



**Lessons In Abhidhamma:
A Practical Top-Down
Conceptual Approach**

Lessons In Abhidhamma:

**A Practical Top-Down
Conceptual Approach**

This is work in progress

I am not sure why I am putting a
copyright on this, but

© Bhikkhu Subhuti 2014

All rights reserved.

Since this is a work in progress, please avoid copying
and refer others to the most recent copy at:

<http://withmetta.net>

so the latest revision may be read.

This is work in progress

Table of Contents

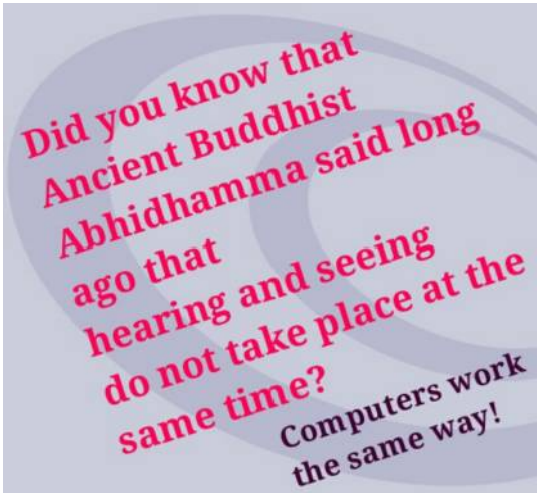
Abhidhamma Lesson #1.....	6
<i>Hearing and seeing do not take place at the same time.....</i>	6
Abhidhamma Lesson #2.....	11
The mind is singular and digital without mixing.....	11
Abhidhamma Lesson #3:.....	18
The Idle Process.....	18
Abhidhamma Lesson #4.....	25
Can water be felt?.....	25
Abhidhamma Lesson #5.....	34
Guns, Buttons, and E.Motions.....	34
Abhidhamma Lesson #6.....	63
What Matters?.....	63
Abhidhamma Lesson #7.....	81
So what happens during samādhī?.....	81
Abhidhamma Lesson #8.....	94
It's In There!.....	94
Abhidhamma Lesson #9.....	123
The Super Easy Fifth Method of Dependent Origination.....	123

Abhidhamma Lessons

Abhidhamma Lesson #1

Hearing and seeing do not take place at the same time.

This was one of the first things I learned about Abhidhamma in 1999. I read this in the introduction to A Comprehensive Manual of Abhidhamma by Bhikkhu Bodhi. I knew computer science principles at that time and it blew me away. The same is true for all sense doors including the Mind Door. They are broken up into small chunks and do not run in parallel. I am surprised that experts like Daniel Dennet do not mention this as a historical source, or even using it as a model to explore.



Here is a free introduction to the book.<http://www.accesstoinight.org/lib/authors/bodhi/abhiman.html>

Here is a free translation of the book that Venerable Bodhi's work is based on.
http://www.buddhanet.net/pdf_file/abhidhamma.pdf

Here is the book by Venerable Bodhi (only \$5 from <http://bps.lk> if you are in Sri Lanka). A kindle version is available.

<http://www.amazon.com/Comprehensive-Abhidhamma-Vipassana-Meditation-Teachings/dp/1928706029>

Another resource is a YouTube channel by Dr. Min Tin Mon, who has a Chemistry PhD and is a Buddhist Advisor to ITBMU. Dr. Mon is a meditator who knows the Pa-auk Course well. The goal of the course is to see all this with the mind. Here is his book.

http://www.buddhanet.net/pdf_file/abhidhaultsci.pdf.

This simple message was posted to a Philosophy Of Mind group from Google Plus. It was how this whole series of lessons got started. Adam Black is an active leader of the group encouraged me to write something on Abhidhamma. The initial responses were not favorable, but positive reception eventually grew as I included more supporting details. Below are some edited comment replies from skeptics who claimed they knew computer science, and one other.

Javed Mahmood said, "...Ask someone who knows computer science..." **Me:** The whole point of the post is that hearing and seeing appear as if they happen at the same time, but in reality they don't. The mind switches very quickly. It processes a small amount of sound, then sight, then sound, then sight. All of this occurs thousands of times per second. As a computer science student will learn in his Operating Systems and Digital Circuits classes, this is what an operating system does to make your computer work. Robots do the same thing. According to Abhidhamma, the mind works the same way.

When I took a class in Operating Systems, we learned that the operating system runs a program for so many ticks, saves the stack, and then runs another program with another previous stack pushed into memory. It then does this over and over again to make a multitasking operating system. This was in the days of single processors, and that is what I am referencing. I'm also

referencing different I/O devices connected to different ports. I would imagine that usb chain links these too, but I am dated. We also had a robot at school that did the same thing. It would see, calculate, move, see, calculate, move, etc. IRQ – used to interrupt the computer – was used back then to make the hardware "see" and do other things with external feedback hardware. The way to connect a mouse to a computer was to use a com port that used to work on this IRQ. They probably still exist today. That was how external hardware could communicate with a computer. It needed to interrupt the computer. By interrupting, it creates a multitasking system. As a multitasking human (while eating), you eat, interrupt your eating by taking a drink of water, then you eat, then you drink. You need to interrupt yourself in order to do multiple things. Otherwise, you have to wait until you are finished eating before you can take a drink. That was how the "old black screen" MS-DOS computers worked before Windows came around. In the beginning, Windows did not do a good job at multitasking, and you might remember "waiting" quite often.

The whole Windows operating system was a giant message queue. If the keyboard was hit, it generated a message. "Mouse move," also generated a message..in a queue. There are exceptions to the rules, but it still should be a valid general point today. I have not done much computer work since 1999 when I left the industry and Multi-processor cores of today may change things, so I can only speak from the past when comparing the mind to a computer according to Abhidhamma. It is a statement about Consciousness from an Abhidhamma point of view which relates a general computer science concept I learned in the 90s.

Me: to Adam Black. Thanks for your support.....--

....About the mind-door, or better to say the mental processing that takes place in the heart. This is like an IO device for a computer, a mouse, a keyboard, a digitizer, a camera, a microphone, etc. IRQ works in a similar fashion. BTW...

Most non-Buddhist people are familiar with the Tibetan wheel. One of the pictures near the right hand side of the circle is a house with six windows. This represents mind and matter. These are the 5 sense doors, plus the mind.

The five-door averting mind process selects one of these doors for the consciousness process to occur. After that, the data appears in the mind-door. There are other consciousnesses that occur (one mind moment/computer tick each). Eventually the mind knows the object and then the emotion process (seven ticks) occurs. Most of the mind is in an idle process (life continuum), similar to a computer. Click on task manager and you will see it as the main process unless you are doing computer graphics rendering!

Idle keeps a car engine from dying, hence the name Life-continuum.

Abhidhamma is a complex subject. You need to learn all of the pieces to the puzzle and then eventually make sense of it as a complete mind/matter/kamma system. I chose to start with the computer science connection because that was what I connected with when I first learned about how the mind could not see and hear at the same time. I am not sure if the introduction listed below in HTML format is the same as the one in the paid version of the book, but the kindle version is available and I assume can be read as a sample. (see 3rd link above).

In short, the computer does many things very quickly to give the appearance that everything is happening at the same time. If you are video Skyping multiple people "Brady Bunch Style," you will see everyone all at the same time, but under the hood, Skype is probably sending different feeds for each, and they are all separately handled (my guess).

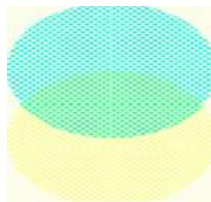
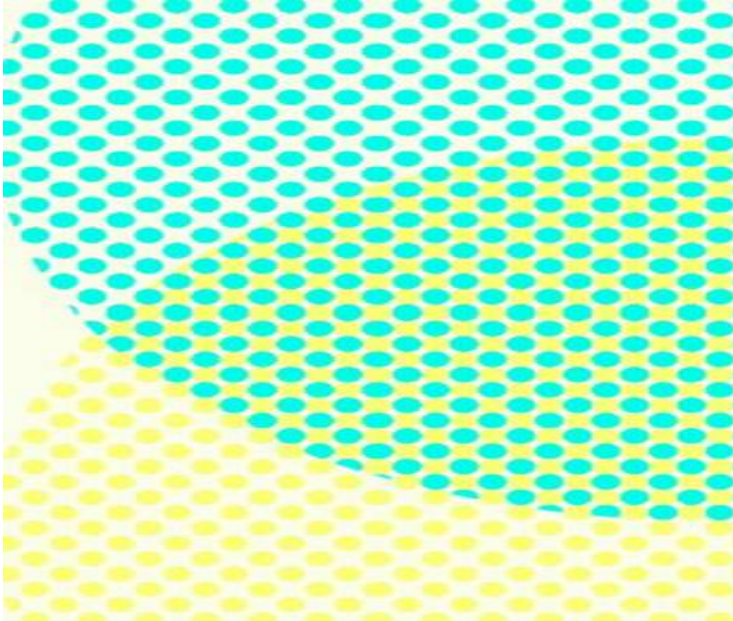
When you see a Sony 3D IMax Movie, your LED goggles are blocking one image at a time and giving you separate views for each eye. If the refresh rate

is fast enough, you won't notice it and you will see a 3D image in your mind. Virtual reality is getting better refresh rates and is now making headlines. Your computer screen also has a refresh rate, which is why a video of a computer screen looks flickery. The video produces a strobe effect. Video itself is just a series of pictures that are so fast you do not see individual frames.

The sound and vision processed in your mind happen one by one, very fast in the same manner. The human mind has incredible clock speeds. Abhidhamma asserts that the mental processes that process visual data from the eyes takes place in the heart. Some say it is in the blood in the heart. There is a consciousness that happens in the eye, in the ear, etc. However, this is just consciousness of raw visual consciousness without any emotions, or judgments attached to it. In Abhidhamma, there is a traffic cop process called 5 door averting (interrupting) process. This controls which of the five senses gets the attention in the mind (separately). One by one it happens and it is all faster than a blink of an eye.

Abhidhamma Lesson #2

The mind is singular and digital without mixing.



The Theravada Abhidhamma says that no two mind moments can occur at the same time. Before, I had related that the senses do not occur at the same time. This

is because consciousness happens in a singular approach. Each mind related to the senses is a single consciousness moment. Actually it happens in a group of consciousnesses that are singular in its subject. This is called a vithi which will be discussed later. If you love tasting a chocolate flavor, that is one group that is exclusive to mental data regarding taste. If you love looking at chocolate, that is another group that is exclusive regarding sight or color, and so forth with smelling and feeling it melt in your mouth, etc. They are all separate mind processes that happen in serial.

Likewise the craving that occurs in the heart-mind-base as a result.

In our modern society, we believe we have two forms of perception; analog and digital. As far as Abhidhamma is concerned, we could say that mind is digital. That is to say, it is there and then it is not there. According to Abhidhamma, the mind does not perceive the movement of objects. The mind can only experience one object at a time. A video relies on the same principle and is "digital" as I am explaining it here.

These days, many people have seen a video editor and know that it is just a bunch of serial pictures to simulate movement. Previously, this was only seen in science museums. As you can see in your video editor, each picture is there for a brief moment and then it is not there, replaced by a new one. This is what I mean by digital. Analog, which shows continuous movement or continuous change, is the opposite. A cassette recording is analog.

When you draw a circle, this is analog. A computer does not draw a smooth circle on the screen. If you zoom in, you will only see dots and jagged lines.

So there is no mixing of mind. Its subjects are singular and digital. There is no such thing as anger mixed with giving. "Giving" is one process and "Anger" is another. Below is a diagram of what happens when you give a Christmas gift

to your ex-wife who takes you to court all the time. *Anger* is represented by 'A' and *Giving* is represented by 'W' for wholesome consciousness-groups. The same diagram could be made by giving with "Conceit," substituting 'A' with 'C.'

ĀĀĀĀĀĀĀĀWĀĀĀĀĀĀĀ
 CCCCCCCCCCCCCCCCCWCCCCCCCCCCCCCCCC

The opposite can be said about compassionate killing. There is no such thing as compassionate killing. "Killing" is one mind process and "Compassion" is another. Taking mind processes in this example we will use "Killing" as 'U' for unwholesome consciousness process and "Compassion" as 'C'. (this parallels the previous example and stresses that killing is always unwholesome)

CCCCCCCCCCCCCKKKKCCCCCCCCCCCCCCCC

Here we can see that killing is surrounded by compassion although you might only believe it is pure "Compassion." In Abhidhamma, there is no such thing as killing consciousness. It is categorized as generic "Anger." A mind that intends to kill can never be disassociated from anger. We will go through this in the mental exercise so you can know and experience this for yourself.

In Abhidhamma, compassion is usually associated with a samādhi consciousness, but it is simply wholesome consciousness with compassion as you know it. We will group that into the label wholesome consciousness. So really the chart for "compassionate-killing" would look like this:

WWWWWWWWWUUUUWWWWWWWWWWWWW

Mental Exercise

Try to remember an event where you gave a gift to someone when you were not happy or "Proud" of giving. Try to run this through your mind and replay it back in slow motion. Try to see each frame of the video tape. Each of those frames is a processes relating to one type of sense or one type of emotion (wholesome or unwholesome, etc). If you do, you will start to see the difference of mind during the time of giving. If you do not see, you need to slow it down further. You should see each sub-process happen in your mind's eye. As you see this, pay attention to the quality of your mind of whether it is wholesome or not.

Hopefully you do not have experience with compassionate-killing. However, you can imagine it in the same way as above. Imagine killing your pet dog because he has a really bad infection and will die, etc. Do it with an ax. Play it out in normal speed. Then take your mind and do an instant replay in slow motion. It is possible to do this. You will see that the mind process changes the when you intend to kill it. Compare that mind, with the compassion that precedes the killing. This is only a mental exercise. Please do not do the real thing!

A Note on Kamma

Kamma is similar to the word karma as you know it. Theravada uses this word exclusively to represent the energy created from thinking, speaking and actions. We have a separate word for the results of this energy (which can come back to us at a later time). If one were to look at the diagrams, one might say that compassionate killing will yield a net "good" kamma. This would be somewhat true if you gave each mind moment an energy value of one unit. We know this in basic math. However, they are not equally weighted because *thinking of killing* is different from *doing killing*. Therefore *thinking of compassion* is differently weighted from *doing killing*.

Kamma is created in three ways. Usually we call these the three doors for kamma; mind, speech and body. The lasting effects are different for each door. In general and especially in the case of compassionate-killing. Thinking can be considered like putting your finger through the air filled with smoke. Its mark on the smoke is gone in a few moments. Speech can be considered like running your finger through the water or sand in a desert. Here, its mark will be noticed, but gone shortly. Lastly, action is considered like an engraving in stone. This last one can last for a long time, depending on the depth and material engraved. (modified by "S.N. Goenka.") All that said, little things can add up quickly and the oceans have been filled with tiny drops of water. Likewise, the first verse of the book, *The Dhammapada* says that mind precedes all states. So keep your mind pure as much as possible!

So if we were to put together weighted averages for giving surrounded by anger, giving would yield an infinitely larger good kamma than the surrounding angry thoughts. Likewise, the surrounding thoughts affects the action as a preceding cause which would make the action less valuable than a pure wholesome mind. The same is true with Mercy killing. The *doing of killing* will yield infinitely more bad kamma than from the many thoughts of compassion. However, it will be less bad kamma than cold-blooded murder or an angry action preceded by an angry mind. Nevertheless, mercy killing is still a big problem and should not be done. A bigger problem is when mercy killing is your livelihood. After so many times, you will not be any better off than a murderer. Remember, that whether body, speech or mind, things accumulate and add up.

