



7

UNCOVERING VYĀYĀMA IN YOGA

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Abstract

This chapter aims to show how the 19th-century revival of *vyāyāma* became a source for modern yoga to emerge in India during the first half of the 20th century. In order to do so it will look at the contents of four exercise texts: *Gymnastics Part One* (1874); *Gymnastics Part Two*, *Vyāyāma Śikṣak* (1875); *Vyāyāma Dīpikā* (1896); and *Vyāyāma Śikṣak* (1904). It will examine these texts alongside a broad historical understanding of the *vyāyāma* traditions of India in the classical and medieval periods, and will explore the cross-currents of *vyāyāma* in *haṭhayoga* and modern yoga. The research will lead us to understand how the syncretic nature of today's globalised yoga is nothing new. This feature is common throughout the historical development of physical yoga, both in the formative period of modern yoga and the amalgamation process of *haṭhayoga* over past centuries.

KEYWORDS

Vyāyāma, B. C. Ghosh, T. Krishnamacharya, Bikram Yoga, *Sūryanamaskār*, *Vinyāsa*.

Introduction

Even a beginning student of yoga can compare today's practices with the *Yogasūtra* and notice a vast difference between them. From the limited number of *āsanas* found in the 15th-century *Haṭhapradīpikā* and the contents of the pre-1500 *Śivasamhitā*, how did the practice of yoga, which placed a secondary focus upon *āsanas*, amid a graduated system of *prāṇāyāma* and *samādhi*, transform into an approach which mostly emphasises postural training that prompts strength, endurance, and flexibility? Explaining how this happened has been an essential question of research into modern yoga history over the past few decades.

Misconceptions have been as commonplace as clarifications. During the 1920s and 1930s, India was attempting to promote its culture. Colonial oppression fuelled Indian nationalism and intersected with yoga's presentation as an ancient spiritual endeavour. For example, when two young Indian yoga teachers from Calcutta, Buddha Bose and Bishnu Charan Ghosh, toured America and Europe in 1938–39, it was to present “India's physical culture system.” They demonstrated their “Quasi-Sacred Physical Culture Made Up of 84 Body Postures” from India's “3,000-year-old Yoga system” of exercise (Armstrong 2020: 219). Yet, the particular type of yoga *āsana* exercise which reached the shores of Europe and America from the 1930s to the 1970s was not, as was popularly believed, a yoga system practised in India for two or three thousand years. Instead, it was an amalgamation of different cultural currents, both from abroad and from within India, developed to meet the needs of modern society.

The scriptures of the *Yogasūtra*, claimed as one of the foundational texts of classical yoga, are “more closely linked to philosophy than to athletics” (Alter 2007: 1156–1171). The Sanskrit term *haṭhayoga*, used in Indian texts from the *circa* 12th century CE onwards, denoted “a type of yoga in which physical practices predominate” and that, between the 14th and 18th centuries “was gradually assimilated into several mainstream Indian religious traditions” (Mallinson 2021). The premodern style of the era of the 17th–19th centuries included both healing advice and an increase in dynamic movement (Birch 2018b). The *Haṭhābhyāsapaddhati*, an 18th century text precursor to modern yoga, brings more dynamic postures into yoga which, at least, intersected if not assimilated with *vyāyāma*.¹ Considering these themes, I suggest that most Indian gurus

¹ The significance of the inclusion of the *Haṭhābhyāsapaddhati*, located within the tradition of *haṭhayoga*, “is [that] there is now evidence that *haṭhāyogis* practised dynamic *āsanas*,” with moving *āsanas*; “many *āsanas* are combined with a movement that is to be repeated over and over” (Birch 2018a: 134).

drew upon their practice and expertise of *vyāyāma* during the formative period of modern yoga.²

A broad definition of *vyāyāma* from the perspective of a modern, Hindu scholar of Ayurveda portrays *vyāyāma* as a desirable physical activity that develops “bodily stability and increases the strength of the body” (Bagde 2015: 6). Monier-Williams (1872: 980–981), similarly to the Indian lexicographer Vaman Shivram Apte (Tiwari and Gehlot 2014: 359) and the Venerable Dhammissara (2015: 12), provides several, widely attested etymological references for *vyāyāma* as “exertion, manly effort, athletic or gymnastic exercise.” With this in mind, Norman Sjoman, while linking the gymnastics tradition of Mysore Palace to the *vyāyāma* text *Vyāyāma Dīpikā*, concluded with a question: “Is the distinctive nature of yogic movement inherited from an indigenous exercise system which preserves the clue to its basic nature only in its name today?” (1999: 44). It’s an insight into one potential bridge between *vyāyāma* and modern yoga’s focus on flexibility through athletic exercise and physical exertion.³

The 20th-century Calcutta yoga and physical culture teacher B. C. Ghosh wrote of *yoga-vyāyām* during the 1940s to 60s (B. C. Ghosh and his students would hyphenate yoga and *vyāyāma* together in their Bengali writings to reflect their modern invention).⁴ Though we find no such acknowledgement within modern yoga that emerged from South Asia under Tirumalai Krishnamacharya in Mysore, recent scholarship attests to this same

² This chapter uses the term “modern” yoga to apply to the different yoga styles formulated within India during the first half of the 20th century. Often, they relied upon transnational exchanges that continued forwards. Its use is different, both as a precursor and in style, from the globalised yoga practised today, which combines and creates dynamic movements from a multitude of different lineage sources and functional inspirations.

³ An etymological understanding of the word is not necessarily an exact method for the determination of usage in a historical context. Does *vyāyāma* as defined in the *Carakasamhitā* (1st century CE) have the same usage in the *Mallapurāṇa* (16th century CE), and too, the late 19th and early 20th century texts on *vyāyāma* examined within this chapter? The second and third sections in this chapter contains an overview of *vyāyāma* within the *Carakasamhitā* and the *Mallapurāṇa*. See also McCartney’s chapter in this volume.

⁴ See Armstrong (2020: 528) in Index under “*bayam*” for multiple references (the transliteration of the word from Sanskrit commonly used *b* instead of *v* among Bengali writers). Yoga teacher training at Ghosh’s Yoga College in Kolkata (*circa* 2015) included one hundred and ten freehand exercises (*vyāyāma*) and ninety-six different *āsanas* for trainees to learn.

phenomenon.⁵ Similarly, this chapter will attest that: the *sūryanamaskār* exercise system, first presented to the public by the Rāja of Aundh, Bhawanrao Pant Pratinidhi, is likely sourced from *vyāyāma*. Understanding *vyāyāma* historically is vital to understanding a significant component of how dynamic exercise systems, such as *sūryanamaskār*, Bikram Yoga, and Vinyāsa, were sourced, developed, and popularised throughout India and after that, the world. Still, it has a complicated history to explore.

Modern Yoga's Transnational Exchange

In addition to looking to India's past for modern yoga sources, we cannot escape the fact that modern yoga looked outwards from India. Although this chapter makes the case that the postures, movements, and goals of an indigenous Indian exercise became assimilated within modern yoga, there is undoubtedly a case for a "transnational exchange" during the "genesis of modern postural yoga" (Singleton 2013: 37).

Amidst a range of other modernities in Southern Asia at this time, the modern emergence of physical fitness links India to Europe and the West (Alter 2007: 1156–1171). This direct connection between the international physical culture movement and many early innovators of modern yoga, who "borrowed European techniques of gymnastics and bodybuilding, and merged them with indigenous practices," resulted in the "emergence of a physical culture style of yoga" (Singleton 2013: 39). B. C. Ghosh and his elder brother Paramahansa Yogananda pursued "Western styles of exercise, practising and doing research on them" (Armstrong 2020: 92). Bengali *vyāyāma* proponents such as Nilmoni Das and R. N. Gupta (*My System of Physical Culture*, 1927) mostly followed their western counterparts (as did B. C. Ghosh with *Muscle Control*, 1930), integrating different forms of physical exercise.

In addition to indigenous sources, Mark Singleton (2013) points towards this "transnational anglophone yoga" exchange when noting that Shri Yogendra explicitly borrowed from "women's gymnastics traditions" from the West to develop "health-oriented yoga practices" (ibid.: 47). Tirumalai Krishnamacharya was "likely influenced by popular pedagogical gymnastics" while creating a system of *āsana* practice called Vinyāsa in the 1930s (ibid.: 39).

⁵ Birch and Singleton (2019: 57–59): "Krishnamacharya's *vinyāsa* method is likely derived from wrestling exercises like those described in the 1896 Mysore gymnastics manual, the *Vyāyāmadīpikē* [...] such movements are reminiscent of *vinyāsa*s of Ashtanga Vinyasa Yoga. It may then be the case that Krishnamacharya's *vinyāsa* method is in fact derived from techniques from the wrestling traditions such as *jhoku* and *daṇḍ*, and perhaps directly from the text of the *Vyāyāmadīpikē* (in combination with *Haṭhābhyāsapaddhati* itself)."

