History of Science in South Asia



Mastering Deathlessness

Some Remarks on Karpam Preparations in the Medico-Alchemical Literature of the Tamil Siddhas

Ilona Barbara Kędzia 匝

Volume 5, numéro 2, 2017

Special Issue - Transmutations: Rejuvenation, Longevity, and Immortality Practices in South and Inner Asia

URI : https://id.erudit.org/iderudit/1116116ar DOI : https://doi.org/10.18732/hssa.v5i2.16

Aller au sommaire du numéro

Éditeur(s)

University of Alberta Library

ISSN 2369-775X (numérique)

Découvrir la revue

Citer cet article

Kędzia, I. (2017). Mastering Deathlessness: Some Remarks on Karpam Preparations in the Medico-Alchemical Literature of the Tamil Siddhas. *History* of Science in South Asia, 5(2), 121–142. https://doi.org/10.18732/hssa.v5i2.16 Résumé de l'article

The article presents some remarks concerning practices aimed at achieving rejuvenation, longevity and immortality described in the literature of the Tamil Siddhas, with special reference to the medico-alchemical stream of the tradition. The study is based on the philological analysis of selected representative works of Tamil Siddha literature, starting from the Tirumantiram of Tirumūlar (6-12th century). The Tirumantiram is generally acknowledged to be a root text of the Tami Siddha tradition and it contains passages that elaborately discuss the theory and practices of yoga, presenting them as a means of attaining longevity and immortality. It also contains references to medical practices. Further, relevant ideas about rejuvenating, life-prolonging and immortalizing methods found in selected texts of the medico-alchemical stream of the tradition are discussed. The literature of the medical and alchemical lore of the Tamil Siddhas, roughly dated to the period between the 16th and 19th centuries, abounds in practical recipes for the drugs (karpam) for prolonging life. Certain items credited with extraordinary powers connected with rejuvenation and immortalization, such as triple salt (muppu), mercurial jewel (racamaṇi), human urine, special varieties of medicinal plants, etc. are particularly referenced to in the paper. Finally, the concepts relating to "the art of non-dying" (cākākkalai) taught in the works of Vaḷḷalār, the poet-saint born in 19th century and closely linked with the Tamil Siddha tradition, are outlined in the article.

© Ilona Barbara Kędzia, 2017



érudit

Ce document est protégé par la loi sur le droit d'auteur. L'utilisation des services d'Érudit (y compris la reproduction) est assujettie à sa politique d'utilisation que vous pouvez consulter en ligne.

https://apropos.erudit.org/fr/usagers/politique-dutilisation/

Cet article est diffusé et préservé par Érudit.

Érudit est un consortium interuniversitaire sans but lucratif composé de l'Université de Montréal, l'Université Laval et l'Université du Québec à Montréal. Il a pour mission la promotion et la valorisation de la recherche.

https://www.erudit.org/fr/



History of Science in South Asia

A journal for the history of all forms of scientific thought and action, ancient and modern, in all regions of South Asia

Special issue:

Transmutations: Rejuvenation, Longevity, and Immortality Practices in South and Inner Asia

Edited by Dagmar Wujastyk, Suzanne Newcombe, and Christèle Barois

Mastering Deathlessness: Some Remarks on Ka<u>r</u>pam Preparations in the Medico-Alchemical Literature of the Tamil Siddhas

Ilona Barbara Kędzia Jagiellonian University

MLA style citation form: Ilona Barbara Kędzia. "Mastering Deathlessness: Some Remarks on Karpam Preparations in the Medico-Alchemical Literature of the Tamil Siddhas." *History of Science in South Asia*, 5.2 (2017): 121–142. DOI: 10.18732/hssa.v5i2.16.

Online version available at: http://hssa-journal.org

HISTORY OF SCIENCE IN SOUTH ASIA

A journal for the history of all forms of scientific thought and action, ancient and modern, in all regions of South Asia, published online at http://hssa-journal.org

ISSN 2369-775X

Editorial Board:

- Dominik Wujastyk, University of Alberta, Edmonton, Canada
- Kim Plofker, Union College, Schenectady, United States
- Dhruv Raina, Jawaharlal Nehru University, New Delhi, India
- Sreeramula Rajeswara Sarma, formerly Aligarh Muslim University, Düsseldorf, Germany
- Fabrizio Speziale, Université Sorbonne Nouvelle CNRS, Paris, France
- Michio Yano, Kyoto Sangyo University, Kyoto, Japan

Publisher:

History of Science in South Asia

Principal Contact:

Dominik Wujastyk, Editor, University of Alberta Email: (wujastyk@ualberta.ca)

Mailing Address:

History of Science in South Asia, Department of History and Classics, 2–81 HM Tory Building, University of Alberta, Edmonton, AB, T6G 2H4 Canada

This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge.

Copyrights of all the articles rest with the respective authors and published under the provisions of Creative Commons Attribution-ShareAlike 4.0 License.

The electronic versions were generated from sources marked up in LTEX in a computer running GNU/LINUX operating system. PDF was typeset using XHEX from TEXLive. The base font used for Latin script and oldstyle numerals was TEX Gyre Pagella developed by GUST, the Polish TEX Users Group.

Mastering Deathlessness: Some Remarks on Ka<u>r</u>pam Preparations in the Medico-Alchemical Literature of the Tamil Siddhas

Ilona Barbara Kędzia

Jagiellonian University

THIS paper aims at presenting remarks about the practices oriented towards rejuvenation, longevity and even immortality described in Tamil Siddha medico-alchemical literature.¹ Those medico-alchemical practices relate mainly to the use of certain substances and preparations for internal and external application called karpam.² This essay describes and exmines several selected substances and procedures, such as the use of black herbs ($karum\bar{u}likai$), the "triple salt" (muppu), the "tied salt" (kattuppu), mercury (iracam) and urine (amuri) related to karpam therapy, along with the effects ascribed to the karpam preparations in Tamil Siddha literature. As observed in the examined passages, karpam therapies seem to be closely connected with the discipline of yoga in medico-alchemical texts. The affinity between the purpose of medico-alchemical preparations on the one side, and of yogic practices on the other, such as the stabilisation and preservation of the physical body, as well as the synergy of the methods of both disciplines stated by the medico-alchemical Tamil Siddha literature suggest a close relation between Siddha medicine, alchemy and yoga.

