corner, the 'mindful walker' may be fortunate enough to have a tryst with migratory birds, the Osprey, for instance, which is 'piscivorous.' Ospreys are hawk-like, large birds with brown wings and contrasting white underparts. I am told that these birds can locate their prey in water from over a height of thirty feet. In flight, they are distinct with the 'M shaped' kink in their wings.

Each day is filled with surprises. Walking, the best way to detox, recreate and recuperate! It is a great way to spend quality time with family, friends and proves to be therapeutic in more ways than one in this gadget-addicted, fast-paced life of ours. It is imperative that walking becomes a way of life not only to appreciate the beauty of life forms, empathy in relationships, but also to understand the importance of ecological conservation in human lives.







# A CHANGE IS IN THE WIND


JELLIE N. WYCKELSMA

The clouds knew the wind was angry, when it chased them along. Why, was beyond their comprehension, and all they could do, was to submit and move along the sky towards the horizon, on an unknown journey. Perhaps it was some consolation to the clouds that they weren't the only ones targeted by the wind.

The wind raised clouds of dust which swarmed over the arid paddocks, choking all in its path. In submission, plumes of grass bent deeply towards the earth, losing its fresh-green colour. The trees near the shallow creek shook uncontrollably, desperately trying to hang on to its branches and leaves. A few branches snapped and were immediately swept along further down, away from the mother-trees.

Along the beaches the tumble-weed tumbled on endlessly towards the piers of coastal towns, which also received a battering from the waves, swept up by the same wind. Ocean foam sprayed all along the coast. Dunes shifted centimetre by centimetre land inward ...

A red-hot sun rose and seemed warmer than normal on a spring day. City streets became deserted. In parks and gardens, flowers wilted. Animals sought shelter in shady places and people switched on the air-conditioners.



In the forest, a bolt of lightning struck an old tree, starting a fire, which soon took off. The angry wind blew the sparks high up into the air, where they descended on the arid lands, creating more fires ... Frightened people fled their homes, fearing for their safety, as their houses turned into ashes. Many animals, unable to outrun the fires, lost their lives in the ferocious blazes ...

Heads of State, concerned Scientists and Environmentalists flew in private aeroplanes, from all over the globe to the mega capital of Hope Valley. They met in luxurious hotels, enjoying exquisite cuisine, toasting fine wine, while trying to discuss the effects of climate change, interpreting the message of anger displayed by the wind, having noticed that there was a change in the wind ...





# HIS ARMS

## JELLIE N. WYCKELSMA

The City Council of Cowsville had commissioned a well-known sculptor for making a statue of a citizen, who was born in the town nearly two centuries ago. It was Donald D. Dixon, who had lived in Cowsville for many years, when it was still a hamlet, barely worthy of a mark on the map. Donald had been a writer and poet of world-fame. The Dixon's family cottage was already heritage-listed, and the Councillors had also given his name to the town-square. It was now known as the Donald D. Dixon Square. A life-size statue in the square would attract even more admirers and tourists from all over. It would boost the local economy, was the general consensus.

It was on a sunny spring day, that the unveiling of the statue was to take place. Government officials and other invited dignitaries had gathered in the town-square for the occasion; a great public moment for some years. The local band had played the national anthem, and its members rested their instruments. A hush fell over the crowd in anticipation of what was to follow. Only an old crow squawked, flew overhead, and settled on the church spire; undoubtedly having the best view of all.

The Mayor pulled the cord gently. The white cloth slid to the ground ... Everyone gasped in disbelief. The Mayor stepped back, raised his eyebrows and stuttered as he spoke lines he had prepared before. People ignored him, surged forward, wanting to be closer, demanding answers. Mayhem erupted. The Mayor dropped his notes. The sculptor merely pointed in the direction of the statue.



'This is how he really looked like,' he tried to explain. But the crowd booed him.

'Liar! Liar!' someone yelled.

Anger reared its head and the sculptor fled the scene. He knew he was right. He always researched his subjects. He had read the story about the arms. Perhaps he shouldn't have made a statue without them, but he believed it was the truth, as he had learned from a legend about Donald D. Dixon, the famous writer and poet. The story revealed that he was a handsome man and attracted many followers and admirers. One drew his special attention, because she too had that special gift of writing. They corresponded for a while and in one of her poems to him, she ached for strong arms to embrace her, to give her strength and courage to carry on. Donald couldn't give her his heart, so he sent her his arms... It turned out to be an ill-fated story forever.

# RAJ

## Rtd Prof LATHA PREM SAKHYA

"Stretch your hand", the master roared. Raj counted the seconds with closed eyes to feel the impact of the cane on his palms. But nothing happened. Raj slowly opened his tightly shut eyes and found his teacher looking at his palm with a strange expression on his face. Then he drew Raj closer to him. His tone softened." What is this son?" He pointed to the calluses on his palm and fingers. A palm that looked like a manual labourer's palms. The master's tone was one of curiosity mingled with disbelief. Raj did not look like a day labourer's son. Most of the boys of his age never did anything around the home rather than playing mobile games or simply playing with their peers. But this boy's palm looked like a hardworking grownup's palms.

"Yes, Raj replied, "I help my father in the morning and in the evening looking after the cows and chickens and helping him with his vegetable garden. We grow our vegetables". The teacher was surprised. He was only thirteen but he spoke with so much pride and enthusiasm. His father was a government employee, who, like his own father, had an yen for farming. He would get up at four o'clock to work on his farm followed by little Raj just three years old then. When his father cleaned the cow shed Raj too would do his little bit. So working on the farm for him was like breathing and he grew up doing all sorts of work with his father. All his extra time went into it. As he grew up he followed his father everywhere on the farm. Whatever his father left incomplete in the morning due to lack of time Raj would complete after school. So like his father he knew to dig, to plant vegetables, a bit of carpentry for doing repair works in the farm a bit of welding and masonry too. They built their own sheds, chicken coops and gobar gas plants. Everything his father did at the farm he imitated. So his palms were not soft like a thirteen year old's coming from a well to do family. He was his father's handyman.

The teacher's eye brimmed and softened. He hugged Raj and turning him around he showed the calloused palms to his classmates. The boys who loved Raj gave him a loud round of applause. The teacher forgave him for not bringing his work book and told him to take his seat. That day, the composition period was taken up for a lecture on the dignity of labour and responsibilities of students to their parents and home. And the model was of course Raj.



# A STITCH IN TIME SAVES NINE

## T S MANOHAR

There is no doubting the adage 'clothes maketh a man'. Power dressing indeed makes a signature statement at any given event. However over time, people tend to become outsized and the choicest attire that was a perfect fit not so long ago does not fit at all! It is here the alteration experts come in handy.

"A cut here, a stitch there we get the clothing back to fit without compromising on the shape. Undoing and redoing is a daunting task which the established tailors detest. We give the expensive clothing an extended lease of life by our deft and patient job. This is all the more true for the children who outgrow their apparel very fast. When the customers haggle and bargain before paying a pittance for the job done well, it pains me," says Gopi, the roadside tailor, who is content to do this thankless yet satisfying job.

"To begin with, I was in fact doing the stitching in a fashion show room on a monthly salary. The cutting master, for once, goofed up on the measurements for a three piece suit and threw the blame on me. He failed on the cardinal principle "always measure twice and cut once". I got fired for no fault of mine. Self respect made me to set up a shop on my own but I got my fingers burnt ever since I decided to do these alterations and adjustments. Some kind soul accepted to keep the machine safely after sundown at their premises. Resizing and reshaping has become my mainstay now. Everyone knows that 'a stitch in time saves nine' and that keeps me busy and occupied. You see I have a family of five to support", grins Gopi as he sets about aligning the ends to sew.

Positioned below the shady Neem tree, he is at an arm's length to most of the houses in the vicinity. At any given day he makes a few hundreds, just enough to make his ends meet. I am amazed at his self respect, dignity and resilience!!



# EFFECTIVE PARENTING

## T S MANOHAR

“Chandru is a born genius, you see. He unravels the puzzles in a jiffy. Give him any gizmo, he masters all its functions.”

“Music comes naturally to Meenu. The swaras, aalap in higher octaves is lilting. You must hear it, to believe it. ”

“My second son Raju , is even better than his brother Bharath, in cricket. He is going to be the future ‘Sachin’ of India.”

These are often heard idle boasts of ideal parents. The more we hear, the more we detest. You can't blame them. In their enthusiasm to provide everything to their children they go overboard. This is very pronounced amongst the middle and upper class of the urban populace. The children are not allowed to fool around. They are habituated into structured entertainment. Sometimes it goes like this:

- If it's Monday, it must be music,
- If it's Tuesday, it should be tennis,
- If it's Wednesday, it is Karate.
- If it's Thursday, they must be swimming.
- If it's Friday, it is the German class.

If you thought they are free during the weekends, you are wrong. They are into specialized tuitions to cope up with the curriculum. So much so, the children breathe easy only on a bandh day or on a solar eclipse!!



The lot of the parents is also pathetic. They seem to leave no stone unturned. They drop their wards meticulously and pick them up religiously. Often times, the child is so confused, that he or she goes through the motions without mind or liking.

‘Cometh the summer, cometh the camps.’ There are camps for everything. From cricket to chess; camp for arts, crafts, painting etc. There are even ‘concentration camps’ (not the Nazi kind!), to better the memory and retention.

In this endeavor, talents, latent or apparent, are supposed to be tapped and developed. The parents want their wards to outperform and outshine others at every outing. If they fail, they are dejected and depressed. You know, a parent went to the extent of slapping his son in full view of the audience, when he lost a match. Outrageous! It is time the parents realize the reality and put an end to this nonsense. The children have the right to live and enjoy their childhood. No parent has the right to push their children to the limits and expect result immediately.

‘Never try to prepare the road to the child. Allow him to explore, experience and enjoy. Stop this helicopter parenting, hovering around them all the time’, said a celebrated child psychologist. Otherwise, what they seem to think as effective parenting will be defective parenting indeed.








# THE ART OF LEARNING

## ORBINDU GANGA

A dark room is knighted with darkness with eyes searching for the light. The vision is unable to capture the light with the absence of the light but can feel the movement with the sound. Even a speck of light can bring curiosity with a smile. Our thoughts are eager to see a speck of light to pass inside the room and spread around to taste the corners of the room. Why do we want it to expand? Are we not happy with the status quo of darkness around? Why are we in search of a speck of light? The room is filled with darkness for you to explore the space. But why are we looking at a smaller sized speck for hope? Is it not our choice to explore the darkness rather than looking at the speck of light which is not in the room? Many questions are floated, but are we ready to read the questions properly? The intuitive thought shall augur well in such a situation. As we grow, the thoughts are being conditioned to approach the way it has been universally taught. Are the thoughts which are conditioned to be accepted blindly? Are we here to accept anything which is universally accepted? Haven't we realized that the thought before us needs to be questioned, analyzed and explored?

Many conundrums shall whisk into our minds for questions to be asked. Are we prepared to answer them all? The answer is No. We are being conditioned from our childhood to learn things the way it is. No one has ever told us why to learn. None gave us an insight on how to learn. The question of what to learn has never surfaced before us. Such thoughts have never been encouraged because we are being conditioned to learn without knowing the thought of learning. Is there a thought we need to keep within us before we start learning?




Art of learning is a thought which has its inception for an urge to question the thought of learning. Being a Philomath, I love to know the deeper meaning of learning which made me think and question the deeper aspect of the thought, the flow of thoughts, the flow of learning and the real essence of learning. The most refreshing aspect of learning is the joy of knowing. Learning is a thought to explore without a conditioned mind. A thought to know why we learn, how we learn and what is the purpose of learning that should meander in minds to find the answers. Such questions are never asked before us when we start our journey of learning.

Learning is a joy; less understood by many, but more talked about. The real essence of knowing is exploring without knowing any. Only when we have an unconditioned thought before us, we will be able to explore with our observation, questioning, and understanding. The key to learning is attributed to the joy to know in a free ambiance.

Learning is an experience to explore new things in our journey. The thought of knowing new things requires observation and listening as the key skill sets. An individual has to understand that one needs to have the patience to listen; listening is one of the most ignored skill sets. Observation is linked to listening, contributing to the process of learning.

Observing is not restricted to seeing but a process of being aware of the surroundings. Visual observation cannot alone make the thought process of observation complete. Visually, you capture the sight; it requires other senses to synchronize to give a thought more lucidity. Observation is an important aspect of learning to assimilate the observed raw content to be used for analysis.



The clarity in thoughts is necessary for learning. Listening is an important skill set to give clarity of thoughts. A good listener should be clear on what he receives as it will be easy for him/her to take in all the required raw content to help in the analysis. When we are observing or listening, the required content to be taken depends on the specific subject. Irrelevant content should not be absorbed. The decision of taking the relevant content is from the experience of observing and listening. The more you practice the skills of observation and listening, the more you would be clearer on the content to be absorbed.

Art of learning is a combination of many skill sets that require practice to master it. Knowing the true essence of learning is a must before starting the process of learning. Questioning remains the key thought of making one clear on the thought process of understanding. Observation and listening make the process of learning experience to stay forever. Enjoy the joy of learning by being a student of life. Each day we learn something new which continues forever.