Transnational cross-currents within modern yoga include pedagogical devices, Sanskrit studies, esotericism, and yoga's scientific medicalisation. Also, the 18th- and 19th-century traditions of Delsartean manuals have linkages from their practice to India's modern yoga *āsana* practice, as do anglophone physical culture manuals that included stretching within their fitness methods. Basic concepts of yoga language, that of "blocked energies" and "the free flow of energy," entered yoga's lexicon through mental constructs of 18th-century Mesmerism, a practice centred around personal magnetism (Baier 2020).

In *Yoga Body* (2010), Singleton brought awareness to multiple historical cross-currents that shaped the formation of modern yoga, including harmonial gymnastics, a class of exercise and stretching routines that preceded the introduction of *āsanas* in the West. Following on in the study of harmonialism, Anya Foxen (2020) recognised that it "profoundly influenced how practices such as yoga have been received and interpreted in the West" (ibid.: 2). The dialogue of globalised yoga, to include "relaxation [...] pairing breath with movement and using both to effect healthful change in the body," draws on the language of the Swedish school of light gymnastics (ibid.: 114). Teachers such as Mollie Bagot Stack (1931), following a 1912 sojourn into the Himalayas where "she learned some *āsanas* and relaxation techniques," then "incorporated elements of this teaching into her programs" without referring to it as "yoga" (Singleton 2010: 150). That is, the "female dominated, stretching classes" of today's globalised yoga "can be more profitably seen as developments within the Western harmonial gymnastics tradition than within *hatha yoga per se*" (Foxen 2020: 2). Within this globalised practice of yoga, Foxen concludes, "there is a Western history of practice here that was overwritten" due to "the interaction of Indian yogic traditions with this Western body of thought and practice, among others [...] thereby becoming invisible" (ibid.).

Similarly, an examination of *vyāyāma* will reveal information that will further inform the intersection of *vyāyāma* with *haṭhayoga* and modern yoga's formation.

Vyāyāma in Ayurvedic texts

A modern Indian interpretation of *vyāyāma* claims it to be "the oldest energetic and curative gymnastics in the world," from the Vedic age of India to this day (Plazas 2008: 157).⁶ Joseph Alter (1992a: 97) describes *vyāyāma* as a physical training system

⁶ Within a modern lineage of martial arts, Swami Tilak presents a series of dynamic posture movements as a "Traditional School of *vyāyāma* Yoga." This school claims "an original and ancestral form of *vyāyāma* yoga" which traces its roots to the "texts of the *tan* expansion path of *Tantra Marga*" and the principles in the

“designed to build strength and develop muscle bulk and flexibility” alongside “health and fitness.” A key concept in modern *vyāyāma* is the holistic, regulated control of the body, which “disciplines the body through strenuous, patterned, repetitive movements” (ibid.: 97). Modern *vyāyāma*, similar to today’s yoga, concentrates on stretching, strength, and cardiovascular exercise.

The roots of *vyāyāma* before the four late 19th-century texts reviewed in this chapter are relatively obscure. *Vyāyāma*, as a reference to physical exercise, is first mentioned within Ayurvedic texts. The oldest textual mentions of *vyāyāma* are within the Ayurvedic texts, the *Carakasamhitā* and *Suśrutasamhitā*, written sometime between the mid-1st millennium BCE and the 5th century CE (Tipton 2008). Within the *Carakasamhitā*, there are aphorisms which focus on the exertion of the body to produce “good consequences to the body itself,” as a result of *vyāyāma* (Dhammissara 2005: 13).

Both the Ayurvedic texts, *Carakasamhitā* and *Suśrutasamhitā*, are primarily texts for addressing the health issues of householders, and provide a “medical perspective of *vyāyāma*” as “therapy” (*cikitsā*) (Dhammissara 2005: 12).⁷ Recent scholarship on the *Carakasamhitā* interprets its message as being that regular *vyāyāma* practice is essential to maintain health, to avoid various types of disease, to rejuvenate (curative) and for longevity (Bagde 2015: 6–10). The primary focus for *vyāyāma* is curing the sluggishness brought on by diseases and disorders caused by excess *kapha*, and a preventive balancing of the *doṣas*. *Vyāyāma* (XIV.64) and *vyāyāmaśakti* (“power of exercise,” VIII.121) refer to physical activity. For “persons who have a rough diet, habitual exercise will stimulate digestive fire, and the impurities get diminished by physical exercise (*vyāyāma*)” (Jadev 1968: 565). The practice of *vyāyāma* has been interpreted as complementary in that it “suggests *vyāyāma* for the body and yoga for the mind and soul” (Roy, Chatterjee and Mondal 2018: 208–211).

The Ayurvedic texts mention *vyāyāma* as a means of physical activity, related to well-being and essential for an embodied worldview, but there are no explanations of what the practice entails. There are no specific instructions or examples beyond the general guidelines of it being rigorous and producing beneficial results.

18th-century *Mahānirvāṇa Tantra*, suggesting that it was “the personal training of warriors” (Plazas 2008: 1). However, there are no mentions of *vyāyāma* within the *Mahānirvāṇa Tantra* (Avalon 2010).

⁷ For a discussion on the topic of Ayurvedic texts and yoga, see Birch 2018b: 1–83.

Vyāyāma in Medieval texts

Between the time of the earliest Ayurvedic texts and the 19th-century texts examined in this chapter, there are few historical references to *vyāyāma*. There are mentions of *vyāyāma* in Buddhist texts and references to it in Tantric texts, but these yield few results related to yoga.⁸ However, tracing exercise practice through the history of wrestling within India delivers information. The freehand exercises of *vyāyāma* suggest a link to Indian martial arts, as *vyāyāma* is a preparatory practice for *kuṣṭī* (Persian word meaning “modern combat wrestling”) and its ancestor, *mallayuddha* (“combat wrestling”) (Alter 1992a: 14–15). References to wrestling can be found in the *Mahābhārata* and the *Rāmāyaṇa* (Alter 1992b: 332, n. 6), composed between the 1st century CE and the 3rd century CE. The earliest extensive commentaries on wrestling exercises in India are found, however, in two medieval texts, the *Mānasollāsa* and the *Mallapurāṇa*.

The 12th-century *Mānasollāsa* is a comprehensive text of one hundred topics connected to the royal household of the court, compiled by the Kalyāṇī Cālukya King Someśvara III. Its socio-cultural information is derived from Karnataka and the medieval Deccan region of India and provides comments on the different types of wrestlers in a section titled “Mallavinoda” (“Wrestling Contests”) (Bhattacharya 1939). In its description of wrestling, over just a few pages, the *Mānasollāsa* only provides “the names of moves and exercises but does not provide descriptions” (Alter 1992a: 15–16).

The 15th- or 16th-century *Mallapurāṇa* (possibly from an earlier copy) is a dialogue about the origin of *mallavidyā* (“the science of wrestling”) and the wrestler’s caste. It lists a series of movements, practised daily, which function to develop strength, stamina, and agility for wrestlers (Hanlon 2007). It concerns the *jeṭhī-mallas* (see Rochard and Bast in this volume), professional wrestlers who originated in Gujarat, and provides evidence of something very similar to *vyāyāma* as practised in 19th-century texts. Sandesara and Mehta describe the text as ambiguous and incomplete, offering minimal descriptive features of the exercises themselves, but it does provide relevant information (1964). Chapters 8–10 of the *Mallapurāṇa* present exercises along with a list of *āsanas*. The chapter on *āsanas* includes seventeen listed postures (see McCartney in this volume). The exercises are called *śrama* (“exertion” or military exercise in this

⁸ Within Buddhist texts, *vyāyāma* refers to one of the eight practices for the abandoning of conditions, as defined in the *Dharma-saṃgraha*. And from within the Pāli Canon, in the noble eightfold path, is *samyak-vyāyāma* (“right effort”) (Walshe 1995). There does not seem to be an explicit body-focused analysis of *samyak-vyāyāma* within the Buddhist writings.

context), and the text merely mentions *vyāyāma* alongside stretching and the movement of joints (Gharote 1998: 51).⁹

On the topic of how the practice unfolded for participants, Sandesara and Mehta describe that students learned free-hand exercises for muscular strength and stamina (1964: 25):

They not only help to develop the muscles of the arms but are so organised as to develop the powers of fingers, wrist, back, belly, and side muscles. There are special turning and twisting exercises to develop the strength of the waist and agility. These freehand exercises are devoted to conditioning the physique for further heavier work.