The chronology of Tamil Siddha medico-alchemical literature remains uncertain, due to the lack of critical and comprehensive studies done so far. Often scholars date texts that are traditionally accepted as authoritative works of Tamil

1 The medico-alchemical stream of Tamil Siddha literature is one of the few categories of Siddha texts recognized by scholars. On the classification of the Tamil Siddhas and their literature see, e.g., Venkatraman 1990; Ganapathy 1993: 22–24; Zvelebil 1993: 17– 19, 2003: 19–20. On the content of nonmedical Tamil Siddha literature see, e.g., Buck 1976; Venkatraman 1990; Zvelebil 1993; Meenakshi 1996.

2 The term *karpam* is the Tamilized version of the Sanskrit word *kalpa*, "proceeding", "rule", "treatment", "medicinal compound." Siddha medico-alchemical literature to the period starting from the 15th–16th century onwards. However, the material contained in them most probably derives from earlier centuries.³ At the same time, it is also probable that the texts include large interpolations of recent origin. It is estimated that the number of Tamil Siddha medico-alchemical texts encompasses hundreds of works preserved on palm-leaf manuscripts, only some of which have been printed so far. The texts are scattered and unorganized and it is assumed that the vast amount of manuscripts still remains in private hands.⁴

1. SOURCES

T^{HIS ESSAY is based on the reading of selected Tamil Siddha medico-alchemical texts. The text most widely cited here is the $P\bar{o}kar Karpaviti$ (PKV)⁵ by Siddha P $\bar{o}kar$.⁶ It is almost entirely dedicated to prescriptions for drugs called *karpam*. It consists of 342 stanzas divided into ninety-four small subsections, each of which deals with a particular topic, often with a particular prescription. The text in major part contains practical recipes for preparations with herbal, animal, mineral and metallic ingredients. Prescriptions usually provide lists of ingredients and a general description for the method of preparation, some of them also list the diseases against which the preparation can be used, as well as other effects}

4 See Venkatraman 1990: 15; Zvelebil 2003: 139. Recently, a project entitled "Conservation, Documentation and Preservation of the Knowledge of Siddha Medicine" headed by Brigitte Sébastia and supported by the British Library, was carried out at the French Institute of Pondicherry (IFP) in order to preserve, catalogue and digitise extant Siddha manuscripts. One of the aims of the project was to put the digitised manuscripts online on the website of the British Library (see the project website, Sébastia 2015–2017).

5 I have used the edition of the text with the commentary edited by Citta maruttuva ilakkiya ārāycci āvaṇattuṟai, citta maruttuva maiya ārāycci nilaiyam in Chennai on the basis of the palm leaf manuscripts collected at the Maharaja Serfoji's Saraswati Mahal Library in Thanjavur. 6 In scholarly publications other transcriptions of the Tamil name "Pokar" are also used, such as "Pogar", "Bogar" or "Bhogar." "Pokar" is a Tamil name which derives from the Sanskrit noun bhoga, "enjoyment", "eating", "pleasure", "wealth." The Siddha called Pokar, considered to be the author of the text, is a highly-esteemed figure among traditional Siddha practitioners. However, it is possible that among Tamil Siddhas there were several authors with the name "Pokar" (see Venkatraman 1990:65). The most famous one probably could be regarded the author of the monumental work Captakāntam ("Seven Chapters"), in which marvellous, and sometimes phantasmagorical, journeys undertaken by the author with the use of mercurial pills are described. On the biography and works of Siddha Pokar see, e.g., Ganapathy 2003; Little 2006; Natarajan 2009; Kędzia 2017.

³ See, e.g., Scharfe 1999:609–612; Weiss 2009: 48–50; Zysk 2013: 182–183.

of the drugs. In this essay, I also refer to the works of other Siddhas that elaborate on the subjects relevant for the present study that are not discussed adequately in the text of Pōkar. Those texts include two works ascribed to Siddha Akastiyar,⁷ namely the *Kuru Nūl Muppu 50* (KNM), consisting of 49 stanzas, and the *Karpa Muppu Kuru Nūl 100* (KMKN), consisting of 103 stanzas. Both texts deal mostly with "triple salt" (*muppu*), and they provide recipes for some *karpam* preparations as well. Yet another Siddha whose works have been used for the present research is Yākōpu alias Irāmatēvar,⁸ the prolific author of at least seventeen works,⁹ which are highly esteemed and used as manuals by contemporary Siddha doctors, especially with regard to metallic preparations.¹⁰ Cita-

7 Akastiyar is traditionally considered to be the founder of the Tamil Siddha medical system. He is claimed to be the author of more than two hundred texts in Tamil (see Zvelebil 1993: 32). According to the common view, he is credited with founding the first Sangam and with composing the first grammar of the Tamil Language (Sivaraja Pillai 1930: 36–38). However, it has been indicated by T. P. Meenakshisundaran that the language of the medical writings of Akastiyar cannot be older than the fifteenth century (T. P. Meenakshisundaran, quoted by Zvelebil 2003:71). It is also highly dubious that a single person composed all of the works ascribed to Akastivar. According to Zvelebil, in the medieval and modern Tamil tradition, several authors of the same name (with some variants, such as "Agastya", "Akattiyan", "Akattiyar") have been merged into one single personage credited with some supernatural characteristics (see Zvelebil 1992: 235-261.). The name "Akastiyar" is a Tamil version of Sanskrit "Agastya", the name of the revered Vedic sage, whose figure is well attested in the Sanskrit literature, starting from the Rgveda. See "Agastya" in Macdonell and Keith 1912: 6–7.

8 Siddha Yākōpu probably lived between the fifteenth and seventeenth centuries (Natarajan 2004: 257). However, Venkatraman places his works in the later period, i.e., between the seventeenth and the eighteenth century (Venkatraman 1990: 63). The author introduces himself as a person originally called "Irāmatēvar" in several passages in his texts, and provides a story about the origin of his family, which belongs to a lineage of warriors. According to autobiographical accounts contained in his texts, Irāmatēvar travelled to Mecca in search of alchemical knowledge. There he converted to Islam, underwent circumcision and received the Muslim name "Yākōpu." On the life of Yākōpu, see Natarajan 2004; Venkatraman 1990: 63–64; Kędzia 2017.