# THE LITTLE ONE

## Dr S PADMAPRIYA

Years ago, there lived an adorable little girl, who had the heart of gold. She was kind-hearted and warmth-exuding. She spread a wee little bit of sunshine wherever she went.

Preetha was in Grade One. Her best friend was Sai, who herself did not know that she was considered by the former as her best friend. The reason behind this one-sided friendship was that Preetha liked Sai but had never had the courage to tell that to Sai. Preetha was quite ordinary looking and dull in studies. On the other hand, Sai was very good in mathematics, a subject in which Preetha herself was just about average. Preetha wanted to announce her friendship with Sai but was very shy to do so. Preetha's little mind could never convince her that Sai, the genius in maths could ever be her friend. Preetha was not particularly good in anything and was certain that her other classmates would consider it audacious if she would try to strike a good friendship with the class genius. So, Preetha pined silently for friendship with Sai never ever telling the latter about her desire to be friends with her. The two remained in the same school for two years. Preetha was going to be seven soon.

One day, her parents announced that they would be moving away to another country soon. Preetha was disconsolate. She could not imagine, living away from her best friend. She wanted to be friends, forever with Sai. She was miserable and decided that she would not go with her parents to live abroad. Her elder brother, using the knowledge of his years captivated little Preetha and convinced her that she must leave the country with them because they would soon go to a magical world full of fountains of chocolate, rivers of fruit juice, talking robots and a bewildering range of animals. The little girl with her limited knowledge and wild imagination believed every word that her elder brother said and was soon on the flight to the neighbouring country. It was much later that she found out that nothing that her brother had said was real. The only reality that she now faced was that she was not going to ever be able to see Sai.



In the meantime, Sai had gone to the Andaman Islands because her father, a geologist had got a job there. Meanwhile, our little girl could never forget Sai. In the new country, she would cry herself to sleep every night, thinking about her friend. She remembered those beautiful dimples, fair glossy face and the smile of a star! She would have given anything to be like Sai – intelligent, good and beautiful. How Preetha yearned to be like her! Time ran fast. Three years passed quickly and Preetha's father's tenure in East Pakistan had ended. During the fourth year of their stay abroad, Preetha's family travelled to their home country.

As Preetha sat in the Calcutta airport with her parents waiting for the connecting flight to Madras, she saw a girl, who looked just like Sai. Sai was accompanied by a girl, who looked just like Sai's elder sister. Preetha's heart seemed to stop for a moment. She wanted to get as close to Sai as quickly as possible but as most children are, Preetha was very dependent on her parents and wanted to seek their approval to speak to Sai. Preetha wanted permission from her mother to go to meet Sai. Her mother did not give her any direct permission. Her mother had her own problems to think about and she was scarcely interested in the feelings of her nine year old daughter. How Preetha yearned for guidance and support from her mother but her parents were not much concerned about their daughter's inner turmoil. Preetha sat making elaborate plans in her mind to meet Sai. She started thinking that she could go strolling near Sai, drop her handkerchief near her and then, Sai would pick it up and then Preetha would ask her something like, "Do you remember me? I was your classmate, Preetha." She would finally muster the guts to tell Sai how much she valued her. She would tell Sai as to how much she had missed her, how much she had needed her and how desperately she had sought her friendship!

As Preetha rehearsed her acting sequence, she did not notice that the Sai's family had already left to catch their connecting flight to Delhi. When Preetha looked up from her reverie, everything had ended for her. This was the second time that she had failed in this game of friendship and all because she didn't have the guts to go and speak with another human being!

Her Sai was not there. Sai had gone away. Her Sai! Preetha's little heart broke into a thousand pieces. The little girl had tears in her eyes. It was not childish tears. They were real tears. Her pain was real. Her loss was real even if she was a little girl - even if no one understood her!

There are many tears and fears. There are many Preethas in this world, who are seldom understood and often dismissed.



# PROBLEMS OF THE OLDER PEOPLE

## PARVATHI

Well, experts say that elder people in the family were happy in their good old days, as they spent more time with family and loved ones and nowadays many suffer from loneliness which leads to health problems.

Now before we go ahead further let me ask you what according to you good health is? Is good health only about being physically fit? Well, definitely not !Good health is a combination of being fit physically and mentally; it is the failure of mental health which leads to physical illness.

Good health does not always come from medicines it comes predominantly from laughter, joy, peace of mind, love, kindness etc. But we as matured individuals being caught in the rat race we not only neglect our health but also the health of our beloved elders in the family.

Alright so let us discuss the reasons behind the decline of physical and mental health of elders in the family. Apart from our work pressure the following below are the reasons that keep the elders in the family isolated.

### 1) TECHNOLOGY :

“I fear the day that Technology shall surpass human interaction “.

As Albert Einstein rightly quoted technology has definitely surpassed human interaction. Gone are the days of listening and getting ourselves deeply involved in the witty, adventurous, comical stories from elders upon the arrival of technology things have changed drastically and has created a havoc in the life of young children. Today's children are more interested in playing online games, watching videos than spending time with parents & grandparents.



Being addicted to technology today's children fail to understand the priceless values and moral practices from elders.

## 2) SOCIAL MEDIA :

“ Don't use social media to impress people use it to Impact People ”

Technology being available anytime anywhere people are able to download social media apps such as facebook, twitter, instagram, in a jiffy and very soon get hooked to the virtual glossy reel world. People are busy comparing their lives with others and by uploading snapchat videos, status , checkins etc. With the sudden rise in social media usage people get carried away in the fake world forgetting the genuine affectionate family waiting for them to shower the much needed love & care.

## 3) CONVENIENCE FOOD

“ Chewday, Breadnesday, thirstday, fryday,platterday and sundae-Zomato

With technology being available abundantly not only apps such as facebook, twitter can be easily downloaded easily even apps such as swiggy, zomato are downloaded easily. Upon availability of these apps food can be consumed anytime anywhere and people no longer understand the urge and need to dine with family they completely forget that food is tasty when had with family.

Alright now having discussed the reasons of elders being isolated let us discuss about the different ways to keep them healthy & happy.

## 1) BEING TOGETHER AND FOREVER

Well gone are the days of being together in a noisy, huge, happy joint family. Due to various reasons today the concept of joint families has been totally reduced and it is more of nuclear families and less of joint families.

Not all old people are lucky enough to stay with families, some stay alone or in retirement homes and end up feeling sick ,depressed etc. In order to ensure their happiness, we as mature individuals should take the steps mentioned below.

Fix a convenient date and time and try to meet them personally and ensure that they have a lovely time. This is applicable for people living in the same city. It is a well known fact that for people staying outside the city and country it is impossible to come down and meet them personally so for people staying outside kindly communicate with a video call or skype call whenever possible.

## 2) A WALK TO REMEMBER

Well it is a well known fact that all of us are stressed and tired ! In order to keep ourselves fit mentally and physically let us start taking a brisk walk on a daily basis.

When starting our walk why walk alone let us take a walk with the elders in the family while walking strike a meaningful, comical, pleasant conversation. In doing so, we not only to take care of our health also the health of our family members and keep them contented as much as possible.

## 3) TEACH TECHNOLOGY

Technology is something that is not only restricted to youngsters but also applicable to elders . We as matured individuals should not misuse technology but use technology productively by teaching technology to elders and help them connect with friends and family all over the world and also keep them updated on the latest happenings around the world.

#### 4) GIFTS

Well it is a undisputed fact that love , affection and commitment are some of the best gifts to be both given & received especially with respect to elders ,but apart from the above mentioned gifts there are also other special gifts that would make a lot of difference to them such as wishing them without fail on their anniversaries & birthdays , cooking their favourite food , gifting their favourite sweet , fruits etc. And on top of all , trying our level best to spend quality time with them is the best gift!

#### 5) COMMUNICATION

The first best tool which always keeps a relationship going is communication. Crystal clear, loving and supportive communication are the key elements for a lovely relationship.

A simple caring communication via phone call, video call means a lot to them and shall make a huge wonderful impact to their physical and mental health.

#### 6) WEEKENDS

Weekends are not only meant to have fun. Weekends are also meant to spend time with family especially with parents and grandparents. So it is important to plan schedule for the weekend accordingly and spend maximum time with elders as far as possible.

I hereby conclude by stating that elders be it parents or grandparents are a big asset to the family and it is our duty to take care of them. Let us try our best to take care of them and spend time with them genuinely whenever possible because later when we look back from our busy schedule there won't be anything better.