Added to this are several varieties of *daṇḍ*s that work the muscles of the legs. Sandesara and Mehta conclude that the leg work is a variety of *baiṭhaks* that were used as warm-up exercises. Parts of these descriptions could be identical to *baiṭhaks* and *daṇḍ*s of modern *vyāyāma*, but it's challenging to claim so based on the limited text.¹⁰

We can conclude that the *Mallapurāṇa* has exercises meant for strengthening and bodybuilding, and though there is not much continuity to discern from its limited text, there is an ethnographic analysis of the *jyēthī-mallas*, which concludes that these exercises have remained intact up to the present time.¹¹ Some Indian Sanskrit scholars have concluded that continuity of the concept of *vyāyāma* goes from the Ayurvedic *Suśrutasaṃhitā* through to the *Mallapurāṇa* and the *Mānasollāsa*, which represent the creation of *vyāyāma-vidyā* ("the science of exercise") (Roy, Chatterjee and Mondal 2018: 209). If this were to be true, it would have happened so under the names of various

⁹ The relation between *śrama* with *vyāyāma* is not explored here, but raises interesting questions and begs the question as to whether or not there are other terms of nomenclature which might clarify the historical transition from one kind of physical practice to another. For example, does *vyāyāma* encompass *śrama*? And what of *abhyāsa*, which is found closely related to *śrama*, within the *Mallapurāṇa*? See Bodewitz (2007) for a discussion of *śrama* in Vedic texts, which indicates that *śrama* ("exertion") has a connection with *tapasyā* ("heat" or "ascetic austerity") and other Vedic connotations which associate it with *dīkṣā* (initiation) in order to achieve a goal or something that is sought out, rather than with hard physical work for its own sake. The use of *śrama* extends into Buddhist literature as well, within the semantic history of *śramaṇa* and *āśrama*, suggesting a further connection with asceticism as a place or mode of spiritual effort (this might be physical and/or mental). See Kazi 2014: 30–31 and Olivelle 1993: 9–17.

¹⁰ It is important to note that neither *baiṭhak* nor *daṇḍ* is mentioned in the *Mallapurāṇa*. See McCartney in this volume for further discussion of *śramas* in *Mallapurāṇa*.

¹¹ "The major part of the tradition is still preserved by the *Jēthī mallas*. The varieties that appear to be lost are due to the use of new terms. The old terms have become obsolete" (Sandesara and Mehta 1964: 18).

other forms of exercise. The exercises discussed in the Ayurvedic *Suśrutasamhitā* and *Carakasamhitā* as *vyāyāma* and the types of exercises described in the *Mallapurāṇa* lack a sufficiently thorough description to know whether or not they are the same as *vyāyāma* discussed in these texts. While the limitations of a textual pathway of what *vyāyāma* entailed before the 19th century are not explored here, a revival of exercise occurred in the 19th-century which centred on the tradition of indigenous exercise under the title of *vyāyāma*.

19th-Century Revival of *Vyāyāma*

In *Vyāyāma Dīpikā* (1896), the author S. Bharadwaj describes the contents as “an attempt at the revival of Indian exercises” (Sjoman 1999: 107–108). Mazumdar, in *Vyāyāma Śikṣak* (1904), portrays this revival as being due to “the lack of physical education and any sort of *vyāyāma* in our native schools, combined with the ignorance of nutritional diet, [which] has resulted in very sickly students. Their lack of physical development is painful to witness” (ibid.: 1–4). During the time of British rule in India, which began in 1858, Indians in Calcutta developed an affinity with the English lifestyle. A sort of “Britishness in the colonies” emerged as the way to proceed (Chatterjee 2015: 4). Although the *akhārā*, *kuṣṭī*, and *vyāyāma* remained in at least some of the villages, they were not present in Calcutta. A renaissance of physical instruction needed to take place for Calcutta to become an epicentre for the revival of *vyāyāma*. The first stage was the growth of public physical exercise facilities.¹²

Alongside the importation of the British culture of sporting clubs, the culture of the gymnasium arrived in Calcutta. The British concept of a gymnasium was a “distinctive colonial public sphere” where the English “kept themselves fit through exercise” (Chatterjee 2015: 5). And though nationalist resistance among Indians remained prevalent, exercise was not overtly political. Instead, it was cultural, with part of its emphasis on physical training. As a part of the overall Bengal Renaissance, in 1848, Akshay Kumar Dutta, of the Brahmo Samaj (which led many reform efforts), stressed “the scientific importance of exercise, physique, and physical culture among the youth force of the then Bengal [...]. It was a collective effort on the part of the nineteenth-century educated and cultured elites,” to instil a “physical practice” both for men and youth (ibid.). This socio-cultural nationalism created the *Caitra Melā* (aka the *Hindu Melā*

¹² Examples of this are the Calcutta Cricket Club, which traces its origin to around 1792, the Calcutta Rowing Club, established in 1858, and in the 1870s, the Dalhousie Athletic Club and the Calcutta Football Club. Outside of the UK, these are some of the oldest sports and exercise clubs established in the world. See Chatterjee 2015: 4.

from 1867 to 1874) movement which, among many other cultural revivals, merged the *akhārā* with the gymnasium in Calcutta.

In 1866, the Bengali intellectual Rajnarayan Bose, also a Brahmo Samaj reformer, wrote *Prospectus of a society for the promotion of National feeling among the natives of Bengal* (Bagol 1945). In it, Bose urged his countrymen to speak and write in Bengali, establish schools of indigenous medicine and music, revive all national forms of greeting, diet, exercise, and dress, and shun further colonial social reform unless it fostered a nationalist feeling among Indians. Though the movement re-popularised Bangla folklore, literature, music, poetry, and nationalistic songs, the other main components of its cultural assertiveness were in physical culture and in the first Indian gymnasium. Bose called for the revival of national gymnastics exercises.

It was within this period of revival or renaissance of physical culture that Calcutta's Nabagopal Mitra opened the National Gymnasium in 1866, the first establishment of its kind in India.¹³ In the Introduction to *Gymnastics, Part One, Vyāyāma Śikṣak*, Harish Chandra Sharma (1875: 6–7) describes the book's topic as “native *vyāyāma*” and dedicates the book to his teacher, Nabagopal Mitra. Mitra's formation of the National Gymnasium in Calcutta was the culmination of a revival effort. Written nine years later, Sharma's publications show us what they were practising.

At the National Gymnasium, indigenous methods and European techniques were both practised. The result was a modern-day adoption of the European, urban place of exercise within the context of the *akhārā*, the indigenous site of wrestling and other martial activities. The North Calcutta location of the gymnasium was popular for a time. Swami Vivekananda (1863–1902) was among those who attended the National Gymnasium in the 1870s, and the experience likely shaped his views on developing a muscular India in response to British rule (Chattopadhyaya 1999: 22).

Potential Western Influence on *Vyāyāma* Texts

Writing in Bengali, Sharma compiled a two-part instructional book in 1874–1875, which provides a direct look into the practice of *vyāyāma* in the National Gymnasium. *Gymnastics, Part One* (1874) is presented within a British-sourced context and contains

¹³ The place of the National Gymnasium is still standing, located at 1 Ghosh Sarkar Lane, across the road from Vidyasagar School, with no recognition there of its revolutionary place in history. Mitra (who took on the nickname of National Mitra), with funding help from the Tagore family, engaged in all sorts of nationalistic efforts in addition to the Gymnasium, including a National Circus and a National Paper. See Armstrong 2020: 77–83, 104–107.

mostly advanced exercise on gymnastic bars.¹⁴ *Part One* is 101 pages long, with sixty-seven different activities and thirty-five demonstration slides. It is divided into three sections: standing warm-up exercises, gymnastics parallel bar exercises, and pole climbing.¹⁵ It is composed entirely of Western gymnastic exercises.

Printed a year later, in 1875, *Gymnastics, Part Two, Vyāyāma Śikṣak* (“Exercise Instructions”) contains forty-six different *vyāyāma* exercises. The text and practices move from comfortable to moderate to strenuous, emphasising accomplishment before moving onto the next exercise. The first section is on swinging clubs, *mudgar*.¹⁶ The second section is on *daṇḍ phelā* (“drops to the hands”). Within the chapter on *daṇḍ*, there are five different exercises explained, which include dynamic push-ups and a jump-through the legs into what resembles *lolāsana* (“pendant pose,” a hand-balancing *āsana*). The third section is on *baiṭhak* and has five exercises and squats. The fourth section is on *ḍigabāji* (“somersaults”) and contains six different exercises, including hand balancing *āsanas*. The fifth section includes mostly two-person activities. It includes *lāṭhī* (“stick”), arm wrestling, rope-pulling, use of pulleys, stairs, and ladders. If we were to set aside the club swinging and the two-person exercises, there are sixteen different, single-person activities in the three groups of *daṇḍ*, *baiṭhak*, and *ḍigabāji* that we might compare with modern and global yoga.

¹⁴ *Part One*’s Introduction credits the publication to the efforts of William Stephen Atkinson (1820–1876), the director of public instruction for Bengal, Bihar and Orissa, as the head physical education teacher. Atkinson also served as the Secretary for the Asiatic Society in Calcutta. In 1860 he became Director of Public Instruction across Eastern India. Harish Chandra Sharma is also the author of two other 19th-century books in Bengali, one titled *Jeevan Rakhak*, and a second titled *Osho Dabholi*.