9 Yākōpu is credited with seventeen texts, claimed to be composed after his conversion to Islam. The list of his texts, provided by Ji. Irāmacāmik Kōn, the general publisher of Yākōpu's works, includes the following titles: Vaittiya Cintāmaņi Elunūru, Kurunūl Aimpatti Aintu, Cunnakkāntam Arunūru, Cuņņam Munnūru, Centūra Cūsti[ram] Nūrru Aimpatu, Cūstiram Aimpatti Aintu, Vakārak Kalanku Munnūru, Pañcamittiram Munnūru, Tanțakam Nūrru Pattu, Cūstiram Aimpatti Aintu, Itaipākam Patināru, Ceypākam Patināru, Vaitya Vātacūstiram Nānūru, Vaittiyam Munnūru. To this list the text entitled Kallāțam, traditionally ascribed to Yākopu, is also added (see VaiCin: 2). Moreover, before his travel to Mecca, Irāmatēvar may have also composed a few texts, for example Civayōkam Irunūru (see Natarajan 2004: 258). 10 Personal communication from Dr Kaviarasu Balakrishnan, traditional Siddha practitioner. According to Dr Balakrishnan, Yākōpu's works are the prominent works on alchemy of the Tamil Siddha tradition.

tions from the *Cuṇṇakkaṇṭam 600* (CuṇKaṇ),¹¹ consisting of 605 stanzas, which provide many recipes related to *cuṇṇam*¹² preparations, as well as from the *Vaittiya Kallāṭam* (VK),¹³ which is especially interesting with regard to its language as it contains manifold riddles, were the most relevant for the present paper. The *Nāṇakaṛpam* 222 (ÑK) of Siddha Pulastiyar has also been referred to.¹⁴ As indicated by the title, the text consists of 222 stanzas, and concerns subjects related to medicine, alchemy and yoga. I will also refer to an important older text that is usually not included among the medico-alchemical literature of the Tamil Siddhas, namely the *Tirumantiram* by Tirumūlar¹⁵ (twelfth century)¹⁶. The *Tirumantiram* is often regarded as a foundational text of Tamil Siddha literature, including the medico-alchemical stream. The text consists of nine chapters called *tantiram* that comprise over 3000 verses, and it deals with a number of subjects, primarily yoga and Śaiva philosophy.

The content of the literature of the medico-alchemical stream of the Tamil Siddha tradition covers a wide spectrum of subjects, including medicine, alchemy, yoga, magic, etc. The number and choice of themes can vary significantly from one text to another. The texts often have the form of practical manuals, especially for certain medical and alchemical preparations. However, the prescriptions are frequently not provided with details necessary for the procedure and

11 I have used the printed edition provided with the modern commentary.

12 *cuṇṇam* / *cuṇṇam* is a variety of drug prepared from metals, white in colour and possessing qualities similar to calcium. It is regarded as very potent. It is obtained with the use of *ceyanīr* (a pungent liquid prepared by exposing the mixture of minerals to night dew), fuller's earth and acids. See *cuṇṇam* in Sambasivam Pillai 1931–1994.

13 The *Vaittiya Kallāțam* consists of three parts, dealing with medicine, alchemy and yoga, respectively. The first and the longest medical part, which has been used for the present study, contains 53 stanzas that provide recipes for medical preparations against various diseases, and is accompanied by an explanatory commentary.

14 In contrast to the above-mentioned Siddhas, no information about the life of Siddha Pulastiyar has been found in the available sources.

15 The twelfth-century text *Tiruttontarpurāņam* recounts a story about the author of the Tirumantiram. According to the tale, the author was a yogi who travelled to South India from the north. On his way, the yogi saw a herd of cows weeping over the body of a cowherd called Mulan, who had died suddenly from a snake bite. The yogi secured his own body in a safe place and, having migrated into the corpse of the deceased cowherd, he led the cows to their home. Remaining in the cowherd's body, the yogi attained "real knowledge" (meyñānam). Then he sat down in meditation for three thousand years, composing the three thousand verses of the Tirumantiram at the rate of one verse per year. See Venkatraman 1990: 46-47.

16 The date of the *Tirumantiram* remains uncertain. However, as demonstrated by Goodall on the grounds of the conceptual content of the text, most probably it cannot be earlier than the twelfth century. See Goodall 1998: xxxvii-xxxix, n. 85; Goodall 2000: 213, n. 27. are sometimes hardly understandable without a commentary, because of the peculiar esoteric language, which contains colloquial Tamil forms, cryptic symbolic expressions and ambiguous technical terms of the traditional lore. The use of the symbolic and equivocal "twilight language" (Tamil: *cūniya-campāsanai*, "discourse on the void") is considered to be a common feature of the Siddha texts, also beyond the Tamil tradition. Such language, among other possible purposes, may serve to protect the great truths of the Siddha doctrine from profanation by uninitiated persons. Through the use of colloquial expressions, it may allow persons outside the literary elite to access Siddha teachings. Symbolic expressions may also be used to convey mystical experiences, expression of which remains beyond the abilities of ordinary language.¹⁷ Interestingly, in Tamil Siddha medico-alchemical literature, even simple recipes against common diseases may be intentionally presented in a highly perplexing way. In some texts, information necessary for the preparation, such as names of crucial ingredients, instruments or doses, have been hidden in rebuses and riddles, the solving of which is frequently impossible without a commentary. The riddles are often based on word-play with the use of synonymous words. For example, the solution of the riddle "join the mother to the beginning of lead"¹⁸ is "clove" (*ilavankam*), because when the synonymous words of the word "mother" (avvai), i.e., ila, ¹⁹ is added to the beginning of the word "lead" (vankam), the word ilavankam ("clove") will be obtained. Another example is based on the simily between Tamil letters and numbers: "add the mother $(t\bar{a}y)$ to the eighty (enpatu)".²⁰ In the Tamil system of writing, the numerals "8" and "o" of number "80" have a very similar shape to the letters "a" and "ya." If we add yet another synonymous word for "mother", i.e., *kāntai* ("wife", "woman") to the cluster "a+ya", we obtain the word *ayakkāntai*, which is almost identical with *ayakkāntam*, i.e., the Tamil Siddha term for lodestone.²¹ The use of such an enigmatic language is also found in esoteric yogic texts which contain passages concerning spiritual practices aimed at obtaining liberation. One remarkable example of such esoteric passages is the whole seventeenth chapter of the ninth section (tantiram) of the Tirumantiram entitled cūniya-campāṣanai ("Discourse on the void") or maraiporuț kūrru ("Speech

17 See Ganapathy 2004: 3–6.

20 VK: 49: [...] enpatoțu tāyai cērttu [...]

21 This method of encoding, based on the similarity between the visual form of the

Tamil numerals and the letters is more common in the Tamil Siddha tradition, also beyond the medico-alchemical stream. One remarkable example is number "82" which has an important meaning for the Tamil Siddhars. Numbers "8" and "2" look very similar to Tamil letters "a" and "u", so the number "82" is used to denote the sacred syllable "*aum*."

¹⁸ VK: 32:3 [...]vańkamuta lavvaic cērttuc [...].

