6. The *jhānas*: *Dhamma* made easy

Many centuries ago, the question of the role of *samādhi* in *satipaṭṭhāna* opened up a contentious *Dhammic* rift that remains with us today. The core question is: "How can the investigation or knowledge of something as complex and wise as *Dhamma* be experienced in the deep stillness of *jhāna*?" The title of this chapter suggests that an encouraging answer to this question is forthcoming. However, the almost unanimously accepted answer to this core question among scholars today is: *"Investigation of Dhamma can not occur in jhāna!"*

In spite of this consensus, its adherents manage to split themselves further into two camps with regard to whether *Dhamma* investigation or *jhāna* is primary in the path to liberation. The following seems to be a rough overview of the membership of the two camps overview.[1]

Contemplating *Dhamma* is primary. Gombrich, Conze, Rahula, Collins, Carrithers, Masefield, Lindtner, Hamilton, and also most modern *Vipassanā* traditions.

Typically, *Samādhi* is thereby regarded as a preparation for contemplation.

***Jhāna* is primary.** Griffiths, Vetter, Wynne, Bronkhorst, Rhys Davids, Norman, Cousing, Gethin, Anālayo, Sujato, Kuan, Samuel, Brahmāli.

Often deep *jhāna* is regarded as the (ofttimes mystical) liberating experience itself, and *Dhamma* as a kind of secondary, conceptual bi-product. Sometimes contemplating *Dhamma* is regarded as a preparation for *jhāna*.

On the other hand, Shulman challenges two questionable assumptions underlying the presumed incompatibility of *Dhamma* investigation and *jhāna.* In his 2014 book *Rethinking the Buddha*, he argues:

(1) that *Dhamma*, in the very earliest texts, is not generally abstract philosophy in need of higher reasoning processes, but rather for the most part descriptive of direct experience, and
(2) that repeated *Dhamma* investigation itself induces a "restructuring" or

1. Shulman (2014, pp. 7-12).

> "internalization" of content conducive to a more spontaneous means of apprehension.

In chapter five I have taken his first point to heart in showing how each of the *Dhamma* teachings referred to in the *Satipaṭṭhāna Sutta* has a nuts-and-bolts interpretation in terms of direct observables. In this final chapter, I will focus on Shulman's second point. We will learn that internalization is already intrinsic to all human skill acquisition, from learning to walk or drive a car, to weaving or to playing the accordion. In each case, it turns know-what into a progressively more spontaneous, intuitive and non-conceptual know-how, easily, with repeated practice, within the capabilities of the still mind. In fact, we will see how *jhāna* serves to enable the practice of investigation to reach ever greater refinement as internalization puts it out of the reach of the more deliberate reasoning processes, with remarkable results.

It should also be appreciated by the end of this chapter that if we equate *satipaṭṭhāna* investigation with *vipassanā*, and *jhāna* with *samatha*, the Buddha's few statements about the need to balance these in practice make sense. The Buddha said,

> Again, a *bhikkhu* develops *samatha* and *vipassanā* in conjunction. As he is developing *samatha* and *vipassanā* in conjunction, the path is generated. He pursues this path, develops it and cultivates it. As he is pursuing, developing and cultivating this path, the fetters are abandoned and the underlying dispositions are uprooted. (AN 4.170)

6.1. Acquiring the skill of *Dhamma*

A typical practice (Buddhist or otherwise) has two aspects:

(1) *Performance,* and
(2) *Development and cultivation,* aka *skill acquisition*.

Consider the practice of *mettā*. We practice *mettā* in everyday situations as acts of sincere kindness, with immediate benefits for self and others. This is our performance. At the same time, the more we practice, the more *mettā* becomes inscribed as a disposition, and eventually as an intrinsic aspect of our character. In short, we "do" and we "learn by doing." This is the very nature of human skill acquisition. Buddhism, as a practice toward awakening, tends to put great weight on the development and cultivation of such practice skills. This is why we also develop *mettā* as a contemplative practice, generally on the cushion, without the *immediate* benefit in performing *mettā* for others. *Satipaṭṭhāna* is also such a contemplative practice, focused on acquiring the

skill of apprehending the world in accordance with *Dhamma*.

Full skillful engagement is the key to the optimal performance of a practice task, and with enough repetition over time the optimal development of our skill in performing that task in the future. Throughout the early texts we repeatedly find the phrase 'development and cultivation' (*bhāvanā bahulīkatā*) in association with various practices to refer to skill acquisition. *Bahulīkatā* 'cultivation' (literally 'done a lot') refers to the repetition required for the cumulative development (*bhāvanā*) of the skill. This applies to *mettā* contemplation, to observation of precepts, to *satipaṭṭhāna* contemplation, or for that matter to bird-watching, fly-fishing, or driving a car.

6.1.1. How you acquired the skill of driving a car. Let's consider the acquisition of skill in the domain of driving a car. I will assume that you are now a relatively expert driver, but that you were not always so. Let's look back on your learning curve.

Stage One. At the time of your first driving lesson, your skill was largely limited to *know-what*, that is, it was based on conceptual instruction. You learned which is the brake and which is the gas pedal, what the effect of turning the steering wheel clockwise is, and so on. If you had gotten behind the wheel at the beginning of your training and driven in real traffic, it would have been impossible to know, all at once, when to turn, to speed up, to slow down or to stop, much less how to navigate among the swirl of cars, curbs, street signs, bikes, kites, angry drivers honking behind, and pedestrians scattering in front, while fearing for your own dear life. That would have required know-how. Luckily, at the beginning, your instructor took you to an empty parking lot where you could practice and become adept at one sub-skill at a time in preparation for entering real traffic.