¹⁵ The thirty standing exercises include walking, running, jumping, forward/left/right/back high jump, long jump, low jump, mixed jump, joining your hands at the back jump, punching forward/upward, rotating your hands, standing on the ground with your toes, touching your buttocks with your ankle, chest with knees, floor with knees, standing on one leg, touching the floor with left knee, “*praṇām*,” crunch, cross your legs in the air, extend your feet in the air, jump over a stick, and jump over your hands. The parallel bar exercises contain instructions “to first build this bar by bamboo, and only if the funding is sufficient, can one go ahead and build it with wood.” Thirty-five different parallel bar exercises are described. The last two exercises are climbing up a *supārī* (“betel-nut”) tree or a mast.

¹⁶ *Vyāyāma* is often linked with Indian Club swinging. The usage of the Indian club swept through Europe and American earlier than the popularity of postural *āsana* practice. Its linkage to “mass drill regimens” abroad, and “military training” within India, could be an important guide for learning what facilitated the development of body-building postural practice within India. That is, “in colonial discourse, Indian *jori* and *mugdāl* swinging in India was associated with muscle-building and feats of great strength” (Alter 2004: 514, 525).

Historically, the next publication we will consider is the *Vyāyāma Dīpikē*, *Elements of Gymnastic exercises, Indian System* (hereafter *Vyāyāma Dīpikē*), written in Kannada and published in Mysore in 1896. Compiled by S. R. Bharadwaj, the book should be viewed as the outline of “the Mysore Palace Gymnastics Tradition” according to Sjoman (1999: 53) because Bharadwaj’s teacher, Veeranna, was likely the teacher of the Mahārāja N. K. Wodeyar (1892–1901). The text includes eighty-four exercises, with chapters on variations of push-ups, *daṇḍ* and *baiṭhak* exercises, and other *vyāyāma*.

The final publication, *Vyāyāma Śikṣak*, was written in Bengali by Bidhubhushan Mazumdar at the turn of the century, in 1904. There are eight parts or chapters and thirty-six different exercise instructions. It describes eight different variations of *baiṭhak* and fifteen different variations of *daṇḍ*. The instructional text also includes chapters on how to curve/bend/bow the body, run in place, reverse postures, and perform flips and somersaults. The third chapter on *baiṭhak*, the fourth chapter on *daṇḍ*, and the sixth chapter on flips and somersaults are instructive for the purposes of this chapter.

Again, we can consider the transnational influence of these *vyāyāma* texts. The text by Sharma is titled *Gymnastics*, which was a catch-all term for many exercises related to physical culture in India at the time. Whether there is a comparable and distinct category with India’s physical tradition called gymnastics is uncertain. The use of the term “reflects the modern, western vocabulary of physical culture” (Birch and Singleton 2019: 49).¹⁷ It calls into question how many of these exercises are the result of transnational imports from the West. There was a “cultural exchange between India and the West,” which influenced the development of modern yoga in India, with the result that today’s globalised practice of yoga “is not a direct export of existing yoga practices” from India (Carnegie 2012: 412). To what extent this pertains to these *vyāyāma* texts is difficult to know.

In the early 20th century, the international influence of physical culture by institutions such as the YMCA was immense. The European, gymnastic, freehand exercises, widely introduced by Pehr Henrik Ling throughout Sweden had, by the 1820s, reached India. Ling’s use of short instructions (“Fingers: Spread! --Close!”) is replicated in the drill-like format of the Sharma and Mazumdar *vyāyāma* texts and had a long-lasting influence.¹⁸

¹⁷ Birch and Singleton 2019: 47–48, n. 114, n. 119.

¹⁸ Ling presented a raised-hands variation of the separation “made only between the third and fourth fingers” while doing arm and finger spreading stretches (Ling 1853: 31). Hypothetically, it is just this sort of variation one can imagine, which might have made its way from Europe, through gymnasiums of Calcutta

Ling's pedagogical influence informed not just gymnastic instruction during the 19th century, but also "physical culture for Indian youth well into the twentieth century" and perhaps even "the pedagogical structure of modernised Haṭha yoga" (Singleton 2010: 84–86). However, it is more complicated than a one-way cultural exchange, particularly related to exercises.¹⁹ Ling's use of "free movements," which did not need an apparatus, and the "freehand exercises" of Calcutta gymnasiums, must be understood with the realisation that indigenous *vyāyāma* exercises had just the same techniques before the "muscular Christian reforms" were brought to Calcutta in the 19th century (ibid.).

Broadly speaking, if looked at from the perspective of the transnational exchange between Europe and India, then one sees only a division between the static "postures" and the dynamic "exercises" and might therefore conclude that, "therein lies the difference" between yogic *āsanas* and "callisthenics, East-West" (Foxen 2020: 25). An expanded awareness of *vyāyāma* (and premodern *haṭhayoga* examples of dynamic movement) brings about a more comprehensive viewpoint, inclusive of intersections and exchanges within India's indigenous timeline.

The Indian authors do not present *vyāyāma* as anything other than indigenous and wholly apart from European physical culture traditions. *Gymnastics, Part Two*, by Sharma, also includes a subtitle of *Vyāyāma Śikṣak. Part Two's* contents are very different from *Part One*; one is presented as entirely imported and the other as exclusively native.

from the 19th century into the mid-20th century, where Bikram might have encountered it being similarly applied to the half-moon series posture, wherein he gives instructions to close all of the fingers except for the index fingers while standing with arms stretched and hands clasped during half-moon pose (*ardhacandrāsana*).

¹⁹ Ling, of Sweden, formed the Royal Gymnastic Central Institute in Stockholm in 1822. While he lived abroad and travelled for seven years, in Denmark, he was said to have met a man named Ming, of Chinese origin, who was a master in *Tui-na* traditional massage and martial arts. One authority at the time called this collaboration "an invention of Ling's rivals, in an effort to discredit his work" (Kleen 1892: 24). However, Kleen also wrote that Ling was "probably aware of Chinese massage" though "he instead developed a system of integrated manual therapy, combining physical training and gymnastic procedures with knowledge of anatomy, physiology, and pathology" (ibid.: 25). Ling would no doubt have been fascinated by the quality of the physical and philosophical teachings of such a master as Ming, as it would have brought his own millennial knowledge and teaching to another level. Upon his return, Ling introduced the Swedish Movement Cure and the Swedish Massage technique, one of the most widely practised and better-known types of massage in the west. Martial arts in China have an intact history of movement practices such as *qi gong*, a dynamic apparatus-free method to improve functional movement, which Damo brought from India to complement the health and focus of the Buddhist meditators at Shaolin temples.

Similarly, *Vyāyāma Dīpikā* “contrasts the English exercise system of gymnastics, trapeze, parallel bars” with the Indian system “of bodybuilding, wrestling, and the use of weapons” (Sjoman 1999: 52–57). And Mazumdar (1904: 1) does not present Western gymnastic traditions at all, focusing only on *vyāyāma*, explaining that “the exercises described in this book are popularly known as *desi-kasrat* [regional exercise/gymnastics] in Madhya Pradesh.”²⁰

When comparing machine- or apparatus-based exercises with those performed only using the body, opinions varied as to which were more effective. Bharadwaj proposed that the eighty-four exercises are superior “to the modern or western method because they require no apparatus” as found in gymnastics (Birch and Singleton 2019: 47). However, this was a common rhetorical trope, which perhaps has its basis in Ling, and was claimed even within later modern yoga manuals written by Iyengar and Bose.

While nomenclature and pedagogical tropes can point towards western influence in the development of modern yoga, the impact of *vyāyāma* has to be explored. Krishnamacharya’s *Vinyāsa* method could have its basis in wrestling exercises similar to those described within the *Vyāyāma Dīpikā* and the 18th-century *Haṭhābhyāsapaddhati*, in addition to the acknowledged influence of the 19th-century *Śrītattvanidhi*, and its “eighty ‘principal’ postures” within the yoga section of the text (ibid.: 34). Sjoman too (1999: 52–57), suggests that *daṇḍ*s were used by Krishnamacharya in that the *daṇḍ* movements “are most reminiscent of Krishnamacharya’s *vinyasa*-s and Iyengar’s series called ‘jumping’” (ibid.).

Sjoman’s analysis of the text found similarities between the *Vyāyāma Dīpikā* and the *āsanas* taught in the Krishnamacharya tradition as represented in B. K. S. Iyengar’s 1966 publication *Light on Yoga*. Birch and Singleton (2019: 3–70) further uncovered that several of the exercises within the *Vyāyāma Dīpikā*’s are similar to some of the *āsanas* in the *Haṭhābhyāsapaddhati*, yet are not featured in any of the Krishnamacharya systems. This may point towards a synthesis of Indian exercises and yoga postures that predates the advent of modern yoga during the 20th-century postural yoga revival. The contents of these texts on *vyāyāma* will show further proof of this claim.