¹⁹ The word used in ancient times in addressing a woman in a familiar manner. See *ila* in the University of Madras's *Tamil Lexicon* (1924–1936).

on secret sense"). The chapter consists of seventy stanzas composed in symbolic and highly ambiguous language and it concerns yogic practices which aim at liberation.²²

The view that rejuvenation and long life can be achieved through certain practices is well-attested in Tamil Siddha medico-alchemical literature. Moreover, in some texts it is also suggested that some preparations and therapies may even bestow immortality.²³ Nonetheless, the concept of immortality is not elaborated in the consulted medico-alchemical texts. From the context, it may be inferred that immortality, as conceived by the medico-alchemical Siddha writers, is related to the preservation of a prosperous, youthful and handsome physical body, which is often suggested to be the result of the application of the described preparations. In the consulted texts, it is not explicitly stated what the aim of the attainment of such a body is. The pursuit of an immortal body found in medicoalchemical texts may indicate a link between yoga and medicine within the Tamil Siddha tradition. Bodily immortality and the preservation of youthfulness are repeatedly stated to be a result of yogic practices in the *Tirumantiram*. The author claims that both the body and the soul are equally important and interdependent entities, and the body is considered to be indispensable for achieving "true knowledge" (meyñānam) leading to liberation.²⁴ This view, although not explicitly stated in medico-alchemical texts, may underlie the practices described in them as well.

2. RECIPES FOR REJUVENATION, LONGEVITY AND IMMORTALITY

I^N MEDICO-ALCHEMICAL LITERATURE, it is *ka<u>r</u>pam* therapy that is widely recommended to achieve rejuvenation, longevity and the power to remain deathless:

I have told [you] about the *karpam* preparations which have the power to [keep a person] alive without dying.²⁵

- 22 TM: 2826–2895.
- 23 See e.g., VK: 53; PKV: 328.

24 TM: 704–705 "If the owner of a body perishes, then the owner of the soul will perish [too]. He will not achieve real knowledge with certainty. Having learnt the means for cultivating the body, I have cultivated the body and [therefore] indeed I have cultivated [my] soul. Previously I considered the body to be inferior [to the soul]. [Then] in the body I saw the wealth. Knowing that God set [his] temple in this body, I am protecting the body". utampār aliyil uyirār alivar titampata meynānan cēravu māṭṭār utampai vaļarkkum upāyam arintē utampai vaļarttēn uyirvaļarttēnē utampinai munnam ilukken riruntēn utampinuk kuļlē yuruporul kantēn utampulē uttaman kōyilkoņ tānenru utampinai yānirun tōmpukin rēnē. 25 PKV: 328:1 māļātē irukkavallō karpañ connēn Recipes for *karpam* drugs are found in numerous medico-alchemical texts. However, as indicated by A. Shanmuga Velan, none of the texts presents the complete line of the treatment.²⁶ Some passages suggest that certain herbs alone may serve as a powerful *karpam*.²⁷ Siddha texts frequently mention extraordinary rejuvenating powers of *karpam* plants. It is often repeated that *karpam* herbs possess not only rejuvenating and healing properties, but that they are also powerful catalysts in alchemical operations, effecting "binding" (*kațțu*) operations on many metals.²⁸ Pōkar enumerates forty-five *karpam* herbs that are credited with alchemical powers, including effecting *kațțu* on sixty-four substances.²⁹ It is also said that those herbs provide support for yogic practices, bestow rejuvenation and immortality upon the human body, and allow one to walk in the sky.³⁰

The majority of *karpam* preparations are recommended to be taken internally. However, there are also preparations prescribed to be applied externally, for example as an anal ointment, eye ointment, or in the bath.³¹ The range of *karpam* recipes encompass both very simple preparations³² as well as extremely complicated prescriptions, fulfilment of which requires repeated operations with the use of special apparatuses and numerous ingredients from plant, animal, mineral and metal kingdoms.

of the 25 or 26 alchemical "bonds" (*bandha*). Each of the bonds may also be used in medicine (see White 1996: 266–67).

29 PKV: 190–94.

30 In Indian alchemical traditions, the ability to walk in the sky is regarded as a skill acquired by the alchemist due to the specially prepared mercurial pill kept in the mouth. See White 1996: 211–12. Stories about the Siddhas travelling around the world due to the powers of mercurial pills are also found in Tamil Siddha literature, see e.g. works of Siddha Yākōpu, such as VāVai: 4, Cuņ: 153– 156, CunKan: 287.

31 PKV: 8; 9-10; 5.

32 For example, *milaku karpam* (black pepper *karpam*) consists of just one ingredient (black pepper). Initially 5 peppercorns per day should be taken with urine. Every following day the dose should be increased by 5 peppercorns until it reaches the amount of 100 peppercorns per day. Subsequently, the dose should be reduced by 5 peppercorns each day (see PKV: 37).

²⁶ See Velan 1992: 55–56.

²⁷ For example, passage PKV: 204–6 ascribes certain herbs to particular Siddhas. It states that the Siddhas have lived for aeons only due to the application of those herbs.

²⁸ Kattu ("bond") is an important alchemical operation, frequently mentioned in the texts. The operation aims at consolidating the substances and rendering them heatresistant (see kattu in Sambasivam Pillai 1931–1994). Substances subjected to kattu often mentioned in Pokar's text are mercury, metals, salt and sulphur. Kattu seems to be the art of rendering the substances stable, dense, resistant and solid. Materials recommended to be used for effecting the "bond" on the substances are usually herbals which are also used as karpam medicines. A counterpart of kattu can also be found in Sanskrit alchemical literature. Among operations aimed at perfecting mercury (samskāra) the operation of "binding" (bandhana) mercury is also listed. The goal of the operation is the fixation of the mercury with the use of one

The most common operation in metallic *karpam* preparations described in the texts seems to be roasting the drug in the *puțam*, i.e., a capsule constructed with the two identical earthen plates. The usual sequence of actions in the *puțam* operation starts with the repeated grinding of the metals in the mortar with the juice of certain *karpam* herbs, the choice of which depends on the metal used. Ingredients should subsequently be put inside the capsule, after which a special lute, usually made with herbal leaves, is applied. Then, the capsule should be placed into a fire of a determined number of burning cow dung patties and roasted. Usually, the whole sequence of the above-mentioned operations should be repeated several times. The products of metal processing are named after the form they obtain at the end of the *puțam* operation, the most common drugs being: *centūram*,³³ *parpam*³⁴ and *cunnam/cunnam*.³⁵ All three preparations are considered to be highly assimilable metallic compounds.