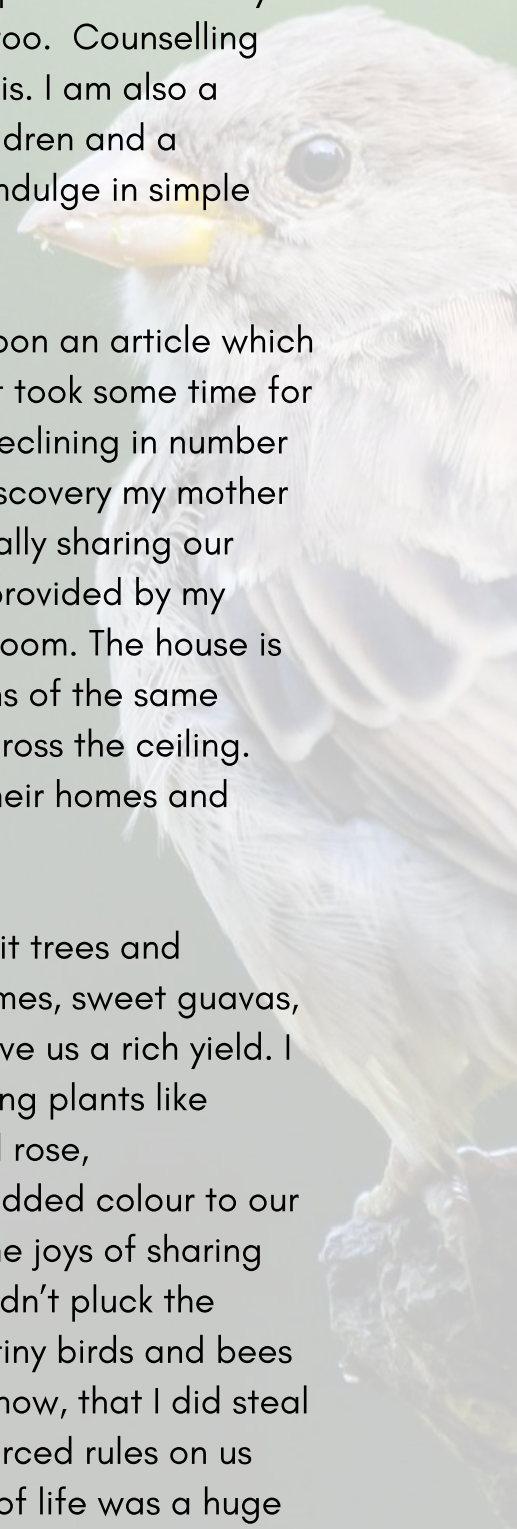
# SPARROWS – MY BEST WINGED FRIENDS

Dr A SADHANA RAJKUMAR

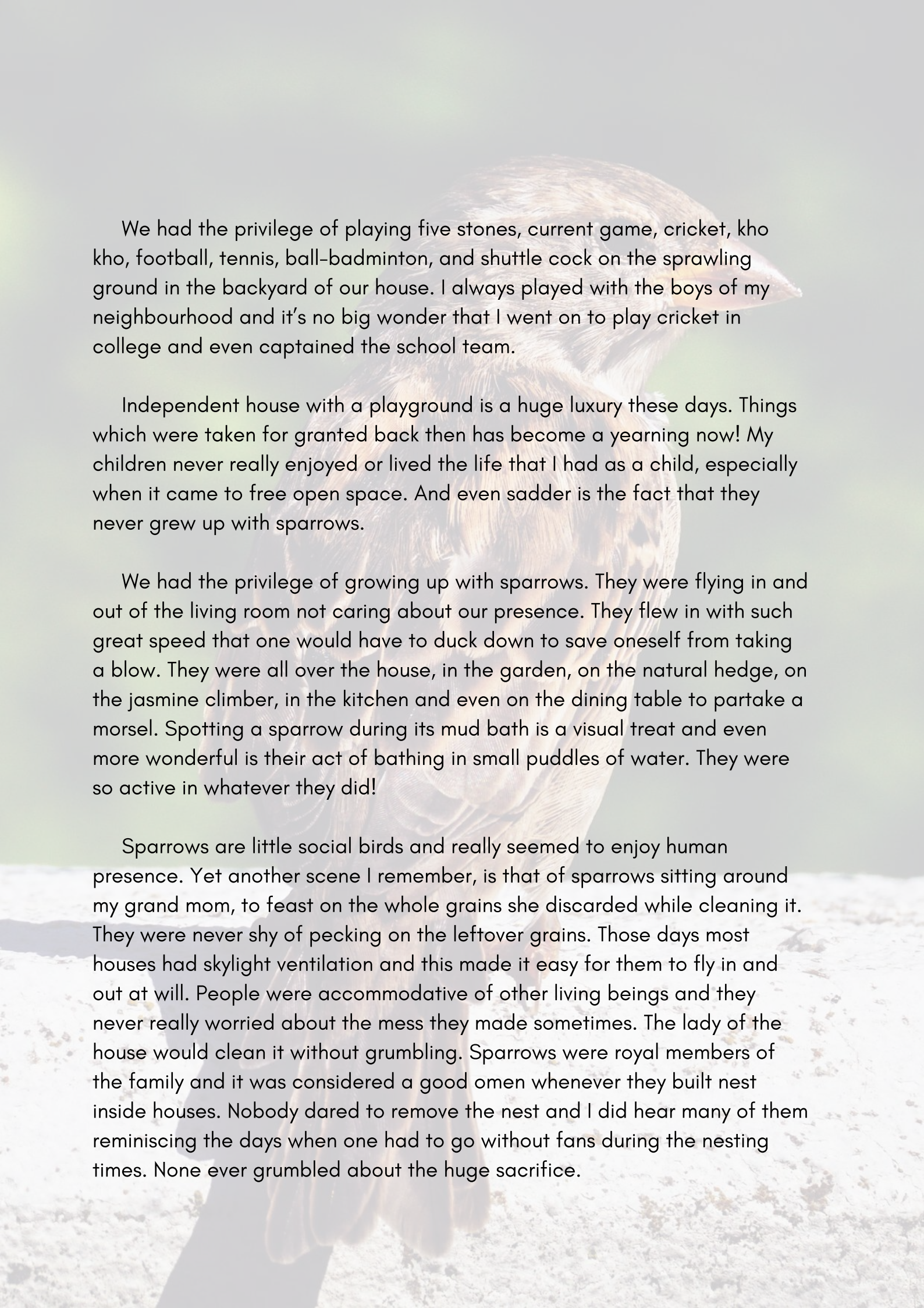
On one of those week-end visits, when my mother made a concerned casual remark about not spotting a single sparrow back in Perambur, I didn't care to find her and dismissed it by saying that they would have gone elsewhere in search of greener pastures. I also teased her that probably they got fed up of her cooking. Back home I got busy with my professional duty. By the way, I am a practising nutritionist and a Dietician too. Counselling and formulating diet charts has been my routine and still is. I am also a social worker. It was a hectic lifestyle with two young children and a demanding husband to care for! I had very little time to indulge in simple pleasures of life.

One day when browsing through the net, I chanced upon an article which shocked me and I was in total disbelief after reading it. It took some time for me to really ponder on the findings that sparrows were declining in number throughout the world. I then realised the gravity of the discovery my mother made. This little friend was my childhood companion, royally sharing our space in our Perambur house. They occupied the space provided by my great-grandfather right in the upper corner of our living room. The house is more than hundred years old and has seen six generations of the same family. It had Madras roofing with teak beams running across the ceiling. They were so conducive for our winged friends to build their homes and nurture a family.

This house had a sprawling garden with all sorts of fruit trees and flowering plants. Coconut palm, custard apples, sweet limes, sweet guavas, bananas and papayas were all there and they indeed gave us a rich yield. I don't remember buying those fruits in the market. Flowering plants like jasmine, native rose, nandiyavattam, morning glory, wood rose, kanakabaram, table rose, oleanders and yellow flowers added colour to our traditional house. Lessons in peaceful coexistence and the joys of sharing were strictly enforced by my not-so-strict father. We couldn't pluck the flowers and fruits from the garden. They were all for the tiny birds and bees to feast on. Lo! I do remember vividly, rather with shame now, that I did steal those fruits whenever my father was away. He never enforced rules on us children (my younger brother and me) but rather his way of life was a huge lesson for us.







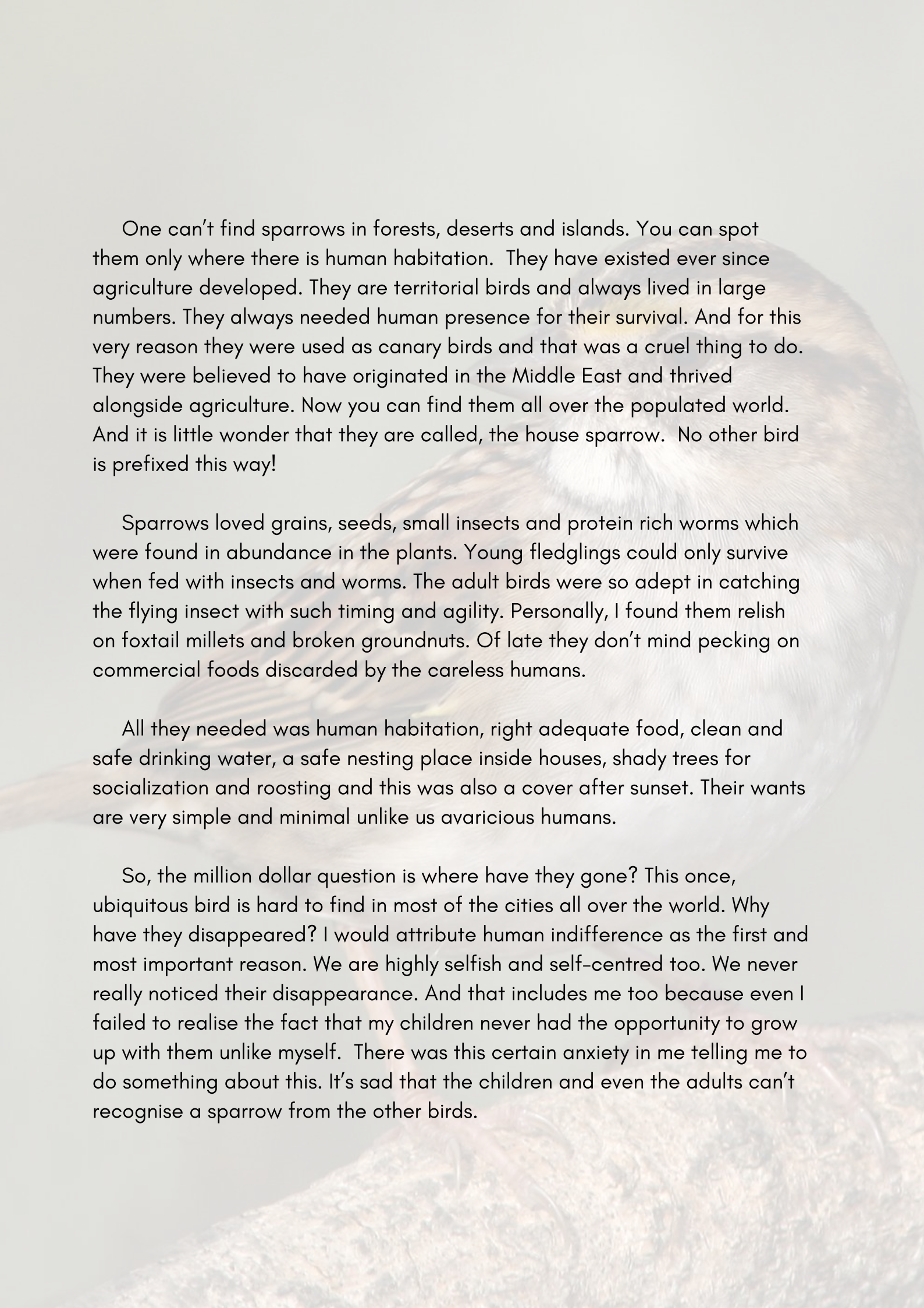
We had the privilege of playing five stones, current game, cricket, kho kho, football, tennis, ball-badminton, and shuttle cock on the sprawling ground in the backyard of our house. I always played with the boys of my neighbourhood and it's no big wonder that I went on to play cricket in college and even captained the school team.

Independent house with a playground is a huge luxury these days. Things which were taken for granted back then has become a yearning now! My children never really enjoyed or lived the life that I had as a child, especially when it came to free open space. And even sadder is the fact that they never grew up with sparrows.

We had the privilege of growing up with sparrows. They were flying in and out of the living room not caring about our presence. They flew in with such great speed that one would have to duck down to save oneself from taking a blow. They were all over the house, in the garden, on the natural hedge, on the jasmine climber, in the kitchen and even on the dining table to partake a morsel. Spotting a sparrow during its mud bath is a visual treat and even more wonderful is their act of bathing in small puddles of water. They were so active in whatever they did!

Sparrows are little social birds and really seemed to enjoy human presence. Yet another scene I remember, is that of sparrows sitting around my grand mom, to feast on the whole grains she discarded while cleaning it. They were never shy of pecking on the leftover grains. Those days most houses had skylight ventilation and this made it easy for them to fly in and out at will. People were accommodative of other living beings and they never really worried about the mess they made sometimes. The lady of the house would clean it without grumbling. Sparrows were royal members of the family and it was considered a good omen whenever they built nest inside houses. Nobody dared to remove the nest and I did hear many of them reminiscing the days when one had to go without fans during the nesting times. None ever grumbled about the huge sacrifice.





One can't find sparrows in forests, deserts and islands. You can spot them only where there is human habitation. They have existed ever since agriculture developed. They are territorial birds and always lived in large numbers. They always needed human presence for their survival. And for this very reason they were used as canary birds and that was a cruel thing to do. They were believed to have originated in the Middle East and thrived alongside agriculture. Now you can find them all over the populated world. And it is little wonder that they are called, the house sparrow. No other bird is prefixed this way!

Sparrows loved grains, seeds, small insects and protein rich worms which were found in abundance in the plants. Young fledglings could only survive when fed with insects and worms. The adult birds were so adept in catching the flying insect with such timing and agility. Personally, I found them relish on foxtail millets and broken groundnuts. Of late they don't mind pecking on commercial foods discarded by the careless humans.

All they needed was human habitation, right adequate food, clean and safe drinking water, a safe nesting place inside houses, shady trees for socialization and roosting and this was also a cover after sunset. Their wants are very simple and minimal unlike us avaricious humans.

So, the million dollar question is where have they gone? This once, ubiquitous bird is hard to find in most of the cities all over the world. Why have they disappeared? I would attribute human indifference as the first and most important reason. We are highly selfish and self-centred too. We never really noticed their disappearance. And that includes me too because even I failed to realise the fact that my children never had the opportunity to grow up with them unlike myself. There was this certain anxiety in me telling me to do something about this. It's sad that the children and even the adults can't recognise a sparrow from the other birds.



People believed and resigned to the fact that the radiation from the mobile towers was major reason for their disappearance. These no-ion rays are not strong enough to destroy the eggs. There is a serious information deficit that is widely prevalent. And people have to understand this fact. At the most these radiations from cell phone towers can hinder their navigational skills but don't kill them.

Sparrows are our bio indicators and a royal ambassador of the bird species. In conserving this small bird we are actually helping in maintaining the bio-diversity and even safeguarding ourselves. There is careless environment degradation happening in the name of development and this has to stop immediately, lest there should be further degradation and this planet would become uninhabitable. I dread to think of the day when the whole bird population is wiped out and lo! We would all have to wade through one foot depth of insects and worms. Did you not hear of the locusts menace and the threat it is posing to agriculture?

Together let's create a conducive environment for our feathered friends. Make provisions to fix a nest. Convert your house into a sparrow friendly one. Every garden, whether on the ground or the terrace should sport a feeder. Make provisions for water for dehydration is another major reason as to why they are perishing. One can even create artificial water ponds, so that these birds can cool themselves and protect themselves from the harsh summer. Let them have the luxury of indulging in their favourite activity of water bathing.

Grow more native plants which are natural homes for the insects and worms. And this becomes a food haven for our sparrows. Remember the young fledglings need these for their survival.

Waking up to sparrow chirps is indeed a blessing and a beautiful social activity. Humans! Arise and awake! Start acting now and conserve our winged friends, lest our future generation gets to see them only in museums much similar to our dinosaurs which once walked this planet!

The treacherous tomorrow that is threatening our today is already here. So, what are you waiting for! Together let's bring back our Sparrows.

# THE FIRST STEP

## SWETHA NARAYANKUMAR

What's so beautiful in a baby's first step? Those cute, trembling legs with which it stumbles and falls for every inch it tries to get up and move, and yet continues to go ahead for the mere reason of wanting to. Even without realising that it's simply the first of the many in the wonderful journey that's ahead of it. There's so much energy and so much excitement in spite of all the falling. And falling! And that's the beauty of it all!