To examine the contents of the *vyāyāma* texts within the context of this chapter’s focus on the influence of *vyāyāma*, we will look at the exercises of *daṇḍ*, *baithak*, and other *vyāyāma* examples in the three following sections of this chapter.

²⁰ Mazumdar does state that the effort was “under the direction of” W. Booth, who also wrote a review of *The Doctrine and discipline of the Salvation Army* in 1889, published in Madras, India.

Daṇḍ in Vyāyāma

Daṇḍs are the strength-building variations of “Indian push-up” in vyāyāma. Sharma’s (1875: 20–26) description of *daṇḍ phelā* contains five variations: 1) plank on hands “with the feet apart by one foot”; 2) plank on hands with “no distance between the two legs as you stand”; 3) one hand and one foot lifted and “suspended in the front and back of opposite sides”; 4) Lifted legs are “brought forward within the two hands in front” (Fig. 1).

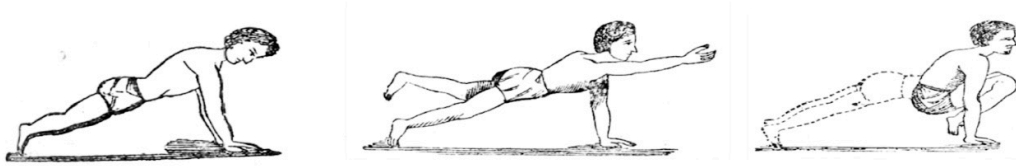


Figure 1: *Daṇḍ Phelā* (2, 3, 4) in *Gymnastics Part Two, Vyāyāma Śikṣak* (Sharma 1875).

Sharma’s fifth *daṇḍ phelā* is the standard dynamic Indian push-up, with similar instructions described by Sharma and Bharadwaj. It remains the prototypical modern-day *daṇḍ* exercise (Fig. 2):

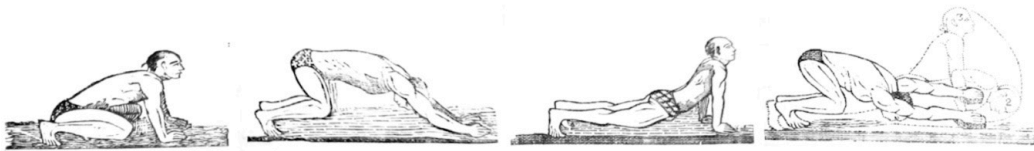


Figure 2: *Daṇḍ Phelā* (5) in *Vyāyāma Dīpikā* (Bharadwaj 1896).

The debate on whether this form of *daṇḍ* exercise is a precursor to *sūryanamaskār* can be looked at in light of the *daṇḍ vyāyāma* within these texts.²¹ The flowing moments of *sūryanamaskār*, with its dynamic movement, in synchronisation with the breath, formed the basis for Krishnamacharya to develop his method of yoga *āsana* practice based on *vinyāsas*, involving a dynamic and methodic combination of movement and breath (Singleton 2010: 180).

²¹ There are oral accounts that go further back in time than the textual examples in this chapter. However, it is difficult to determine whether the “*namaskāras*” mentioned are the same as the *sūryanamaskār* of modern yoga (Majumdar 1950: 453). For further discussion of *sūryanamaskār*, see Stuart Sarbacker’s chapter in this volume.

The earliest propagator of *sūryanamaskār* in print was the Rāja of Aundh, Bhawanrao Pant Pratinidhi. In the early 1920s, Bhawanrao introduced a school system and free education throughout Aundh with compulsory physical instruction and exercises that included *sūryanamaskār*. Around that time, in 1923, Bhawanrao provided a how-to guide titled *Sūrya Namaskār*, which was translated into English and published in book format in 1928 as *Sūrya Namaskārs -Sun-Adoration- for Health, Efficiency & Longevity*.

Apa Pant was the son of Bhawanrao Pant and followed his father's devotion to *sūryanamaskār*. Though Pant claims that the origin of their practice, which he learned from his father, dates further back, some seventy-five years prior, the family lore of how Bhawanrao developed the precise sequence is "sketchy" and in need of scrutiny (Goldberg 2016: 187). The *Encyclopedia of Indian Physical Culture* (1950) repeats the Pant claim of the origin of *sūryanamaskār* as an exercise without further evidence. An alternative origin is revealed in the son's biography on his father. Titled *An Unusual Raja* (1989), Pant wrote that from a young age his father Bhawanrao had been attracted to physical culture and was fond of wrestling. Bhawanrao may have encountered *vyāyāma* at that time. Whether he came across the text by Mazumdar remains a mystery, but if he had access to training in physical culture and wrestling, this would have provided him greater exposure to indigenous physical exercise.

Regardless, the complex variations of *daṇḍ* described by Sharma, Bharadwaj, and Mazumdar show plenty of variations of *daṇḍ* to illustrate how *sūryanamaskār* came into existence as a physical exercise.

In *Vyāyāma Śikṣak* (1904), Mazumdar describes fifteen different *daṇḍ* exercises. Each of the *daṇḍ*s described begins and ends in the standing position. They are dynamic movements using the hands and the floor. The transition between *daṇḍ*s is called *adho mukha āsana* (Fig. 3).²²

Hanumān daṇḍ includes the lunge and, combined with *sahaj daṇḍ*, displays the basic movements of *sūryanamaskār*. If this is compared with *sūryanamaskār* as publicised by Pant, one can readily recognise the influence of *daṇḍ* and *vyāyāma* (Fig. 4).

²² Similar to "downward dog": "Stretch out your hands towards the ground, keep your hips raised above the ground in *adho mukha āsana*. The whole body weight should be on the feet and toes. The space between the two palms should be a little more than the chest space" (ibid.: 17).

JOURNAL OF YOGA STUDIES

Yoga and the Traditional Physical Practices of South Asia



Figure 3: *Daṇḍ* variations (*Sahaj* and *Hanumān*) in *Vyāyāma Śikṣak* (Mazumdar 1904).

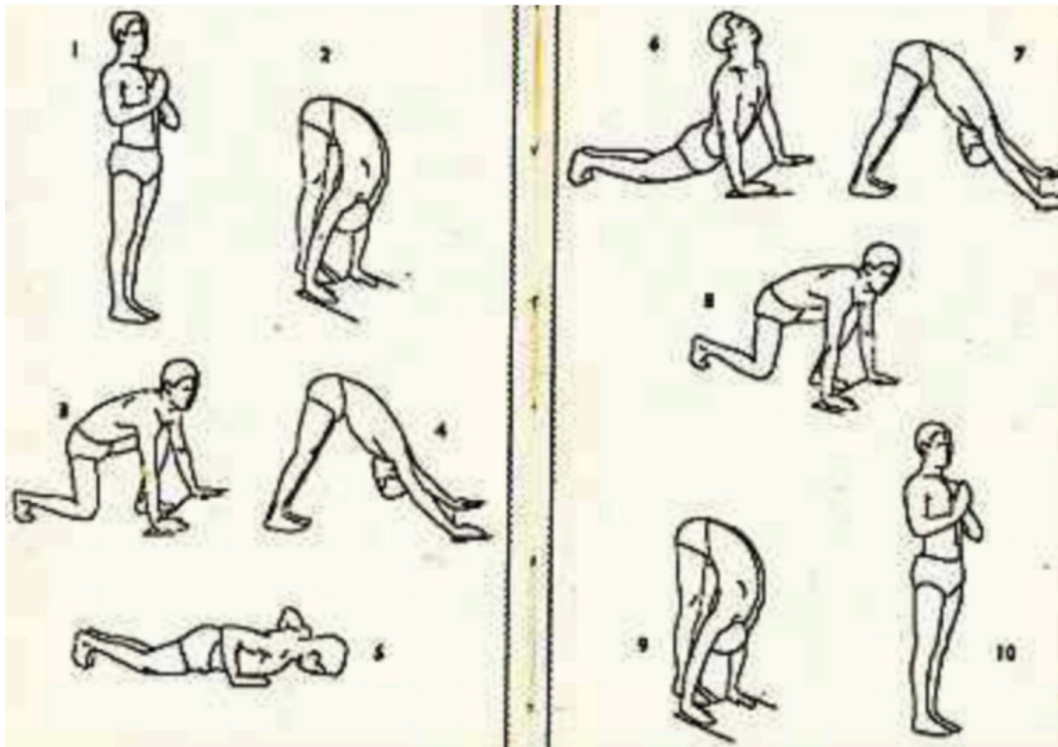


Figure 4: *Sūrya Namaskār* (Pant 1928).