Among materials used by the Siddhas in *karpam* therapy, some items belonging to herbal, animal, mineral and metal domains are credited with particularly powerful rejuvenating and life prolonging properties:

BLACK HERBS

Among herbal recipes, Pokar mentions certain karpam preparations which require the use of black varieties (karumūlikai) of some common medical plants, for example karantai (fragrant basil) or nelli (amla).³⁶ Those plants are credited with medical properties even in their common form, but according to the Siddha, their black variants possess particular rejuvenating powers. Pokar provides instruction for cultivating such herbs.³⁷ The preparation of a special soil appears to be crucial for their cultivation. According to the text, one should fill half of a box with a dark alluvium soil and tamp it down. The remaining volume of the box should be packed with marking nuts (*cēnkottai*). Then, the soil should be watered for six months, if whole nuts were used, or for three months, if the nuts were previously halved. When the nuts decompose, the soil should be left to dry. Next, on the soil prepared in the described way, one sows the seeds of the medical herbs. When the crop ripens, the new seeds should be collected and the whole operation should be repeated three times. Pokar claims that the fourth crop will be black in colour. The text states that cultivated black herbs rejuvenate the body, and remove wrinkles and grey hair. To test the efficacy of the black

33 *centūram* – red calcined oxides. For the varieties of *centūram* type of drugs see *centūram* in Sambasivam Pillai 1931–1994. 34 *paṟpam* – calcined oxides, white in colour. For the varieties of *paṟpam* see *paṟpam* in Sambasivam Pillai 1931–1994. 35 See *supra* note 12. *Cunnam* may look similar to *parpam*, but it is regarded as more potent. See *cunnam* in Sambasivam Pillai 1931–1994.

36 *karantai*: PKV:62–63, *nelli*: PKV:128. 37 PKV:198–203. herbs, one should take a feather of a crane and smear it three times with the black herb juice. The feather, having dried in the sun, should become as black as the feather of a crow.³⁸

Apart from the black herbs, plants collected in mountain regions are believed to be of better quality than herbs growing elsewhere.³⁹ This belief prevails among contemporary traditional Siddha doctors.⁴⁰

"TRIPLE SALT" (MUPPU)

Muppu is one of the most mysterious items mentioned in the literature of the Tamil Siddhas. The term *muppu* may be translated literally as "triple salt" (*mu-uppu*)⁴¹. In a great number of medical texts, it is suggested that *muppu* should be understood as a compound of the three material substances. According to the text *Karpa muppu kuru nūl* ascribed to Siddha Akastiyar, the essential ingredient of *muppu* is obtained from soil found in desert-like places devoid of plants and grass:

Indeed, in the place where grass does not grow, [there] will be [the substance, white like] garlic [...].⁴²

On soil with white foam-like salty efflorescence, one should look for stones resembling skulls or eggshells:

What [kind of] soil [is it]? It is a brackish soil with consolidated foam, it [is] a beautiful white salty substance. [...] What [is its] form? Learn [it], it [would appear] to you in such a way [as if it was] an eggshell [or] a skull.⁴³

38 PKV: 203.

39 Passage PKV: 184–9 relates that one mountain herb even transformed a cow who consumed it into the mythical wish-fulfilling cow (*kāmatēņu*).

40 In order to find the best quality herbs, yet another special plant called "grass of light" (*jōti pul, arukampul*, i.e., *hariyali* grass) is used. The blade of the grass, when wet with water and held in two fingers, starts to spin. In order to test a plant the spinning blade should be held above it. When the grass spins clockwise it should be interpreted that the herb being tested possesses beneficial properties. See my video demonstration, Kędzia 2016.

41 According to yet another interpretation, the original term should be spelled with a

long - \bar{u} as a final vowel (it should be kept in mind that spelling mistakes and inconsistencies are not uncommon in Tamil Siddha literature). In that case, the term *mup-pū* could mean "triple blossoms", understood as a mixture of three bodily secretions. In Tamil a word "blossom" ($p\bar{u}$) means also "menstruation", and, by extension, *mup-pū* may be interpreted as the three bodily fluids: menstrual blood, semen and urine. See Zvelebil 2003: 98.

42 KMKN: 11: 4: pullațā muļaiyāta vițattilētā<u>n</u> /pūnțirukkum [...]

43 KMKN: 12: 1–2, 4: [...] pūmiye<u>n</u>na / ponkini<u>n</u>ra uvaruppu yiramaveļļai/karuve<u>n</u>na itu uruve<u>n</u>na terintukoļļu u<u>n</u>akkuttānum/ ote<u>n</u>ru mantaiyen<u>r</u>u muraikkalāccē [....]

It is often claimed by scholars that this essential ingredient of triple salt should be interpreted as a salty substance obtained from the water collected from fuller's earth (*pūnīr*, "a water of earth").⁴⁴ It is stated in the Siddha texts that *pūnīr* should be collected only during three months of the Tamil year, i.e., *Māci, Paṅkuṇi* and *Cittarai* (mid-February to mid-May).⁴⁵ Another two ingredients of *muppu* are often enlisted as *aṇṭakkal* ("egg-stone"), considered to be white stones found in the sites of fuller's earth and *kalluppu* ("rock-salt").⁴⁶ The last ingredient remains the most obscure, since it may signify a salt mined from rocks, sea salt, or an artificially prepared salt. According to some Siddha texts, *kalluppu* is insoluble in water and it melts in fire. Some texts also list *veṭiyuppu* ("explosive salt", potassium nitrate) among the ingredients of triple salt.⁴⁷ Siddha Yākōpu provides the following recipe for the preparation of triple salt (*cavukkāram*, another term for triple salt in Siddha literature):

Look, dear, in merciful *Pańkuni*, the month [appropriate] to collect *punīru*,⁴⁸ collect [it] and listen. [...] Dear, measure four units (*pați*) of [*punīru*], add one unit (*pați*) of the well-formed limestone (*karcunnam*). Indeed, dear, add one unit (*pați*) of rock-salt (*kalluppu*). Listen still with esteem, [there] is one method [of preparation]. [...] Dear, I have spoken about the processed urine (*amuri*) in the 700 [verses], study [that]!

Take eight units of [processed] urine (*amuri*), about which has been [previously] spoken, and add [it to the mixture]. In the well-known way, leave it for three days. Kindly collect the liquid on the fourth day, put it in the oven [and] heat it in the firm fire. Having noticed the change [in consistency] into a thick liquid, like molasses, orderly add [to the mixture] half a unit of sesame oil . [...]

Pour [the liquid into the vessel] and cook [it] in order to coagulate. After it becomes beautifully ripened, praise God at the proper time [and] according to [my] wholesome words, expose the ground to the width of nine inches and spread the ashes on it. Listen! In an affectionate manner, place [on the ashes] two [layers] of cloth, apportion the [cooked] thick liquid with the ladle and pour [it on the first layer of the cloth] in order to sink in. Listen!