Stage Two. With further practice, you might remember, there were a few months in which driving was exhilarating. You were fully engaged in both performance and acquisition of this skill, challenged but confident, exhilarated, for it seemed that every time you got behind the wheel it was with more skill than the time before.[2] This second stage was the most rewarding. You may recall other such elated and productive periods of full skillful engagement also in learning to play chess, the tuba or tennis; in training to be a brain surgeon or a welder; or in learning meditation. Pry children away from their passive digital distractions, and children experience this exhilaration

2. *Full skillful engagement* is defined in 2.1.2 and developed throughout chapter 2. There it is identified with the *satipaṭṭhāna faculties*, listed at the beginning of the *Satipaṭṭhāna Sutta*: "… ardent, discerning, and recollective, having put away covetousness and grief for the world …"

quite readily in play. It is also what attracts adults to hobbies. This exhilaration is *pīti* (aka 'rapture') in Pali.[3]

Stage Three. Since reaching this stage, you drive almost effortlessly. You barely notice, and sometimes may forget altogether, that you are driving. You are so adept that the car seems to drive itself. Unchallenged, most of your attention is now free to talk on the phone, drink coffee, listen to the radio, text, honk at lesser drivers, and lean out the window to flirt with pedestrians, all while the car is conveying you to your destination. Most of the various operations that constitute successful driving, once so difficult, now happen with better results than ever, quickly, quietly, spontaneously, without effort or thought, intuitively, under the radar. The downside is that you are no longer fully engaged, nor exhilarated. The development and cultivation of the skill of driving has reached a plateau. In fact, driving has become routine and a bit boring, which is why you seek the above-mentioned distractions.

The same learning curve is evident in the practice of fly fishing, chess, basketball, crochet, the culinary arts, everyday "mindfulness," reading, *satipaṭṭhāna*, and shuffling cards.[4]

6.1.2. Internalization. What is most remarkable in this process of skill acquisition is that, even though the task to be performed remains the same, your cognitive faculties are, by the second stage, performing the task in a very efficient manner, with very little expenditure cognitive energy. The skill has become at least partially *internalized*, and relies primarily on a different set of cognitive faculties than it did at the beginning of the first stage. You didn't have to think so much. By the third stage, the energy required for thought and careful deliberation, critical in the first stage, has become almost entirely reallocated to distractions. The task of driving itself seems to be handled largely unconsciously, intuitively, spontaneously. This reallocation of faculties is *internalization*; it makes performance easy.

Understanding internalization will provide a good basis for understanding the role of *jhāna* below. Cognitive scientists have modeled[5] internalization in

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3. *Pīti* is the fourth awaking factor, following the three factors of recollection, *dhamma*-investigation, and energy, which describe full skillful engagement in *satipaṭṭhāna* practice, and followed by tranquility, *samādhi* and equanimity (see 1.5.2).

4. The three phases of being over-challenged, comfortably challenged, and under-challenged are described in psychology by Csikszentmihali (1997, pp. 30-32), who associates the first with anxiety, the third with boredom, and only the second with producing conditions conducive to "flow," which we will introduce momentarily.

5. This model is called *dual-process theory*. See Kahneman (2011), Gladwell (2005), Bronkhorst (2023), T.D. Wilson (2002), McMahan (2023, p. 73), etc.

terms of two distinct systems that generally work cooperatively in parallel.

The *explicit* system is conscious, conceptually based, deliberate and effortful. It is characterized by attention, agency, choice, and reasoning, and it is very clever in thinking its way through novel problems. The explicit system is very flexible and adaptable. However, it is an extremely limited resource, it operates very slowly, it consumes a lot of energy, it tires easily, and it is easily overwhelmed. It is a real gas-guzzler.[6]

The *implicit* system works virtually effortlessly under the radar of consciousness, intuitively, spontaneously and automatically. It is an essentially unlimited resource, and operates super-fast, almost tirelessly. Its great talent is in detecting, remembering and responding to complex patterns[7] that are obscure to the conceptually based explicit system. But to do what it does so well, it must be trained over time through repeated practice.

The strength of the explicit system is in its power to reason through novel situations as they are first encountered, whereas the implicit system requires prior habituation to recurring situations. Once trained by the explicit system, the implicit system will operate in an astonishingly refined and efficient manner, and will also grow its skill beyond the conscious reach of the explicit system, fine-tuning itself as it detects ever more subtle patterns in the environment, so that it will commonly perform the task more precisely than the explicit system can even comprehend. As a result the implicit system will eventually be able to produce intuitions or hunches, that arise in the blink of an eye, and that are often far more accurate than the results of long explicit deliberation.[8] Almost all of human cognition runs in the implicit system.

Internalization can be thought of as a process whereby explicit skill or know-how is "offloaded" onto the implicit system. It is the primary learning process in acquiring a skill. Internalization makes the difference between being a novice and being an expert. It makes the difference between knowing what the Buddha taught, and seeing the world through the eyes of the Buddha.

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6. The sluggishness of the explicit system is reflected in the fact that it actually consumes glucose in the brain at a very high rate, whose supply is easily exhausted, a condition suggestively called "ego-depletion" in neuroscience.

7. T.D. Wilson (2002, pp. 49, 66).

8. This is the theme of Gladwell's (2005) popular book.

6.2. Mastering the skill of *Dhamma*

We saw above that continued skill acquisition falters at the third stage of the ubiquitous learning curve. It is there that we stopped becoming better drivers, or better singers in the shower. The skill of walking (a fruit of toddlerhood) would otherwise by now have made gymnasts, acrobats or ballet dancers of us all. We still play the ukulele about as well as we did twenty years ago, no better. Studies indicate that physicians, on average, actually become *worse* at performing their jobs as they gain experience beyond a certain threshold.[9]

Recall that in the first stage we are over-challenged and anxious as we attempt to acquire a new skill. In the second stage we are fully charged: Our skills are challenged ever anew, and we are delighted to see our skills develop with each performance. We have little problem with wandering attention, since rapture sustains ardency and full skillful engagement. We humans love this stage. By the third stage, the practice typically lacks challenge and seems routine. Our practice has become the victim or its own success. It has became internalized and effortless, it has released the excess energy that had been consumed by extrinsic system in the second phase, and turned it to multitasking, or to a dimwitted scattering of attention. We have become bored, disengaged, and the development and cultivation of our skill has faltered. Skill acquisition has reached a plateau.

However, the plateau in skill acquisition is not inevitable. We know that because there those among us who continue to develop and delight in a chosen skill, eventually to achieve *mastery*. Consider the case of our pianist who began training years ago in childhood, continues to develop her skills decades later, and is now widely admired as a virtuosa, through whose fingers the music today passes effortlessly and unimpeded to fill the concert hall. How did she do it? The Buddhist *arahant* has become at least equally adept in their mastery of the more fundamental skills of virtue and wisdom.