Other than *uttānāsana* (Fig. 2 and 9), all of the movements in Pant’s 1928 sequence are readily found in Bidhubhushan Mazumdar’s book from 1904 among the *daṇḍ vyāyāma*.²³

²³ The *daṇḍ*s in Mazumdar (1904) comprise ten variations. Apart from those closely related to *vyāyāma*, such as *sahaj* (“easy”) and *baiṭhak* (“jump”), some are named similarly to *āsana* poses such as *siṃha* (“lion”), *hanumān* (“monkey”), *eka pāda* (“single-legged”), and *garuḍāsana* (“eagle”), for example. The *daṇḍ*s end with this regimen instruction: “On this count pull your legs forward and stand up. Close your fists, raise them above your head, and then bring them down. Fists touch the armpits, elbows jutting back. The elbows must be behind the body, pressed against the side of the body. The thumb must enclose the rest of the fingers when clenching the fists. Not the other way around. The fists must also face each other in parallel.”

As for *uttānāsana*, Mazumdar does include an example of forward-bending to the left and right side within the chapter on curving the body. It is the same posture found in Krishnamacharya's book on *āsana*, published in 1934, therein titled *pārśva-uttānāsana*.²⁴ The argument that "*sūrya namaskār* is a hybrid exercise which integrates aspects of *vyāyāma* with yoga *āsanas*" was made by Alter (1992: 98) thirty years ago, and the addition of textual proof adds heft to the claim.

Similarly, we will find examples of this integration in the Bikram Yoga class of twenty-six postures and two breathing techniques. With its division into standing and sitting postures, the class is a hybrid of both *vyāyāma* and yoga *āsanas*. As we examined the *daṇḍ* examples of *vyāyāma* in the above mentioned texts for a more plausible origin of *sūryanamaskār*, an examination of the movements of *baiṭhak* will reveal examples of the integration of *vyāyāma* which produced the standing series of Bikram Yoga.

Baiṭhak in *Vyāyāma*

Baiṭhak comprises the second group of *vyāyāma* exercises that are examined in *vyāyāma* texts (Fig. 5). Sharma's chapter on *baiṭhak* presents six steps to develop lower-body strength (1875: 26–30):

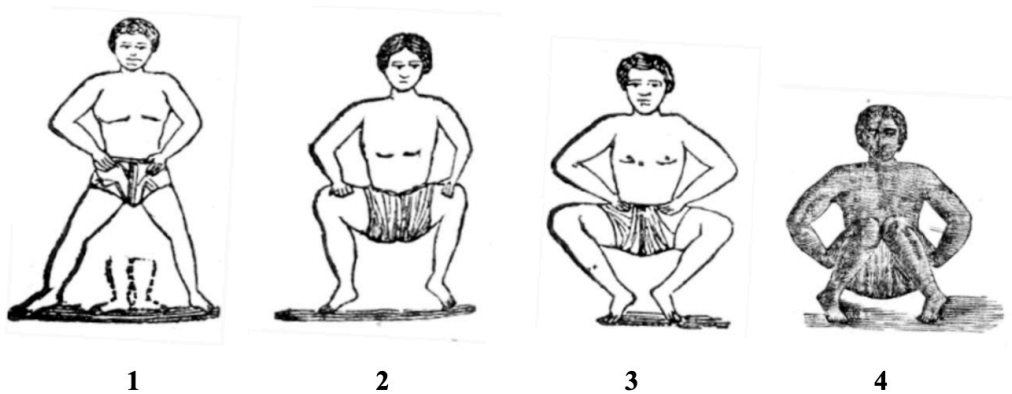


Figure 5: *Baiṭhak* exercises in *Gymnastics, Part Two, Vyāyāma Śikṣak* (Sharma 1875).

1–3) "Stand with your feet apart by one hand distance, hands resting on the lower waist. Jump the two feet together in a lively manner and sit only on your toes, with the heels up, and the body bent just enough to keep the balance."

²⁴ Krishnamacharya includes this *āsana* in *Yoga Makaranda*. See Krishnamacharya 1935: 124.

4) “With both legs together, jump ahead to sit. Your legs must be a foot apart. Keep the knees touching each other, hands on the waist.” Now, the knees must be as far apart as possible, hands on your upper thighs. In a seated position, on your toes, with heels raised. Your hands must rest on your thighs and keep some distance between your feet.”

Other instructive variations of the above are also given:

Sit as if on a chair, higher than you did before. Jump a little on the right, then left, then front and back. When you have mastered this jumping *vyāyāma*, the next step is to keep one foot or toes forward a little and the other a little back. Now jump as before right, left, front, and back. Give the impression that you are doing some dance steps.

In *Vyāyāma Śikṣak* (Mazumdar 1904), and its chapter on *baiṭhak*, six types of *vyāyāma* comprise a series of movements from a standing to a seated (*āsana*) position (Fig. 6). The six titles of the *baiṭhak* exercises explained are squat, jump, rotation jump, *eka pāda* expansion, body twist, and limb twist.

This sequence presents an example of how a medieval *haṭhayoga* posture, *utkaṭāsana*, went from a low squat to being modified for modern postural yoga. Specifically, we can look at how these are combined and included as one of the standing series postures in Bikram Yoga.²⁵



Figure 6: *Baiṭhak* exercises in *Vyāyāma Śikṣak* (Mazumdar 1904).

²⁵ The Bikram Yoga sequence, which combines twelve standing exercises with fourteen floor exercises, with an opening and closing breathing exercise, is taught as a ninety- or sixty-minute class under many different names, sometimes practised with induced heat, and sometimes not.

The standing and floor series class of Bikram Yoga was developed by Bishnu Ghosh's student Bikram Choudhury in 1970 while he was residing in Tokyo, Japan. Bikram Yoga is a fusion of two of Choudhury's teaching styles provided by Ghosh. The second half of the class (the floor series) is what Choudhury describes (1978: 111) as "the real yoga" or "the serious yoga," which comes directly from *Yoga Cure*, written by Ghosh in 1961. In Bikram Yoga, the exercises in the first half of the class (the standing series) are described as a warm-up. These are among the more demanding freehand exercises Choudhury learned while attending Ghosh's College of Physical Education in the early 1960s.

During this period, Choudhury and many of Ghosh's students entered local bodybuilding contests and performed strongman feats. Students in Ghosh's gymnasium, alongside weights and barbell practice, performed *daṇḍs*, *baithaks*, and freehand exercises for strength and control. At the same premises (at 4/2 Rammohan Roy Road in Calcutta), Ghosh operated Ghosh's Yoga College (then called *Yoga Cure*). Within the facility, freehand exercises (*vyāyāma*) served as warm-ups for the practice of *āsanas*.

Choudhury began his gymnasium training under Ghosh in 1962, mostly as a weightlifter (Armstrong 2020: 378). After being a massage therapist (a personal coach for Bollywood celebrities) in Bombay for five years, he trained in yoga for six months with Ghosh before leaving for Japan in 1970 (*ibid.*: 420). It was not an extensive training in yoga *āsanas*, but enough to create Bikram Yoga; he learned both *vyāyāma* and *āsanas* well enough to teach them to others individually.²⁶

Bikram's teacher, Ghosh, had learned the full array of *haṭhayoga* at his brother Yogananda's school during 1916–18, then *vyāyāma* at City College in Calcutta, before beginning to teach in 1923.²⁷ Later in his career, Ghosh advocated a mixture of *vyāyāma* and *haṭhayoga*, with many references to *yoga-vyāyāma*. So, Bikram's mutation of his

²⁶ B. C. Ghosh taught one-on-one therapeutic yoga instruction. When he began, in 1923, Ghosh advertised that "young and old there is a different exercise for each of you; an experienced trainer can only rightly select them." Choudhury claims to have invented the one-size-fits-all class with the input and blessing of Ghosh. However, all accounts given by other students of Bishnu contradict this claim. Bishnu Charan Ghosh died in July, 1970. Bikram Yoga first underwent development as a class towards the end of 1970 (see n. 30). One of Bishnu's last students, Mukul Dutta, explained this in an interview that, as a student of Bishnu Charan Ghosh, he was "not familiar with group classes" and that among Ghosh students, "Gouri Shankar Mukerji taught individually, so did Buddha Bose, and so on. Maybe it is more practical to have group classes in the West" (Armstrong 2020: 120, 414, 505).

²⁷ "With the advent of Swami Kapilananda, this part of education stepped up further. Needless to say, I was a keen student and soon learned *asana*, *dhauti*, *pranayam*, *mudra*, *nauli*, *uddiyana*, *basti*, etc." (Armstrong 2020: 43).

teacher's method was not different in theory, but practice.²⁸ Choudhury combined a selection of freehand *vyāyāma* for the standing series part of the class. For the “serious yoga” of the *haṭhayoga* series on the floor, Choudhury relied upon the writings of Ghosh, telling a Hawaiian reporter in 1972 that *Yoga-Cure* (Ghosh 1961) was the source for his floor series.²⁹ To see the influence of *vyāyāma* upon Ghosh's gymnasium (and Bikram's standing series), one posture to recognise is *utkaṭāsana*.