As we age, we often forget that's a lesson we could carry for the rest of our lives. To take those little baby steps towards our interests we are passionate about and to enjoy every bit of it while we do so. We could go on for hours and hours talking about our desires and plans to someone and yet hesitate making that first move that will actually help us in achieving them. It's the disbelief in oneself and the extreme belief in someone else's opinions that hold us back from doing something we love. We often stay away from things that our close kin or friends disapprove of even if it reflects our deepest desire. While the fear of failure is one thing, it's most often the fear of being criticized about it that makes it all the more difficult for us to try things that we are actually interested in. Of course, being careful about our moves is important but that should not stop us from trying it altogether in the first place. As much as we focus on making our first step, it's also important that once we do, we take them one step at a time, slowly and cautiously, so that it does not leave us flustered on route our journey. With every fall there is learning and the farther we go up the steps the lesser we fall and the more confident we become with ourselves. And before we know, we would have achieved what we desired to. What is more intriguing are the experiences that we come across in every step, for it is something priceless which could someday even become someone else's inspiration. It's about not hurting anyone in your stride towards your aim but rather inspiring them to succeed in future. Yet another thought to consider is that more often than not, we forget to appreciate the simpler things in life in the process of achieving something big. What makes life enjoyable are the little moments of joy, celebrating the success in every step of our way, however small and a continuous validation of the self which in fact will drive us into doing greater things.



The greatest hindrance to our actions is our mind, so a constant act of self validation to focus, regulate and understand our thoughts can actually help us in tiding through a tough time with grace and positivity.

Even though it seems as simple as it sounds, this is quiet terrifying for most us, no matter the age. It could be as simple as making your first dish alone, learning something new or as huge as making that first move in a career of your choice which might even mean leaving the already existing one behind. The fear of humiliation and the self doubts on our skills blindfolds us to the success that is ahead of us. On a personal note, this is my first ever effort to put down my thoughts in writing and let me tell you even as I am writing this, I have my fears at the back of my mind still nagging me to backtrack but I choose to take the leap right now, right here because there's no better time than NOW. As much as I am afraid of criticism, the fear of regret of not trying is much deeper.

Ideas or maybe even dreams can come any time to anyone and it is up to us to realise them and make that first baby step yet another time. After all, this time it could be a step that could change your life.





# TRUTH AND REALITY

## Dr VARANASI RAMABRAHMAM

Daily, at the end of my “anusthaanam” (spiritual ritual)”, I make a strong, fervent and sincere prayer to the Divinity that intellectuals and scholars in the world should be fearless and speak the truth without any inhibitions. This has been the tradition of our ancestors and speaking truth is essential for the benefit of the society and the society will be able to know the actualities and act on them.

Normally the rulers do not like the truth to be known. Also leaders of ideologies, religions, their supporters and the like also do not like the truth to be known to the ordinary people. The writers are normally and should be fearless such that the ills and evils in the society are exposed and remedial measures are taken. But what is truth?

Truth is what it is or as it is irrespective of perceptions of the individuals. Reality is what we see of truth; how much we see of truth. Reality is always dictated by our mental make-up, likes, dislikes, limitations in our ability and willingness to see, view, comprehend and accept the truth. Reality is individual's perception of the truth. Truth, most of the times, is only perceived and rarely understood or experienced.

Thus reality is limited truth. Reality is either inability to be truthful or inability and limitations of the individual to see the truth unbiased. Also Truth corresponds to the individual, about himself, his Self and the reality corresponds to the objective world within and without the body of the individual.

Real situations are compromised states of existence in the attempt of pursuit of the truth. We all talk about truth, limited by our perception and not the truth most of the times. We have compulsions inbuilt, acquired or imagined not to accept the truth and allow truth to be spoken or spread through us. But truth is a flowing river. It may flood us but it never dries up. On the other hand, the reality is like a stagnated lake. Our fear of repercussions taking place if we speak, accept or propagate truth, make us real and not truthful. We prefer peaceful and calm life. We call that realistic approach and adjust and compromise.

Thus, most of the times, we are not truthful. We are all limited and confined to our perceptions of truth. Truth is best revealed when understood or experienced. But we rarely get such insight. All our knowledge and information is hearsay through books, newspapers, magazines, radio and TV news channels, web sites etc, We are all aware that these books and news items are filtered through the editors and owners of these media. Thus the perceptions of these responsible and financing individuals decide the truth content in the item. We pick up these as truth and argue or form our own perceptions.

Sometimes the editorial policy of the editors or owners of these media do not allow truth as it is to reach us when they find it objectionable in that form. Thus truth is never completely known or allowed to be known and hence not completely comprehended. The fears, imaginations, illusions shape our perceptions and our comprehension of the truth. Many times, it appears that no absolute truth exists or known, perceived or understood and experienced. Just as feelings and perceptions of good and bad and other qualities, truth is also relative as "truth to me", "truth to him", "truth to you", "truth to them" and a truth accepted by all is not possible and available to be expressed, accepted or spread and we all mistake our perceptions of truth as truth without understanding or experiencing the truth.

But truth is like fire. It cannot be hidden or held in the palm. Truth sneaks through our cautions and suppression and declares itself.



# IN SEARCH OF TRANSCENDENT FORGIVENESS

## VIDYA SHANKAR

A couple of weeks after the launch of my poetry book "The Rise of Yogamaya", I ran into an acquaintance who followed my social media posts and had read the newspaper articles featuring my book and my journey through mental health issues. She was very happy for my various achievements.

We spoke about my struggle with anxiety and depression and how poetry facilitated the recovery. Applauding my motive in dedicating my book for the cause of mental health, my friend, who is a psychoanalyst, asked me with great concern if I was still battling the ill-ness. I assured her that I was over it now and it was all well-ness with me. She smiled at my answer. 'Yes, I can see that,' and added, 'I hope you have done some forgiveness. It is most essential that you forgive...'

'Yes,' I cut in, a little too hastily, 'I did go through a process of forgiveness. I have forgiven the ones who caused me hurt. I know they are not at fault; they didn't mean to hurt. But circumstances, misunderstanding, long years of conditioning... I have sent them all prayers. I don't hold any grudges or ill-will. Yes, sometimes I still do feel a pinprick. But when that happens, I try to ground myself in the present and say a quick prayer.'



' She looked at me as if sensing something, but instead went on to say, 'That's good. You seem to know what you are doing. But please do remember to call me if you need any help.'

'Oh yes, I will.'

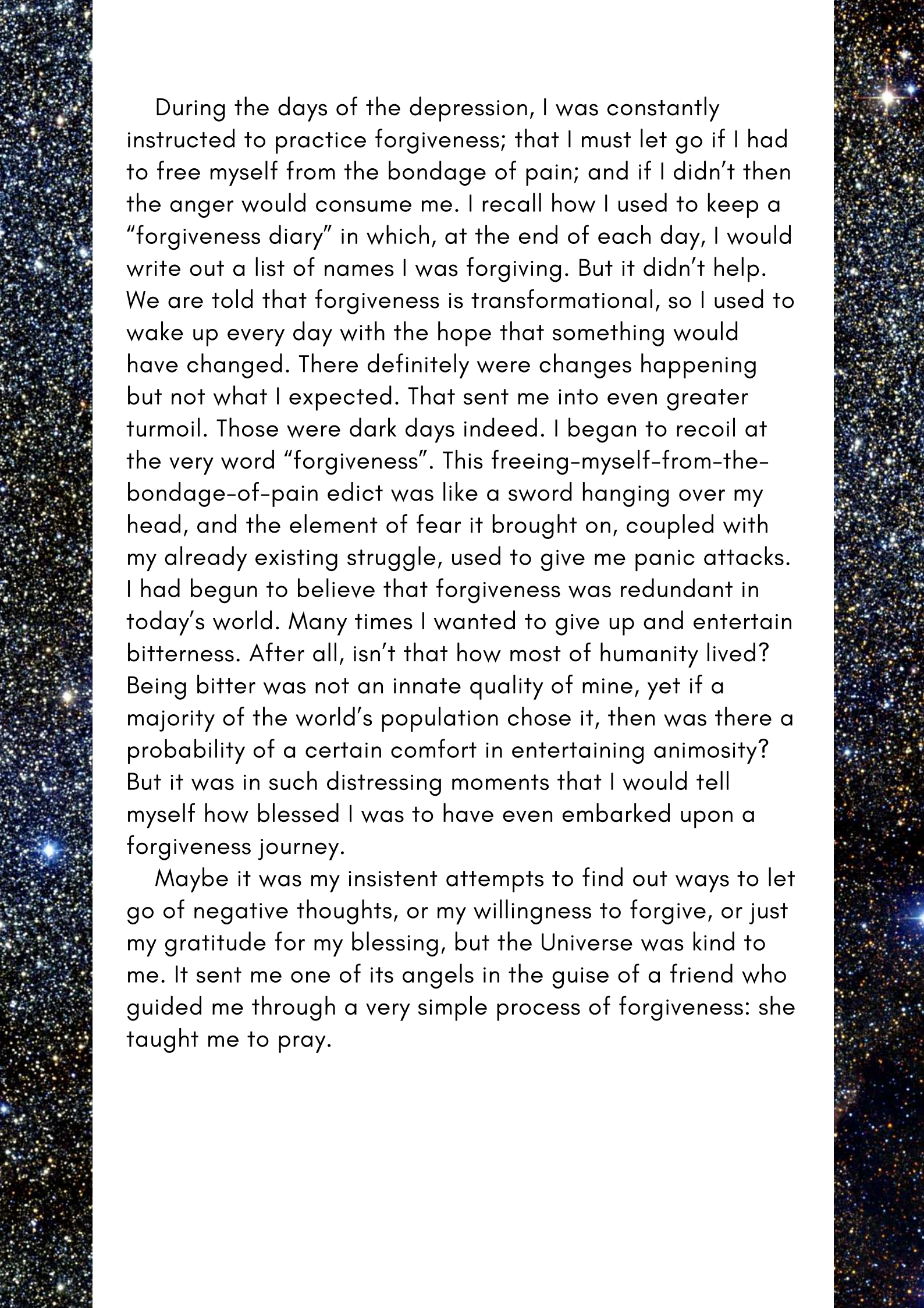
We hugged each other, she with empathy and I with gratitude, and we went our ways.

Life, following this conversation, was as usual. I was my familiar chirpy self, and my writing was taking me to places like it had been over the past year and a half or so. Yet there was this faint irritation at the back of my mind which I knew could be traced to the conversation I had had with my psychoanalyst friend a few days back. The conversation on forgiveness. And I also knew that much as I tried to ignore the feeling, it wouldn't go away unless I faced it. So I finally decided to bid goodbye to denial mode and take the nagging feeling by the horns.

The nagging didn't worry me because my tryst with mental health had left me all too familiar with the workings of my mind. I have come to recognise that any persistent thought was a sign that the Universe had a message to convey to me. I readied myself to receive the communication and offered a prayer of gratitude before "opening" the message. And this is what it said: that while the dark phase was behind me, there was no going back, and I was well on to a life filled with abundant grace, the healing was not complete. I must admit I was aware of this, for I still carried some body aches and pain — remnants of the resentment and anger I used to harbour — aches and pain that wouldn't get resorted with any across-the-counter or doctor prescribed medicines and balms. That pain has only one medication: more forgiveness. More forgiveness because I had already gone through a "course" of it.

Or, so I assumed.