It Is All An Illusion

As I have said before, I love optical illusions. The best ones are right in front of you right now. No, not the picture in this post, but your computer screen.

There are only Pixels or dots on your screen. usually displayed as Red, Green and Blue.

Open up your favorite photo in your favorite editor and zoom in to "Ridiculous Zoom" or "Ludicrous Zoom." Either one will show you that your photo is just a bunch of dots. The purpose is to show you that although we see a big picture, there is no mixing under the hood, and according to Abhidhamma the same happens with the mind.

The following quote was taken from:

http://designer-info.com/Writing/understanding_halftones.htm

"So why would you want to overlay halftone screens? The answer of course is color. So far I've only talked about simulating gray-scales but the real beauty of halftones is that they can easily be adapted to produce color. The system is analogous to the screen pixel where 256 levels of red, green and blue lead to 16 million possible colors (256 x 256 x 256). With print the primaries are cyan, magenta and yellow. By overlaying angled halftone screens printed in these inks the offset halftone spots create a tiny rosette pattern that the eye again averages to produce the impression of a color. This is the secret behind color separation and all color print."

Conclusion

So, I hope this makes some things clear for you about what happens in the mind according to Abhidhamma. It is actually more complicated than what I just told you because each sense door that is working all of the time (in succession) is doing work. For instance, you need to "See" the dog, "Feel" the axe, move the axe, etc. Likewise, these letters will occur billions if not trillions of times in a split second. But in general, this is what happens with the emotional mind.

And what is the coolest thing about all of this? It was taught in Ancient Buddhist Scriptures long long ago!

No animals were harmed during the making of this post, so please be careful and do the same when you do the imagination experiment.

Some comments:

graeme russell ellin said:

In the forest the other day I came upon a sick kangaroo. Its joey was taken by a fox in front of my eyes. Kangaroo couldn't get up, clearly was sick. Decision – do I leave it to die a horrible death at the hands of foxes or do I kill it quickly? I killed it quicklyagree not compassionate killing I killed for a positive reason to lessen the suffering of another being .

Me: I believe that Milindapanha says that if you do a wrong knowing it is wrong, it will be less bad kamma than one who does wrong and does not know it is wrong. It is like a child who sticks his hand in a fire not knowing he will get burned compared to an adult who does the same.

While I am not happy about your experience, I am happy that you can report your experience related to the post and confirm the killing mind part too. I would like to let you know that on the surface we do not like to see any beings suffer. It may seem sort of cold to let it die. However if you keep in mind that suffering can motivate one to leave samsāra then this can be good to know.

For the animal realm, animals need a chance to become human, and it is rare for them to escape, especially the wild animals rather than the domesticated ones. Human contact is important. Compassionately, you could have comforted the

animal and temporarily protected it, letting it get a good look at you to know your desire. Instead, the animal may not have known your intentions and thought you were harming it more than the fox.

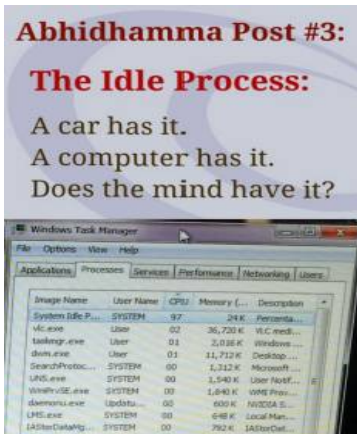
In Dependent Origination, the near death mind takes an object for rebirth based on the experience in this life¹. Though I think it would be rare to go directly to human, there may have been a wish to be near you or other humans, who protected him. "Gee, this wild animal life is not easy, I need to be near these two-leggers!" If he thought that, he could have become a domesticated dog or cat and then later a human. Perhaps after that, he might be able to learn the Dhamma. Such a rare opportunity we have even as humans!

So the next time this happens, let him know that humans will protect him (temporarily or even long-term) and leave him that memory when he dies from natural causes. By thinking in this way, it is more compassionate.

¹ There is a gati nimitta that can arise which counteracts this statement.

Abhidhamma Lesson #3:

The Idle Process



If you were to go into the task manager of your computer, you would see an idle process running. This is necessary to keep the computer operating system running when it is not in use. If your machine is on, this process will be active whether you are running a large program or not. Even when your machine is working hard and showing you a video, or a 3D graphics game, the idle process is still working in-between the time it shows you the video frames. Go ahead and check! Run a

video and task manager at the same time. Click on CPU usage to sort by percent of processor time and be sure to show processes for all users (system). Idle will be in the high nineties and VLC (video playback program) and the other processes will take up the remainder, depending on how old your computer is. In other words, your computer is yawning most of the time...even while playing a video!

Remember, single processor computer "systems" only do one thing at a time. It is hard to imagine your computer literally "yawning" between each frame, but it does. You will see percentage points given to each process which shows how much time is allocated to each program that is running. Time allocation means just that. It spends a percentage of its processor time to do a task and switches

very fast between the other applications. It needs to do this really fast so it can appear like it is doing many things at once, like showing your mouse moving, displaying your keyboard pecks, or copying a file from a USB disk. While it looks like they all happen at the same time, one by one is how they really occur. That is why we call them multitasking operating systems. In the olden days, we had only interrupts IRQs to allow for hardware peripheral input in MS-DOS. The Abhidhamma says the mind also has an interrupt function for the senses. Isn't that cool?

A car is the same way.

Your car has an idle process too. It is there to keep your car from stalling when you are not pressing on the accelerator pedal. The idle process keeps your engine alive.

The mind is the same way.

In Abhidhamma, we have an idle process. It is called Bhavanga or Life Continuum. That is because it keeps your mind going while it is not working. Just like a car, it is a resting state for your mental engine. Unlike a car, once the mental engine stops, it cannot be restarted. Otherwise you as a human, will die because the body material needs the mind in order to replenish its materiality and the mind cannot work without its materiality. In other words, the mind and body are dependent on each other simultaneously.

I will refer to this resting state as an Idle Process in this article, but please remember the name based on the function of it keeping a car's engine alive. This Idle Process of the mind is most active when you are in a deep sleep. But like a computer, it also allows for other mental processes to interrupt it. This idle process is always working – of course, only in-between each process. As you might remember, the Abhidhamma says the mind only does one thing at a time.

The Idle Process's duration is special. Unlike other mental processes like seeing, hearing, anger or love, the idle process happens in-between every consciousness cycle. Except for the mind of samādhi, and the idle-process, there is no other mind that can happen successively for more than 7 clock ticks. The emotions you know and love, like anger, and love, etc, happen for a maximum of 7 clock ticks. If you add the per-processing and post-processing to the 7 ticks, you will get a maximum of 17 for a cycle (minus the idle). Even with today's fastest supercomputer, the mind is faster. Gigahertz means one billion computer moments per second. So even by using a slow 1GHz PC as an example, we can imagine that seventeen is not so much time at all. After a count of those maximum seventeen moments, the mind falls into Idle or simply stated, "sleeps." So, the idle process happens very often. The idle consciousness is happening right now, billions of times for many billions of cycles while you are reading this single sentence.

Do you follow all of this? OK, go back to the picture of the task manager and look at how much CPU is spent on System Idle and VLC. The mind is similar and spends most of its processor time in idle! Do you believe this about your mind? Of course it is difficult to believe, but it is also difficult to believe your computer is yawning 97 percent of the time while you are watching a video! Do you remember the real name? "The car idle keeps the engine alive..." yes...Life Continuum.

Mental Exercise

Sit down with your eyes closed and try to let your mind rapidly switch back and forth between all of the different feelings in your body that arise and the different sounds the ears hear. Then imagine a Bhavaṅga or Idle Process in-between each of these rapid moments, just like you would focus on an empty spot in-between a rotating fan. Then slowly let your mind focus on that Idle

process in-between the sensory noise. Stay there for a few moments and then go back to the sensory noise and repeat.

One more thing.

The Object of Consciousness

The very first Idle Process of your life is present in the second moment after you are conceived. Every mind has an object, and so does the Idle Process.

What is the object of consciousness? If you have eye consciousness while looking at a candle, a color picture of a candle will be the object of that consciousness. Hearing a baby cry will have a split millisecond of an "audible blip" as the object of hearing consciousness. Got it?

The object of the Idle Process is always very subtle. It is so subtle, that meditation teachers often say it confused for Nibbāna or samādhī (Jhāna) by those who lose their meditation object. They often say, "I knew nothing." The Abhidhamma says that the Real Consciousness that knows Nibbāna as its object has *sati* or awareness as an included mental factor. Therefore, one is *aware* during this attainment. One should have a proper meditation teacher who instructs according to the Abhidhamma and Commentaries to avoid false samādhī or false nibbāna. Although The Buddha said to rely on personal and direct experience, there are many *upakilesas* or "false enlightenments" listed by the texts *that can be directly experienced*. That is why direct experience *combined* with a skilled meditation teacher who works in accordance with the texts and commentaries is important for True Enlightenment.

The Idle is your resting process and this very subtle object will remain the same for your Idle Process until the day you die. Likewise, the very first and final mind moment of your life will also contain this object. This mind is very subtle, so most people do not notice it until they become advanced meditators.

I will end here, but I wanted to let you know this idea I had. **It is my own idea and not said by the Abhidhamma.** I say this not to make any claims, but to be clear what is the written teaching and what is not the written teaching. My "idea" is just my own theory.

According to Abhidhamma, your Idle Process not only keeps you alive but the object of this consciousness contains the object based on the reason why you are alive! In more exact terms, the Abhidhamma says the object of bhavaṅga has the same causes as your cause for your birth as a human or whatever. *It is my personal belief* that this Idle Process equates to a proper subconscious equivalent, but much deeper than Freudian Psychology. Some who unknowingly figure out what the object is and flow with it may call it "God's Plan," "It's my calling," "It's my purpose."

Whatever they want to call it, it is inside the Idle Process. However, since it is a process that sleeps, quite often the object will end up being

Your life long dream!

Suppose the object of your idle process has "cook" written all over it and for reasons floating in your subconscious, you decide to train hard and eventually become a chef at a 5 star Hotel. Now, when you are tasting the food at your job, it will flow with the object of your idle. When you smell the aroma of your food, it will flow with your idle process. The same with all sense doors, especially seeing the food. Whatever you do, your mind is sleeping in-between for much more than the idle process of a computer. But when this chef is in idle, his object is still related to cooking. So when you interrupt your idle to do the same thing as the idle, things work out better than if you were a chef with a plumber's idle process! Some people have a knack for things and some just

don't.

Take for instance a monk. Being a monk is rare, even for our Bodhisatta during all of the times he was training to become a Buddha. So, it is highly likely that one has "monk" in their causes for their idle process if he is indeed a monk today. He can flow well because his idle process past causes probably has the resultant object with "monk" written all over it. When he wakes up early, it flows with his idle. When he does not use money, it flows with his idle. When he does not eat after Noon, it flows with his idle. When he keeps a celibate life, it flows with his idle. When he meditates and aims for Liberation, it flows with his idle. He will feel as though this was what he was meant to be doing all along. He is living a fulfilled life because he is fulfilling the purpose written in his idle process.

It is most obvious with those who are the best in their field and/or make their career their entire life, whether monastic, music, sports, preaching, teaching, science, acting, corporate business, they all swear they are doing what they are meant to be doing. This is because their subconscious confirms this in-between every consciousness cycle. These people are tapping into and flowing with their own stream of Idle Consciousness, their Life Continuum, their purpose. It is fixed for your entire life, but your future life's causes and object and Idle can possibly be changed through dedication in this life. However, that would be another subject called Dependent Origination.

References and Notes:

Narada, *Manual of Abhidhamma*, p188 to 191.

Computer Note: My knowledge of computer systems does not go much

beyond the late 90s. However, a basic OS class that every Computer Science student must take explains some of these principles. Low level NT architecture seems to be the same or similar today as before. Lastly, this does not take into account multi-core processors. Multi-threading on a single processor machine is still one at a time. The purpose is to explain Abhidhamma and not computers, though they are relatable and help explain what goes on in the mind from another viewpoint which can be understood and inspected by the reader.

a quote from Idle (CPU) from Wikipedia.

"Most operating systems will display an idle task, which is a special task loaded by the OS scheduler only when there is nothing for the computer to do. The idle task can be hard-coded into the scheduler, or it can be implemented as a separate task with the lowest possible priority. An advantage of the latter approach is that programs monitoring the system status can see the idle task along with all other tasks; an example is Windows NT's System idle process."

Abhidhamma Lesson #4

Can water be felt?

An Introduction To Material Realities And The Sense Of Touch.

It is a funny picture isn't it? When I first saw it, I laughed internally and then immediately thought of Abhidhamma and said,, "Yup, that is how it really is!". We all sort of know that, but we really don't buy it. Water is water. It is this flowie watery stuff that we drink, wash and swim in. But in reality, we know it is just a bunch of molecules.

This knowledge is deep and mere children do not have the deepness to understand the included photograph. Geek Humor or Deep Humor? If there were more molecules than in the picture, then maybe it could be deep. An interesting point is that the Abhidhamma knew about particle theory thousands of years ago. Isn't that cool? I am not sure why the history books do not give recognition to this, but they don't. Maybe it is too difficult to understand? Even if it were considered wrong by scientific standards, we study Aristotelian, Ptolemy Physics or the geocentric (earth centric) theories for historical purposes. I hope some of what I write will one day change this silence.

The Material Realities in Abhidhamma rely on the smallest indivisible piece of matter. It is called *kalāpa*, which means group, or group of materiality. This group contains the four elements (Earth, Water, Fire and Air) and some other

properties like Color, Taste, Smell and Nutriment all in a group, but it is the absolute smallest group that can exist. A Hydrogen Atom is sort of a group too. It contains a proton and an electron as a group. Oxygen is a single atom group too but it has protons, neutrons and electrons. Some reckon *kalāpas* are similar to quarks since they are smaller than electrons and are the smallest known particle to man. Not long ago, electrons were thought to be the smallest. That has changed and it is now believed that the smallest is a quark, but what is next? I personally believe *kalāpas* are something on another dimension since they are something that only the most powerfully trained mind can know and see.

I want you to imagine everything made of particles. Imagine everything made up of fine little digital balls that turn on and off, and can be touched and felt. Without special tools, they will appear to be a continuous solid mass, but zoom in, and it will turn into a singular and digital mass of flickering particles that arise and pass away in randomness. Zoom out, and it will be a continuous mass again. Just like a cloud in the sky. Sand on the beach. Foam on the shore.

The human body is sort of like this. Slow down the natural time lapse photography we see and you will observe that the cells in your body appear, reproduce, die and perish. But speed up the camera time lapse and *go from reality to what we naturally see* and we will observe a solid continuously existing human that does not change. However, we do change. We know that, *but we really don't know this all the time.*

Just like I explained to you in the second Abhidhamma post, a computer screen or color halftone separation is not as it appears and we are often fooled by the speed of the computer monitor and the lost proximity of not being able to zoom in to it. This was why Abhidhamma calls them *Ultimate Realities*, because this is how it is on a *real* level. A pixel would be an ultimate reality for a computer

screen's display of photos and videos. Remember that videos are made up of single pictures displayed in serial. These pixels are very small and refresh at about 80 Hz. This is how movement and change is simulated. It is similar to each frame on a video, but in the case of a computer screen or TV, it is just dots turning on and off. They do not move. It is just an illusion, just like Christmas lights do not move. Do you understand this so far?