The twenty-seventh *śloka* of the second chapter of the *Gheraṇḍasāṃhitā* describes *utkaṭāsana* with the instructions to “put the big toes on the ground (taking the weight), the ankles in the air, and the anus on the ankles” (Mallinson 2004: 36).³⁰ The basic *āsana* from *haṭhayoga* becomes layered with the influence of *baithak* exercises and the influence of 19th-century *vyāyāma* (see Fig. 5 and Fig. 6) to become the three-part dynamic posture in Bikram Yoga (seen in Fig. 7 below).

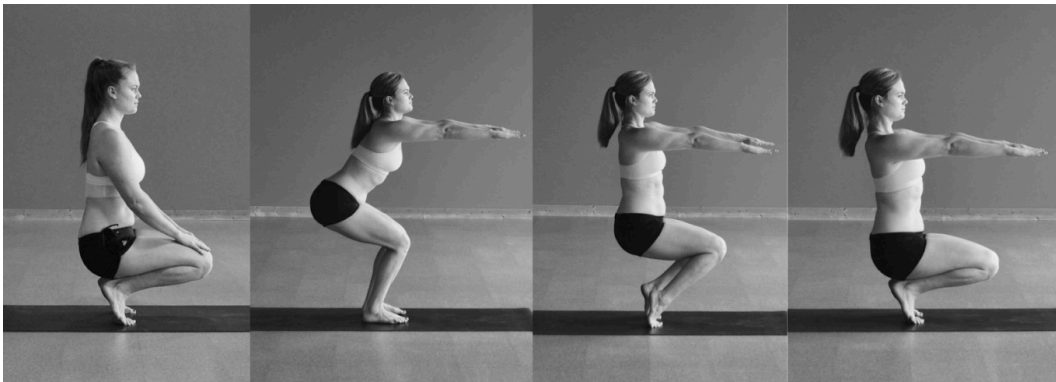


Figure 7: Ida Jo in *utkaṭāsana* in *Gheraṇḍasāṃhitā* (left); *utkaṭāsana* in Bikram Yoga (right three).

²⁸ Choudhury created the class alongside Bimal Das in Japan during the second half of 1970, and its first rendition included four additional seated postures. Das, a more Senior yoga teacher under B. C. Ghosh, returned to Calcutta to teach yoga, and began a similar class of mixed postures, taught to women and men separately and without the added heat (Armstrong 2020: 414, 505).

²⁹ Indeed, the instructions in the Ghosh text and the Bikram dialogue are very similar for the seated postures. See “Bikram swears by a booklet, *Yoga-Cure* written by his instructor, the late Bishnu Ghosh.” Honolulu State-Bulletin, August 23, 1972. In Armstrong 2020: 393.

³⁰ Originally a pose for *basti* practice: “The same might be said for the Haṭhayogic water enema, which requires that the yogin assume a half-squatting posture (called *utkaṭāsana*) in a river and create an internal abdominal vacuum to draw in the water” (Birch 2018b: 49). The *jalabasti* (“water enema”) *āsana* of *haṭhayoga*, as presented in the *Gheraṇḍasāṃhitā*, became a more physical posture within *haṭhayoga* texts from the 17th century onwards.

What is also revealing in both Sharma's instructional manual and the Bikram Yoga dialogue are the similarities. Although they are written about one hundred years apart, they both originate in Calcutta and are evidence of a continuity of practice from the National Gymnasium to Ghosh's gymnasium.

As described by Sharma (1875, *baiṭhak* exercises):

Now, jump so that your legs must be a foot apart. Then, in a sitting position. You have to sit on your toes with heels raised. Your hands must rest on your thighs and keep some distance between the feet. Sit as if on a chair [...].

The posture as described within the teacher's dialogue of Bikram Yoga (1978, *Utkaṭāsana*):

Six inches gap between toes and heels [...] On the top of the toes, the spine is in a straight position [...] Sit down halfway until your hips touch the chair [...] Come up higher on the toes [...] Hips should not go down below the chair; you are sitting on the chair [...].

Utkaṭāsana shows us a transitional evolution of the posture, whereby *vyāyāma* introduces dynamic change into the *āsana*. The *utkaṭāsana* found in Bikram Yoga, viewed as informed by the *baiṭhak* variations, portrays the influence of *vyāyāma*.

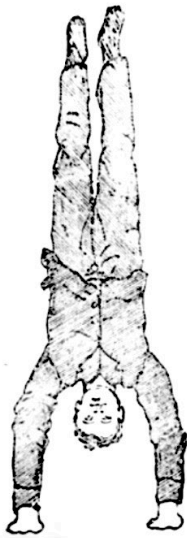
Other *Vyāyāma* and *Haṭhayoga*

The exchange between *vyāyāma* texts and the precursor texts of modern yoga, such as the 18th-century *Haṭhābhyāsapaddhati*, are readily observable in the documents, both in generalities and in postures. For example, *vyāyāma*, as prescribed in an Ayurvedic text, “produces lightness in the body” (Dhammissara 2005: 17). Likewise, in the *Haṭhāradīpikā*, *āsana* practice is said to produce lightness in the body. Similarly, the introduction to the 17th-century *Gheraṇḍasāṃhitā* calls its yoga “*ghaṭastha*” (“vessel,” i.e., “body pot,” “cauldron”) and seeks to embody the perfection of the body and mind (Mallinson 2004: ix). As within the *Haṭhāradīpikā*, we can recognise syncretism with other *vyāyāma* exercises in these 19th-century Indian exercise texts.

The *vyāyāma* found in these texts represent a full system of dynamic exercises to develop strength in the “shoulders, neck, wrists, spine, waist, elbows and arms” (Muzumdar 1904: 40). These examples are among the closing exercises in

Muzumdar and Sharma (see Fig. 8 and 9) and are more advanced, resembling exercises akin to handstands, somersaults, cartwheels, and backflips, which are *vyāyāma* exercises that resemble modern yoga *āsana*s.

Within Mazumdar (1904), three types of *vyāyāma*, performed dynamically, use the terminology of animals (similar to the *Haṭhābhyāsapaddhati*), which intersect with both older *āsana* texts and modern yoga *āsana* practice. These are *ṛścik cāl* (“scorpion”), *makar cāl* (“crocodile”), and *maṇḍūk cāl* (“frog”), which are hand-walking, crawling, and jumping exercises. Similar to dynamic movements replicated within the *Haṭhābhyāsapaddhati*, this shows a level of exchange hitherto unnoticed between *vyāyāma* and *haṭhāyoga* (Birch and Singleton 2019: 48).



Vṛścik Cāl



Siṃha Daṇḍ



Upside Down

Figure 8: Other *Vyāyāma* in *Vyāyāma Śikṣak* (Mazumdar 1904).

Other postures are also listed and/or provided with accompanying diagrams by Mazumdar (1904), with either Bengali or English nomenclature, which resemble modern yoga *āsana* practice (Fig. 8).

Four examples of *vyāyāma* found within Sharma (1875) and pre-colonial era yoga texts will serve to highlight this point of intersection (Fig. 9).

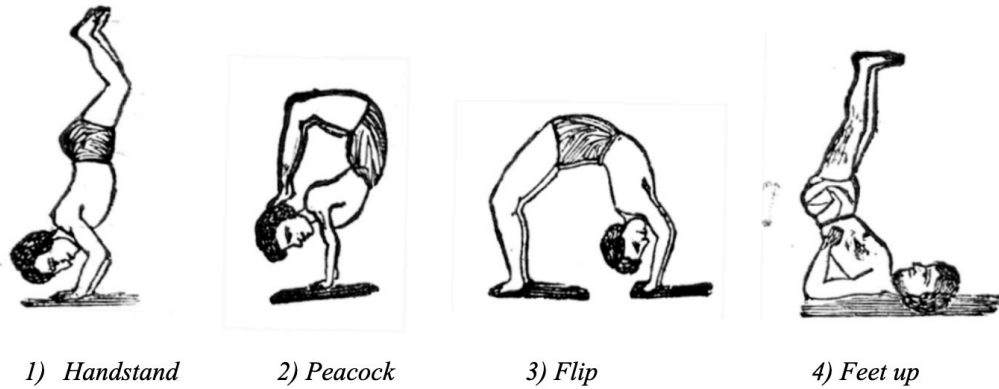


Figure 9: Other Vyāyāma in *Gymnastics, Part Two*, *Vyāyāma Śikṣak* (Sharma 1875).

They are: 1) walking on hands with the feet up in the air; 2) *mayūrāsana* or “peacock” with variations of “pecking at a pebble by a peacock” and “jump ahead on hands as you jump on your feet”; 3) arch backwards to “land on your feet on the opposite side”; 4) “Throw your feet up: Place your hands and forehead on the ground and steadily put up your legs in the air, elbows and upper portion of your back are on the ground. Your hands hold up your body from the waist. Stay in this position for some time.” Each of these exercises in Sharma (1875) has an equivalent within the *Haṭhābhyāsapaddhati*, the *Jogapradīpikā*, and other pre-modern and classical *haṭhāyoga* texts.