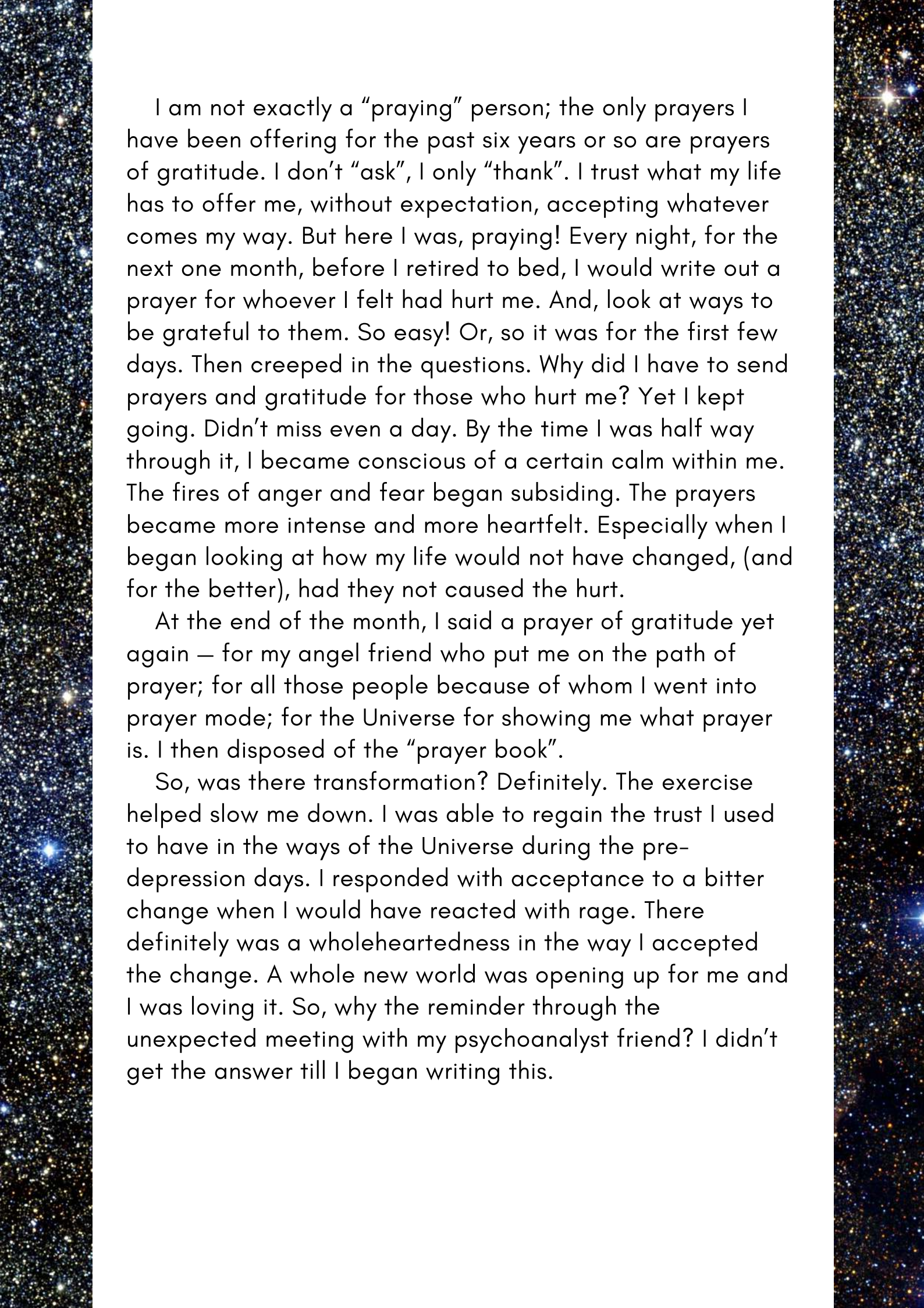




During the days of the depression, I was constantly instructed to practice forgiveness; that I must let go if I had to free myself from the bondage of pain; and if I didn't then the anger would consume me. I recall how I used to keep a "forgiveness diary" in which, at the end of each day, I would write out a list of names I was forgiving. But it didn't help. We are told that forgiveness is transformational, so I used to wake up every day with the hope that something would have changed. There definitely were changes happening but not what I expected. That sent me into even greater turmoil. Those were dark days indeed. I began to recoil at the very word "forgiveness". This freeing-myself-from-the-bondage-of-pain edict was like a sword hanging over my head, and the element of fear it brought on, coupled with my already existing struggle, used to give me panic attacks. I had begun to believe that forgiveness was redundant in today's world. Many times I wanted to give up and entertain bitterness. After all, isn't that how most of humanity lived? Being bitter was not an innate quality of mine, yet if a majority of the world's population chose it, then was there a probability of a certain comfort in entertaining animosity? But it was in such distressing moments that I would tell myself how blessed I was to have even embarked upon a forgiveness journey.

Maybe it was my insistent attempts to find out ways to let go of negative thoughts, or my willingness to forgive, or just my gratitude for my blessing, but the Universe was kind to me. It sent me one of its angels in the guise of a friend who guided me through a very simple process of forgiveness: she taught me to pray.



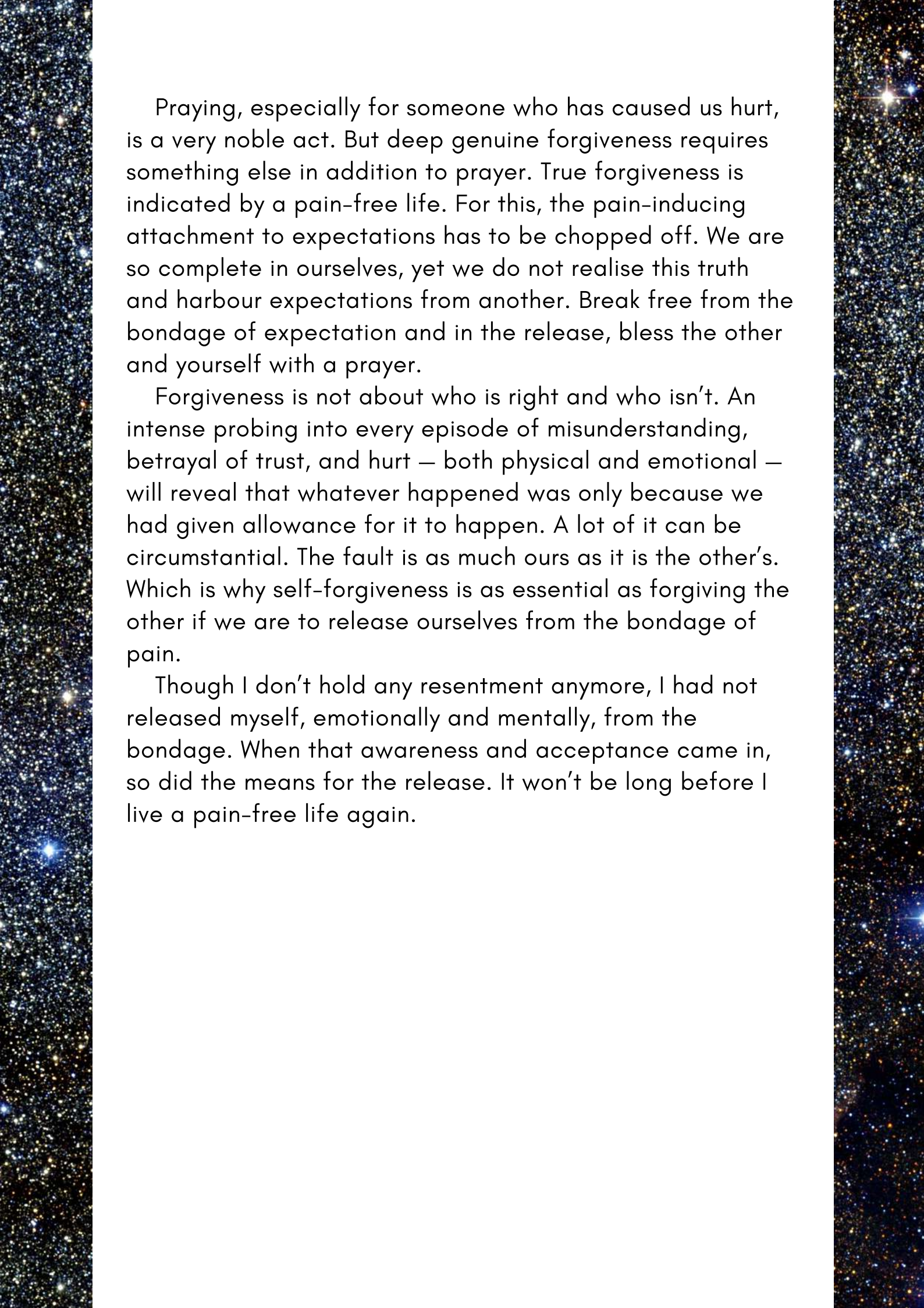


I am not exactly a “praying” person; the only prayers I have been offering for the past six years or so are prayers of gratitude. I don’t “ask”, I only “thank”. I trust what my life has to offer me, without expectation, accepting whatever comes my way. But here I was, praying! Every night, for the next one month, before I retired to bed, I would write out a prayer for whoever I felt had hurt me. And, look at ways to be grateful to them. So easy! Or, so it was for the first few days. Then crept in the questions. Why did I have to send prayers and gratitude for those who hurt me? Yet I kept going. Didn’t miss even a day. By the time I was half way through it, I became conscious of a certain calm within me. The fires of anger and fear began subsiding. The prayers became more intense and more heartfelt. Especially when I began looking at how my life would not have changed, (and for the better), had they not caused the hurt.

At the end of the month, I said a prayer of gratitude yet again — for my angel friend who put me on the path of prayer; for all those people because of whom I went into prayer mode; for the Universe for showing me what prayer is. I then disposed of the “prayer book”.

So, was there transformation? Definitely. The exercise helped slow me down. I was able to regain the trust I used to have in the ways of the Universe during the pre-depression days. I responded with acceptance to a bitter change when I would have reacted with rage. There definitely was a wholeheartedness in the way I accepted the change. A whole new world was opening up for me and I was loving it. So, why the reminder through the unexpected meeting with my psychoanalyst friend? I didn’t get the answer till I began writing this.





Praying, especially for someone who has caused us hurt, is a very noble act. But deep genuine forgiveness requires something else in addition to prayer. True forgiveness is indicated by a pain-free life. For this, the pain-inducing attachment to expectations has to be chopped off. We are so complete in ourselves, yet we do not realise this truth and harbour expectations from another. Break free from the bondage of expectation and in the release, bless the other and yourself with a prayer.

Forgiveness is not about who is right and who isn't. An intense probing into every episode of misunderstanding, betrayal of trust, and hurt — both physical and emotional — will reveal that whatever happened was only because we had given allowance for it to happen. A lot of it can be circumstantial. The fault is as much ours as it is the other's. Which is why self-forgiveness is as essential as forgiving the other if we are to release ourselves from the bondage of pain.

Though I don't hold any resentment anymore, I had not released myself, emotionally and mentally, from the bondage. When that awareness and acceptance came in, so did the means for the release. It won't be long before I live a pain-free life again.

# SATHYAVAN'S SAVITHRI

## VIDYA SHANKAR

\*Urugathavennaiyumoradayum naan nootren  
Orukalumenkanavarennaipiriyamalirukanam.

I offer, O Lord, unmelted butter and jaggery pancake  
So death does not take my husband away from me,  
ever.

Thus is believed that Savithri prayed  
Mythological eons ago  
To bring her Sathyavan back to the living world  
From the tightened noose of the Dead.

It was the day of the Savithrivratham  
When devout wives and innocent girls  
Would fast as Savithri had  
And chant her prayer. But not his wife, not today.  
His wife, who had tied with conscientiousness  
The yellow sacred thread even as a six-year-old  
For an as-yet-non-existent-husband  
Lay wasted upon the bed, shrunken and sick  
Gasping for life.

What if that unconsciousness had been him?  
Surely, his wife would have with even greater  
diligence

Fasted with faith and prayed with deference for him.

So, why the hesitation in the reciprocation  
When he loved his wife as dearly as she did him?  
Would Sathyavan have challenged Death  
Had it been Savithri's soul snatched away?



The husband didn't seek an answer; his heart knew it

—

Sathyavan's love for Savithri  
Was no less in virtue than Savithri's for him.  
Why then was praying for the spouse  
Only a woman's prerogative?  
Why weren't men too taught to pray even as boys  
For their consorts, year after year, as did the girls?  
Why wasn't he taught to fast for his wife, and with  
her  
Year after another year?  
And so the questions piled till guilt nudged him —  
Guilt for mistakes his parents, and theirs, and theirs  
Unseeingly chose to pattern.  
But it was not late now — he waited his eyes  
Upon his wife's mildly heaving chest —  
No, it was not late now.  
He took the yellow threads, all three of them  
Placed one upon his beloved, wound the other  
Round his wrist, offered the third at their shrine  
And in obeisance, spoke he in a quiver:  
I offer not, O Lord, unmelted butter and jaggery  
pancake  
But please let not death take my wife away from me,  
ever.  
He heard a sound, he turned a trembling face to the  
bed  
Upon which his cherished frailty lay  
His tear-filled eyes met another pair—  
Eyes that just had opened; eyes that played a smile  
A smile, though faint, was enough to tell him  
That his wife, his love, was back  
From the dead.

(\*Urugathavennaiyum...is a prayer in Tamil. The ritual mentioned in this poem is what the Brahmin community of Tamil Nadu follows.)

In the story of Sathyavan and Savithri, a narrative from the Mahabharata, Savithri uses tact to get Yama, the God of Death, to release the soul of her husband. Yama claims Sathyavan's life and takes his soul to the netherworld when Savithri insists on following them, reason being that a good wife follows her husband. Yama dissuades her, but when she doesn't relent, He tempts her with three boons so she would leave them. Savithri uses the first two boons to ask for favours for her father and father-in-law. And very subtly, for the third boon, asks to be blessed with children. When Yama blesses her, she points out that she cannot have children without her husband. Yama realises he is outsmarted and restores Sathyavan to life.

If we were to do an analytical delving into this story, we will find that it was Savithri's determination, equanimity, and smart thinking that cornered Yama. She did not employ any emotional manoeuvres, but was very resolute in her mission. Yet Savithri is not celebrated for her fortitude and wisdom. Instead, she is idolised for the 'devotion' she has for her husband!

A patriarchal society that we are, how can a woman be extolled for her ingenuity? But pati-vrata, or devotion to husband, that is more becoming of a woman, much in tune with the idea of female dutifulness and subservience to the male and this story so favourable to this theme, the pure love that Savithri had for her Sathyavan has conveniently been misinterpreted as pati-vrata. So, we have women observing the Savithrivratham, or fasting, each community keeping the core idea but formulating the rituals to suit their culture. And, because we bring up our daughters with the sole purpose of marriage, this practice was looked upon as an ideal tool to inculcate the theory of pati-vrata into young female minds, for an as-yet-non-existent husband.

Let us, for a while, keep our traditions aside and take a long, rational look at Savithri's story. If there had been role reversal, would Sathyavan have followed Yama just as Savithri had? Maybe yes. He too loved Savithri as deeply as she loved him. And then, maybe no. No, not because it was not the 'right' thing for a husband to do but because I don't think he had the tact that Savithri was blessed with: a tact that made her reckless. Sathyavan comes across as rather meek in comparison.

