

The Cyclicity of *Dhamma* – PART 4

The knowledge of change of an object of *Dhamma* is a mental construct (*samskaranaya*) not an inference made about an absolute real change. This means that if one refrains from construction of change, nothing changes. It also means that change is whatever one constructs it to be. In other words, the knowledge of change is the change. In this case, a concept of an observer separated from the observed is irrelevant and not needed to understand change. As a result, this concept of change does not distinguish between changes in general and what may be regarded as “self” change in the conventional sense.

However, to construct change, a comparison must be made between two instances of the “same” object. The questions are: What are the two instances, how do we define its sameness and what allows comparison between the two? To say that a *dhamma* exist between two instances is to acknowledge *aatma*. In part 3 of this series we discussed a way to avoid this dilemma by considering a cyclic relationship between an object constructed from many *dhammas* (e.g. *mind*, P) and a single *dhamma* (e.g. *citta*, d). It was shown that the impermanency of the existential states of *dhammas* in general causes the composite object $P \leftrightarrow d$ to perpetually jump between the states ($P=1, d=0$) and ($P=1, d=1$). The thought was that the mutual dependency of P and d would form a memory and give rise to the idea of sameness between the two states of the composite object even though taken alone a single *dhamma* cannot be considered the same between the two instances ($d=0$ and $d=1$). However, state changes such as $(01) \rightarrow (11)$ or $(11) \rightarrow (01)$ do not automatically create knowledge of change since change is a *samskaranaya*; therefore an active process. To construct knowledge a comparison must be made of the object at two instances. Here we claim that the object $P \leftrightarrow d$ must be in the same state in order to make such a comparison. Thus to make a comparison, a cycle of transition such as $(10) \rightarrow (11) \rightarrow (10)$ and not a mere state change is sufficient. Here at the end of the transition the object is at the same state as it began with and also the state of P remain at $P=1$ throughout the transition hence the memory and the sameness is also sustained. Therefore change can be constructed at the end of this cycle. (A transition of type $(11) \rightarrow (10) \rightarrow (11)$ would also fit this criteria but we will chose to ignore it here because of the similarity of the former to the process of measurement).

The cycle of state transitions $(10) \rightarrow (11) \rightarrow (10)$ is the fundamental unit of memory that allows construction of the smallest change of the composite object $P \leftrightarrow d$. We could further identify the transition $(10) \rightarrow (11)$ as *uppada* and the transition $(11) \rightarrow (10)$ as *bhanga* and the state (11) as *tithi* referring to the states of d , *citta*. This provides a model for the concept of *kshana* in general and *cittakshanaya* in the case of d being *citta*. However it should be noted that in this case we are considering the states of a composite object ($P \leftrightarrow d$ or *mind* \leftrightarrow *citta* if necessary) and not of a single *citta*. This cycle of transitions, $(10) \rightarrow (11) \rightarrow (10)$, or a *kshana* repeats itself because the composite object jumps between (10) and (11) endlessly. At the end of each cycle, the knowledge of change can be constructed by comparing with the previous (10) state. Due to the construction of change at the end of each cycle, the memory of the object must also undergo change. Therefore we could say that at end of each cycle of transition or *kshana*

the memory is renewed. It is to this continuous renewal of memory that the concept of time is appointed (*pannati*). In the remainder of this article the word Kalaya is used in place of time to distinguish the proposed concept of time from the linear, absolute physical entity that is called Time.

In summary, a *kshana* is a cycle of events associated with a memory that enables construction of the smallest change of a composite object of Dhamma. The concept Kalaya is appointed (*pannati*) to the continuous renewal of this memory. However a *kshanaya* is neither a point nor an interval of this Kalaya.

Although the composite object undergoes change in Kalaya, the cycle (10) → (11) → (10) cannot be broken down in Kalaya. Therefore the object of dhamma cannot be captured either in state (10) or in state (11) in Kalaya. Since these are the only two states that the object can exist in, no stage of the object can be pin pointed in Kalaya during its purported change. In this sense Kalaya is a non-physical entity compared to Time.

In part 3 of this series we assumed that the continuous state change of dhammas took place in Time. It is clear that the idea of state jumps in Time is an abstract concept that may not be known as a *prathyaksha*. However we will continue to use the concept of absolute, physical Time in order to understand and develop this story but will keep its definition separate from that of Kalaya.

In the preceding discussion we assumed ***P*** to be a *samskaranaya* of large number of dhammas whose existential states obey, $P = p_1 \vee p_2 \vee p_3 \dots \vee p_n$ where p_i are the constituent *dhammas* whereas ***d*** is a single dhamma. This gives ***P*** a probability to exist for a longer period (in Time) compared to ***d***, the single dhamma which undergo continuous state change. (There could be other reasons as to why a certain object of dhamma prevails longer than the others. Could we say karmic energy?). In general, change can be constructed via this mechanism by assuming both ***P*** and ***d*** to be objects made out of any number of dhammas given ***P*** exist for a longer Time compared to ***d***. In this case both ***P*** and ***d*** undergo cycles of (10) → (11) → (10) with ***d*** having a higher frequency *kshana* than that of ***P***. That means, during the ***P***'s existence ***P*** ↔ ***d*** undergo many cycles of (10) → (11) → (10). The fact that a *rupa-kshana* consist of many number of *citta-kshana* could be understood by considering a cyclic relationship between *rupa* and *citta* with ***P*** as *rupa* and ***d*** as *citta*. Since it is the existing state of ***P*** (i.e. ***P***=1) that enables memory between instances of composite object ***P*** ↔ ***d***, once ***P*** becomes none exist that memory is destroyed and consequently Kalaya ceases to flow. In the next instance when ***P*** comes to exist again, a new memory and a new Kalaya are born and continue on as before. Thus when ***P*** is finite (in constituent dhammas or in karmic energy), Kalaya has a beginning and an end.

In terms of an absolute Time, the Time interval of the cycle (10) → (11) → (10) of ***P*** and ***d*** is determined by the respective number of constituent dhammas (or the Karmic energy?) of ***P*** and ***d***. The length of Kalaya in Time is the Time interval of the cycle (10) → (11) → (10) of ***P***. The relative lengths of ***P*** and ***d*** in Time determine the number of

kshana of *d* between the beginning and the end of a Kalaya. Overall these properties characterize the objectivity of Kalaya appointed for a pair of objects of dhamma.

In general there could be many objects of Dhamma. According part 2 of this series, all such objects must be in cyclic relationship with all other objects. Therefore, following the same mechanism described above, a memory can be formed between any two objects such a way that an objective Kalaya is appointed inherent to that pair. Thus there could be multiple parallel memories/Kalayas at a given instance although one may focus or give attention to only one pair at a time. Kalaya of each pair is characterized by an inherent *kshana*, and a beginning and an end in absolute Time. Each pair of object also carries a particular memory that is renewed at each *kshana*. Like Kalaya, the memory associated with it also has a beginning in absolute Time. Since all objects are mutually dependent with each other it is possible that the attention of the mind could be switched from one Kalaya to another. Then by switching to a Kalaya that has a beginning before the current Kalaya in absolute time one could access past memories, even in previous *bhawas*.

In conclusion, a *kshana* is not an interval in Kalaya but a unit cycle of events (10) → (11) → (10) that construct the smallest change of an object of dhamma. Impermanency causes this cycle to repeat causing continuous renewal of memory associated with the object. It is to this renewal of memory that Kalaya is appointed. Kalaya is an objective entity characterized by the properties of dhamma that constitute the object that gives rise to it. In general there could be many objects in mutual dependency. Thus there can be multiple parallel Kalaya, each associated with distinct memories.

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