Say, "Yes." for me so I can move forward. Good! I am glad you are following me!

In the same way, we have *kalāpa*-particles. Little tiny digital materiality balls, and there are four major different types of these particles based on the nutriment or cause for their existence. I might discuss the four types in a future lesson. All of the different types of particles arise and pass away very quickly, but slower than mind moments arise and pass away. They turn on and off just like the pixels of a computer screen, but they are three dimensional real materiality. It is possible to know and see these particles with the mind. Since it can be observed with the mind, a skilled yogi can see this penetrative Three Dimensional technology with the eyes open or closed with whatever he is looking at. One can penetrate and see depth in something as thin as a Lotus flower's petal. It is strange to describe, but some call it X-Ray vision. MRI vision would be more accurate. Unfortunately, the world's way of "seeing" is only just literally scratching the surface since penetrative vision does not happen with the eyes.

OK! Enough with that mental seeing and onward with the Abhidhamma science!

I want to shy away from long and detailed introductions and keep you glued to the interesting stuff. This is a very brief and general description, but also very

deep. Pardon the water pun, but when people read about four elements and they have this knowledge, they understand things in a deeper way. It is just like reading something a second time around and knowing what all of the footnotes reference. It gives one a deeper level of understanding from the top level words. The Abhidhamma is the footnotes to the Buddhist texts and also to life in general – for what we see, touch and feel and the connection between mind, matter, its causes and its negation.

Sensing and Feeler Particles

We have "sensing" particles too. We call them Eye Sensitivity kalāpas for the eye and the same for the other sense doors. We have Eye Sensitivity particles, Ear Sensitivity Particles, and likewise for the nose, tongue, and body. The mind in the heart has heart-based-particles. They help us have mind consciousness in the heart. Consciousness takes place in the location where the sense base (particles) is located. It can take place in the eyes, ears, nose, tongue and mind. Most of it takes place inside the heart where the mind is. There is another special thing to remember. Body sensitivity Particles are present in just about all parts of the body, especially where the five senses and mind are. This is why it hurts when someone pokes you in the eye.

Without materiality, we cannot have mind. Without mind, new replenishing sensitive particles can not be produced. That is why we have an Idle Process. It keeps our body/mind engine running. Do you remember the name? Life Continuum Consciousness or simply The Idle Mental Process.

As long as our mind is working, new particles can appear. As long as new particles are present, the mind can operate. We cannot see without working and "alive" eye sensitive particles. The same is true for all senses, especially the mind inside the heart.

So Back To The Picture

The sense of touch is caused by "Feeler Particles." They can sense the touch of other particles that make up the objects we know and love. Like a nice soft pillow, or cool dip in the lake on a hot summer's day. Your feeling particles can feel Earth (hardness), Fire (temperature), and Wind (pressure). However, they cannot feel water (flowing or cohesion). *Flowing is inferred.* Please remind yourself of the picture. If you were to go microscopic and know that your feelers were the same size as the particles you are "feeling," and there was only one split moment of time to sense the particle striking the feeler particle, then would you be able to sense movement? The answer is "No," if only one particle can be felt at a time and that is the case with Abhidhamma. Remember the mind is singular and only does one thing at a time.

Repeat aloud what you just learned with me now. "The mind only feels one particle at a time by only one feeler-particle for a split moment in time. It puts several of these consciousness moments together to *infer* movement.". I did not hear you! Let's try one more time even though we are tired.

The mind only feels one particle at a time by only one feeler-particle for a split moment in time. It puts several of these consciousness moments together to *infer movement.*

Now try to understand the mental exercise below to really understand!

Mental Exercise

Imagine yourself having sand poured over your finger tip. What would you feel? You would feel sand flowing in a similar way as water. However, in reality, the sand particles are striking against different "feeler particles" one at a time in succession to simulate movement. Take a high speed camera inside your mind's eye and zoom in all the way. Imagine your high-tech slow-mo

instant replay technology rolling along, frame by frame with the feeler particles the same size as the sand particles. Moment by moment is one frame at a time. You would only feel the presence of the particles as Earth, Fire, and Air (hardness, temperature and pressure.) You would not feel flowing on a moment to moment basis because *there is no movement in a freeze frame moment*. That is why they call it a freeze frame. One should also remind oneself of Abhidhamma lesson #2 that the mind is singular and digital. In this case hardness can only be felt in one mind moment and temperature can be felt in another and the same with pressure. So hardness flowing, flowing heat, and flowing pressure are inferred processes. The flowing sensation is inferred by time and other sense-feeling-particles in succession. It is just like how the movement of pixels is inferred. Remember, particles are like pixels and do not move. Nothing moves across your computer screen when you move your mouse across it. The pixels do not move. It is all inferred. Your feeling of flowing is inferred for movement and assumed as flowing.

Do this mental exercise again and again until you understand. Be sure to zoom in far enough to slow it down all the way to a freeze frame moment where the contact arises.

Try to understand your own body now. Imagine what it is that you call "you." Which moment and which particle is you? Go through your whole body and try to understand that the particles constantly arise disappear. You felt something but now whatever helped you feel it is gone. That feeling is gone now too. Seeing is the same way. It is there in a freeze frame image which takes place in your eye-sensitive particle. Whatever helped you see is now gone. Who are you if it is all arising and passing away at incredible speeds? It is just like the cells in the body that are born, arise, die and perish. We all know that happens, *but we are rarely aware of it happening*. Did I say that before? Use your time wisely to reflect on this. Use your slow motion camera to go all

the way to a frame by frame mind, and also to zoom into the sensitive particles throughout your body and senses. Try to identify with something that lasts for only a moment, it is unlikely you will be able to do that.

A small note about the location of the mind

We believe the mind takes place in the Heart or more specifically the blood. We call this the mind door, the eye, the eye door respectively for the other sense. Neuroscience believes the mind door to be in the brain. I say it is like paying attention to the speakers of a stereo system and not knowing where the music really comes from. It is like paying attention to the mother board, hard drive and memory without paying attention to the CPU of a computer. A child only knows the computer screen, mouse, keyboard and power button. It is difficult for me to prove without you knowing about mental training. However, there is really little known about consciousness by modern science outside of seeing blood move around in the brain and reading electrical impulses from the brain. However, some Abhidhamma meditation teachers assert that it is in the blood where the mind takes place. One thing neuroscience knows is that different consciousness states have blood in different parts of the brain. Science also knows that there are two heavy consumers of blood: the heart and the brain. This is where the two sciences can meet...but the heart wins this race as a blood consumer.

I hope you enjoyed this lesson. Remember there is much more to say and I am generalizing many parts for you to simply enjoy, understand and say "Wow!" Nevertheless, I am focusing on the deep undercurrents that are concepts which I believe are not so difficult to understand if explained in this way. That has been my goal of the previous three lessons.

Trust me, the traditional way to learn this materiality stuff is to memorize the basic eight, nine or ten parts of a particle, and sometimes there are more in

certain cases. You will also memorize the 28 types of materiality, the 54 types in the eye, the 54 types in the other senses and the 54 types in the mind. Likewise, most of the body parts have 44 types. Did you get all that? That is what we call "knowing the numbers."

Abhidhamma is traditionally all about the numbers and matrices. "How many with, how many without?" are the common questions an Abhidhamma teacher will ask his students. That is why Mrs. Rhys Davids coined the phrase, "The Valley of Dry Bones," when she translated one of the first Abhidhamma books into English. It stuck, and very few Westerners are interested in Abhidhamma these days.

This "knowing the numbers" is how one normally learns and at the end, or mixed in the middle, one will learn that feeling is inferred. However, he might not fully understand its importance since he was so busy learning and memorizing everything else and trying to get the numbers right. I hope you like this approach to digital-serial-singularity and find it interesting. I find it interesting and I enjoy sharing what I enjoy in a personal writing style with an applied technology approach for Abhidhamma. Rejoice!

References:

Please see pages 317-360 of *A Manual of Abhidhamma*, Narada for all of the lists and details of Materiality.

http://www.buddhanet.net/pdf_file/abhidhamma.pdf

Temporary Nature p 318

Atomic Theory History, p. 318

Four elements plus color taste, smell and nutriment pps. 319-320

Top of page 330 mentions that flowing (apo) can not be felt and is inferred.

Page 330 has a mention if cardio theory (mind in the heart).

Lifetime of a kalāpa p. 334

Abhidhamma Lessons

Mind produced matter p. 343

Rupa (materiality) as groups (kalāpa) p. 354

Abhidhamma Lesson #5

Guns, Buttons, and E.Motions

There is more than meets the eye.



In my second Abhidhamma lesson, I generalized the mind with some lines of letter sequences representing a stream of consciousness to show that the mind of mercy-killing or giving-while-angry do not mix and they are separated conscious moments for each mind.

(Compassionate killing may look like this even though we may believe it is 100% compassion. Compassion=C and

Killing=K)

(Giving while angry may seem like 100% anger, but there is wholesome mind (usually neutral without joy if preceded by anger) Anger = A and Wholesome/ Neutral = W)

CCCCCCCCCCCCCCCCCKKKKKKKKCCCCCCCCCCCCCCCC
 AAAAAAAAAAAWAAAAAAAAAAAA

Likewise, I showed how the action associated with the mind (like killing or giving) is king as far as power, weighted averages and expected results are

concerned. The way I wrote about this was immensely simplified and that may lead to some harsh criticism by Abhidhamma Scholars or even worse, the teachers of practitioners themselves (none so far yet). The problem lies in the fact that once someone knows the details, it is difficult for him to generalize things again. To him, it may seem like someone is lying because he knows what the truths are, and the truths are all about going into the details of things, and ***breaking up compactness***. So what is not explained by an *Ultimate Truth* may seem like a lie.

It is like a hand specialist drawing a stick figure man with a flower stuck on the crisscross that represents a hand and saying, "This man is holding a flower, but almost all other species cannot do this." The main idea was to show the general concept rather than to explain the individual fingers as well as the parts to each finger, the details of the fingers, the names of each finger, the names of the bones, ligaments, joints, nerves, and muscles for grasping a flower. If this complete detail was said, or even shown in a picture, you might get confused. And the main thing I want to say is, "This stick figure man can hold a flower and a real man can hold a flower too." Nevertheless, another hand specialist doctor may say, "There is a lot more to this picture than meets the eye and it is really not like this." The complaint is true, but the message is clear. A stick figure man is a concept for the man to express the main idea simply and quickly.

So the *Ultimate Truths* are all in the details, and therefore it is difficult to say what really happens in the mind in a general way because some very important stuff will be left out. ***What is not the Ultimate Truth, is not a reality***. In this way, it can be seen as a lie just like the stick figure man's hand. That is why this top down approach is never used by Abhidhamma experts. I am not an expert though, and that is where you can benefit.

The experts will call this knowledge of every minute detail "*Breaking up compactness.*" It is called *Ghana* in Pāli.

There are four types of Compactness for the mind.

1. Continuity of compactness of mind
2. Grouping compactness of mind
3. Function compactness of mind
4. Compactness of mental phenomena which take object

Do not get confused about the list above, it is just a preview. Nevertheless, it the fundamental core reason for learning Abhidhamma is to Break Up Compactness. Although it is mentioned in *The Path To Purification*, and the *Pa-Auk Meditation Manuals*, this is never mentioned in *The Manual of Abhidhamma*, which is the Bible for Abhidhamma. It is this particular theme that I am trying to teach first. I am interested in explaining the concepts of Abhidhamma rather than the regurgitated matrices of details. Breaking up compactness is perhaps the deepest thing you can learn in Abhidhamma, but often, like in *The Manual*, it is not mentioned.

This breaking up of compactness is essential for the study of insight. One must "*Know and See*" all that takes place in the mind on a detailed level for insight to occur – at the beginning level of insight to the deepest level; Enlightenment. Do you know what enlightenment is and how to get there? Many people do not know, they just think enlightenment will make them happy and search endlessly for everlasting happiness. Compactness of mind, matter and their causes must be broken down before insight can occur and insight is the way to Enlightenment.

The neuroscientists need to know about blood, brain cells, synapses, electrical brain waves, the location of everything and neural networks, among other

things. It is a system, but all of the details are necessary for proper understanding as far as science is concerned. Nevertheless, one might explain what goes on to laypeople in simpler terms without all of the complicated details that will confuse them. All of that said, Abhidhamma does not deal with the brain, since Abhidhamma and practitioners of meditation say the mind is to be located in the blood (of the heart). In Lesson Four, I said that neuroscience puts a strong importance on blood flow in the brain, and this is where the two philosophies can possibly come together. However, as I said before, I personally believe that mentality and materiality take place on another overlaid dimension since they are only visible directly to those with strong mental training.

So I am going to get a little detailed on you. Don't worry about the list of compactness that I had mentioned above. I will cover only one of these in this lesson: **Continuity**.

Does that sound familiar? It should sound familiar, but we will cover the compactness of continuity in terms of mental processes. This is different from what I have been explaining before.

So in this lesson, I am going to let you know some detail. I will take quite a bit of time to explain what goes on, so this lesson will be long, just like the introduction. However, even though the length will be long, much of the detail that can be said will be left out. It would just be too much to include all of the details. Too much for the both of us! There will be much explaining going on in this lesson, which is a single simple chart in the Abhidhamma for a *vitthi* or mental cycle. I do not expect you to know all of the individual parts that I mention when you are finished reading. What I do want you to know is that there is a process with different types of preparatory consciousnesses in order for us to experience our emotions like the individual letters on the stream of consciousness I listed above for "Mercy-Killing" and "Giving-While-Angry."

Each individual letter in that stream will have a process or cycle within it. This is the main concept that I am trying to communicate. In this way, when you see each letter in a stream of consciousness, you know there is a subprocess that goes on behind the scenes. You should know and see the hidden "footnote" for each letter representing consciousness. Another thing. You should know where the mind takes place and *although most of it takes place inside the heart as I have been saying all along, sometimes it happens elsewhere*. Hmm... Anything else you remember is extra credit for the both of us. So read on, and be fearless!

So back to the mind. What happens when we see an image of a girl donating food to someone who needs it? Let me paint a picture for you. A girl and her mother are walking back from McDonald's at night. The mother is holding her meal and the daughter is holding her Happy-Meal box. On the way, the girl sees a homeless man begging for food. She asks her mother if she can give her Happy-Meal to him as a donation. Her mother says she can, but she will not be able to eat any food until the next morning if she does. She donates her Happy-Meal to the beggar and walks away feeling good.

Now isn't that a nice story? If we were to see that story happen in real life, it would be something that would make you want to say "Awwww." Let's say it together on the count of three.

1,2,3, "Awwww."

So what happens when we "see" this girl give her happy meal? We would generalize it and say it is wholesome consciousness. There are eight types of wholesome consciousness, but we will generalize it as a wholesome consciousness that makes us joyous because we know that it is good to give because giving has good moral benefits for the future. Even if you believe in

only one life, giving reaps good results because giving makes one happy in this life. Well, most of the time. Most often, the wholesome mind that knows it is wholesome is a happy mind. Why? When we know the answer to a question a teacher asks us, does a natural smile appear or do we stay the same? Often you will smile. It is natural and there is no *why* answer.