Let us now look at the relevance of that story in today's world. Though there is still a long way to go, we, the modern women, are comparatively more emancipated than our mothers or grandmothers ever were. We are beginning to realise that what makes us whole is we ourselves; we don't need a man or child to complete us. So, today's girls, once they are able to think for themselves, go through the Savithri ritual grudgingly, or just don't want to go through it. But the story of Sathyavan and Savithri is so much part of our culture, a powerful tale, and it would be sad to see the memory of the story diminish.

Why should a good story go waste? Why can't we keep the story alive by taking it for its true value? Why can't we begin to regard the story as a medium to pray for intelligence, shrewdness, and composure in the face of death and distress? And also respect it as a celebration of true love?

Once we give this story (and other stories too like the one behind the tying of the rakhi) its true respect, it obviously will become a ritual that is not limited by gender. Husbands can join their wives in prayer and both of them together can pray for each other's longevity. Boys can join their sisters and the children can pray for each other's well-being and for blessings of intelligence.

Boys will begin to respect girls and husbands and wives will begin to think of themselves as partners in life's journey. Imagine the change we can bring about in society's attitude towards women! Imagine then what a safe world it will be for girls and women, a world where there wouldn't be any more Nirbhayas. And no more capital punishment.

I do not regret the hanging of the four monsters, yet I cry for the extreme sentence we have had to deliver. The hanging served to punish the perpetrators of only one gruesome crime; it served justice to only one Nirbhaya. Nothing else has changed. No capital punishment can bring about a 'No More Nirbhaya' state. The solution lies in the weeding out of misogynistic thinking at the grass root level. And one way of getting this done is by re-structuring our traditional customs. Bringing about such a huge shift in "traditional" thinking can only be implemented and achieved by women. Just in case you are wondering I am all talk and no action, like a majority of people out there, I have brought about this change in my own household. For the past few years, my husband and I have been observing the ritual together.

So, ladies, are you ready to take up the challenge?

# PRUDENCE

## Dr ALOK KUMAR RAY

Disdaining nuisance of whimsical attitude before hand,  
Distancing own self from mere cunningness that occasionally withstands,  
Debasing foolish talk that seems capable to shroud  
Demonstrate wisdom to stand outrightly in your own ground!

Taking a vow not to be preoccupied with the vicious circle of past anymore,  
Tightening own able grip to move upward further  
Treasuring the pros and cons of change in heart for ever,  
Tarnish not self esteem there by rely verily on wisdom to usher!

Let your actions speak loudly on your behalf,  
Let your conscience guide you against unpardonable mishap,  
Learn how to forgive and forget sans demeaning noble self  
Let the attitude of a good Samaritan provoke you all the time to render help!

Prudence rescues us when devastating cyclonic wind blows,  
Prudence like the stream in hill tracks that naturally flows,  
Prudence gives us courage to stand against deadly foes,  
Prudence nurtures in us confidence to take the right pose!

Firmness in egalitarian treatment to one and all,  
Fixity in approach that isn't wrapped with the notion of big and small,  
Flamboyant gesture to dismantle self-centric ungodly circle,  
Fashioning trust on own instinct one can do miracle!



# LIFE IS A MYSTERY

## Dr ALOK KUMAR RAY

Let life remain as a mystery,  
I don't care,  
Living life as it is only I aspire,  
Though its a tough challenge,  
It's not a daydreamer's myth!

Life gives succour to all,  
Be in mirth or in despair,  
From womb to tomb  
It stretches its zigzag journey,  
Upheavals seem fire like fury!

So also it radiates sunshine like glory,  
Living life fruitfully only I aspire,  
Cherishing noble deeds of humanity,  
Life is to be sustained albeit amity,  
It's like a precious pearl!

Let not spoil it by unnecessary trial,  
Its like a bubble,  
Thinking of its end result all of us tremble,  
Live life as if you will die today,  
Standing on the remnants of past, welcome future  
everyday!

Let life remain as a mystery  
I don't care  
Living as a human all that I aspire!

# TAJ MAHAL

## A ANNAPURNA SHARMA

When, from in between the greenery you emerge  
An unknown ecstasy, they whispered  
Your white might turn black  
With my expressions, they claimed

I set in search of you  
I reached just as the sun  
Was about to sink

You didn't seem as white as I imagined  
The tinge I expected didn't roll out

Was it the sun or my looks?  
Was it the polluted words you heard each day?

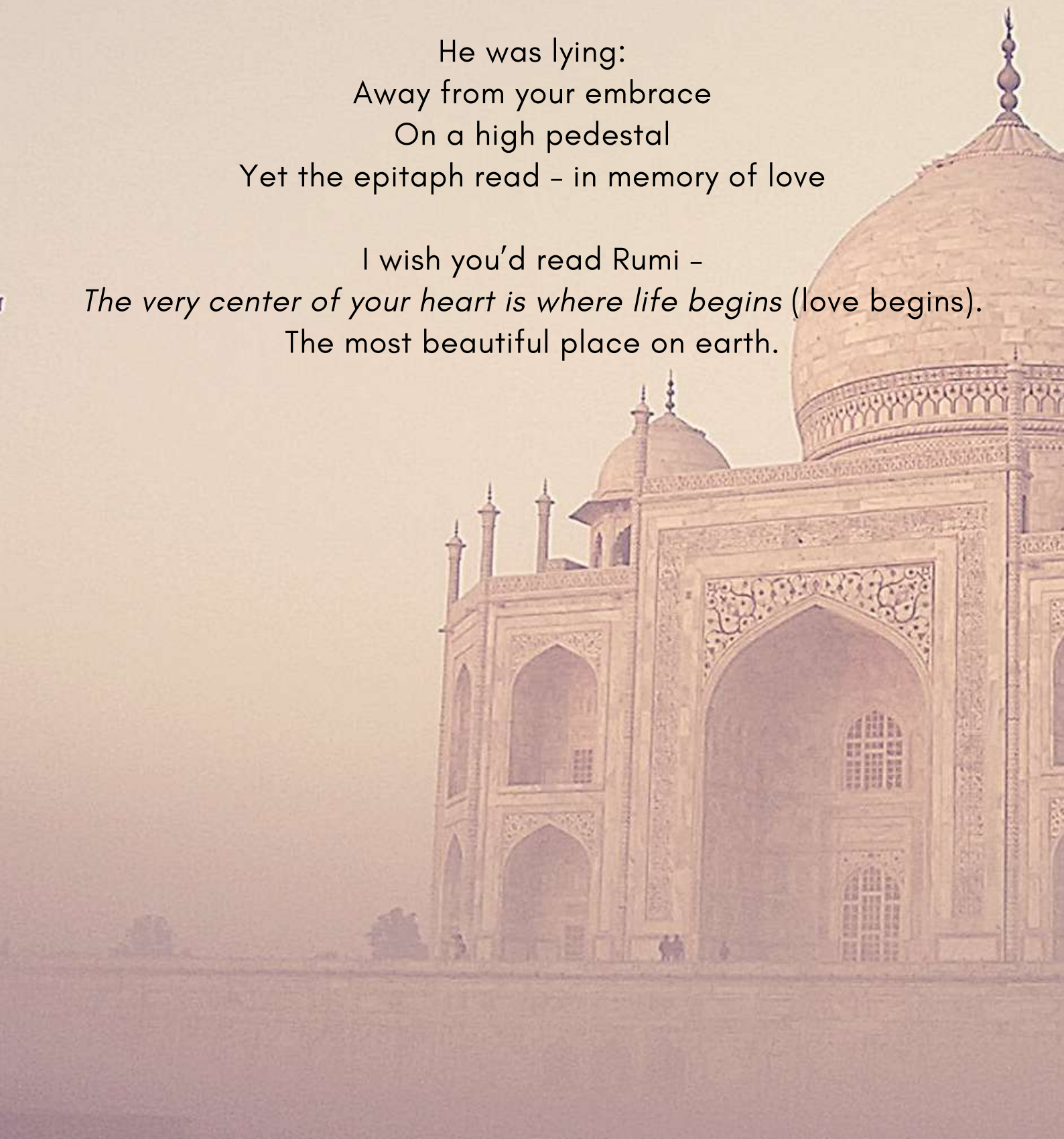
I stood in line  
Waiting my turn to touch you  
To invade your inner sanctity



What was once a symbol of Love  
Was merely a symbol of Sorrow  
Their feet leaving pockmarks  
Their hands wiggling around  
For a feel of you, sans love

He was lying:  
Away from your embrace  
On a high pedestal  
Yet the epitaph read - in memory of love

I wish you'd read Rumi -  
*The very center of your heart is where life begins (love begins).*  
The most beautiful place on earth.



# INK

## BHAGYASHREE MISHRA

When there's no one around and alone silence  
prevails

I whisper into ears of these mighty papers  
I write, not to be heard, but to feel  
contented

Ink to me, is that last straw of hope which  
helps to swim  
And reach the shore, saving my being from  
sinking

Ink to me, is the only ultimate saviour

I write when a teardrop trickles down  
Scribbling my despairs and agonies, I heave a  
sigh of relief  
When hunched and tormented by the worldly  
dolour, I ink.

Serenity sprinkling from the celestial far  
Awakens my reposing muse and dormant emotions  
I ink if a winsome smile adorns my being.

I ink while sailing into a peaceful oblivion  
Pausing the chatters around, verses keep on oozing  
I write amid streams of silence and arrays of  
cacophony.

In written words, I see my escapeway  
Quietening that introvert form dwelling within  
I ink not to become famous, but to feel  
expressed.

# HURDLES

## GITI TYAGI

Spiraling around the mountains hefty,  
Humming, singing songs so sweet;  
Touching softly pebbles underneath,  
Lo, there's a brook, pure and swift!

Not for once it stopped, not awhile,  
Not for a moment focus it lost;  
Danced and curled, hopped and curved,  
Down in the plains, quenched the thirst!

A life without the thorns, imagine if you can,  
Possibly what would it exactly be like;  
No lessons, no progress, no enlightenment,  
Without a Guru as a learner lost!

Whilst dealing with the forces adverse,  
Stay calm, peaceful to the best of the capacity;  
Allow not anything to disturb your poise,  
Hold yourself firm, with confidence abound!

Call down peace, deep inner quietness,  
Equanimity, the basis of all spiritual power is;  
Inevitable are the attacks of the forces adverse,  
Strengthening the determination, aspiration clear!





Resembling the tests meeting on the way,  
Tread thy path with courage, faith;  
Give not a reason for them to exist,  
Respond not to their whims, let them retire!

Let not the hostility stop nor hamper,  
The spiritual progress on the path Divine;  
Confidence undeterred in the Divine help,  
Aspiration sincere, the succour defeats!

Steering you through, sure secure,  
A quiet call, a faith unshaken;  
The way the Divine keeps us on the path,  
Patience, strength, virtues develop!

Resistance, anger, natural reactions are,  
Impeding the progress, delaying the success;  
Resent not, for they appear,  
To brighten up the path, to enlighten up the soul!

Companions trustworthy never do they fail,  
In creating an environment conducive to change;  
For the success, the progress, thank the impediments,  
For they are the ones that hold you strong!

With the will, the power, let the race be won,  
Quit not betwixt, vanquish the Hurdles!

# LET IDEAS FLOW, WORDS SHALL FOLLOW

GITI TYAGI

The complex words woven intricately,  
Tangled twisted knotted sophistically,  
Complicated discourse drifting aimlessly,  
Adrift afloat as a rudderless boat,

As a withered leaf with gentle breeze blown,  
Floats over the alley destination unknown,  
Gliding past floating soaring,  
Steered by the wind, mounting perching,

Weigh thy thoughts, reflect a bit,  
Ruminating contemplating tranquil musings,  
Unfasten unlatch, give wings to thy thoughts,  
Plunging deep in the echo of the depth,

I saw them die for lack of vent,  
Slashed and slayed, wanting to be heard,  
The support of the times when lonely I sat,  
Pondering into vacant emptiness within!

Poured out as the flowing tears beside,  
Drenching self in the tranquil flow,  
Touching hearts as the gentle hand,  
Caressing healing the inside out!

The days I spent with no companions around,  
My only solace, my beloved dear,  
As the pearls spilled on the paper blank,  
Shining sparkling on the ocean bed!

Talked I to them and so did they,  
The strengthened bond with the passage of time,  
Dear I hold them to my heart,  
There they reside, never to depart!

Of course when agony to apex reaches,  
A soothing touch they offer then,  
Pleasure success when surrounds abound,  
The cheerful ones flow dazzling out!

The thoughts upsurge, the tides high and low,  
The roaring waves as the ideas floating,  
The beauty of the world, the universe, the expanse,  
Hidden lie in the blooming blossoming words!

The radiant aura as the crowning halo,  
Let ideas flow, words shall follow!



# **WATER, THE ELIXIR OF LIFE**

## **HIMANSHU BHUSHAN JENA**

Water is the incredible gift of nature since creation  
It's the life of lives, treasure of treasures, resource of resources!