6.2.1. Remaining fully engaged. There are a number of ways to remain skillfully engaged, so as never to be mired in stage three of the learning curve. For instance, we might make the practice task ever more challenging. Teenage boys take this principle to heart in continuing to challenge and develop their driving skills beyond those of the law-abiding by exceeding posted speed limits and other legally imposed constraints, or by drag-racing on open roads. Zen practitioners, on the other hand, make even basic tasks, like walking, more challenging by imposing additional, exacting standards, making a ritual out of each detail of the task to be performed. Another option is to leave the task as it

9. Ericsson & Pool (2016, p. 133).

is, but to increase our challenge by handicapping ourselves. An adept chess player in the midst of mediocre players is known to play without a queen. A soldier learns to disassemble and reassemble his rifle blindfolded.

Full engagement maintains itself where the incentive is high. I imagine that a hunter or a sniper must maintain full engagement in the skill of alertness for long periods of time because their livelihoods depend on it, and then, at a brief critical moment, engage themselves fully in another skill, the skill of the shot upon spotting prey. The popularity of dangerous hobbies, like hang-gliding or rock climbing, can be explained as retaining stage-two rapture through fear of a fatal distraction. We can also incentivize full engagement by risking our social reputation in competition, as in chess matches, bake-offs, and duels.[10] An additional source of incentive comes in Buddhist practice from refuge, from enormous faith or conviction in the efficacy of the practice in producing great benefit. The *satipaṭṭhāna* faculty of *ardency* (discussed in chapter 2) reflects such an incentive.

In 4.2 we learned of the Buddha's parable about the gent who must carry a bowl of oil without spilling a drop, lest he lose his head. The long internalized skill of walking while carrying something is thereby incentivized to a higher standard of performance, once again through fear of a fatal distraction, the danger of which is bumped up in the parable by the presence of "the most beautiful girl in the land" singing and dancing. The Buddha then tells the monks that they must maintain that level of attention as they move about.

This brings us to *mental discipline*, the most characteristic means in Buddhist practice for foregoing stage three of the learning curve. The discipline in subduing distractions is particularly relevant here. In Buddhist practice, we are expected to be engaged in a *single* practice task. Distractions arise when attention overshoots the concerns of the current practice task. When attention is confined to the concerns of the practice task, it is said to be *secluded*. We also say the mind is *one-centered* (*ekagga*), or *concentrated*, or *secluded* from irrelevant concerns. Acquiring or maintaining this state is a fundamental skill learned in Buddhist practice. The hindrances (*nīvarana*) are common types of distractions that we train to work with.

Notice that the scope of concentration here must minimally encompass the concerns of the practice task, lest it squelch it all together. *It cannot be one-pointed.* If we want to remain fully engaged, for instance, in the non-Dhammic task of washing dishes, the scope of concern must encompass movements of

10. Such competition is generally avoided in Buddhist practice, because it is a ready source of craving.

the hands, the scrubbing, the sponge, the detergent, the know-how acquired through years of washing dishes, the dishes themselves, etc. One-pointedness would limit attention to, say, the fingernail of the right index finger.[11] One-centeredness, on the other hand, wraps snuggly around the entire scope of relevance, the *theme* or concern of the task.

6.2.2. Tranquility and *samādhi*. In this section I present the gist of my thesis.

The *seven awakening factors*[12] form a conditional chain that looks like this,

> recollection → investigation of *dhammas* → energy → rapture → tranquility → *samādhi* → equanimity.

The first three factors describe the investigation of *Dhamma* and its requisites, that is, it describes *satipaṭṭhāna* practice (see 3.1.1). *Dhamma* investigation focuses on one particular teaching at a time, and with regard to a particularly field of observables. These constitute its *theme* (*nimitta*) or scope of concern. When this practice is fully engaged, rapture arises. We've already found this in association with stage two of the learning curve described above. Rapture sidesteps distraction, because it is already having too much fun with full engagement. The mind becomes still as the loss of the familiar mix of potential distractions allows the practice to be performed at a lower energy level. This stillness is tranquility (*passaddhi*), and it bottoms out in one-centeredness, where the energy level of the mind is optimally adjusted to the current theme, that is, the concerns of the task at hand, which continues throughout the sequence of factors. One-centeredness also marks entrance into *samādhi*, within which full skillful engagement of the practice task continues.

> *Samādhi* is one-centeredness of mind. (MN 34 i 301)

Let me pause here to address a couple of potential objections. This account may seem out of accord with some readers' meditation experiences. Rather, this account of the awakening factors seems to suggest a *natural* process in which *samādhi* arises through a condition-driven chain that begins with a particularly high and energetic degree of skillful engagement, rather than with a complete withdrawal from any activity. Moreover, at no point do we stop to apply a special technique to induce the stillness of *samādhi*, such as concentrating on the breath at the nostrils, or on a kasiṇa.

Although many later traditions suggest otherwise, what I have described is exactly what the early texts tell us. First, the absence of a special mechanism

11. For the across-the-board justification for translating *ekagga* as 'one-centeredness' see 3.2.

12. See 1.5.2, 5.3.3.

in the early texts to induce *samādhi* has been pointed out by Vetter (1988, p. xxv), Arbel (2017, especially pp. 46, 156), and Polak (2011, p. 206). Polak (2024, ch. 5) devotes a whole chapter to this issue. He also points out (p. 260) that the Chan/Zen school has remained in accord with the early account, making no use of a special mechanism to induce *samādhi*.

Second, there are many instances in the early texts that follow the same pattern exhibited in the seven factors of awakening, that is, that begin with engagement in a primary practice then lead through the same chain of conditions "rapture→ tranquility→ *samādhi"* or (in a more detailed version) "delight → rapture → tranquility → pleasure → *samādhi*." These primary practices are heavy on ethics, refuge, and include sense restraint, even *Dhamma* study, in addition to *Dhamma* investigation.[13]

Third, the Buddha explicity describes the absence of effort in the arising of *samādhi*,

> Just as, bhikkhus, when rain pours down in thick droplets on a mountain top, the water flows down along the slope and fills the cleft, gullies, and creeks; these, being full, fill up the pools; these, being full, fill up the lakes; these, being full, fill up the streams; these, being full, fill up the rivers; and these, being full, fill up the great ocean; so too, … with faith as proximate cause, delight; with delight as proximate cause, rapture; with rapture as proximate cause, tranquility; with tranquility as proximate cause, pleasure; with pleasure as proximate cause, *samādhi*; with *samādhi* as proximate cause, the knowledge and vision of things as they really are. (SN 12.23)

That this transition to *samādhi* is a natural process, suggests that it is already present in human cognition independently of Buddhism. In fact that this process continues into the *jhānas* will be evident in positive psychology and neuropsychology, which we will look at in 6.3.1

The process of transition to *samādhi* is a natural process, but it is also characteristically Buddhist. In Buddhist practice it is "developed and cultivated" (*bhāvitā bahulīkatā*) into a refined skill in itself,[14] internalized through repetition, so that it arises spontaneously as before, but much more readily.