If we were to make a chart of this wholesome action we would say:

WW

(This particular 'W' has joy and knowledge built into it, which can happen all at the same time in one mind moment)

With consciousness, we cannot just say "wholesome." It must be associated with one of the six senses (sense number "six" is the mind). So we will be using "seeing" consciousness for our happy-wholesome-knowing mind as our example. I have explained in lesson three that there must always be an object of consciousness for all types of consciousnesses. Sight will have an image, sound will have a tiny blip of a sound, and smelling and tasting will have an object too. In the last lesson, I covered the sense of touch which is special and it is special in many more ways than I previously described. There can also be a pure mind object as well, which takes mental objects. We will take "seeing" consciousness for this example because when we remember things, seeing pictures are easy to remember. Often, as I briefly explained in the second lesson, there are other senses involved, like hearing a joyous thank you, smelling the food you see being given, or the feeling of patting the donor on the back (tactile sensation). There are many different consciousness mind moments working of our senses just for a second of our lives, but for now, we will just take the simple "seeing" mind.

So you are standing there for a minute and smiling as a visual witness of this beautiful act of kindness. Wonderful!

But what happens *_for you_* to watch this and have this Wholesome and joyful moment of knowledge?

Quite a bit, because there is more than meets the eye.

Speaking of bits, we will go back to the computer analogy and speak about the buttons we push in our software programs. However, before we talk about computers, let's talk about guns. The main thing about guns are the bullets that get fired. There is not just a bullet that gets fired from nothing. Assuming it is a single barrel shotgun that any crazy person can still own without a gun license, there is a process that fires that shotgun. Just like the phrase, "Guns don't kill people, people with guns kill people (now drones)." Guns don't just fire by themselves. There is a whole process that takes place to do the deed, even moreso with drones. The mind is the same way and we will sort of brush a bit of "free will" topics here too.

There is a big debate about "free will" among "Philosophers of Mind," and Abhidhamma explains this very nicely. Basically, we are an airborne rocket and all we can do is slightly modify our path. Our rocket trajectory is always in action, but we can change that ever so slightly to nudge the path of trajectory. I will maybe explain further later in another lesson..or maybe just leave you to guess and ponder.

We have lightly touched about continuity of form, mind, and time. We have broken up the perceived compactness of mind and matter in terms of momentariness, serial, natures. There is also a compactness of continuity in terms of different mental processes that take place. So back to the guns, we think there are only gun shots when we are in a war zone (yeah, with only shotguns, but go back a few centuries), but there is a process that is in-between the shooting of every single gun. So the bullet firing process is not continuous, it is broken up by other operations. When we shoot a gun, we need to put a

bullet in the chamber, cock it back, aim and shoot, the gun fires and hits the target and then the bullet hits the target, stops, and the process sleeps until another shotgun process is fired.

In a war zone we hear bullets firing represented by 'F'. Each firing bullet gets seven letters (I will explain later)

FFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF

But in reality there are other things too.

We need to open the chamber (O)

put a bullet in the chamber (B),

cock it back (C),

aim (A)

and shoot (S),

the gun fires (F)

and hits the target (T)

and the process sleeps (S) until another shotgun process is fired.

I will show the letters together in proper sequence to show the process of firing a gun below. You do not need to try to trace the letters so much, but just know it is broken up for now and compare it with "Just Firing." Do not get so confused about the letters I used or try to remember which letter is what. I made it all up two minutes ago, so just know that it is not just 'F's. Know that when guns get fired, that there is a *Process* that takes place *In-Between* the gunshots. Also know that the process consists of moments that are different from what an ignorant observer may think is going on. If you were an attacker, do you think this could be useful information? I think it would be. In a war situation (17th Century), a soldier could hear a bunch of shots and then retaliate when their shots have been used up because they would be reloading at that time.

Abhidhamma Lessons

What the soldiers hear:

FFFFFF FFFFFFF FFFFFFF FFFFFFF FFFFFFF FFFFFFF FFFFFFF

What the shooters hear:

BCASFFFFFFFRRSSSSSSSSSSSSSSSSSSSS BCASFFFFFFFRRSSSSSSSSSSSSSS

OBCASFFFFFFFRRSSSSSSSSSSSSSSSSSSSS OBCASFFFFFFFRRSSSSSSSSSSSSSSSS

Another example is of Clint Eastwood, an actor of my youth who was most famous for saying, "Go ahead, make my day!" and "Do I feel lucky?" The latter was used in Google's main search screen "I'm Feeling Lucky," which would put automatically load the first hyperlink location instead of giving you a list. Most people never noticed or used it, so it was removed. These quotes are so famous they are part of American speech and of course, in Wikipedia, where I got the quote:

"While in a local diner, Clint Eastwood sees a bank robbery in progress and, alone with his revolver, he kills two of the robbers and wounds a third, challenging the man lying near a loaded shotgun:

*I know what you 're thinking: "Did he fire six shots, or only five?" Well, to tell you the truth, in all this excitement, I 've kinda lost track myself. But being this is a .44 Magnum, the most powerful handgun in the world, and would blow your head clean off, you 've got to ask yourself one question: "Do I feel lucky?" Well do ya, punk?
After the robber surrenders, Eastwood pulls the trigger, revealing the gun to be empty."*

In summary, it is important to know you know more about your enemy's gun!

The same is true for the computer programs. When you press any button, it does not matter which one, there is always a process that takes place. I like using computers to describe Abhidhamma because Abhidhamma is sequential and much of software is sequential. So there are many similarities.

When you press a button there are things that happen in the programming world that you are unaware of. There is a whole system protocol that takes place. There are thousands of messages that get produced in a single second when you merely wiggle your mouse. There are mouse move messages for every little movement you do, right down to the pixel. There is a message when you hover over a certain area, when you left or right click, there are repaint messages, draw messages, so many messages are generated when you stutter your mouse before you press a button. And even before a programmer receives a Button Clicked Message, there are separate preceding messages, like `L_BTN_DOWN` and `L_BTN_UP`. Compactness is broken up in the programming world too!

Most of these details are hidden from the user, conveniently by choice, and hidden from the programmers too (but accessible) because it would be too tedious to program. These days, most programming languages are higher level languages that hide much of the details about what goes on behind the scenes. The older "old-school" programmers were once very familiar with these messages that get generated, their order of execution, and how to go deep into the Microsoft Matrix to trap these messages if they need to do something different from the standard hooks. If these old-timers can still remember their stuff and know the faster newer top-level technology, they can be worth their weight in gold. They will rarely use these messages, but they "know" what goes on behind the scenes and it helps them when they do the normal stuff.

This is why computer science students are required to build a simulated calculator with electronic components in a Digital Circuits class, or write a

simple multitasking routine like an operating system would do in an Operating Systems class. Practically speaking, these exercises are useless since we have proper calculators and operating systems. However, it gives them the background information to know what is always going on behind the curtain *even if they never use it directly*. It helps them with a deeper knowledge of what they are doing. It gives them *insight*. That is why it is important to know all of the details, whether it seems applicable or not. Otherwise, it will seem like a magic black box. And when the black box does not work, people get worried.

When we first learned Mathematics as children, we learned how to "Do it out" instead of using a calculator. Now, we add with calculators these days, especially with advanced mathematics, and as a small child in school, I complained, "Why do we need to do this if we can use a calculator?" I think we all know the importance of knowing the background information for simple addition today, but it may be difficult to put into words, "Why we need to" in order to answer the child's question correctly to add faith. That is half of my goal when I write these lessons. It really only takes a page or two to explain the mental process.

So what goes on in the computer when a button is being pushed?

There is a lot that goes on indeed. There is surely more than meets the eye. However, in a similar way, it works a little bit like guns. I will leave out some details and perhaps simplify things too in a conceptual way, even for programming.

First of all the button has an ID number associated with it. We can assign a number like 10002 for "Send" button.

We can map this number to magically call a function like `OnCmdSend()`. This is somewhat of a standard for most languages like Visual C++ and even

something easy like Word Basic, or MS. Access programming.

So what happens behind the silicon curtain? First a message get dispatched which says that a command button with a certain number was pushed. It then goes to the mapped function you set up called OnCmdMyButtonPushed() and calls (fires) some code. This code will send an email or something and then return a success or not. Then the program will sleep/Idle (this is a simplification of course). In short, there is some loading of the programming gun, before the main code is fired. Below are some steps a little closer to the mind to ponder while reviewing the button example.

We start with **Idle**. We have discussed what the Idle Process does in both a computer and in the mind. The computer's Idle Cycle gets **Diverted** (averted) to do some code related to messaging of buttons (as opposed to Mouse clicks, drawing messages, etc.).

When we get the message "command button clicked," we become aware that something is calling our attention – a message will have an ID as well as some other information. This message will be **Received** and when we look into or **Investigate** the message contents, like the ID of the button pushed and the contents of the other accompanying information, this is an **Investigation** of our data. We look at the ID and know and **Decide** to call a function called "OnCmdSend()."

We **Run** the code inside the function (to send an email).

The code in the function is quite longer than all of the "processes" needed to call it and consumes some processing energy. It will do many things and have its effect elsewhere outside of this small routine (like someone reading the email).

The code will stop the function and a status of success or not will be **Registered**.

Could you follow and imagine all that I said? I hope so. I had some words set to bold. I want you to quickly review the last paragraph and pay attention to the bold words and the functions again so when you read what happens in the mind, these terms and functions will be familiar to you.

There are many ways I could write a computer analogy. I chose a very low level one mixed with a generalized "send" function. Keep the thoughts of loading a gun and pressing a button alive in your mind when you read the next section so you can fully understand what happens in the mind.

Now What Happens In The Mind?

I will mention some terms quickly. Just skim past the terms, but try to understand that a process happens. We will take the seeing of our adorable little girl who forgoes her own dinner in order to feed a homeless man. Her mind does not matter. It is our own mind that witnesses this and wants to say "Awww" that matters.

It is always our mind that matters.-

As an overview, there is **Vibrating Idle**, **Arresting idle**, **Five door averting consciousness**, **Receiving consciousness** and **Investigating consciousness**. With all of that, a **Deciding consciousness** slingshots the mind into the **Running** or what I will refer to as an **E.motion consciousness**, where our typical emotional mind state runs for seven steps. After that, the mind has a **Registration** process that slows down the mind and then it goes back to **Idle**. Hopefully, I will be able to explain everything listed above in a way that is understood. If we exclude the Idle process and Idle related processes (like vibrating and arresting idle) there are four steps prior to our E.motion consciousness plus two moments to "*slowdown*" before we Idle again.

First, as I explained before, the mind is yawning all of the time and spends most of its time in **Idle**, just like a computer or a car does in New York Traffic Jams. Our eyes are always taking in data if they are open, but rarely is there any consciousness connected (in terms of how fast things can happen), so something needs to wake you up and take you out of Idle. You are "Awake" in the conventional sense because you are standing with your eyes open looking at our pious girl, but like a computer, you are sleeping in-between each mental process or each frame of your video that you are watching through your eyes even as you read this lesson. This was discussed before and is the whole purpose of lesson three.

So when we "wake up," in-between each frame of our video, the **Idle** process that was purring like a kitten gets a little bit rough and **Vibrates** in one moment. Then it starts to disappear in another moment which is called **Arresting Idle**. Just like a runner who wishes to stop running takes a few more footsteps to slow down to a halt or the older cars from the 70s that have sort of a small momentary hiccup or stutter after the ignition key is removed, the mind does not lose its idle immediately as well.

If we were video editors, we would not just change a scene abruptly. When we want to change the scene of a video, we need a transition to take place. Often the most simple video transition is called a fade-in. We are changing the object of consciousness, so a mental fade-in must occur to arrest our Idle. The mind actually always goes at the same speed, just like a computer, but changing the object takes some doing. It is like trying to stop a cargo ship or change its immediate direction. It cannot happen abruptly. One last note. Although the speed is constant, the power of each mind moment may vary, just like one truck with a heavy load that travels 10 miles per hour compared to the power of an empty truck of the same type that is traveling at 10 miles per hour right next to

it.

After the Idle is arrested, allowing us to change our object of consciousness, there is a special process that "tunes" the mind towards the eye door which is called **Five Door Averting Consciousness**. "Avert" means to change the direction or location of the mind. This Averting mind is an automatic process that does not have much of a choice at what it does. It is like a sorting machine for coins in a vending machine. Coins of a certain size roll down one way, and coins of another size roll down another way. The sense mechanism, like the eye that is active and strong, connects with Five Door Averting Consciousness. Although it is automatic, previous mind moments and intentions can help us control our mind's activity. But often it is difficult. For instance, it is difficult to block out a loud noise without earplugs. It is difficult to *not* see something if your eyes are open. The same with someone passing gas in an elevator or sour milk in your mouth, likewise the pain in your neck. The pain in your neck can also cover the mind objects regarding certain people (usually loved ones) you might remember.

When I was a lay person in the 90s I would need to shut off or turn down the radio if I was driving in a rain storm so I could concentrate. The radio would "steal" my mental processor time for me to drive well. Sounds are often a distraction for meditators who want to focus on one object, like the breath. One can intend to ignore it and it will be less noticed when we are actively and intensely involved with another sense. Just like a computer can be tuned to give processor priority to foreground applications, the mind can also tune itself to give priority to one sense door. For instance, sounds may fade away to the background when you meditate or simply read a book. Remember, the mind can only do one thing at a time. All that said, averting is an automatic function. There is often talk about whether or not we have free will. I won't get into it, but free will and not free will sort of work like I just described, but there are

many causes for us to be, act and experience who we are.

So after this process happens for the mind to be tuned to the eye, **Eye Consciousness** will happen in the eye instead of the heart. *This change of the consciousness location is a key point I mentioned in the beginning of this lesson.* It will not happen in the brain, not in the heart, but the eye.

There are many transparent light sensitive particles in your eye as I explained before in the previous lesson. Each one is like a tiny little lens. It is not similar to a camera film sensitivity or mega pixels. Each particle is capable of having a complete image. If you know a little about holograms, Abhidhamma says it is sort of like that. Each Eye-sensitive-kalāpa-particle will have consciousness of the complete visual object the eye is looking at.

After consciousness changes from the heart to the eye, it then changes again back to the heart. ***All consciousness happens inside the heart except for the respective sense door location.*** The eye door takes place in the eye, the ear door takes place in the ear. The mind door, where our thoughts are, arise in the heart. Almost all mind moments take place in the heart-mind door. When the consciousness is taking place in the heart-mind door, we are deaf and blind for those moments. A single processor computerized robot is also deaf and blind when it is processing information. Take this thought to heart when you are driving and see a Google car. When we are processing what we hear, we are deaf to new sounds in our ear-door during those moments. Pretty strange, no? But at this stage, you should be able to understand how fast the mind is and when I say you are deaf when you are processing the sound you just cognized in your ear, you know you are not really deaf for any amount of time that would matter. The same is true with a Google car.

OK, so where were we? We were speaking about Eye consciousness in the eye.

What happened before that?