But our unwise acts make it contaminated and out of reach  
Safe drinking water is in scarcity, waterborne diseases are in high  
velocity

Life is losing its sanctity and running towards total annihilation!

Here is high time to preserve water and use judiciously,  
For the destiny of the globe rests on the future of water!!



# THOUGHTS FOR HUMANITY

## HIMANSHU BHUSHAN JENA

Contemplation for the cause of humanity is divine to the core  
Staying at home keeps us and our society safe and secure

In the dead of night when all are in slumber deep  
I am wide awake to meet the lost and departed across the globe  
How can I sleep perfectly well when the moaning is heard from  
each corner

regardless of status, race, caste, creed or gender?  
How can I resist the pains and sufferings within amid the  
violent waves of dark clouds in breakless feather?

Let the virus die before it kills our thoughts and lives  
Let our acts of quarantine silence forever the deadliest one  
building a world free of inequity and strives!

# ONCE AGAIN, A LOCK DOWN

## HEMA RAVI

Once, the Spanish flu spread through sneezy coughs  
World war troop movements hastened its lethality  
Resulting in mass human deaths and layoffs  
Infecting populace in near totality.

Again, bubonic plague from rodents brought on deaths  
Spread through droplets from man to the locality  
Making man understand the need to control pests  
Maintain extra hygiene in the vicinity.

Now, a crowned monster's doing the deathly rounds  
Frequent washing, safe distancing the modality  
To control its spiking in effortless bounds  
And bid adieu without further mortality.





# SHORES OF ETERNAL PLEASURE

## JAYALAKSHMI

Cradle of love thrills in lulling lyrics,  
Dawning words flow and settle in heart-sills  
Awakening my senses to the radiance of truth,  
Between floating imagery moments soothe!

Verses align in rhythmic meters, with crawling limbs,  
Affirm immaculate glow of heart's links,  
Soothing vibes before hurdles of life glares,  
Rhymes and rhythms escorting shadows unawares!

Muses wait enticing to join the symphony of seasons,  
For they are my bestowal as thy prayers' versions,  
Metaphors and similes conjoin beauty and truth,  
Blooming miracles throughout the path!

Poetry...

Sheer bliss in nature to swim and splash,  
Serene depths to sink and search,  
Sublime shores of eternal Pleasure!



# THE SHORE OF SCIENCE JAYALAKSHMI

Afar the simmering tip of this wondrous planet  
Allures a shore of encompassing mystery  
Glistening wisdom's laboratory  
Brimming with Almighty's elegance  
Beckons the shore of science.

To heal the bruises of manmade atrocity  
That disturbs nature's serenity.  
So near I touch when love chisels  
Thy name on the flimsy waves of my concern  
So far it fades and illumines as a crescent vessel

Wrings and drifts along confusing horizons  
Fecund sand holding holy elixir  
Feed and feast ardent flora.  
Twinkling turf of vast knowledge  
Fill and festive fervent fauna.

Shore of silence synthesizes  
Natural phenomena  
Under His vigilance  
Embrace humanity pledging  
Universal peace and eternal Happiness.





# HEAVEN ON EARTH

## LEENA RAJAN

Mother, puny may be word, but on analysis,  
Mighty world depends solely on entity this.

Mostly she is keen of welfare of kids,  
Making herself ready to do anything for kids.

Firmness is her chief characteristic found,  
Frank, faultless and fair she will be to a kid.

Fragrant her mind, will be alert to provide,  
Food, when we simply cry, as if we are starved.

Given birth to us or rears us up to such a state,  
Golden Heaven, is solely alone under her feet.



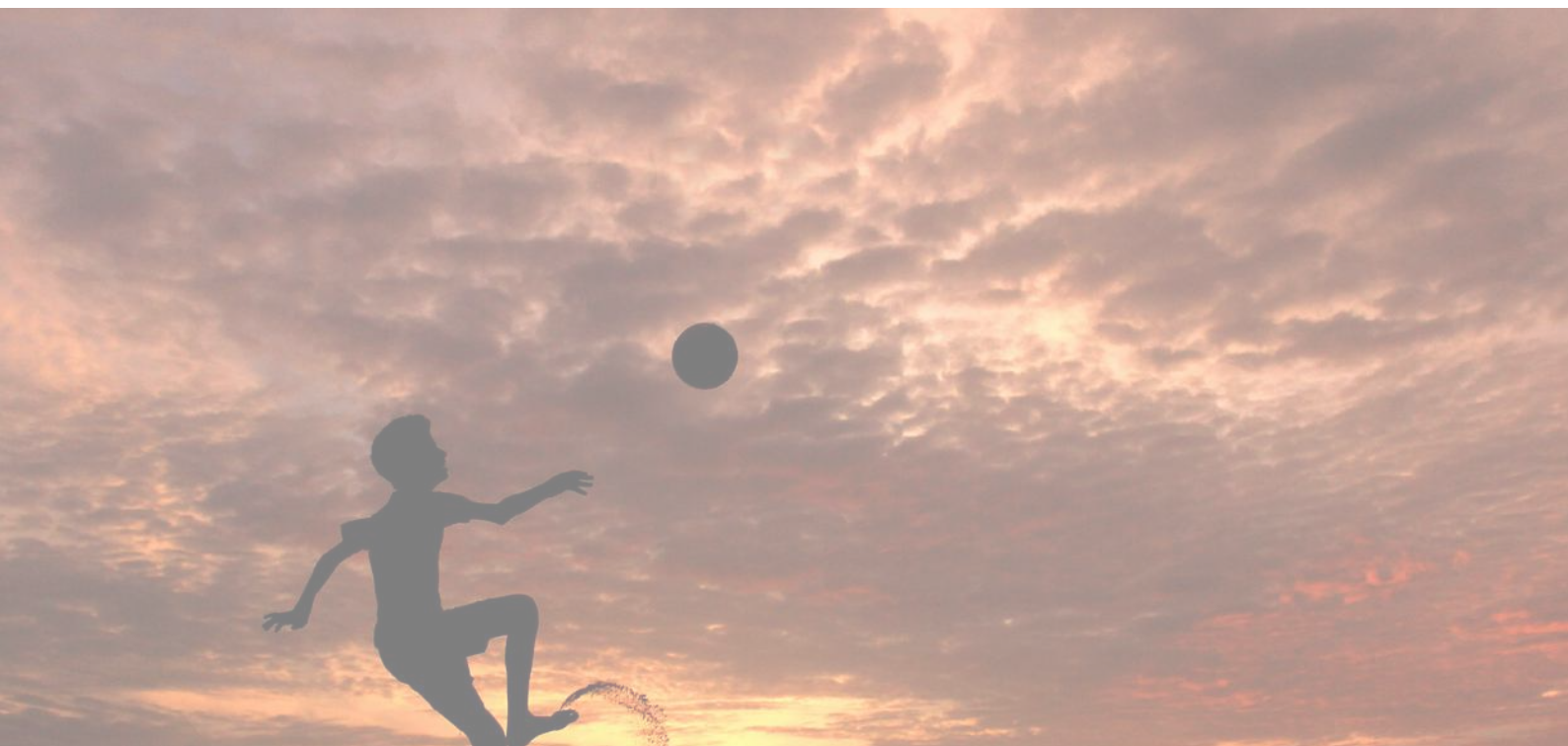
# DESIRE, DECISION, DETERMINATION

## LEENA RAJAN

Desires of all are not fulfilled often,  
Desires, determination, and decision,  
Do wonders for dream's realisation,  
Delightful, creating heavenly elation.

We, if desire simply, to get sweet water,  
In a dry land, will we get it?  
Without doubt, no water we get.  
Well digging tools we should collect,

If we decide to work on digging well,  
Ingeniously, determined to work well,  
Invariably water we get as the result final.  
In procuring anything, these are vital!





# THE FLOW

## MADHUMATHI H

Answer me, dear river  
How to have a mind, serene like you  
Going with the flow  
A rhythm in the ripple, when thoughts stampede  
A pattern, so calming  
A flow so gentle  
Reflections like a drop of dew  
Upon the morning blossoms, unsullied


Liquid silence spreading like a lilting sheet  
Life, merrily drifting across moments  
Carrying nothing, leaving nothing  
To just build a bridge  
Between entry, and exit  
Connecting like a contented smile  
With love... And more love..

# LIFE GOES ON

## MADHU JAISWAL

Putting aside my demons, hurting inside  
I tried to decipher life in that slice of heaven  
Taking solace in the embrace of an intruder  
the only feel I endured at the time  
Was as if my soul knew him since long  
Peaceful and enticing  
Encapsulating my heart  
Planned by the stars  
Destined to happen  
Luring and luxating my eternal self  
A bond so angelic, it was so pure in realm  
Wading in the mysticism of dos and don'ts  
I surrendered myself, in the hands of fate  
Life was pulsating with the vibrancy of love  
Everything was so dreamlike  
Never had I felt this eternal joy  
Not realizing it was just a wondering phase  
Gratified with the allure  
Illusion of a beautiful life path  
Swayed dreamlike in my eyes





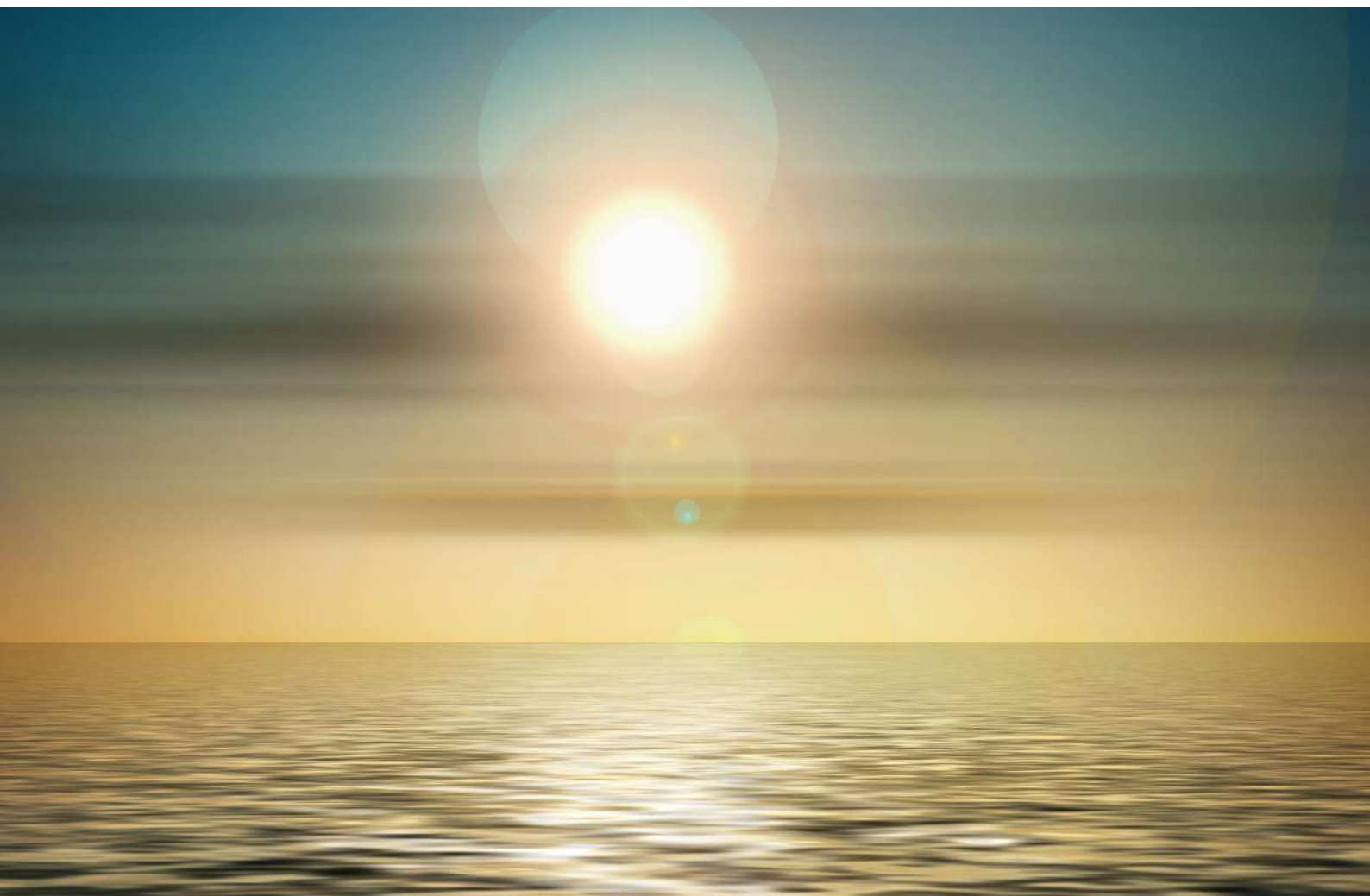
As swiftly it came and shimmered along  
It vanished in thin air, one fine day  
No trace left behind, no more magical moments of bliss  
Tears rolled down, numb with the grief  
Life hit back blatantly with lamentable moment of agony  
Excruciating pain, dejection and loneliness  
The sole companions, left with me now  
Dreams shattered  
Left with a broken heart  
I was back to the square one  
The wish unfulfilled  
The road not taken  
A deep mark ingrained on my innocent soul  
Taking a deep sigh  
Bearing the brunt  
Trudging and often tearing apart  
Everything seem a miss nowadays  
Destiny rules  
Staring blankly in my face  
Life goes on, at its usual pace

# REALIZATION

## ORBINDU GANGA

Been in search for answers  
To let the thoughts stay still,  
Stillness is a state lasting for a few seconds  
To drive the mind, stand for long,  
She is a child, not to be still  
Despite redundant chorus,  
Understanding her rhythm  
Took me to hear her silence,  
Spending years of observations  
Mending my way to be a listener,  
The mind is no more a child  
She is listening to me,  
I am holding her within me  
To be still in the stillness,  
Little did I expect the observation  
To hold the mind to listen to my thoughts,  
Created a seed of thought  
To let the mind know the thought,  
Her inception wandered  
To know her being,  
Within the mind, she was watching  
The other thoughts blooming,  
She wondered the smile  
Among her fellow thoughts,  
She followed one each time

To see them misted in fumes,  
Never to be lived long  
To be born and misted in the air,  
Being in her own thoughts  
Never to be bothered by other thoughts,  
Never to think of tomorrow  
Made her blossom every time,  
A thought to make my thoughts  
To be the reason for the smile,  
Letting the beginning to unfurl  
The thoughts of end to celebrate,  
Whispering in silence  
To be in synchrony with the unknown,  
For the form to taste  
The formless entity of blissfulness.