6.2.3. Perfection. Complete mastery of a skill is "virtuosity" (at least I will define it that way). With virtuosity one can perform even an extremely

13. See 3.1.1 for more on this.

14. Arbel (2017, p. 39).

complex task with virtually no help from the explicit system. Consider, once again, the case of a virtuosa pianist, having seated herself in front of a live audience, the music seems simply to appear at her fingertips with no effort at all on her part.[15] She is so competent and confident that she can entrust the performance entirely to the implicit system. As a result, she might have no sense that she is doing anything at all, or is even present. Charley Parker once said, "Don't play the saxophone. Let it play you."[16] Remarkably, if the explicit system—with all its energetic thinking and deliberating—intrudes even for a moment, the performer is at risk of choking up, such that the performance might easily go awry.

Consider the similar case of the *arahant*: He has developed and cultivated in *Dhamma* for decades, perhaps lifetimes. He no longer has the sense of being an agent: he creates no *kamma*![17] He witnesses an implicit, intuitive, non-conceptual, improvisational process of appropriate conduct and perception in response to the world's contingencies that adheres to *Dhammic* standards.[18] He has thoroughly habituated virtuous patterns of action (precepts, generosity, kindness and compassion). He exhibits virtue but does not identify as a person of virtue (his behavior arises spontaneously).[19] He has developed and cultivated the wisdom teachings, but now simply "sees with the Buddha's spectacles."[20]

Virtuosity can take a lifetime to attain, and in the Buddhist case we are allowed multiple lifetimes. But all of us develop, cultivate and perfect minor skills at some point in our lives, such a memorizing a poem, to the extent that the intrusion of the external system becomes an affliction to the effortless performance of the implicit system. The possibility of this level of perfection tells us the the human mind is capable of performing extremely complex skilled tasks silently, without the participation of the faculties bound to the explicit system, particularly without thought and deliberation. It therefore comes as no surprise that the *attenuation* of gas-guzzling explicit faculties, such as planning or pondering, under certain conditions are built into human cognition. We've all experienced this.

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15. Ericsson & Pool (2016, p. 81).

16. Slingerland (2014, p. 1).

17. SN 35.145, AN 4.235.

18. Garfield (2021, p. 24).

19. He is *sīlavā*, but not *sīla-maya*. MN 78 ii 27.

20. Gombrich (1997, p. 36). Shulman (2014, p. 111) refers to "a method by which philosophy [i.e., *Dharma*] is turned into an active way of seeing," and Kuan (2015, pp. 58-9) to directing perception to conform to *Dhamma* such that wisdom results.

Consider an unanticipated emergency situation, like unexpectedly driving onto an oil slick at a high speed. Most readers will likely have experienced something like this: without thinking, the body simply responds, usually with surprising adeptness and successfully,[21] before we are even fully cognizant of the danger. The mind has shut down the explicit system altogether, and given full control to the implicit system. Why? Because the explicit system is so slow that whatever danger looms will have played itself out long before the explicit system would have been able to respond. Intermittent curtailment is most easily observed at *critical moments* when the potentially winning throw is executed, when the hunter's shot is fired, when the surgeon makes the critical incision, and so on. At that moment, the world seems to reduce to the basics: gun and prey, ball and basket, scalpel and brain tissue. All is silent and even the breath comes to a momentary halt. If there is an empathetic audience, even some of the viewers' faculties come to a halt, rendering even the most loquacious of chatterboxes silent. These are spontaneous, momentary curtailments of explicit faculties.

6.3. The *jhānas*

We have seen that the faculty of *samādhi* is defined as one-centeredness (*ekagga*), the narrowing of the scope of attention ideally down to the concerns of a primary practice task (guarding the senses, mettā contemplation, investigation of *Dhamma*, recollection of the triple gem, etc.), to exclude all else. Accordingly the word *samādhi* is most often translated as 'concentration.' *Samādhi* in this function is critical to the efficiency of both performance and development of the skill of practice. However, this entails that concentration can rarely be "one-pointed" without forsaking the practice task. One-pointedness would serve neither the virtuosa pianist nor the surgeon well.

Moreover, beyond concentration there is a second means by which the function of *samādhi* is fulfilled: through appropriate attenuation of explicit faculties. To the extent that the skill of practice has been offloaded onto the implicit system through internalization, costly explicit faculties play a diminished role in practice. Withdrawing unneeded faculties often allows a practice task to be performed in a highly efficient, intuitive and spontaneous manner. I call the process by which explicit cognitive faculties are attenuated or shut down *curtailment*. The second, third and fourth jhānas are products of curtailment, along with the change in active *jhāna* factors as we progress through the four *jhānas*.

21. Kahneman (2011, p. 55).

6.3.1. Curtailment. Curtailment occurs in a predictable pattern, described in early Buddhism with regard to the four *jhānas*. The *jhānas* represent stages of initial concentration and progressive curtailment. Like *samādhi* itself, the *jhānas* seem to unfold naturally and effortless as needed, leading to the final awakening factor of equanimity (*upekkhā*), but become familiarized and highly refined in Buddhist practice. Under everyday, mundane circumstances a range of cognitive faculties is active at any one time: in support of analysis, perception, presumption of what is not directly visible, planning, and so on. Just as *samādhi* is a natural process, the *jhānas* are expected to unfold naturally. Accordingly, we find everyday curtailment independently of Buddhist practice as a natural process, generally under conditions that require a time-critical response.

Research in neuropsychology and in positive psychology confirm the natural process of curtailment and its experiential qualities in human cognition, under conditions similar to those that give rise to *samādhi* in the Buddhist context. "Optimal experience" or "flow"[22] is an important field of study within positive psychology that concerns experiences which are repeatedly described by subjects (unprompted) as "flow." A composer, for instance, describes it this way:

> "You yourself are in an ecstatic state to such a point that you feel as though you almost don't exist. I've experienced this time and time again. My hand seems devoid of myself, and I have nothing to do with what is happening. I just sit there watching it in a state of awe and wonderment. And it just flows out by itself."