We first had an Idle, a disturbed (vibrating) Idle and an Arresting idle. Then we "tuned" or Averted the mind towards the eye and then had Eye consciousness in the eye at the eye-sensitive-kalāpa-particle. This is where we see the complete image of our pious girl as she made a donation. Awwww. Ain't that nice? But don't say, "Awww" yet. We haven't gotten to the E.Motional stage yet. There is no emotion that takes place until we get to the E.Motion consciousness mind moments. There is no "feeling" in the eye during eye consciousness as you would expect. There is only a neutral feeling during eye consciousness. No matter how beautiful or ugly the object is, it is always a neutral feeling during Eye Consciousness. As I said in lesson four, if something is painful in your eye, it is because of Body Door (nerve) Particles present in your eye which can feel pain. So the only thing that happens when we have eye consciousness in the eye is bare seeing of the holographic image in our eye. There is merely seeing and nothing more.

After we collect our image datum in the eye, we **Receive** that data for processing in the heart. A Holographic photocopy magically appears in the heart/mind door for further processing. This is called **Receiving** consciousness. After we receive this data we can feel pleasure or neutral experiences for that image². If it is something we want to say "Awww" about, it will be pleasurable. Anything else will be neutral, even things we don't like to see, like blood

²

coming out of our bodies. This consciousness that can "feel" is called **Investigation** Consciousness.

With all of this happening, and because of memory, previous mind moments and the previous processes all together, a **Decision** consciousness will be made which will slingshot us into our **E.motion** consciousness. Now speak together with me and say, "Awww". We are now experiencing wholesome consciousness with knowledge and joy combined. Such a lovely state of mind, and we get to stay here for seven counts. Count with me..."1234567." All other consciousnesses that I explained before happen in single mind moments. The Idle consciousness can have many, many uncountable number of mind moments.

This E.Motion consciousness is special. It is called "*Javana*" in Pāli, which literally means "*To run with it.*" I have been calling it E.Motion because this consciousness is more or less where our emotions are present. It is like the gun firing and the bullet in motion. E.Motion sort of says both meanings of motion and emotion. Perhaps our English Language was designed to speak about things this way. Whatever neuroscience says, it has been known since the beginning of time, that our strongest emotions happen in our heart. That is why we have a heart to represent love, or a broken heart to represent despair. The word *Javana* is often left untranslated by scholars, but I have made the translation to E.Motion. Proper translators cannot make up words like that, but I am not a proper translator:-)

Unpleasant (*patigha*) experiences do not happen in this consciousness mind moment. When it is something that will induce unwholesome (like anger/aversion) it will be a neutral feeling.

This Javana-E.Motion consciousness has power, like nothing mentioned before. This is where kamma gets generated. It happens for seven beats and then wants to stop on the seventh. However, it takes two more steps to stop just like I said earlier about the runner who is running fast and needs a couple of more steps to slow down to a halt. These last two steps are called **Registration**. When I say "stop," I mean that the process ends, or the repeating consciousness like Idle or Javana-E.Motion finishes with its object. The mind is always working. If it were to stop, you would die. That is why the Idle takes over. Do you remember the name of this Idle Process? Life Continuum, because it keeps the engine of the mind always running or alive.

As I mentioned before, there are two more mind moments called registration that occur. One mind moment for each of the two steps. After this happens, the mind falls back into its idle mental process again for millions of moments. In Lesson Three, we learned that a computer spends most of its time in idle, and the same is true for the mind. Millions of mind moments in Idle are very quick, like it never happened. The smarter a person is, the less mind moments one spends in Idle. We even have an intuitive English expression for this. "This boy has an idle mind."

After **Idle** happens, there is a reviewing mind door process that happens in the mind of what was previously seen, only without the need to go to the eye again. It is the same as stated before except that it goes straight from Idle to a step similar to Decision Consciousness but called **Mind-Averting Consciousness**. Then seven E.Motion consciousness moments occur again with another two "Registration" steps to slow down.

In Review: Notice that Investigation uses a special character Ī and registration uses 'S' to represent Slowing Down. Eye door has a special character too – ê.

- (I) Idle mind moments (Many of them)
 - (V) Vibrating Idle Consciousness (The new object disturbs the idle)
 - (A) Arresting Idle Consciousness (The new object stops the idle)
 - (F) Five door averting Consciousness (The new object causes a turning to the eye)
 - (ê) Eye Consciousness (Consciousness takes place in the eye-sensitive-kalāpa-particle like a hologram)
 - (R) Receiving Consciousness (A holographic photocopy appears in the heart)
 - (Ī) Investigation Consciousness (The heart-base feels the object for the first time)
 - (D) Deciding Consciousness (The mind has decided the type of E.Motion and slingshots it into action)
 - (E) E.Motion Consciousness (The mind experiences the emotion for seven mind moments with power)
 - (S) Registration Consciousness (Slowing down of the object's power)
 - (I) Back to Idle Consciousness (Object changes back to the subconscious reason and purpose of why you exist)
- Then a mind-door reviewing of the previous object occurs to digest, compile, and reinforce the object and emotion.
- (M) Mind-door Averting Consciousness (Takes the mind out of Idle directly and slingshots the mind into the E.Motion process)
 - (E) E.Motion Consciousness (The mind experiences the emotion for seven mind moments with power)
 - (S) Registration Consciousness (Slowing down of the object's power)
 - (I) Back to Idle Consciousness (Object changes back to the subconscious reason and purpose of why you exist)

IIIIIIIVAFêRĪDEEEEEESSIIIIIII..
...IIIIIIIMEEEEEESSIIIIIII IIIIIIII..

There is a chart in *A Manual Of Abhidhamma* by Venerable Narada that will do more justice. This explanation, which you have read, may have been the longest explanation ever written on how the mental process cycles work. There is quite a bit of new information though and it is not expected for you to fully understand each step by memory. However, by reading the material, I do expect one to understand that:

1. The mind spends much of its time in idle.
2. The mind slowly wakes up and then gets tuned to the eye.
3. Then the eye sees in the eye door.
4. After that, it goes back to the heart with a copy of the object that was seen in the eye.
5. It knows the object better and then
6. An emotion is decided and thrown into that emotion.
7. That emotion runs for some time and then slows down and falls back into idle mode.

You should be able to follow this above statement *while reading* and you should know it better than one who reads that cold. If this is what happened to you, then I have accomplished most of my goal, but I am not finished yet!

By memory, you should know:

1. The idle process takes place in the heart and slows down when an eye door object is calling.
2. The mind goes to the eye and sees.
3. Then the object is "seen" in the mind.
4. A few moments later, the emotions takes place in the heart base and slow down.
5. Then it goes back to idle again.

Remembering the Idle is easy because we spent a whole lesson on it (Lesson Three). Therefore there are only three things to remember, numbers 2, 3, and 4.

2. The mind goes to the eye and sees.
3. Then the object is "seen" in the mind (of the heart),
4. A few moments later, the emotions takes place in the heart base and slow down.

Take a moment, close your eyes and memorize these three things listed as #2,3, and 4 (and then bookend it with idle).

If you cannot remember that, know that the idle and emotion take place in the heart. In between the idle and emotion, the mind switched to the eye to see the object.

You might ask why the mind needs to do all of this switching stuff just to see. You should one day learn how to build a calculator that can add some numbers. There are many steps to get new numbers and lots of switching that takes place! Only then can it add the numbers in memory.

In Review

You now know that guns don't just fire and that there is a lot of prep work for any computer code to be called when you press a button. Sometimes we have the expression "Don't press his buttons" to explain not to do something to elicit an emotion. Again, there is much that goes on in order for emotions to take place. The goal of this was to show you that there is a process that takes place in-between each emotion. The goal was to **break up compactness** for you and to let you know there is "more than meets the eye." I had said earlier that the "knowing mind" usually experiences joy, because one feels joyous when one knows the answer. Let us look at Giving-while-angry one more time. In this

example, however, when you see each letter this time, you should be able to understand that each letter has a process to it. You should "see" the footnotes in every letter when you look at it. Enjoy!

ĀĀĀĀĀĀWWĀĀĀĀĀ

Something to Contemplate.

All of this happens faster than the fastest super computer known to man. Computers that are that fast can simulate parallel processing and asynchronous processing while still being serial and singular. Parallel and asynchronous processing is the current theory proposed by the top philosopher Daniel Dennet of Tufts University. However, it appears that he knows nothing about the Ancient Abhidhamma. It should seem strange that Abhidhamma could be "thought up" thousands of years ago. It is my personal belief that the Abhidhamma is real and could actually be "known and seen" thousands of years ago as well as today. There is a system of meditation that is explained in the Ancient book, *The Path To Purification* and it is taught in the present day by The Most Venerable Pa-Auk Sayadaw. Many people who have achieved distinction in concentration have been able to know and see this information for themselves. It is not a mere theoretical proliferation.

Mental Exercise

As part of your knowledge that you know by memory, you know that the mind starts in the heart with an Idle, gets tuned to the eye, goes to the eye, then back to the heart and then has the E.Motion process there a few steps later. Then it goes back to the Idle again.

You do know that, right?

You might also remember that I said that the Consciousness that happens in the eye is a neutral feeling type of consciousness. Remember that, because it is part of the mental exercise.

I want you to remember three different events from your past:

- 1). Happy/Joyous wholesome event.
- 2). Greed/lust happy event (don't overdo it).
- 3). Angry/unpleasant event

I will explain according to the first event listed. Please be aware that one who has distinction in meditation will be able to do this exercise in a more complete manner with ease. However, I want to give you a taste.

I want you to use your slow motion instant replay camera again. I want you to remember and hold the image in both your right eye and in your heart at the same time. When I say "In the eye," I want you to imagine a very tiny glass-like particle that is in the eye and that this particle can see that image. The smaller you zoom in, the more clear the image will be. I want you to feel where the emotion with joy and knowledge is. Is it in the eye or is it in the heart? Try to go into the eye directly to see if there is any feeling associated. Next, do the opposite and go to the heart directly and know and see the emotional feeling associated with the consciousness that takes a seeing object in the heart.

Have you ever contemplated where the emotion takes place and tried to feel it before? This will become useful for you in the future. You will later need to look inside your heart to know more and more details about the emotional process. An advanced meditator will know 34 details inside the heart for wholesome/joyous consciousness with knowledge. I am asking you for only three!

(Wholesome consciousness, Pleasant feeling and Joy)

This exercise only scratches the surface, but it is very important. Try and try again and again until you can understand that there is only a neutral feeling in the eye and there is a pleasant and joyful feeling in the heart when wholesome consciousness happens.

If you are more skilled, perhaps you can feel the mind's digital nature and it arising and perishing quickly.

You might be able to see your mind get called to the eye too.

You might be able to also know that as soon as there is consciousness in the eye, an image will appear in the heart immediately after.

You have done the Idle exercise before, but I did not instruct you to know it in the heart. Now, I want you to try to know it in the heart. This will be your starting point. Imagine the visual wholesome image hitting your eyes, but you do not have consciousness yet. Try to feel a "calling" in your heart that an eye door image is waiting. Then let your consciousness go to the eye door, and as soon as your eye sees, consciousness immediately goes to the heart with that image. Try to feel that happen now. After that, there is a knowing better and a surge, that places the mind into the emotion stream.

Just like one can look at a particular place where a fan is spinning, and see an individual fan blade, you can also do this with the mind. You can also slow it down with your slow motion instant replay. Try again and again until you have some idea of what has been said. Try to do a full cycle from the Idle Process, to the eye and eventually back to the Idle Process again. This is not real knowing & seeing, because you are not familiar with the individual mental factors associated with each consciousness. However, it should be insightful.

The most important thing is for you to know that the emotion happens in

the heart and no emotion happens in the eye.

You can also try this with the greed and anger. Likewise, try this with the five senses. You might have to pick another example for wholesome smelling or wholesome touching, etc. The same with greed and anger.

Try to reserve at least an hour to play around with this exercise.

Lastly,

I encourage you to give whenever a good opportunity exists, even food to homeless people. Whatever condition they are in, whether they do drugs or drink alcohol, they will need food and they are in a very bad situation. So go ahead and make their day!

References:

Please see pages 49-51 of *A Manual of Abhidhamma*, Narada
http://www.buddhanet.net/pdf_file/abhidhamma.pdf

THOUGHT-PROCESS—According to Abhidhamma when an object is presented to the mind through one of the five doors a thought process runs as follows:—

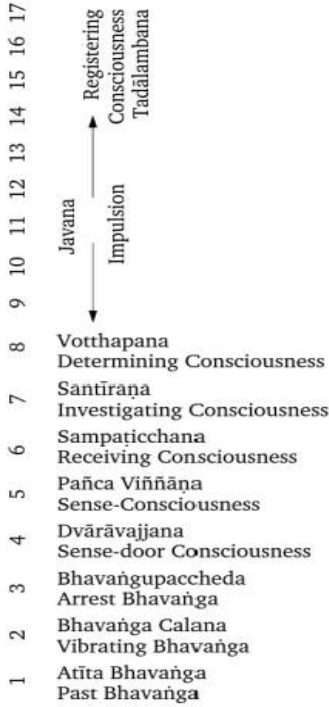


Diagram I

Abhidhamma Lesson #6

What Matters?

Further information on Materiality Realities.

In Lesson Four, I spoke about *kalāpa*-particles as it relates to feeling water. There was quite a bit of information that I stuck in there without you knowing it, but even still, there was so much missing. That lesson was perhaps one of my favorites, while the last lesson (number five) will probably be my least favorite and perhaps your least favorite too, but I had to do it. I was going to get into mental factors for this lesson, but I decided that I needed something more interesting and exciting after losing half of the readers from the last 20+ pages that I wrote on the mental process cycles. Wow, that was a really long chapter! I think I can stop trying to sell the Abhidhamma at this stage, because:

1. I've done a lot of selling already.
2. You are part of the crowd that is still reading and perhaps already sold on Abhidhamma, or at least enough to read on further.

Abhidhamma is an interesting philosophy to know whether you believe it or not. While it does encapsulate the core beliefs of Buddhism, much of Buddhism is quite logical and universal in nature. The *Dhamma* explained are called the "Natural Laws that were discovered," but not created. They existed from the beginning of time, just like Newton did not make up gravity, he only discovered it.

Material realities are very interesting and so are *mental factor realities* too. I

hope to write lots on *mental factors realities* in the future and hopefully I can also relate it to some of what I read in Malcom Gladwell's book, *Blink*. So if you have not read that book, you might want to start reading it now. I hope to discuss the "Thin Slicing" and the "Taste Testers" mentioned in that book. It felt like it had Abhidhamma written all over it, but I might bet Malcolm Gladwell had not heard of Abhidhamma before he wrote *Blink*.

Onward!

The Microscope World

We all know that the body is made up of small particles. We know "Small Particles" in many different ways. The most well known particles in our bodies would be the knowledge of our cells. We have blood cells, and skin cells. Our whole body is filled with cells of different types. We also know we have genes inside these cells, DNA and lastly, we know that our body is just a bunch of Atoms too. Abhidhamma seems to have somewhat of a hybrid of *all of the above*. Although the size difference renders "all of the above" impossible to exist at one time, as I have said before, I believe that Abhidhamma is all on another dimension and that science cannot confirm or deny what is in the Abhidhamma. Even though it is on another dimension that only the mind can see, there are some striking similarities. I also believe that there are some holographic characteristics of *kalāpa*-particles too. So what is seen on a microscopic level like cells is also viewable on atomic level like atoms. Even though they are subatomic particles, we have "living" particles too. Material Realities can be very interesting and one can speak on this topic for quite a long time even though it is one of the smallest meditation manuals of the Pa-Auk Meditation System based on *The Path of Purification* or *The VissudhiMagga*.