Then with tenderness leave the liquid [prepared in the described manner] with *punīru*, which has been taken and poured with the

44 See, e.g., Jappār 2014.

46 Jappār 2014: 12–13 and 20–22.

48 In Yākōpu's work the variants *punīru* and *punīru* are used interchangeably for *pūnīr*.

⁴⁵ Jappār 2014: 5.

⁴⁷ See Velan 1992:66.

ladle without failure. On the top, just like before, orderly spread the [second layer of] the cloth, on [the cloth] vigorously shed the ashes. As [you will be] watching for the liquid on the top, it will appear softly. Carefully, without error, remove the upper cloth and watch.

Having removed [the upper cloth you will see that] the ash placed on the ground will absorb the liquid contained in the $pu\underline{n}\overline{i}ru$ [preparation]. For an auspicious fate, take [the remainder] and form it in [the shape of] a ball. Humbly, make a ball [of a size] similar to the fruit of a wood-apple. Carefully place it in the sunlight for eighteen days, place it on the ground. [Then] take [it]. [...]⁴⁹

The triple salt is said to be an essential substance in the process of the calcination of metals:

The one who knows the methods of calcining will become a doctor. Regard the one who calcines as an alchemist who immobilizes [substances]. [In order to calcine metals] it is necessary to know the $mupp\bar{u}^{50}$ which has been spoken about.⁵¹

Listen about the killing [i.e., calcination] of metals. The powder of $mupp\bar{u}$ which is called "the power" is necessary [for the process].⁵²

It is also considered to be a powerful catalytic in *karpam* drug preparation as well as an enhancer of the potency of life-prolonging mercurial preparations.⁵³ The

49 CunKan: 11–15: kāņappā punīru yetukkamātam karunaiperap pankuniyi letuttukkēlu vānappā patinālu alantuvittu vațivāna karcunnam pațitānpōțu tānappā kalluppup patitānpōtu takaimaiyā yinnumoru tanmaikēļu pāņappā yelunūrri lamuritannaip pakkkuvamāy murikkavē connēnpārē connatoru amuripati yettuttānum curutiyāyp põttumē tirināļvaittu nannayamāy nālānāļ telivaivānki nalamāka atuppilvaittu yerinērpākam kannalpōr kuļampāka varutalkantu kanakkākap paţiyarainal lenneyvittu [...] vārttittut tiralavē kāyccinīyum vativākap pakkuvamā yānapinpu ēttittup paruvamutan cāmpalatannai itamāka atitanilē cāņunīļam kāttittup parappiyē atinmērkēļu kanivāka viruntumē cūlaivittu pāttivittu akappaitinār kulamputannaip patiyavē yetuttūttip pinpukēlē pinputān akappaiyināl montuūttap picākamal punīri lirukkumnīrai anpāka untuvitum

mēlētānum ataivāka munpolē tuņiparappi tenpākac cāmpalaittān mēlēkottit tiramākap pārkkamēl nīraittānum vanpāka untuvitu mellattānum valuvillā mērruņiyai nīkkippārē nīkkiyē punīrilirunta nīrai nilaiyākac cāmpalatu kuțittuppoțum pākkiyamā yețuttumē unțaipannip pativākavilānkāypō lunțaiceytu nōkkiyē katirilvaittut tirinālāru nilaiyāka vaittumē yetuttukkoļļu vākkilē nilaittumē collakkēlu vativākap pākattai valuttakkēlē. 50 The author of the Kuru Nūl Muppu uses the variants *muppu* and *muppū* interchangeably as a name of the same substance. See note 41. 51 KNM: 5: 1-2: nīrruvakai yarintavan vayittiyanākum/ nilaittatoru vātiyenrāl nīrruvānpār

tiyanakum/ nilaittatoru vatiyen<u>r</u>al ni<u>r</u>ruvanpar cā<u>r</u>rukin<u>r</u>a muppūvai ya<u>r</u>iyavēņum [....] 52 KNM: 4: 1–2: [...] lōkamāraņattaik kēļu/ urutiyen<u>r</u>a muppūvin cuņnam vēņum [...] 53 Velan 1992: 64–65; Anandan 2008: viii–x. final portion of *Ka<u>r</u>paviti* enumerates the benefits bestowed by the "salt" (*muppu*). The salt is especially credited with beneficial properties in the fields of yoga and alchemy:

Study with delight – all the successes [are bestowed] by the salt. Study! The above-mentioned bodily powers [are bestowed] by the salt, all the flying pills [are bestowed] by the salt, all the alchemical [operations] which were explained in order [are enabled] by the salt, the [yogic] exercises in breathing [are supported] by the salt, all the *puțam* operations [are enabled] by the salt, accelerated ripening of gold [is enabled] by the salt, rare eight-limbed [yoga] [is supported] by the salt. Everything [is bestowed] by the excellent salt!⁵⁴

Yet another passage suggests that one cannot become a "fulfilled one", i.e., a Siddha (*cittan*) without *valalai*, which is another synonymous term for *muppu*:

Would [one] become fulfilled without the fundamental valalai?55

"TIED SALT" (KAŢŢUPPU)

Another salt important for the *karpam* practices is *kattuppu* ("tied salt"), described in the texts as a processed edible salt used in place of common kitchen salt during *karpam* therapy.⁵⁶ According to Pōkar, in order to prepare *kattuppu* rock salt should first be ground with juices of medical herbs such as *kuppaimēni* (*Acalypha indica* L.)⁵⁷ and *kalluruvi* (*Ammannia vesicatoria*), and with lemon juice. The mixture should be left to dry. Then mineral ingredients, such as borax, cinnabar and red arsenic should be added and pounded with the two herbal juices and mixed into the salt. Then, the mixture should be roasted as part of the *putam* operation. Subsequently, the whole procedure should be repeated. The obtained substance should be pulverized and eaten with food in place of common salt. It is said that "tied salt" makes the body "like an iron pillar" (*utampu irumput tūnām*), and that it is not evacuated with the urine. It is also stated that if one eats an ordinary non-tied salt, all his "flourishing powers" (*vāyttirunta cittiyellām*) will "become dust" (*maṇṇāy pōmē*).⁵⁸ The "powers" (*citti*, a Tamilized version of the Sanskrit term *siddhi*) refer to the powers acquired during yogic practices.

54 PKV: 328: 4–329: [...] vaļappamellām uppālē makiļntu pārē pāren<u>r</u>a kāyacitti uppi nālē/ parantōţun kuļikaiyellā muppi nālē vāren<u>r</u>a vātamellā muppi nālē/ vāciyuļļē āţuvatum uppi nālē pūren<u>r</u>a puţaceyamum uppi nālē/ ponnōţip paluttatuvum uppi nālē āren<u>r</u>a aṣţānkam uppi nālē/ atītamā muppālē ellā māccē.