The domains in which flow has been studied are quite diverse, included music, rock climbing, dancing, sailing, chess, basketball and so on. Flow generally involves states of elation, of intense concentration and of altered consciousness. Flow experiences almost always arise naturally under conditions of full skillful engagement in some task, particularly in which someone has attained a high level of expertise. There is no space for distraction or irrelevant thoughts; time is often distorted and self-consciousness disappears.[23] These qualities are also familiar in the deeper *jhānas*.

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22. Csikszentmihalyi (1990) is the most accessible introduction to flow theory, by its leading proponent. There is also a substantial academic literature. Csikszentmihalyi recognizes (pp. 103-6) a possible link between flow experience and *samādhi* (albeit *samādhi* as defined in later Yoga traditions). Bronkhorst (2023), a scholar of Buddhism, also recognizes the relationship of flow to *samādhi*.

23. Csikszentmihalyi (1997, p. 31).

"Transient hypofrontality"[24] in neuropsychology refers to a mechanism for regular "down-regulation" (seemingly equivalent to "curtailment") of cognitive faculties related to "cognitive control" (seemingly equivalent to "explicit faculties"). This mechanism is located in a particular region of the brain. The resulting curtailment leads to corresponding "altered states of consciousness," found, for instance, within dreaming, within endurance running ("runner's high"), within meditation, within hypnosis, and with use of certain drugs. The list of down-regulated faculties given in the cited paper are high-level functions similar to those attenuated in *jhāna*. Flow is recognized as an experiential correlate of "a state of optimized task-specific processing that results from domain-specific expertise paired with a reduction in cognitive control."[25]

In short, the mechanism of curtailment, its conditioning factors, its experiential correlates, and even the region of the brain responsible for curtailment are growing areas of scientific investigation, and seem to correspond in their relevant features to the account of *samādhi* and *jhāna* presented here. A relationship of Buddhist *samādhi* both to flow and to transient hypofrontality has been suggested by scholars in those fields and in Buddhist scholarship. However, as far as I know, this relationship has never been explored further. I suspect the reason is the lack of a consensus among Buddhist scholars of precisely what the experience of *samādhi* and *jhāna* is.

The early texts define the four *jhānas* in terms of which *jhāna factors* are present in each, giving us a basis for learning to navigate among the *jhānas* as appropriate. Abstracting away the minor *jhāna* factors, each of the *jhānas* can be quickly characterized in terms of progressive curtailment as follows:

- (1st) Concentration to the degree of seclusion (*vivicca*) and one-centeredness (*ekagga*) around the theme of *samādhi* (*samādhi-nimitta*).
- (2nd) Curtailment of thought and deliberation (*vitakka-vicāra*).
- (3rd) Curtailment of rapture (*pīti*).
- (4th) Curtailment of pain and pleasure (*dukkha-sukkha*).

Effectively, the *jhānas* make practice in accordance with *Dhamma* easy. The *jhānas* work in close collaboration with the process of internalization to facilitate the offloading of explicit functions onto the implicit system and to encourage further fine-grained processing within the implicit system. Notice that our adeptness in performing the practice task (degree to which our know-

24. Dietrich (2003).

25. The Buddhist scholar Bronkhorst (2023) briefly suggests the relationship of this work to the *jhānas*, particularly with regard to altered states of consciousness.

how is internalized) should in principle be appropriately matched against the level of *jhāna* in which we abide.[26] I maintain that this is what is sought in discussions *vipassanā* and *samatha*, where the practice task is *satipaṭṭāna*.

Let's look at standard descriptions of the four *jhānas* from the early texts to see how this account works out.

6.3.2. The first *jhāna*. Before we enter the first *jhāna*, we have become skillfully engaged in some practice task (see 3.3), equivalent to the first three awakening factors (see 6.2.2). For instance, suppose we first undertake the *satipaṭṭhāna* theme of *investigation of elements* with respect to *impermanence* (Ex I.5 in 5.0). As a novice in this particular practice, we have been developing a conceptual understanding of the teaching supported by thinking and deliberation, while attention is centered around this concern. This theme will be retained in each *jhāna*, although it will be experienced differently in each. Full skillful engagement in investigating the theme has already resulted in rapture, as described in the awakening factors.

Now we enter the first *jhāna*:

> (1st) Here, quite secluded from sensual pleasures, secluded from unwholesome states, a *bhikkhu* enters upon and abides in the first *jhāna*, which is accompanied by thought and deliberation, with rapture and pleasure born of seclusion.

Recall that *seclusion* is the base level of concentration in the definition of full skillful engagement (see 6.2.1-2 above), equated with "having put away covetousness and grief for the world." "Born of seclusion" indicates that this level of concentration *precedes* entry into the first *jhāna*. What is not mentioned here, and mentioned rarely in similar texts, is the slightly deeper level of one-centeredness definitive of *samādhi*.[27] "Thought and deliberation" (*vitakka-vicāra*) is a discursive cognitive faculty (or rather two) that is capable of complex reasoning, of presuming what is not directly observable, of spinning narratives and so on.[28] It is already present in most of everyday life, but is certainly active if we are first grappling conceptually as a novice, for instance, with regard to our particular *satipaṭṭhāna* exercise.

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26. For instance in AN 4.94.

27. This seems to be a point of equivocation here in the early texts: do we enter the first *jhāna* with seclusion alone, or also with one-pointedness? The texts suggest the former, but then *samādhi*, by definition, arises with the latter.

28. "Thought and deliberation are the verbal fabrication, one breaks into speech." (MN 44 i 301)

The *jhānas* will get progressively deeper in large increments. The first *jhāna* is relatively shallow: with no faculties yet curtailed, it places no limits on our ability to conceptualize and reason *explicitly* about even the most complex *Dhamma* teaching. Given the factor of seclusion, and without the rambling generally associated with everyday thought and deliberation, the first *jhāna* is nonetheless experienced as a composed meditative state, distinct from normal human consciousness.[29]

6.3.3. The second *jhāna*. When we have practiced the theme long and well in the first *jhāna*, such that practice is no longer a challenge, our degree of internalization suffices to curtail the dominant explicit faculty of the preceding *jhāna*, which is thought and deliberation.

> (2nd) With the stilling of thought and deliberation, he enters upon and abides in the second *jhāna*, which has tranquility and equipoise of mind without thought and deliberation, with rapture and pleasure born of *samādhi*.