A Word on "Seeing"

On a practitioner's level, materiality is taught first because it is the easiest to understand, know and see. One does not need distinction in *samādhī* in order to

see *kalāpa*-particles, although it helps. One can do it with simple Access concentration. Access concentration can be defined in many ways, but in short, a meditation yogi with access concentration can see what he wants to see when he wants to see it. The insight knowledge used to do this is not considered psychic power, but it is not considered total fiction either. It is called insight or *Vipassana* Knowledge. Psychic power has another name, called "*Abhinna*," in *Pāli*. That is another realm which we will not talk about because it is not related to the current topic.

32 Parts

We also have biology in Abhidhamma or in the general Buddhist teachings. We have the 32 parts of the body. I will list them here below. Any adult should not get confused by this list, so it will be one of the few lists that I will give.

Hair of the head, hair of the body, nails, teeth skin,
Flesh, sinews, bones, bone marrow, kidneys,
Heart, liver, mesentery, spleen lungs,
Food in the stomach, intestines, intestinal bindings, bowels brain,
Gall bladder, phlegm, blood, sweat, fat,
Tears, spittle, snot, oil in the skin, oil in the joints, urine.

Buddhists like to know biology as you can see. They like to see the body as just a bunch of parts. Doctors sometime have this "footnote-vision" when they look at other people. The ancient texts noted that a butcher looks at an animal differently too.

"Just as though a skilled butcher or his apprentice had killed a cow and was seated at the crossroads with it cut up into pieces; so too a bhikkhu (monk) reviews this same body." MN 10

I have said before that consciousness of the mind takes place in the blood inside the heart. An interesting thing was that the Buddha never mentioned where the mind takes place in the body, and only later works insist that it occurs in the heart area. While some say that this omission and ambiguity can make the Suttas "match" neuroscience, it should be noted that the Buddha never mentioned the brain as an essential body part either. If it were important, it would have been mentioned. Originally there were 31 Body Parts and not the well known 32. The Brain was added later by the *Vissudhimagga*, or *The Path To Purification* to make the famous 32 parts as we know it. However, this book, which appeared about 1000 years after the passing of The Buddha, said that the brain's function was for the mucus to come out the nose. Strange, isn't it? In any case, the brain was thought to be useless for consciousness as far as Buddhist History, Suttas and commentaries are concerned.

In Buddhism we like to slice and dice mind and matter. The more we slice and dice, the less recognizable it is. That is why the meat section of a grocery store do not look so gross. When I became a vegetarian at age 18, I did so because I recognized the meat cooking on a grill as an animal, or bird. It changed my "footnote-view" and walking through the meat section in a grocery store was definitely not fun.

The Five Constituent Parts

In Buddhist Theravada Abhidhamma, we want to destroy the sense of self. We want to not see a person, but only parts. That is why we slice and dice. The most famous of all divisions of the "self" are the 5 constituent parts which make up both mind and matter:

Body
Feeling
Perception

Fabrications
Consciousness.

The last four make up the mind and the first makes up matter. Later, we will speak on the other four constitute parts, some of which, you already know.

For the body, we divided it into 32 parts. There is an old Buddhist joke cited when someone is angry with another person that goes something like this:, "Which part of the other person are you angry with? Is it his skin, his bones, his liver, his lungs or some other part? When you think of it this way, it is a difficult question to answer.

We will also divide the body into Four Elements. You may have heard of Four Elements before. Medicine was once based on Four Elements long ago and it should be noted that modern doctors still measure the Four Elements. They take your body weight (earth), pulse (flowing, water), temperature (fire), and blood pressure (air). So ancient medicine is not that far off from modern medicine!

12 Characteristics

The Four Elements can be further divided into twelve characteristics:

Earth	Hardness, roughness, heaviness, softness, smoothness, and lightness
Water	Flowing and cohesion
Fire	Hot and cold (Temperature)

Air	Pushing, pulling and supporting (Force)

The Four Elements are just a brief method. It has been said that Four Elements (only) are for experts. The beginner needs to learn the twelve characteristics. It sounds sort of like the opposite doesn't it? Why would an expert have less to learn? This is simple. It is like an expert who reads a journal article that is similar to a hundred of other articles he has read before. He can skip the footnotes because he knows all of the definitions already. The experts and begginers know the same things when they discern materiality. However the expert already knows the footnotes to the Four Elements *as the twelve characteristics*. A beginner needs to learn the footnotes first because he does not know them yet.

The first batch of six Earth characteristics mentioned are actually three groups of two. Hardness and Softness is one group. Roughness and Smoothness is another. Lastly Heaviness and Lightness are also a pair. They work together like cohesion is for flowing and not flowing, Temperature for hot and cold, etc. There is no "fire" for Buddhist Four Elements so to speak. It is just temperature. Even so, in physics we know all temperature to be heat. That is how we get the Physics Kelvin 0°. Everything else is hot compared to that. Lastly, there is pushing, pulling and supporting...or simply a force.

So there are many ways to slice and dice in Buddhism. In review, we have the five constituent parts, we take the body part and divide it into 32 Parts. That 32 parts also has Four Elements and those Four Elements can be can be further sliced into twelve characteristics.

One of the biggest misconceptions about the Four Elements is that rocks are only made up of earth element and that water only contains water element, etc. This is not true and we will use water as an example. We will use H²O for water to avoid confusion.

H²O has hardness. Take your hand and slap the H²O and you will see hardness. It also has roughness and heaviness in other ways. A water skier will know roughness and smoothness when he skis on the H²O. A surfer will know heaviness and lightness when the H²O from a wave falls on him. Surfers and water skiers are intimate with water and therefore have more *knowledge* about H²O than the regular person. They know.

Theravada Abhidhamma is all about knowing ourselves on an intimate level and paying attention to things in a new "knowing" way that we may not have done before. Before we can do that, we must learn what to look for. Experience helps, but experience alone may leave one confused. When we tell a surfer that water has Four Elements, he will be able to instantly relate his experience to it if he has enough faith. However, he may still be left confused and say, "Dude, man, like it's just water and I surf it." We'll it is not really like that! I once got a job teaching computers at a private high school in Hawai while I was hitch-hiking which is another story. That school had a special class called "Surfboard Shaping." I spoke with the instructor and he told me many things about what he teaches his students...Dude, like many physics. They need to decide what type of board they want to make, the shape of the waves they want to surf, all of that and more compared to their own body type. After that, they can work out the shape of the board which will have the physics or physical shape to meet their surfing needs. There is a whole science to surfboard shaping and putting the stereotype aside, they have intellectual intelligence in addition to psycho-kinetic intelligence. Surfing is not easy and I

will tell you that with my mostly unsuccessful personal experience.

Therefore H²O has Four Elements. Flowing is the most well-known element of H²O, but it also has cohesion, depending on the temperature. That is how we get ice-H²O. So take notice that cohesion is also property of Water Element. Therefore, since H²O-ice has cohesion for water element, so does cured concrete. Repeat that with me.

"Cured concrete has water element"

H²O has temperature which is Fire Element which needs no explanation. It also has supporting, pushing, and pulling for Air Element. That is how H²O can float a surfboard or water skier. We can analyze the same way for wood, metal, a candle flame or the wind. One by one we can see all of the four individual elements no matter what object we have and its predominance in one element or another.

All that said, H²O of course is predominant in water element and cured concrete is predominant in earth element. The 32 Parts are grouped into the predominance of elements. Earth predominant element body parts come first in the list and water predominant elements body parts come after that. There is another type of body categorization in Abhidhamma which is called Forty-Two body parts which also includes the Fire and Air predominant elements.

Slicing Down to the Particle Level

In the practice of meditation, one will focus on these 12 characteristics grouped into the Four Elements until the body appears as if it were a transparent block of ice. Then, as one continues to apply the same focus power on all of the elements at the same time in that ice block, the mind will start to see all of the particles in the body, which are made of four elements. Slicing further is now occurring again on the particle level.

I have spoken of ultimate realities before, but seeing a particle by itself is not an ultimate reality. As I have said before, I have not been fully truthful on an ultimate truth level because it is difficult to communicate in ultimate truths if you are unfamiliar with them. Many people believe that just seeing a particle is enough for knowing the ultimate reality, but that is not enough. They are seen as a group, but distinct elements.

Many people say they can "see" particle-*kalāpas*. However, color, a visual form, is only one characteristic of the basic eight material realities in particle-*kalāpas*. In order for one to know the ultimate truth of material realities, you must know *all* of the characteristics in each particle *at the same time*. If one only looks at one aspect of a material particle like color, it is like a doctor only giving you a visual examination when you go to him for your ills.

I had briefly mentioned the 8 characteristics of materiality in lesson four. As a reminder, we have the four elements (earth, water, fire and air), plus color smell, taste, and nutriment. While I did say that water element could not be felt directly by our feeler particles in relation to other particles or materiality as we normally know it and that it is *inferred*, the particle-*kalāpas* do have water element materiality within. This water element in a particle-*kalāpa* can be known directly by the meditative mind and bypass the limitations of the senses. There can also be more material realities inside a particle-*kalāpa*, but these

eight are the lowest common denominator, or the "Universals" of Material.

I remember one of my first Science classes where we would evaluate the substances based, on color, smell, taste. Of course density and other properties would be important too, but this was one of my first classes, maybe seventh grade! We evaluated salt, sugar and luckily nobody had any other chemicals around! It was probably not the best thing to teach as a first lesson in chemistry, but I remember it.

So all matter has the Four Elements, color, smell, and taste. (the order is quite standard and if you make your way from your eyes to your mouth for the last three, you will get the order right and it may help in remembering this stuff).

You may have noticed that I skipped the eighth materiality called Nutriment. This property is what causes the particle-*kalāpa* to appear or come to be. It also sustains the particle-*kalāpa* for its brief time and it also helps it reproduce before its time comes to pass. Sort of like our human species do. It is very interesting if you ask me and that is why I chose this subject for this lesson after the previous tedious lesson on the mental process cycles.

There are four types of causes or nutriment for the birth of material particles. This nutriment is also the distinctive characteristic of the particle too. Just like the DNA or genes of a race are distinctive among, Africans, Asian Indians, American Indians, Europeans, etc., so too is the nutriment for particle-*kalāpas*. The four nutriments are, *kamma*, mind, food, and fire.

Hint, whenever I give you a list, it is given (hopefully) in a standard order. Standardized ordering helps with memorization and the Buddhist were the masters of memory feats. Did you know that the Buddhist Texts were from an oral tradition and only written down 500 years later? The oral tradition was

brought back by Venerable Mingun Sayadaw and he holds the world record for the best memory. It took four years to test how many books he had memorized! Go ahead and Google him.

There is a story that Bhante Henepola Gunaratana (Bhante G) once visited Mingun Sayadaw in Myanmar. Mingun Sayadaw pointed to his bookshelves and said, "Take any book off the shelf, open it up to any page, read the first paragraph, and I will finish the page." (!).

Back to Nutritive essence

I will not get into much about all four of the nutritive essence qualities. However a brief mention will be OK. There is:

Materiality produced by *Kamma*

Materiality produced by Mind

Materiality produced by Fire

Materiality produced by Food

We all naturally know about food produced materiality, but it might be interesting to know about the others. *Kamma* as nutritive essence will need to be explained later because it is very deep and complicated. The mind can produce material particle-*kalāpas*. These particle-*kalāpas* do not go beyond the body, but the heat from these particle-*kalāpas* can produce material particle-*kalāpas* that can extend beyond the body, and will have a similar quality. That is why you might be able to feel someone's love or anger from a few feet away. In this lesson, I will talk about the fire produced materiality and how it works.

But before I talk about that, what do you think we will talk about first? My favorite topic of course! We will talk about compactness of continuity.

Before, in lesson two, I have talked about how the mind is digital and singular

and does not mix. I have continuously used the same example of "Mercy-Killing" and "Giving-with-Anger" to show that there are different consciousness moments and they do not mix. Likewise, in the fifth lesson, I explained in further detail about the compactness of continuity as a process. So when someone is angry and gives a gift, his mind does not have just a bunch of $\bar{A}\bar{A}\bar{A}\bar{A}$ letters. We have a process for each of those A's and each of those A's has a built in seven E.Motion or *javana* moments to it.

Writing $\bar{A}\bar{A}\bar{A}\bar{A}WWW\bar{A}\bar{A}\bar{A}$ was a shorthand expression and now you know the footnotes to make the mental process cycles appear in your mind as the footnotes for each letter. The main texts of the *Suttas* are a lot like this. When anger is mentioned, it is up to you to know what the footnotes are (mental processes). It is easier to remember this way and the knowing mind can automatically unzip the footnote materials. When the four elements are mentioned, you should understand that particles are being referenced and if it is mentioned as a body part, you know that predominance of one element is being referred to and that all Four Elements exist at the same time in any material. That is one of the reasons why we say the Abhidhamma is deep. This is because, once you know the footnotes, you can automatically associate it as the deep meaning. It is very rare for Westerners to think like this and therefore it is very rare for it to be taught in English by a native speaker. This way of organizing the Buddhist texts with "unified footnotes" as the Abhidhamma and commentaries was done like this for ease of memorization and of course, the ease of writing it down. In this way, there was no need to keep repeating the mental processes every time anger was mentioned or a wholesome mind was mentioned. It would be all too much and unnecessary. The way it was done was very efficient. It is quite amazing how the whole of the Buddhist texts were organized, especially as an oral tradition. In the computer world, we would call this "Data Normalization" and an "Object Oriented Model.". I keep telling you that the Abhidhamma was certainly ahead of its time!

Digital Movement

I have explained how the mind is digital versus analog as well. I have explained this with the simile of a video being made up of pictures that flash on and off to simulate movement. Even further, I have explained that there is a refresh rate on your computer screen that turns on and off the pixels of your computer screen to simulate movement. The pixels do not move. Does all of this sound familiar to you? I hope so. I spent a lot of time drilling this point again and again. Lastly, I said that Christmas lights do not move and that it is just an illusion of movement being created. I have also said that the pixels do not move and they are the "ultimate realities" of computer screens.

Now I want you to brace yourself for what I am about to explain to you.

Particle-kalāpas do not move. They only exist for a fraction of a second and then they disappear. Then a new one appears in a similar location. This is similar to the pixels of a computer that turn on and off, but of course on a 3D level. I will explain further in the mental exercise.

So particle-*kalāpas* do not move, yet we can move our bodies, throw objects around, drive a car, etc. I know this is hard to believe. In short they arise and pass away. However matter is energy and energy is matter. Therefore, we can assume it fades into energy and then that energy creates a particle-*kalāpa*. The faster this arising and passing way, the more continuous it will seem. Just like the frame rate of a video. If the video frame rate is slow, like 10 fps, then the video will seem jumpy and not continuous. If it is 30 fps, then it will be smooth and continuous. Particle-*kalāpas* arise and pass away at amazing speeds and that is why it is difficult to know that it is not continuous. That is why we call this an ultimate reality. It is ignorance that cannot see this and ignorance is the opposite of reality. According to Abhidhamma theory, to be Enlightened, one needs to see these realities, but knowing and seeing these realities are only a

few steps along the way to even the first level of Enlightenment. (There are four pairs of Enlightenment, just in case you did not know)

Let's go a little slower in time and look at cells. Our cells die all of the time. We do know that, don't we? The cells reproduce before they die and new ones take over. That is why we are alive today. If new cells did not arise, we would only be dead cells by now. Do you agree? Of course you do. This is common knowledge. Within 3 months we are a completely new body and it is just a myth that swallowed gum will stay in your stomach for seven years!