# TIME MACHINE

## Dr S PADMAPRIYA

If you can effortlessly traverse,  
Be in the present,  
Move to the future,  
Slide into past memories,  
And return with lessons learnt,  
Rather than with a repository of bitterness,  
You are a Time Machine!

If you can tie yourself to ideas,  
Rather than to people or things,  
Be more hopeful than dismal,  
You are a Time Machine!

If you have ideas to change the world,  
And know the know-how,  
And successfully go about doing them,  
You are a Time Machine!

If you can pause,  
Every now and then,  
De-stress and move on,  
You are a Time Machine!

If you can escape at will,  
From foolish thoughts plaguing your inner space,  
And life-dance as per your whims and fancies,  
You are a Time Machine!

If you can get up each day,  
And celebrate being alive,  
And plan your next good deed,  
You are a Time Machine!





# BLOOM

## PRABHA KHADKA

The passersby have not noticed  
Its divine yellow  
Ah! People are touched only  
By a recommended imagery  
Their eyes are not trained  
To see its soothing glow  
Still no complaints,  
Without a perfumed shout,  
It blooms here without any name...



# ALL'S A DREAM

## ROOPA SUBRAMANI

In the beginning, is life,  
In life, is great hope,  
From this great hope, a herculean effort,  
For this herculean effort, a great reward,  
For this great reward, an ephemeral sense of happiness,  
In this ephemeral sense of happiness, a slight doubt,  
From this slight doubt, a great slip,  
From this great slip, a volley of circumstantial errors,  
From this volley of circumstantial errors, a deep descent into suffering,  
From this deep descent into suffering, a great sense of despair,  
From this great sense of despair, an utter feeling of hopelessness,  
In the midst of this utter feeling of hopelessness, a sudden rushing forth of potential Grace,  
From this rushing forth of Grace, a trickling of awareness,  
From this trickling of awareness, a slow and steady flow of wisdom,  
From this slow and steady flow of wisdom, a crystal clear and expanded sense of vision,  
This clear and expanded vision, not of the physical eyes, but of the Heart (Spiritual),  
From this clear and expanded sense of vision, a Grand Realization,  
That is witnessed as, 'ONE AS THE ALL' and 'ALL AS THE ONE',  
And this is having lived life at it's truest,  
For,  
In the end, all's a dream,  
Even that ripple in the ocean of consciousness,  
That does so to seem,  
Having been everywhere from that place or state from where one could not have dared to wean,  
And so,  
In the end, All's a dream,  
To a mind now wide awake to it's true nature, having so clearly seen.

# LIFE

## B S SAROJA

Life  
can be called  
a synonym,  
of movement from  
moment to moment!

As  
in a Railway Station  
arrivals and departures,  
hustle-bustle  
on the platform!

The fog  
of incarnations  
bends and curves,  
twists and turns  
appears real!

Believing  
all would be okay  
pushing out insecurities,  
the journey continues  
of pleasures and pains!

Train  
the mind  
to be positive,  
if not on the right track  
stumbles and falls!

Life  
an eternal  
journey of soul,  
in the guise of  
birth and death!



# EUPHORIA

## B S SAROJA

A dew drop on the autumn flower,  
Greets the sun spreading mirth around,  
Ripples of sea waves run fast,  
To touch the shores and retreat!

Shoots of orchids smile,  
At the onset of the spring,  
Amniotic tranquility,  
On the mom's bosom!

Unique freedom that comes,  
In the form of bondages,  
Garland of woven dreams,  
In the excited mind!

Close embrace of loving hearts,  
Sitting beside fire in winter,  
A name that brings with it,  
A mellifluous song of rapture!

An endless wonder of nature,  
Bestowing consecration of light,  
A heavenly feel with the end of night,  
Dropping last petal in joy!





# A THING OF BEAUTY

## SETALURI PADMAVATHI

The green world amidst hills and deep valleys  
The musical fountains and flowing waterfalls  
A treat for my eyes, soul and longing mind!  
Your fingertips gently touch the black cam  
When you show alluring beauty around me!

I'm really tired of physical and mental pains  
And my heart finds solace and solitude here  
Towards the rhythmic brook and rusty lands!  
Your fingertips gently touch the black cam  
When you show riveting beauty around me!

A gentle breeze brings jasmines' fragrance  
Whistling wind sings a sweet welcome song  
And a flowing lake lets me feel the real serenity!  
Your fingertips gently touch the black cam  
When you show startling beauty around me!

The Rocky Mountains lie beside lovely streams  
Refreshing water kisses my tender both feet  
And chirping bluebirds welcome me from afar!  
Your fingertips gently touch the black cam  
When you show enthralling beauty around me!



Swaying branches set a soft swing ahead  
Lush green orchards always enchant me,  
How blessed I'm to be in the lap of nature!  
Your fingertips gently touch the black cam  
When you show engrossing beauty around me!

O, dear! I beg you not to leave your black cam  
As I wish for more fantasy in pictures around,  
Paint the frames with rainbow colours ahead!  
Your fingertips gently touch the black cam  
When you show thrilling beauty around me!



# **BREAK YOUR ADDICTION**

## **SHALINI SAMUEL**

In a world full of choices  
Life puts us in a loop.  
You choose the wrong option,  
And you stay in the endless loop.  
Until and unless you find the exit- the right choice  
You keep tumbling in the maze.

Addictions come in varied forms  
A drug, a device, a habit  
Good and bad- it roams everywhere  
What you choose, what you forgo  
Makes your life.

Life never happens, it responds to you,  
To your actions and thoughts.  
Every second of life is important,  
Be careful, spend your time wisely.



# MIRROR MIRROR ON THE WALL!

## SHREYA SEVELAR

I remember the day we moved in,  
A new house, a new place to hide in,  
I remember my father putting up the mirror,  
A shiny thing, with a frame that shimmered!

I loved the mirror with all my heart,  
Guarding it was my duty since it was bought,  
When it was put up, however,  
I was angrier than ever!

I found that it was a little too high,  
I couldn't see myself, however I tried,  
I begged and cried for it to be brought down,  
'You'll grow up soon' my dad chided with a frown!

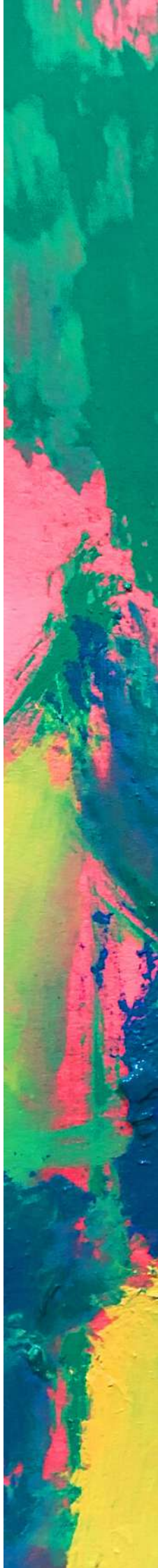
Today I realise how I've grown,  
I no longer have to stand on my toes,  
I look into the mirror with an ease,  
And relive my sweet and fond memories!



# **SOLILOQUY**

## **SIVAMRITHA NIVEDHIDHA R**

When time ends  
and winds sweep  
the soul out,  
I bid adieu  
To this vast universe.  
when time ends  
and the breath ebbs  
I bid adieu to the orderliness  
when time ends  
and the new cycle starts  
I wither "I"  
I drape sunya  
I am beyond abstractions of spacetime curves,  
I am lost  
I evaporate and will never be found !  
Alas ! if its only a disorder state  
And if universe holds in gravity  
in all disordered entropy,  
Then what was withered ?  
And what gained ?  
I continue to muse  
Only to be alarmed  
And spine chilled  
by this never ending mystery .



# LIKE A JEWEL BEETLE

## SUDHA RAJENDRAN

I have just seen a jewel beetle sitting on a leaf.  
It's a beautiful shimmery emerald jewel beetle.  
I don't like jewel beetles in matchboxes.  
I often relate to them when I am inundated by my thoughts.  
Thoughts wear me down like a raced cart.  
My mind acts like a pushed down ball in a tank full of water.  
It is pressurably being immersed by thoughts,  
    thoughts those made me guilty,  
    thoughts those made me unforgivable,  
    thoughts those made me feel pathetic.  
I always run away from those ever chasing thoughts  
    but they consume me like an engulfing amoeba.  
They made me feel like that of a jewel beetle in a matchbox.  
I want to be freed from all of those suffocating thoughts.  
I want to be free as a wanderer of nature.  
I want to sit all alone under a vast open starry night sky  
Listening to the sound of crickets  
    which harmoniously blends with the twinkling of stars,  
    enjoying every moment of inner peace  
    like a jewel beetle on a leaf.



# GRATITUDE TO NATURE

SUJATA PAUL

I bow down my head,  
To the vastness of the sky,  
That makes me learn,  
How to be lenient to the others,  
To lead the journey of life smooth and high!

I love the chirping of birds,  
The smiling face of the child,  
All the natural entertain my desolate mind,  
I care for the innocent orphans,  
With all my love and wishes abound!

But though the greatest gift of nature,  
They feel themselves lonely and feeble,  
I look for the day,  
When deforestation would be halt,  
The stream would flow without any barrier!

I look for the time,  
When there's no violence among the humans,  
Fellow feeling and closeness must reign everywhere,  
I pray to the world,  
To remain one and united!

Nature, the giver the guide the torch bearer,  
Let us learn the art of living,  
To be happy, patient and contented!

# THE CURVE OF IMBALANCE

## THIRUPURASUNDARI SEVEL & PRASANNA S

The length of flower strand is also the length of struggle;  
The aroma of the tea is the aroma of strength;  
The shine of the floors and walls is the sheen of dedication;  
The distance they drive you around is the distance of the economy;  
The heap of vegetables is the heap of faith;  
The crisp of the stitch is the crisp of the talent;

The hands that create, build, feed, support and understand!

The needs of our day, the wants of our ego,  
The demands of our life style - make us forget,  
The food to the plate, the education to their children,  
Health care and welfare;  
In this challenging time, lets support,  
Until this imbalance curve also flattens with the corona,

Till then - support and share, don't forget to make that a habit!





# FLIGHT TOWARDS FREEDOM

Dr VARANASI RAMABRAHMAM

During one of my wanderings  
Through the green bushes  
Saw a lovely little bird  
Fresh in spirits  
Full of enthusiasm for life  
Enticed by  
Few grains under the net  
Alas!  
It flew down  
Eagerly for grain  
My heart melt  
But nature is beautiful  
That cruel, greedy  
But foolish hunter  
Hid somewhere near  
Wanted to collect  
Before the little one  
Is stuck to the net  
Again, nature the magnificent guide  
Made the sweet little  
Sense the trouble;  
And then  
That elegant, vigilant  
And sensible small bird  
Flew, Flew, Flew  
From fools  
Beyond captivity  
Towards the horizon of freedom.

# THE DREAMY EMERALD

## V VARSHA SHREE

I picked up a random book,  
From my shelf, I was rather bored!  
I held it and at first look,  
The book wasn't unexplored!

Yet I opened the book again,  
I had read it a hundred times or so,  
I hoped to find the undiscovered,  
That I hadn't seen a day ago!

A dozen a time I turned the pages,  
I saw pictures of mountain ranges,  
Inattentively I turned them faster  
Until I came across a green gem of lustre!

Allured, my eyes got glued,  
I read what was written there,  
'Emerald', I read that word,  
As I expected the page wasn't bare!

The page had facts big and small,  
About the Emerald, The Healer's stone,  
It changes colour when friends are false,  
They are found never alone,  
Only with Quartz!