"Born of *samādhi*" tells us that *samādhi* (and therefore one-centeredness) is present prior to the onset of the second *jhāna*. "Tranquility," like rapture, is an awakening factor antecedent to *samādhi* (see 3.1, 6.2.2). "Equapoise" (*ekodibhāva*) is commonly regarded as synonym for one-centeredness (*ekaggatā*), which is already implied by *samādhi*.[30]

"The *stilling* of thought and deliberation" is the curtailment that distinguishes the second *jhāna*. The state of consciousness is altered as presumptions and abstractions (otherwise sustained through thought and deliberation) disappear in favor of simple, direct, and very vivid perception of what can be directly observed. We get the sense that we are just sitting with the various details of the ongoing theme. If the theme seems to elude us,[31] it is appropriate to return to the first *jhāna*. Otherwise, further investigation has significantly, but not entirely, been entrusted to the implicit system, which works silently; we are not totally aware of exactly what it is doing. The Buddha accordingly calls this stage of curtailment "noble silence" (*ariya tuṇhī-bhāva*),[32] which will continue into the two deeper *jhānas*. It is the explicit system that has become still, just

29. As we go along, I will include some qualities of the meditator's subjective experience.

30. Kumāra (2022, pp. 49-52) makes the case etymologically for the translation 'equipoise.' I will provide a potential alternative interpretation in a footnote at the end of this section.

31. *Samatha* has gotten ahead of *vipassanā*, in the case of *Dhamma* investigation.

32. E.g., SN 21.1 ii 273.

in time, for its excess energy might otherwise have turned to distraction and multitasking. We are still fully engaged in the practice task, but at a lower energy level.

6.3.4. The third jhāna. When we have practiced under the current theme repeatedly and thoroughly in the second *jhāna*, our degree of internalization suffices to justify dropping rapture, which has been energizing the remaining explicit faculties.

> (3rd) With the fading away as well of rapture, he abides in equanimity, recollective and discerning, still feeling pleasure with the body, he enters upon and abides in the third *jhāna*, on account of which noble ones announce: "One has a pleasant abiding, who is equanimous and recollective."

Rapture had been exciting and had energized the mind in many subtle ways. The curtailment of rapture in the third *jhāna* eliminates the excitement of rapture, and of whatever other minor cognitive faculties are conditioned by rapture. Very little explicit cognition remains, the mind becomes "equanimous," the potential for distraction is greatly diminished, and attention is thereby stabilized so that it remains effortlessly centered and is unlikely to revert haphazardly to a previous *jhāna*, much less be diverted from the theme. "He has a pleasant abiding" suggests that this is the most delightful of the *jhānas*.

"Recollection-discernment" is a term that refers to the core process of skillful engagement itself (see 2.2.4, 3.4.3, 6.4.3), which was already a prerequisite for entry into the first *jhāna*. So why is it mentioned here? To have reached the third *jhāna* we must already have largely internalized the skill of the current practice, so investigation of the theme has largely disappeared into the implicit system. It is under the radar of consciousness. Mentioning full skillful engagement here is certainly a reassurance that investigation continues undeterred, although unheard, even at this very deep level of *jhāna*.[33]

6.3.5. The fourth *jhāna*. In the third *jhāna*, explicit engagement is at most a mere whisper. Pleasure remains, which means that what we do experience matters to us. In the fourth *jhāna* we drop even this.

> (4th) With the abandoning of pleasure and pain, and with the previous disappearance of joy and grief, he enters and abides in the fourth *jhāna*, which has neither-pain-nor-pleasure and purity of recollection due to equanimity. (MN 141 iii 252)

33. For evidence that skilled engagement continues unheard, see 6.3.2-5).

"The abandoning of pleasure and pain" curtails the faculty of feelings, upon which virtually every explicit cognitive faculty is dependent (see 5.4.4). Even perceptions are almost completely curtailed as a result.[34] "Joy and grief" are mental correlates of pleasure and pain, but the *disappearance* of joy and grief had not been mentioned with respect to a previous *jhāna*; we might presume their disappearance had occurred along with the curtailment of rapture in the third *jhāna*. "Purity of recollection due to equanimity" refers to purity specifically of the skill applied in investigating the theme. This reassures us once again that skill is still developing under the radar. The text here makes no reference to discernment, as in the third *jhāna*; perhaps skill is developed in the absence of performance, into a particularly pristine or finely tuned form within the implicit system. The fourth *jhāna* is experienced subjectively as an almost trance-like (void of anything that could be construed as "thinking") state along with some vague stirring of activity seeming to emanate from below consciousness.

6.4. Realizing the fruits of *samādhi*

We've developed enough understanding of the mechanics of *samādhi* (including the *jhānas)* to advance an explanation how it achieves the functions attributed to it. In the *Samādhi Sutta*, the Buddha lays out the fruits of *samādhi*, repeated here:

> *Bhikkhus*, there are these four developments in *samādhi*. What four?
>
> (1) There is a development in *samādhi* that, developed and cultivated, is conducive to dwelling happily in this very life.
> (2) There is a development in *samādhi* that, developed and cultivated, is conducive to obtaining knowledge and vision.
> (3) There is a development in *samādhi* that, developed and cultivated, is conducive to recollection-discernment.
> (4) There is a development in *samādhi* that, developed and cultivated, is conducive to the destruction of the corruptions. (AN 4.41)

We have seen that *samādhi* is a faculty, an *auxiliary practice* (see 2.3, 2.4.1) in support of a skillfully engaged primary practice. Primary practices include exercises within the four *satipaṭṭhānas*, *mettā* practice, recollection of the triple gem, or acts of generosity. I have accordingly translated the compound *samādhi-bhāvanā* as 'a development *in samādhi*' (rather than '… *of* …'), since the primary practice is what is developed here, although (as we will see)

34. See 5.4.5 on these qualities of feelings.

samādhi itself plays a vital causal role in enabling these fruits. Let's explore why practice in *samādhi* should enable these four fruits.[35]

6.4.1. Dwelling happily in this very life. Before his awakening, the Buddha-to-be recognized that there are pleasures that transcend mundane sensual pleasures when he recollected an experience that arose spontaneously in his childhood:

> I considered: "I recall that when my father the Sakyan was occupied, while I was sitting in the cool shade of a rose-apple tree, quite secluded from sensual pleasures, secluded from unwholesome states, I entered upon and abided in the first *jhāna*, which is accompanied by thought and deliberation, with rapture and pleasure born of seclusion. Could that be the path to awakening?" Then, following on that memory, came the realization: "That is indeed the path to awakening." I thought: "Why am I afraid of that pleasure that has nothing to do with sensual pleasures and unwholesome states?" I thought: "I am not afraid of that pleasure since it has nothing to do with sensual pleasures and unwholesome states." (MN 36 i 246-7).