Exercise 1, dancing (i.e., moving around) on the hands is handstand in the *Haṭhābhyāsapaddhati*; exercise 2 is similar to *vṛścikāsana* (“scorpion”); exercise 3 is identical to *cakrāsana* (“wheel”); and exercise 4 describes *viparītakaraṇī*, a *mudrā* described in the 15th-century *Haṭhapradīpikā*, where one is upside down on one’s back, similar to a shoulderstand.

Curiously, Sharma (1875) presents the shoulderstand (feet up) as the last *vyāyāma* to practise, and its instruction replicates the static instruction of *viparītakaraṇī* found within *haṭhayoga* instead of the dynamic tendency of most *vyāyāma* descriptions. This crossover suggests a fluid, two-way exchange. Perhaps the 17th- to 18th-century yogic texts, such as the *Haṭhābhyāsapaddhati*, were influenced by *vyāyāma*. And perhaps *vyāyāma* also absorbed *āsanas*, like *mayūrāsana* and *viparītakaraṇī*, from yoga; likewise Bharadwaj (1896) includes *mayūrāsana* among *vyāyāma*.³¹

³¹ I credit Jason Birch for a discussion which helped point to this claim. As discussed in Bevilacqua 2018: 21, n. 27, further research is necessary to determine the direction of exchange between *haṭhāyoga* and *vyāyāma*.

Vyāyāma and Modern Yoga

After the turn of the 20th century, the practice of *vyāyāma* seems to have picked up considerably, not just in Calcutta, Bengal, but throughout India. Though the physical culture revival of indigenous *vyāyāma* exercises was mostly cultural at first, and within an educational setting, it became part of a political agenda.

During the first decade of the 20th century, Priyanath Bose, while he performed on his Great Bengal Circus tour, “would call on the audience to practise *vyāyāma* for their own and their country’s health,” suggesting an appropriation of physical methods by nationalists to either form systems of *vyāyāma* or draw upon older ones; but either way, to replace European ones (Armstrong 2020: 104–107). The nationalist principle of *svadeśī* (“self-reliance”) swept through the nation in that first decade. The Hanuman Association for the Propagation of Physical Exercise began in 1914, and the Rashtriya Swayamsevak Sangh (RSS) began as an organisation dedicated to the reconstruction of Hindu masculinity (Alter 2007).

The practice of *vyāyāma* and martial resistance, neighbourhood gymnasiums/*akhārā*, and schools based on physical regimens sprang up in most parts of India. Like the one at City College in Calcutta, where Yogananda and the Ghosh family of Bishnu Charan and Buddha Bose practised, gymnasiums taught *vyāyāma*, as did places where revolutionaries might be practising it, or any type of wrestling group with a local *akhārā* (Armstrong 2020: 83–87). By the 1920s, native gymnasiums (*vyāyāmaśālās*) were “flourishing” in India (Goldberg 2016: 241).

When the first modern yoga innovators began their work in the 1920s, *haṭhayoga* was “obscure” and “too fringe to be widely suitable” (Armstrong 2020: 89–91).³² This would radically change over the next decade, as *haṭhayoga* began taking a more central role within India’s physical systems of practice, and as *vyāyāma* was amalgamated into modern yoga. Benefactors played a role, such as the Rāja of Aundh, who promoted the practice of *sūryanamaskār* as a school drill, the Mahārāja Manindra, who funded Yogananda’s *brahmacharya* scholastic endeavours in Bengal, and the Mahārāja of Mysore, under whom Krishnamacharya developed his hybrid of yoga and *vyāyāma*.³³

³² From an urban, Calcuttan, physical culture perspective, see Gupta 1927. For further discussion on *haṭhayoga* and *tapasyā* and the Indian understanding of yoga from within ascetic communities, see Bevilacqua 2018.

³³ First “designed for youngsters,” this “high energy” new form of yoga served as a template for an “outwardly focused culture, with an approachable gateway to a path of deeper spirituality,” for students around the world (Goldberg 2016: 248).

The 1920s was the pivotal decade for the formation of modern yoga *āsana* practice. As the practice of *haṭhayoga* became more widely modified and adopted in the 20th century, those in India who promoted modern yoga *āsana* practice reached into their knowledge (either textual or by verbal lineages) of *haṭhayoga* and *vyāyāma* to inform their presentation of yoga.

As mentioned above, Bhawanrao Pant, the early propagator of *sūryanamaskār*, was a practitioner of physical culture and wrestling in his youth. Bishnu Ghosh returned from Ranchi, where he'd learned *haṭhayoga*, in 1918, and by 1923, after five years of training in *vyāyāma*, began teaching his integrated style of physical culture. Pattabhi Jois says of his introduction to Krishnamacharya that he demonstrated “extraordinary feats of strength and physiological control, such as suspending his pulse, stopping cars with his hands [...] and lifting heavy objects with his teeth” (Singleton 2010: 193). Such strongman feats were familiar throughout India at the time among those in physical culture.

Other early proponents were Swami Kuvalayananda, who began the immensely formative *Yoga Mimamsa* publication in October of 1924. Its main thrust was to provide scientific rigour to the beneficial claims of yoga *āsana* practice. Before being introduced to *haṭhayoga* by Madhavdas, Kuvalayananda's guru was the physical culturist Rajaratna Manikrao. K. V. Iyer also had a long-documented association with physical culture before becoming a yoga proponent. Iyer wrote the Foreword for *Yogic Physical Culture* (Sundarman 1928), which mentions a “psycho-physical” balance of yogic therapy (through *āsana*, *mudrā*, *bandha*, *kriyā*) healing and “the muscular development of the body” (ibid.: vi).

Nearly all of the early modern postural yoga teachers had a biographical background that exposed them to *vyāyāma* (Newcombe 2017: 19). Wrestling, body-building, stage performance, feats of strength, or any physical practice, such as *lāṭhī* (“stick fighting”), would require a training regimen and would utilise *vyāyāma* for freehand exercise preparation. The preparation for yoga *āsana* became the same way, with *vyāyāma* now structurally added. In the formative years of modern yoga's syncretisation, what emerged was from a fluid historical situation whereby different traditions merged into something new, became the status quo, and then became functionally creative again.

Krishnamacharya grafted together indigenous *vyāyāma*, the gymnastic system of the West, and drew upon “yoga literature as if it were a part of his practice and his experience” for a new “yoga exercise system” (Sjoman 1999: 55). Krishnamacharya, Sjoman claims, creatively put together the Vinyāsa system by treating sources

symbolically. Pattabhi Jois followed this tradition with only minor improvisations. It is only with Iyengar that the perspective of the practice changed. Iyengar “treated the āsanās dynamically with his attention to precision, thus returning to the theme idea, namely, a functional perspective on āsanās — the perspective which brings us back to the essence of a dynamic tradition” (Sjoman 1991: 61).

Similarly, Ghosh and Bose structured a one-on-one therapeutic system of modern yoga that synthesised a tradition of *vyāyāma* standing movements with *haṭhayoga* āsanās. Gouri Shankar Mukerji (1963) followed in this individualised tradition with minor changes to the eighty-four āsanās system of Bose and, similarly to Kuvalayananda, added validation through professional medicalisation of yoga. Much later, Choudhury and Das functionally created a yoga class that combined the two practices (*vyāyāma* and āsana), with attention to the need for strenuous and vigorous exercise alongside the traditional benefits of āsanās and *śavāsana* practice.

Conclusion

This chapter presents the idea that many of the postures which appeared on the scene during the formative period of modern yoga in India were part of the *vyāyāma* system, but that doesn’t necessarily mean they were always a part of *vyāyāma*. Other traditions or lineages of physical practice within India existed, and there is support for the idea that some of these may have been within *haṭhayoga*. Given this, an association between yoga and *vyāyāma* was already well established before India’s revival of yoga.

All in all, modern yoga has resulted from a continual layering; an entanglement of ancient cross-currents of indigenous physical practices with metaphysical verbal cues and sentiments which reached India from the West, amidst evolving viewpoints of what constitutes yoga.³⁴ India’s modern yoga, which grew out of a transnational dialectical exchange between precedent and innovation, with roots in indigenous syncretisation, continues to mutate and evolve in global forms of yoga.

A monolithic representation will not emerge, but understanding how *vyāyāma* intersects with *haṭhayoga* and informs modern yoga returns us to the question of whether or not yoga as exercise has a system of practice that connects to India’s deep past. In today’s globalised yoga, when yoga āsana practice overlaps with dynamic physicality, emphasising strength, endurance, and flexibility, *vyāyāma* endures.

³⁴ “Even in pre-modern India, there was no consensus as to which physical practices could be accepted as yoga” (Mallinson and Singleton 2017: 95).

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Yoga and the Traditional Physical Practices of South Asia

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