55 PKV: 335: 3: [...] atiyāna valalaivittāl citta nāmō.

56 According to Siddha Yākōpu, in order to achieve efficacy in alchemy it is absolutely essential to learn how to prepare the triple salt and the tied salt. See CuņKaņ: 5.
57 See *kuppaimēni* in Pandanus Database of Indian Plants (Charles University 1998–2009).

58 PKV: 207-10.

MERCURY AND THE "NINE POISONS" (NAVA- $P\bar{A}S\bar{A}NAM$)

It is often claimed that mercury plays a central role in the Siddha system of medicine.⁵⁹ Pōkar states that there is no death for the one who has mastered the operation of "binding" (*kaṭṭu*, i.e., consolidating) of mercury, which is considered to be the semen of the god Śiva:

Indeed, the truth [is, that] there will never be death for the one who has bound the semen of Śiva [i.e., mercury].⁶⁰

Mercury and its compounds are widely used in recipes for *karpam* preparations in the consulted texts. Three mercurial compounds, namely *vīram* (corrosive sublimate), *pūram* (subchloride of mercury) and *iliṅkam* (vermillion), are included in one of the traditional categories of the fundamental materials used by Siddhas in medicinal preparations, called "the nine poisons" (*navapāṣāṇam*).⁶¹ Mercury, as well as the poisons, should be subjected to operations which remove their toxicity. However, the consulted texts do not contain systematic descriptions of such operations.

An especially powerful form of mercury described in Tamil Siddha literature is called *rasamani*, "the mercurial jewel." There is a saying among the Siddhas that *karpam* therapy consists of the three elements, namely *mantiram*, *mani* and *maruntu*, i.e., "mantras, the [mercurial] jewel and medicines".⁶² Generally *rasamani* is consolidated mercury rendered fire-resistant and formed into a bead. Various methods of *mani* preparation are described in Siddha literature. Usually it is stated that the liquid consistency of mercury should be first turned into a butter-like state during the repeated operation of *curukku*, i.e., adding herbal juices to liquid metals.⁶³ According to one recipe, mercury should be placed in an iron ladle and the juice of a certain *karpam* herb (*venkarantai*, white Indian globe thistle⁶⁴) should be applied for twelve hours:

Having taken and squeezed white *karantai*, take more than the unit of one *palam* of its juice. Clean an iron ladle and put the purified

59 See Velan 1992: 69–73.

60 PKV:60: 4: [...] civavintaik kațți nōrkku/ orukālum cāvillai unmai tānē.

61 The whole list of the nine poisons encompasses *vīram* (corrosive sublimate), *pūram* (subchloride of mercury), *ilinkam* (vermilion), *mānōcilai* (realgar), *tāļakam* (yellow orpiment), *kauri* (golden coloured arsenic), *veļļai* (white arsenic), *elipāṣāṇam* (arsenic oxide), *kārmukil* (dark prepared arsenic). See *navapāṣāṇam* in Sambasivam Pillai 1931–1994.

62 Personal communication with anonymous informant.

63 See e.g., PKV: 28–32; 50–55; 57–61.

64 Other passages recommend different herbs for the *curukku* operation, such as aloe, gall-nut (PKV: 28–32), or *civakkarantai* (PKV: 57–61).

mercury in it. For twelve hours apply the *curukku* operation. [The mixture] will beneficially become like butter, collect [it].⁶⁵

Afterwards the butter-like mixture of metal and herbal juice should be formed into lumps and roasted in burning camphor. Next the lumps should be again roasted in a *puțam* capsule sealed with the leaves of the *ārai* plant (*Marsilea minuta coromandelica*). Another *puțam* should then be applied, and this time, mercurial balls should be inserted into the shells of Datura. Then, the lumps should be roasted in a *puțam* capsule sealed with the ground leaves of the abovementioned *veņkarantai* plant yet another three times. The text states that the consolidated mercury, when melted, would appear like gold and when crushed, would look like a diamond.

Form [the mixture] into lumps, roast [the lumps] in the fire of the flawless camphor, roast [the mixture] in the [capsule sealed with] the leaves of $\bar{a}rai$ plant, roast [the mixture] in the Datura shells. Prepare [the capsule sealed with] *karantai* plant, apply the *puțam* three times. Look, when melted it will appear like gold! Look, when crushed into pieces, it will shine like a diamond!⁶⁶

After consolidation, the mercurial bead may be worn as an amulet. Some passages of the *Karpaviti* state that the jewels can also be worn as a necklace and that, if an adept wears a necklace made of 108 mercurial pills and repeats the mantras in mind, then lord Śiva with his consort shall come to him and bestow upon him supernatural powers, including the power of preserving the body (*kāyacitti*):

Having put on 108 [mercurial] jewels as a necklace, repeating the proper mantras consisting of five and six letters, if [you] look with your internal [eye], indeed lord Śiva with the Goddess will come and will bestow [upon you] great power in yoga and the power [to preserve] the body. If you desire wealth, he will give [you] the power [associated with] alchemy. If your mind is firm, all the powers will become [yours].⁶⁷

66 PKV: 58: vānkiyē kilipolak kaţtik konţu/ mācarra cūţanatu tīyil vāţţu ānkiyē āraiyilaik kuļļē vāţţu/ atikamā mattankāyk kuļļē vāţţu mūnkiyē mun karantaik kavacankaţţu/ mūn<u>r</u>u puțam pōțțețuttu urukkippāru tānkiyē tankampōl uruki yāțun/takarttuțaittāl vayirampōl talukkām pārē.

67 PKV: 259: 2–4: [...] nū<u>r</u>u yeţţumaņi tāvaţamāyk kōttu/iyalpāna ainteluttu ā<u>r</u>eluttu mōta manampārttu tēviyoţu civantān vantu/ makattāna yōkacitti kāyacitti īyvār tanampārttu vātamoţu cittai īvār/ cānkamāy manamuraittāl citti yāmē.

⁶⁵ PKV: 57: 2–4: [...] veņkarantai koņţu vantu/ atikamām paţiccāru pilintuvaittu [...] ayakkaraņţi cutti paņņi/ cuttitta cūtattai atilē viţtu [...] nālcāmam curukkup pōţu/ nalamāka veņņeyām valintu vānkē.