We are not told what theme the Buddha-to-be found so engaging to center his attention upon, and to think and deliberate about, only that he put aside worldly concerns and that supramundane pleasure and rapture arose. Mundane pleasures, based in sensuality (food, sex, money in the bank, adventure movies, playing pranks on the elderly, booze and so on) tend to be short-lived, problematic, fraught and unsatisfying because they are fleeting and get entwined with craving and appropriation (*upādāna*) as "me" and "mine." Spiritual, supramundane (*lokuttara*), or non-carnal (*nirāmisa*) pleasure arises spontaneously in wholesome Buddhist practice. Let's consider how such non-sensual pleasures might arise.

(1) We've already seen that rapture (*pīti*) and pleasure (*sukkha*) arise from full skillful engagement as antecedent states prior to the arising of *samādhi*, rapture as one of the seven awakening factors (see 6.2.2 above). We love full skillful engagement, and the Buddha-to-be must have discovered something he was thrilled to be engaged in as he sat under the rose-apple tree. We've seen that such positive affects continue in *samādhi* and well into the *jhānas.* Because the *jhānas* sustain engagement and avoid a plateau in full engagement, if his discovery were to become a long-term hobby, *samādhi* would secure for him much additional rapture and pleasure in the years to come. This is a development in *samādhi* that is conducive to dwelling happily in this very life.

35. The following section is a more detailed version of 3.5.

(2) As a whole, *Dhamma* practice discourages, over the long term, what is unwholesome, in particular craving and appropriation (*upādāna*) as "me" and "mine," which would otherwise lead toward suffering. Many other non-Buddhist domains of full skillful engagement (like golf or driving) have their own criteria for what is skillful or unskillful, and many are quite unwholesome by *Dhammic* standards (such as marketing useless or harmful merchandise that customers cannot afford). Although *temporary* seclusion from unwholesome states is, in principle, possible also in *unwholesome* practices (even for a sniper), long-term, unfortunate *kammic* effects (regret and unwholesome dispositions) are expected outcomes. The early texts often speak of the goal of *Dhamma* practice as a whole in terms of the eradication of such suffering, and experience shows that a common consequence within this very life is a sense of meaning and purpose. This is also a development in *samādhi* that is conducive to dwelling happily in this very life.

(3) Although rapture ceases in the third *jhāna* and pleasure in the fourth, paradoxically the *absence* of pain or pleasure is often regarded as a kind pleasure found in these deepest *jhānas*. For instance, with reference to the absence of feeling (*vedanā*, of which rapture and pleasure are instances) in *nibbāna*, the following exchange is recorded,

> … Venerable Udāyī said to the Venerable Sāriputta, "But friend, what happiness could there be here when there is no feeling here?"
>
> "Just this, friend, is happiness here, that no feeling is felt here." (AN 9.34)

In the same way, this is also a development in *samādhi* that is conducive to dwelling happily in this very life.

6.4.2. Knowledge and vision. *Knowledge and vision* are factors of wisdom attributed to *samādhi* repeatedly in the early texts, where they represent a stage close to final liberation, at which it might be said that we see what the Buddha saw.[36]

> When right *samādhi* does not exist, for one failing right *samādhi*, the proximate cause is destroyed for knowledge and vision of things as they really are. (AN 10.3)

Jhāna, in particular, is discussed in the early texts consistently in association with attainments that approach awakening,[37]

36. See Cintita (2025, 10.5) on knowledge and vision.

37. Arbel (2017, p. 4).

> There is no *jhāna* for one with no wisdom, no wisdom for one without *jhāna*. But one with both *jhāna* and wisdom, he's on the verge of *nibbāna*. (Dhp 372)

"Knowledge and vision of things as they are" (*yathā-bhūta-ñāṇa-dassana*) begins to develop in the explicit system, in learning to distinguish *right view* from *wrong view*. Wrong views are presumptions of the explicit system, for instance self-view, the bifurcation of the world into subject and object, and the conviction that behaviors and observances (*sīlabbata*) have special efficacy. These wrong views are comparatively easy to correct *intellectually* at the very adaptable explicit level. However, the behavioral patterns or dispositions associated with them are amenable only to slow development and cultivation in the stubborn implicit system. As a result, even as we abandon self-view explicity, self-centered behaviors and conceit may long linger,

> Ven. Khemaka: "I do not regard anything among these five aggregates of appropriation as self or as of self, yet I am not an *arahant* without corruptions. For with regard to the five grasping aggregates I'm not rid of the conceit 'I am.' But I don't regard anything as 'I am this.'" (SN 22.89)

Attaining knowledge and vision of things as they are is effectively seeing directly through the eyes of the Buddha, immediately and spontaneously as a result of deep internalization of *Dhamma* through repeated skillful engagement, for which the exercises of *satipaṭṭhāna* practice are particularly well chosen. This process commonly proceeds through a series of "insights," or "seeing otherwise," beyond normal experience, indicative of internalization. We discover, in the mechanics of the *jhānas*, several points at which such insights are plausibly inspired:

(1) Many of our conceptualizations and narratives, including our worst presumptions (such as of the existence of a substantial self) seem not to be sustained after thought and deliberation have been curtailed in the second *jhāna*. For instance, the second *jhāna* and beyond are empty of subject and object.[38] In general, discursive thought tends toward the most pernicious forms of overthinking, and with its abandonment we, at least temporarily, experience a world devoid of such embellishment. With repetition we begin to internalize this way of "seeing otherwise." This is a development in *samādhi* that is conducive to obtaining knowledge and vision.

(2) As the progressive curtailments found in the silent *jhānas* clear away

38. Arbel (2017, p. 91).

complex conceptualizations, perception acquires crystal clarity,[39]

> Just as if there were a pool of water in a mountain glen—clear, limpid, and unsullied—where a man with good eyesight standing on the bank could see shells, gravel, and pebbles, and also shoals of fish swimming about and resting, … In the same way—with his mind thus composed [in *samādhi*], purified, and bright, unblemished, free from defects, pliant, malleable, steady, and attained to imperturbability—the monk directs and inclines it to the knowledge of the ending of the mental corruptions. (MN 39 i 279)

This lucidity plausibly reflects a partial reallocation to the faculty of perception of explicit energy otherwise unused after the curtailment of other faculties. This is another development in *samādhi* that is conducive to obtaining knowledge and vision.