We have particle-*kalāpas* which are "living" sort of like we say that the cells in our body are "living." They are not "beings" but we know that it is living matter and different from dead materiality. One of the types of materiality that makes certain particle-*kalāpas* "alive" is called "Life-faculty." These are only present in particle-*kalāpas* produced by *kamma*.

The particle-*kalāpas* also reproduce. There is the element of fire (heat) in every particle-*kalāpa* no matter what type of particle-*kalāpa* it is:

Kamma produced,
Mind produced,
Fire produced,
Food produced.

This fire element is manifested as heat, and heat can create new materiality. Einstein came up with his most famous equation $E=MC^2$. We all know this equation, but most of you really do not know what it means or how it works.

There are quite a few highly intelligent people who ordain as monks, especially in the meditation traditions that focus on keeping the rules, like not using

money. “Why else become a monk?” I say. One of those monks is my friend and from Ukraine. He ordained as a monk in Sri Lanka and was once a nuclear engineer at the famous Chernobyl Nuclear power plant. One time, I asked him if he would explain to me how this $E=MC^2$ equation really worked. Since it happened to be my birthday when I asked, he gave me a nice twenty minute lecture with little atom sketches that a six year old could understand. I was so happy to learn this after all of those years of "partially knowing" how it worked. It was a great gift and he does not speak much, but when he does, he can speak for a while.

He explained Nuclear Physics the same way I am telling you about Abhidhamma, or maybe better. I might guess you are itching to hear what he said. He showed me that when you cut a piece of wood, there is a loss of material. That material loss is saw-dust from the saw cutting line. If we were to measure the mass of the two smaller boards, we would find that the two smaller boards will have less mass than the original board before cutting. In atomic theory, that same material loss also happens from the cutting line of splitting an atom. If you take the mass of the two split atoms, it will be less than the original. That loss in mass is from the cutting line. That loss is not atomic dust, but *energy caused by motion* and hence the equation. Cool huh? I already told him to write a book, but he is a monk now and it might not be so good for him to focus on that. Never the less, perhaps he could do more justice on this lesson than I could.

So we know that energy can somehow equal matter. We also know there are two sides to every equation. Therefore matter can somehow equal energy too by dividing E by C^2 which gives us $M= E/C^2$. So keep that in mind while I remind you that there is heat in every piece of matter. That heat, however subtle it is, can be converted into particle-*kalāpas*. Those new particle-*kalāpas* also have heat, which can also create new particle-*kalāpas* and so a perpetual

process can be created. This process happens really fast. It is not as fast as the mind, but for all practical purposes, it is just as fast. Imagine the speed of the fastest supercomputer. It is faster than that.

I do not think that quantum physics has caught up with Abhidhamma just like the Neuroscience is equally in the dark. In any case. The particle-*kalāpas* arise and pass away very quickly and before they pass away, a new particle-*kalāpa* particle is born. Our human race may seem constantly there, but we know it is not constant. Our great grandfathers have passed away and we are here as part of the continuation of them. It seems easier to understand because it takes on average 80 years for a person to die. We can look at his children and then easily know that the whole human race or all species in the world work like this. We see it as constant, but it is just generations that *appear* constant.

So the same thing happens with our cells and the same thing happens with our particles. The so-called constant nature is just a bunch of generations arising and passing away to appear as a stable mass. We are not our grandparents, but we have similar qualities. The same is true with our particles in our bodies or the tiny particles in your chair. Your body or your chair may seem constant and stable material, but it is always changing and being replaced by newer children particle-*kalāpas* at subatomic speeds. The faster the generations happen, the more difficult it is to see. That is why it is hard to know or even believe. Sometimes this is good. For instance, computer screens do not flicker anymore because they finally got the refresh rate high enough. When the Internet was slow, we could see the pages load before our very eyes. In Myanmar, the Internet is a bit like that today!

So particles do not move. They don't, and you should understand that your computer screen does not move either. We have been through this before. The pixels do not move. They turn on and off and simulate movement. The

problem is how to imagine this with 3D materiality?

First lets look at Joe Walker, the walking man. Imagine a person name Joe₁ Walker who arises and passes away every three seconds. On the 2nd second, he produces another duplicate of himself, Joe₂. On the third second, Joe₂ is coming to be. On the third second Joe₁ is perishing away. For a brief time, on the third second, there are two Joes; one who is maturing and one who is perishing. If we continue to count to the fourth second, there is only one Joe again; Joe₂. At this stage a new Joe₃ can be produced because it is Joe₂'s 2nd second. On the fifth second, Joe₂ will perish away and Joe₃ will be coming to be. The reproduction can then perpetuate. That is because the lifetime of Joe Walkers are only three seconds and reproduction can happen on the 2nd second. Can you follow that? Now this Joe moves... but just a little bit at a time because we have only three seconds of life. The new Joe moves a little bit, and then another new Joe moves a little bit more, and so on. Since there is no limit to how many generations of Joe's reproduction, Joe's generations can move any distance he wishes. But one single Joe does not move any substantial distance. Only a series of newly reproduced Joes allows for movement. It is like a relay race with a series of Joes that allow "travel" to the new position to happen. Do you follow this?

So now let us divide the Joe-time by 100. Joe now only lives 3/100 of a second. Before, he may have moved a few feet at a time, but how much now? On the second unit of time, he reproduces as before and dies on the third unit. Can we say he moved? Maybe. What about if we divide Joe-Time by 1000 or One Billion? Particle-*kalāpas* arise and pass away much quicker than that! We will call this *Particle-kalāpa Time*³. One particle-*kalāpa* unit of time is equal to

3

17 Mind-Moments in Mind-Moment-Time. So where is the movement? We cannot say there is movement anymore. Movement is no longer present, and is only manifested as just a pushing force. It wants to move, but it does not move because there is not enough time to move. This wanting to move is a pushing force and is called Air Element. This is the *cause* for motion without movement. When a new particle-*kalāpa* is born, it arises in a new position where that force is headed.

One More Thing:

Do you remember all of the Joes we had above? It is strange, isn't it? Your particle-*kalāpas* also arise and perish in a similar fashion. As I said above, they last for 17 Mind-moments and can reproduce after the first moment and perish on the last moment. Your particle-*kalāpas* do not really exist for any substantial time! Who are you? How do you exist? Which Joe crosses the finish line? Your cells do the same thing, but just a little slower.

A Mental Exercise:

Step 1: Imagine a black wall in your room, and hold up your hand and move it across to the left very slowly with the black wall as a background. Now I want you to move your hand again with your eyes closed and try to "see" your hand move across the black wall. Do it a third time without moving your hand but replaying the action in your mind's eye without any physical movement. I want you to imagine your viewing area in your mind's eye as a 2D computer screen and that the pixels will turn on and off and simulate such a video for you. Remember that the pixels do not move. They only turn on and off and change color.

This should be easy. Focus on the left edges of the hand as you move the hand to the left. The black color (for the wall) will get replaced by the hand color

moving in its area. These are pixels changing the color from black to hand color as the hand moves over to the left (or over the black). On the right edge of your hand, the pinky finger, the hand color will turn into black as your hand moves to the left. Remember that the pixels of a computer screen turn on and off at 80 Hz and when the pixels turn on again, they can stay the same black color, or have a new color of the hand, if the hand should pass over that pixel. The opposite edge of the hand (on the right), will have hand-colored pixels change color into black because the hand is no longer there anymore because it is moving. However, whether they change or not, the pixels are still turning on and off rapidly. Try to see all of this.

Step 2: Now try to imagine that you are in a room filled with water. Now understand that the water, your room and your body are made up of particles. These particles are just like pixels on a computer screen, but we are in a 3D world of particle-pixels now. Now, move your hand again to the left. The whole 3D space in front your hand as it moves from right to the left is made up of many 3D pixels that can turn on and off, change color, etc. Is that possible? Why not? It is a mental exercise! Anything is possible in The Mental Exercise World! Your computer screen can do it in 2D. Why can't we have 3D pixels? I think one day they will have this technology soon for robots and that was how the robot in the film *Terminator I* worked. (I know, my knowledge of movies is quite dated).

Do this with your eyes closed, and moving your real hand to the left, pay attention to the tip of the pointer finger. Try to feel a tingly vibration in tip of that finger. Imagine the vibration to be little balls that appear and disappear rapidly. This will be your focus point for the exercise. Imagine the 3D-pixel-particles of water turning into hand particles as you move your hand to the left. The older hand particles on the right get replaced with water particles as your hand leaves that area. Do this with you real hand using your ultra-slow motion

video camera with ultra-slow zoom lenses. If you are really doing this, you will be moving your hand very slowly across your mind-screen. Try to see only a few particles at a time instead of a hand. One by one, watch to water particles change into hand-particles on the left and the hand-particles change into water-particles on the right as it moves to a new location. Remember that nothing moves. Only the 3D Particle-pixels are arising and passing and changing color (and material nature). Movement is simulated! Do you get it? Cool! While particles do not "change" into different materiality, this can give you some idea. In reality, there is a pushing force, to make the water particles arise in a new spot because the hand particles are arising in that previous spot. This *simulates* "pushing the water away as the hand particles change position."

Step 3: We know that air is made up of particles just like water is made up of particles. Try to repeat this without using a room filled with water. Instead, do this exercise with a room filled with air. Now move your hand again to the left and see the replacement of particles happen (in your mind's eye). The air will get replaced with hand-particles as it moves to the left where the air was. The hand particles on the right will get replaced with air particles where the hand used to be. Again, particles do not move. Then try to see the air particles arising in a new position "to move out of the way" for the and particles arising in that new location.

Can you follow this exercise?

Good.

This exercise should be fun and same thing happens with the real world of particle-*kalāpas* except there are no fixed 3d particle-pixels that change materiality. As I said before, they have new generations like our Joe Walker. The particle-*kalāpas* arise and pass away and new generations get created. If there is a pushing or supporting force (and there always is of some degree), the

new generations will arise in a different place than before. The previous particles, like the air and water particles get pushed out of the way. They too arise and pass away. When the pushing action is applied, the new generations arise in a different place. We have billions upon billions of Joe Walkers as every particle in the hand and surrounding material, like water or air. That is how "movement" occurs.

Got it?

Good!

In this exercise, we cannot say you are seeing particle-*kalāpas*. It takes quite a bit of training, and although distinction in *samādhī* is not necessary, it helps a great deal. However, this exercise can help you understand that particles do not move and how movement is simulated.

This should complement Lesson Four on how water cannot be felt. Now you know that flowing really cannot be felt and that it is simulated. Step by step, I need to show you how the ultimate realities really are. We are not there yet, but we are getting closer than before you started reading these lessons. The other three elements of H²O certainly can be felt. Do you feel good right now? That is the pleasant feeling that often comes with a mind moment of wholesome-knowing consciousness.

Some More Information:

So just a little bit more information and then we can end this lesson. I am getting tired and I bet you are too. Particle-*kalāpas* arise and pass away. Some types of particle-*kalāpas* can appear from nowhere, especially the living kind which are created by *kamma*. The mind can also create particle-*kalāpas* too. Both mind and *kamma* created particle-*kalāpas* appear from nowhere and are created all the time for as long as we are alive. We might talk about that later,

but not in this lesson. Most of materiality in the world is made up of heat-created-particle-*kalāpas*. All particles have heat whether "living" or not and this heat can create new materiality. As we (Einstein, the Ukraine monk from Chernobyl, and myself) said before, energy is made up of matter and matter can be created from heat. The heat in the particle-*kalāpas* causes new children particle-*kalāpas* to arise in a new place while the old one fades and then disappears. This new place of the particle-*kalāpa* follows the "movement" of the rest of the whole object (like a hand) because of a property called pushing (air element).

Don't get confused! I'll explain. If you move your hand, the rest of the arm follows automatically.

The train cars follow the caboose

If you were a real magician sitting in seat 17A on a moving train car that follows the caboose and you made a ball disappear from your hand and then reappear 1 second later, you and the moving train will be in a different location relative to the ground than 1 second earlier. You will still be in the same location (seat 17A) relative to the train. The new ball would also reappear in the new location of the moving train relative to the ground but in the same place where your hand now is relative to the train.

Your hand moving to the left in this exercise is like the train. The ball that disappears and reappears in location 17A is like the particles in your hand that do not move relative to your hand, but changes location when it reappears relative to a fixed point.

Well, not exactly, but close enough to explain this to you.

Mind and Matter Connection

Without materiality, there cannot be any support for the mind to occur. Without any mind occurring, new particle-*kalāpas* which support the mind (with *kamma* as nutriment) cannot arise. The same is true for the five sense doors. The particle-*kalāpas*, (also with *kamma* as nutriment) that support the senses or actually do the sensing are created when the mind is working. Therefore, in order to be alive, we need a constant replenishment of particle-*kalāpas* with *kamma* as nutriment (or cause for these particle-*kalāpas* to arise). This is because the particle-*kalāpas* will disappear in a flash and later be converted into heat created particle-*kalāpas* which do not support mind. That is why we have a Life-Continuum process to keep the mind working. If we do not have this, we will die.

Perpetual Generations

There really is no limit to the heat based reproduction of particle-*kalāpas* and that is why the floor you are walking on still exists. However, just like an H²O fountain keeps its shape and beauty, it is always being replaced by new H²O particles.

Enjoy it's beauty, but do not try to hold on to it.

Please take a moment to look at the picture which was at the top of the lesson one more time. It should look different now.

Abhidhamma Lesson #7

So what happens during samādhī?

A One Track Mind

samādhī is more or less an English term these days depicting some type of attainment in meditation. Some people wrongly associate it with Enlightenment. It is along the Path, but it is definitely not Enlightenment. In Buddhism there are categories of attainments of *samādhī* called *jhāna*. There are typically eight *jhānas* that one can attain. The discussion of the different types of *jhānas* and how to attain them are not up for a real in-depth discussion in this sub-chapter. However, you may be interested to know what happens when one develops deep *samādhī* and what one pointed meditation is all about, especially according to Abhidhamma doctrine.

Well of course you are. Abhidhamma describes meditation states in great detail and is therefore quite relevant to meditators. Abhidhamma is not just some theoretical framework. It all begins with attainments of distinction in *samādhī* which will henceforth be called *jhāna*.

Two Types of Extended Continuous Consciousnesses⁴

I made this term up, but there is actually a number which is really small. It is so small that you might not believe it if you saw it.

4

In order to know about *samādhī* we need to know about what it is like to have a continuous, and extended consciousness moments of the same object and what that means. We want to know how the mind gets interrupted and what a repeated mind of a single object looks like. For the unenlightened, there are only two different types of consciousness that can happen many times to uncountable levels in succession. Which two are they? *Bhavanga* and *jhāna* consciousness. *Bhavanga* is the name for our *Idle Consciousness*. Do you remember the other English name? That's right, *Life Continuum*.

***Bhavanga* Consciousness (Idle)**

Now that you are familiar with the term Idle, we will be using the term *bhavanga* sometimes in this paper. They mean the same. We will look at Idle Consciousness first because it is something that every regular person has and can imagine. This Idle process can happen many uncountable times in succession without being interrupted. That is how you sleep without interruption. We have already discussed that your mind does not shut down, and if it did, you would die. That is why it is called Life Continuum. Let us look at a chart of *bhavanga*.