(3) Each point of curtailment entails a shift in what we experience as "reality," and produces an "altered state of consciousness." This in itself is a direct demonstration of an important component of things as they are, namely the across-the-board presumptiveness (see 5.1) of what we take to be real and substantial. Such shifts present various ways in which we might *experience the world otherwise*, and more beneficially. This is yet another development in *samādhi* that is conducive to obtaining knowledge and vision.

(4) The deeper *jhānas*, in particular, seem to encourage those mysterious flashes of insight that also in everyday life appear out of nowhere, often inducing one to utter "Aha!" and are accordingly called "aha-experiences."[40] An aha-experience typically has its roots in earlier thought and deliberation about a challenging problem, which had reached an impasse and was put aside. This is followed by an "incubation period," during which the problem is largely forgotten, at least explicitly. However, the resolution suddenly erupts into consciousness, typically at the most unlikely time (for instance, in a dream, or while taking a shower), from somewhere in the implicit system.[41]

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39. Shulman (2014, p. 36).

40. Slingerland (2014, p. 147). Zander & Öllinger (2016) observe additionally that this kind of insight is immediately accepted as self-evident and felt as a strong emotional experience.

41. T.D. Wilson (2002, pp. 171-2) points out that gaining insight in this way can be deliberately induced to good advantage (independently of *jhāna*): gather relevant information on the problem, but instead of analyzing it, entrust it to the implicit system for a more accurate result. A day or so later, maybe while tying your shoes, "Aha!" (I discovered and made use of this technique myself when I was in graduate school.)

This is itself indicative of the tendency of the implicit system to retain a theme and pursue it relentlessly, albeit unconsciously. I propose that the deeper *jhānas* provide a particularly effective context for incubation.[42] Recall that recollection-discernment continues in the deep *jhānas* (see 6.3.4-5 above), virtually undetected. This is another development in *samādhi* that is conducive to obtaining knowledge and vision.

(5) As know-how is internalized, it is thoroughly integrated with many other domains of knowledge through the unique capacity of the implicit system to recognize complex patterns and associations that encompass diverse factors, weaving a kind of fabric of connections. For instance, the practices of kindness and generosity will support and be supported by the *satipaṭṭhāna* contemplation of non-self. This is a final development in *samādhi* that is conducive to obtaining knowledge and vision.

6.4.3. Recollection-discernment. Recall that this compound is closely identified with full skillful engagement in the primary task. What is recollected (and kept in mind to guide the practice) is *Dhammic* know-how; at the core of engagement is discernment, the executive control of performance. Full skillful engagement gives rise to *samādhi*, and *samādhi* in turn improves efficacy in performance and development of the primary task in these ways:

(1) *Samādhi* establishes one-centeredness around the theme of the primary task. This manages concentration to keep us on task. This is a development in *samādhi* that is conducive to recollection-discernment.

(2) Recall that internalization of skill or know-how eventually reaches, under normal circumstances, the third stage of the learning curve, at which a practice task is relatively effortless and without challenge, such that boredom might easily ensue and the energy otherwise dedicated to the task at hand might become dispersed or easily distracted. At this point further development toward expertise or toward awakening would reach a plateau. However, through concentration and curtailment of the most energetic faculties, *samādhi* induces the explicit system to operate at a lower energy level, leaving no excess energy for distractions, thus keeping the mind fruitfully engaged in the practice task.[43] This is a development in *samādhi* that is conducive to

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42. Emanating from the implicit system, such insights often defy conceptual explanation. A famous *sayadaw* recounts that when he was a young meditator, he unconvincingly described such an experience to his fellow practitioners as, "You can smell only with the nose." His teacher admonished him, "If you have an insight, don't tell anyone about it; they will think you are crazy."

43. This might feasibly be subject to verification in terms of glucose consumption in relevant parts of the brain.

recollection-discernment.

(3) Bringing practice into the silent *jhānas* facilitates internalization, to reduce reliance on the clumsy and costly explicit system and to extend reliance on the quick and effortless implicit system. This hastens the offloading of skill from the explicit to the implicit system. This is a development in *samādhi* that is conducive to recollection-discernment.

(4) The implicit system takes on an active role in its own in development and performance as it discovers subtle patterns and associations in experience, weaving the internalized content of know-how into broader areas of knowledge, and into the very structure of perception.[44] *Samādhi* thereby makes *Dhamma* transformative.[45] This is a development in *samādhi* that is conducive to recollection-discernment.

6.4.4. Destruction of the corruptions. Knowledge and vision, encouraged by development and cultivation through full skillful engagement, bring us close to the *destruction of the corruptions* (*āsavakkhāya*), a common means of referring to final liberation. The corruptions (*āsava*) are sensuality (*kāma*), becoming (*bhava*) and ignorance (*avijjā*), the fundamental misguided tendencies of the mind with which the worldling is afflicted, whose complete removal marks the Buddhist virtuoso. The aforementioned developments are developments in *samādhi* that are conducive to the destruction of the corruptions. There is a development in *samādhi* that is conducive to the destruction of the corruptions.[46]

6.5. Conclusions

For casual readers who have managed to reach this point in the text, I assure you: you don't need to know all of the details of this exposition to benefit in your practice. My intentions are scholarly: I want to make a strong case for the feasibility of this interpretation of what the *jhānas* are, of their operation and of their function in comparison to alternatives that have been proposed, or that have become orthodox parts of accepted doctrine.

My case is based on a close reading of the early texts, but at the same time on its consistency with what we know about human cognition. Together, these two perspectives provide a natural explanation not only of what function *jhāna* serves, but of how it serves that function. *Jhāna* is a natural process; its

44. As Shulman (2014, pp. 106-7) puts it.

45. Shulman (2014, p. 50).

46. On corruptions, see Cintita (2025, 11.1).

mechanisms are already present and documented in general cognition. However, in Buddhism they are explicitly cultivated and refined, much as wolfing down food is refined in many cultural contexts into haute cuisine and table manners.

The central factor to understanding in this explanation is the role of *internalization* in the learning curve any skill, whereby know-how evolves from the slow conceptual deliberation of the novice to the spontaneous intuitions of the expert. *Jhāna* is ideally suited to working with the expert's end of this curve, so that *Dhammic* mastery can advance to *Dhammic* virtuosity. In the case of *satipaṭṭhāna* practice, its contribution is vital to the attainment of knowledge and vision.