...BB
B...

Now, with this chart, there are no "footnotes" to these series of consciousness moments. There is only *bhavanga* or Idle happening. There are no cycles for each letter like in the previous chapter. It can continue for an uncountable amount of times. We cannot say it is infinite because it will stop when you wake up. Infinity never stops. It also happens in-between the data you take in when you are awake and looking at someone. We have been through all of that in Lesson Five and Lesson Three. Right? Of course you know that, because you didn't skip around, did you?

So this "stream of consciousness" is a real unbroken stream of consciousness. Consciousness always flows. However, "stream of consciousness" here refers to the same object and the same type of consciousness back to back in succession. Idle is different from other forms of consciousness because the longest a stream of consciousness can last is only seven mind moments. This stream happens during the *javana* or *E.Motions Consciousness* we learned in

Consciousness refers to the *pāli* word *citta*

Lesson Five. *javana* or E.Motion is all part of a mental process cycle as we explained before. Worldly E.Motions never last more than seven counts and the whole cycle never lasts more than seventeen. I am hoping you remember that because this chapter assumes prior knowledge of the preceding chapters. Please remember the fact that the speed of the human mind is very fast. If we took a very slow 1GHz computer, it would be 17/1,000,000,000 or seventeen billionths of a second. That is a very short time and our fastest computers are much faster than that. Our mind is much faster than the world's fastest computer. So a single cycle is very quick.

Interruption

This is the interesting part. In-between each cycle is the Idle Process. One gets "stuck" in Idle until the sense doors impinge on it. That is what causes the Idle to vibrate and then the Five Door Adverting Consciousness takes over to tune the mind onto a specific sense door for processing a cycle. Consciousness then changes location from the heart base to, let's say to the eyes, then back to the heart, and in the short form, the E.Motion happens for seven counts and then eventually falls back into Idle. I hope you remember that much from Lesson Five. It then Idles for an uncountable number of times and then processes that same information again in the mind to make it stronger. After a few cycles it might take in new information from any of the five senses like "hearing" for the person you were previously viewing speak or you might "look" at him an additional time as another process. So this is the typical way that your mind gets interrupted *all within a split second*. Normally we say it gets interrupted by the *Five Door Adverting Consciousness* although it gets disturbed a couple of ticks earlier from the sense doors impinging on the mind. First there is a knock on the door (Vibrating *Bhavanga*-Idle), and then the door opens (Five Door Adverting Consciousness). Five Door Averting Consciousness is what opens the door to let the mind out of the heart-base. If your consciousness does not leave the heart-base, you will not have any of the five senses giving new input. You will be blind, deaf and not feel anything at all.

Any sense door can claim attention away from Idle. Your Idle is always interrupted in order for your sense doors to get processed. Otherwise, you are unconscious. Idle lasts a long time compared to the E.Motion process. While seven E.Motions is a short period of time, idle can be millions or billions while you are awake and alert and reading this very lesson right now!

Meditation Sign

Soooo. This does not say much about meditation at this point, does it? It is just a bunch of letters right now. This is where the interesting part comes. All moments of consciousness have an object. If you are looking at my face, my face is the object (color object). If you are hearing me speak, my voice is the object (sound object). If you are focused on the sign of concentration during meditation, that sign is your object. A sign of concentration is a mind-door-only object. It is free from the senses. *Actually, all javana or E.Motion moments are mind door objects and free from the senses.* That is why I said earlier that you are blind when you are processing "vision objects" and even deaf when you are processing "sound objects." However, a meditation sign is different. It is all made up. It is just a figment of your imagination.

What is a sign of meditation? If one meditates on the breath, the breath will become the object of the mind. When concentration gets stronger, this object gets converted into a mental image the mind creates in its place. This is the sign. This sign happens in several stages as concentration develops. It will get brighter and brighter until the last stage called *patibhāga* sign. This is more or less a bright light that is perceived to be the same thing as knowing the breath. Perception can be anything and when concentration is the highest, it is perceived clearly as a bright light. Some see it as a "clear light." At this stage, Access concentration is achieved. That was letter 'A' in the chart, by the way. It is my belief that Western culture knows all of this and that is why we have a "light bulb" in one's head to denote an "idea" born of concentration. *A Bright Idea. That's Brilliant!*

Attainment of Jhāna

Then there is conformity and change of lineage consciousness, which we will nearly skip over (and it is only one mind moment each), and then *jhāna* occurs. The object of consciousness for *jhāna* is that bright perception of the breath called the *patibhāga* sign.

When *Conformity* and *Change of Linage* happens the mind becomes aligned with the preceding object and the object of *jhāna*. It also enters the sublime consciousness. To put it bluntly, it changes to a different state of mind even though the object (bright light) is the same during the whole process of entering *jhāna*. It is a pure concentration because the same object as well as the same

How many processor ticks happen in your computer in just a single minute? If it were a slow 1 GHz computer, a minute would be sixty billion ticks. If it were one hour it would be 3.6 Trillion. Again, that is just a slow computer and our fastest super computer is much faster. Our minds are also much faster than the fastest super computer. *Jhāna* is a super human state of mind. The equivalent is a comparison of jumping up in the air. A normal person can jump up in the air for about second which we will relate to normal limit of seven E.Motion consciousness or *javana* mind moments. However, if there were such a thing as a *Jhāna jump* one would be able to stay suspended in the air for as long as one wishes. It is not normal and that is why *jhāna* is superhuman.

Purity of the Jhāna Stream

So, many mind moments can occur with *jhāna*. *Jhāna* is always pure and during a meditation session it is either *jhāna* or not *jhāna* because there is no mixing of consciousness. However, there is a case where Venerable Mahāmoggallāna, the ancient disciple, who was foremost in psychic power, said that he could hear the elephants bathing and trumpeting during his "Steadfast *samādhi*." The Buddha confirmed that he did have *samādhi*, but it was "not wholly purified." The *Commentary* explains that this was actually a *fourth jhāna* and that his *samādhi* was not pure. It was also said that the Venerable was also a beginner in his first seven days of monastic life. While perfection is better, it was enough for him to attain full Enlightenment.⁵

So how can *samādhi* not be pure? We will explain this in this section. Over time, during an extended practice session, subtle impurities might occur which can affect the overall continuous stream of *jhāna* moments. How continuous that *jhāna* stream is depends on the meditator, his cumulative qualities he has developed in the past or wishes to develop now or in the future (*parāmi*).⁶ Strictly speaking though, *jhāna* is uninterrupted.

Jhāna is very different from sleep or Idle Consciousness. However, since they

⁵ *Pārājika, pārājikakaṇḍamṃ catutthapārājikaṃṃ vinītavatthu P232 and commentaries*

⁶ A completely textbook and continuous *jhāna* takes a very long time to develop and a continuous *jhāna* is not necessary to know *Ultimate-Realities* or reach *Nibbāna*. If one wishes to develop a continuous stream of *jhāna* moments for an entire practice session, they can do so. If they wish to move further, they can do so." See *Note 4 on Venerable Mahā Moggallāna Thera*

are both continuous streams of consciousness, they can be compared quite nicely. Scholars will never compare *jhāna* with *bhavanga* because they are at the complete opposite ends of the consciousness spectrum. Therefore, please keep in mind that we are only comparing the similarities for the "interruption" of a stream of consciousness.

Just like sounds can interrupt sleep, they can also interrupt concentration. If you are not in a coma, sounds can take you out of Idle or *bhavanga*. If you hear a sound from your alarm clock that does not mean you were not sleeping before you heard your alarm. That is why we have alarm clocks. They take you out of your sleeping mode or simply wake you up. Therefore, as soon as you hear a sound from your alarm clock, you are no longer in *bhavanga* or no longer sleeping. You are awake. Consciousness does not mix.

The same thing happens with *jhāna*. If you hear sounds, you are no longer in *jhāna*, but that does not mean that you were not in *jhāna* before that moment of sound consciousness. I'll repeat that sentence because it is a double negative and often misunderstood.

If you hear sounds, you are no longer in jhāna, but that does not mean that you were not in jhāna before that moment sound consciousness.

Jhāna is one thing and hearing is another. They do not mix together at all. During one hour or any length of practice time, especially in the beginning stages, one may go in and out of *jhāna* concentration. There will be a period of unbroken and continuous *jhāna* mind moments and then a small amount of interruption cycles. Then one will go back into *jhāna* automatically as I explained before in the chart starting with Access Concentration.

If this happens, the meditator will be able to hear sounds. However, the majority of the time will be experienced with *jhāna* consciousness moments. *We will refer to this jhāna stream with interruption-impurities as "Jhāna-Mode"* rather than just *jhāna*. Sounds can be known in this mode but ignored.

⁷ Although I made this term up, it is just a label for this condition of practice similar to that of Mahā Moggallāna Thera during his first week of practice. He was noted for hearing sounds of elephants bathing and trumpeting while in the fourth *jhāna*. It was said that he did not have full five mastery and his *jhāna* (stream) was therefore not pure. However, it was enough for insight and he later attained

Through development, one may later hear sounds while in *jhāna-mode* but not know they heard them. This is good or at least better than knowing one heard sounds during an hour of *jhāna-mode*. While Buddhism is all about awareness and knowing, this is one situation where non-knowing, is better. I'll explain why.

It is known that we wake up many times during the night while we are in *sleeping-mode*, but we often do not remember it in the morning. If one wants to, one can notice these awakenings. If one pays attention to these awakenings, the awakenings will have more power and disturb his night's sleep. If one does not want to do this, one can just sleep in *sleeping-mode*. Depending on how deep one is in *sleeping-mode*, the less one will awaken. A coma or anesthesia are extreme examples where one never has an awakening while sleeping.

If one pays attention to sounds when they are in *sleeping-mode*, like the noise of a rain storm, one will have difficulty sleeping. At other times, one may think he heard it rain all night, but somehow woke up refreshed. He would awaken and hear a small amount of noise, become unconscious (and not know it) and then again awaken and hear some more noise. It would seem as though he was hearing the rain all night, but maybe it was a chain of several awakenings. He awakens refreshed because he *did* sleep for the majority of the night, but did not know it at the time. In all cases, it is best to not think about noise when you are in *sleeping-mode* and ignore it totally. This is the way to give less power to awakenings and more power to sleep. Some people can sleep all the way through a strong thunder storm and never know it happened. It depends on the abilities of the person, but both are "sleepers" in general terms.

The same thing can happen with *jhāna*. One can pay attention to the times one comes out of *jhāna* by listening for sounds. If they intend to do this, the sounds will have more power and disturb one's ability to go back into *jhāna*. On the other hand, one can just stay in *jhāna-mode* where one may or may not remember if they came out or not. If one determines to stay in *jhāna-mode* and to ignore sounds, the disturbing force will have less power and one can re-enter *jhāna* quickly, automatically and unknowingly just like the average person does when he momentarily awakes during his sleep. The person who believes he slept soundly and does not remember any of his awakenings will be similar to

Arahant. (*Vinaya Pitaka under Pārājika 4 mula and commentaries Paragraph 232*)

the one in *jhāna-mode* who does not remember any momentary breaks. It might also be possible that there are no breaks. When that happens, *one can eventually have a continuous and pure jhāna stream*. So do not pay attention to your breaks in concentration and only pay attention to your meditation object, forgetting about everything else. By doing this, the breaks will become weaker and have less power, giving a more pure concentration experience. Then more pure concentration can develop.

Jhāna happens in the *javana* or E.Motion type of consciousness. Unlike the *bhavanga* or Idle which is passive and a *resultant* consciousness and also has the same causes as one's birth, *jhāna* is an active type of consciousness. It has strong energy and its *kamma* effects are very powerful. There is not enough space in this chapter to explain the *kamma* effects of *jhāna*.

One Pointedness

One Pointedness is often the description given to the quality concentration of *jhāna*. The original word in *Pāli* is *ekaggatā*. It literally means one (*eka*) point or object (*Agga*). It refers to one object in one consciousness moment. It is also a term spread out and expanded outside of a single moment to repeating consecutive consciousness moments to denote *samādhi* concentration. In this multi-repeated-consciousness of one object, the idiomatic phrase "One Track Mind" or "One Track Mindedness" would fit well. If there is only one track, which is often the case for trains, the train cannot go anywhere else. It is glued to the track as it moves. The train cannot turn left, right or turn around or hop on a road or go up a staircase. It is a one track vehicle. *Jhāna* is a "One Track Mind" and the mind does not get "*side-tracked*." This is the key definition for *ekaggatā* when we speak of *samādhi*. The quality of *ekaggatā* is present in all consciousness moments but it is strongest and most apparent in *jhāna* consciousness. Try to look at the picture of the train track and see it as a stream of *jhāna* consciousness moments. *This is a "One Track Mind."* We may discuss this further in Lesson Seven with "Mental Factor Realities."

Conclusion

So now you know that *jhāna* has the same repeated object and consciousness for an extended period of time. There are no interruptions. If there is an interruption, one is outside of *jhāna*. However, one can re-enter *jhāna* quickly, automatically, and unknowingly and that is why we call it "*Jhāna-Mode*" for someone like the first days of Venerable Mahāmoggallāna and just like one who is in "Sleeping-Mode" for the night. It is well known that you will wake up in your sleep maybe seven or so times per night when you turn in your sleep. Sometimes you will remember, sometimes you will not, but you will have slept continuously. You might remember a storm, but again, you have still slept through the night. The same can happen with *jhāna* and you should discuss this with your teacher.

Remember that venerable Mahamoggalana was cleared by the Buddha himself as having *jhāna*, but not to the purified stage when he was a learner. It was enough for him to not only progress, but to move to the subsequent *jhānas*. He had fourth *jhāna* according to the commentaries and never bothered about his progress. Otherwise, he would not have openly spoke about hearing the elephants. Because of this, he was able to progress according to his teacher's advice. He was able to later perfect his concentration to achieve a pure continuous textbook *jhāna*, but did so only after his first attainment of stream winner and during his insight meditation practice. Bare this in your mind and remember that this venerable was very special and foremost in psychic powers and the chief disciple of the Buddha, which needs the most powerful *jhānas* possible. The attainment of Nibbāna was the first priority and his accomplishment.

The main idea is to be concentrated, focused, and to be able to see with your mind. Like sleep, *jhāna* is your resting place and it marks your ability to keep your mind focused on one object in the general sense and it is marked by nondistractedness. This will be useful later on for the insight stages which can be very tedious and tiresome. Concentration is your refuge and focus, which help you to finish your Vipassana task. Remember that *samādhi* only has a purpose related to insight and fruition when following a real Buddhist practice.

mental exercises. Pay attention to the non-changing of object and extended repetitions of moments. If you can hear the "yo" as smooth sound, then use your mind to know the moments of "yo" as individual moments.

2. Focus on your breath until a sign appears, continue to focus on that sign until you enter *jhāna*!

Please see the book *Knowing and Seeing* by The Most Venerable Pa-Auk Sayadaw for further information on attaining *jhāna*.

References: (All are free books available on the Internet)

A Comprehensive Manual of Abhidhamma, Bhikkhu Bodhi

Pages..167-169, (free pdf version from pariyatthi.org)

A Manual of Abhidhamma, Narada pages..65-68, 436-444

Four Elements and Mindfulness of Breathing, Venerable Pa-Auk Sayadaw.

pages 1-15, 88-90

Knowing and Seeing, Venerable Pa-Auk Sayadaw