It is believed that the jewel possesses healing properties, protects its owner from aging and witchcraft, and supports meditative practices. The bead can also be processed further in order to obtain edible forms, such as *centūram*.⁶⁸ Preparing digestible forms of the jewel requires roasting it with addition of other metals (e.g., gold and lead) and certain "poisons" (e.g., cinnabar, arsenics), pounding it with the juice of other *karpam* herbs and subjecting it to fire.⁶⁹ Some passages also mention mercury consolidated in the form of a "pill" (kulikai). The distinction between a pill (kulikai) and a jewel (mani) requires further research. However, some passages suggest that both the terms might be used interchangeably.⁷⁰ In some Siddha texts, a pill is often mentioned in connection with the power of walking in the sky, which it is said to bestow upon the one who keeps it in their mouth.⁷¹ Pōkar's text suggests that the pill could be furthermore subjected to the empowering operation called *cāranai*,⁷² however the description of the operation is not provided by the texts.⁷³ It is stated that the empowered *kulikai* enables its user to perform some extraordinary actions, such as going to the moon and back with great speed. It is also suggested that the pill turned into an edible drug (centūram) and taken with honey for forty days would rejuvenate the body by shedding its external cover.

If [you] perform *cāraṇai* operation on hardened mercury, [you will] go to the moon and back with high speed! If you prepare *centūram* [you will reach] mountain peaks in thousands! Prepare *centūram* as [described] before, in order [to gain] the power! With attention eat [*centūram*] for forty days in honey, having shed the external skin [the body] will become reddish.⁷⁴

URINE (AMURI)

According to the *Tamil Lexicon*, the term *amuri* can designate "urine", as well as the "nectar believed to be generated in the body by yogic practice".⁷⁵ The term

68 PKV:60-61

- 69 See PKV: 53-54.
- 70 See, e.g., PKV: 249-262.
- 71 See, e.g., CuņKaņ: 287; Cuņ: 153–155; PKV: 278–285.

72 *cāraņai* is the Tamilized form of the Sanskrit word *cāraņa*. In Sanskrit alchemical literature (*rasaśāstra*), this term has a technical meaning. It is one of the sequenced operations for perfecting mercury before its internal application (see White 1996: 268). The processing of mercury in perfecting op-

erations is also described in Sanskrit medical literature starting from the ninth century and becoming more prominent after the thirteenth century (see Wujastyk 2013). 73 PKV: 262.

74 PKV: 180: 1–3: kaţţiyāñ cūtattil cāraņaiyō ceytāl/ kaţuvēka matiyaļavu kaņţu mīļum oţţināl centūram āyirattir kōţum/ urutiyāy munpolē centūram paņņu tiţtiyāy manţalantān tēni luņņu/ ciritākac caţţaikakkic civappu mākum.

75 See amuri in Tamil Lexicon (1924–1936).

might be used in both senses in Siddha literature, which contributes to the ambiguities in the interpretations.⁷⁶ Nonetheless, there are numerous passages in which the term may be most certainly interpreted as urine. Urine is an important vehicle for numerous herbal *karpam* recommended in the texts. Besides, in some *karpam* recipes, urine is listed as the main ingredient. For example, the following passage from the text $\tilde{Nan}akarpam$ 222 ascribed to Siddha Pulastiyar, provides a recipe for a preparation in which the urine of young boys fed with sweets is the main ingredient:

Properly take sixteen measures of the urine of young boys fed with sweets. In a harmonious manner, put the water of the body [i.e., urine] [in the vessel], similarly take eighteen measures of slaked lime and dissolve it without hesitation in the urine. Keep it in separation for three days [exposed] to the sun. [Then put it] in a secret place unknown to the people, away from dew, sun, wind and the shadow of women, for four days. Collect the bright liquid [accumulated] in the

76 A prominent example of the ambiguities concerning the interpretation of the term amuri is found in the Tirumantiram. The chapter kāyacitti upāyam ("Means of [attaining] bodily powers") describes the practice called *amuri taranai* ("preservation of *amuri*", TM:825–30). This cryptic passage deals with the drinkable fluid (*kutinīr*) contained in the body and called amuri ("urine", "nectar"). It is said that one should keep control over the flow of Drinking the fluid is presented amuri. as a therapy which prevents and cures diseases, stabilises breath and mind, and changes the body into gold (TM:826: telitarum intac civanīr parukil/olitaru morānțil ūnamon rillai/vaļiyurum ettin manamum otunkum/kalitarun kāyan kanakama tāmē; "If one drinks this water of Siva which bestows clarity, in one year [he] will receive the light, there will be no defect [in him], the breath will stabilise in eight [years], the mind too will be restrained, the body, granting delights, will indeed become gold"). It is also stated that the liquid removes grey hair and wrinkles and vanquishes death (TM: 828:4: naraitirai māru namanuman killaiyē ; "Grey hair and wrinkles will change and there will be

no death"). One passage recommends drinking amuri mixed with black pepper, as well as externally using the mixture on the crown of the head. It is suggested that the preparation is the best of all medicines and that it eliminates grey hair (TM: 827 nūru milaku nukaruñ civattinīr/ mārum itarku maruntillai māntarkal/tēril itanait teļiyucci kappițin/mārum itarku marumayi rāmē; "The water of Siva consumed [with] one hundred black pepper grains – there is no medicine for human equal to [it]! If you accept it and apply it on the grey crown of the head, it [the head] will be transformed, the [grey] hair will change"). The last portion of the section contains a recipe for a preparation in which the fluid and some common Indian medical herbs, i.e., black pepper, amla, turmeric and neem, are used. It is stated that the mixture rejuvenates the body and changes grey hair into black (TM: 829:2-4: kalavu kāyan kalantain nīrilē/miļaku nelliyum mañcaļum vēmpițil/iļakum mēni iruļun kapālamē; "If one places black pepper, amla, turmeric, and neem in this water contained in the body, the body will grow tender and the [hair on] the head will darken").

pit of the vessel. Now leave it alone in the vessel. Accordingly to the prescription, place it on the fire place. Keep it on a moderate fire.⁷⁷

When taken during yogic practices, this preparation is expected to turn the human body into a diamantine body.⁷⁸

3. ANALOGIES

 $\mathbf{F}^{\text{ROM THE PRESENTATION ABOVE, the question arises what the relation between the mentioned items and relations is the second relation of the second relat$ the mentioned items and rejuvenation, longevity and immortality is. In the case of the black herbs, the black colour of the plants may be easily associated with the black pigment in hair of the person who has not aged yet, and therefore, by extension, with youthfulness and vitality. Moreover, the recurring theme in the discourse on the abovementioned substances is their immobilization, especially with regard to mercury, which in the form of a bound, resistant and consolidated jewel is expected to bestow immortality. Such immobilization associates medical and alchemical preparations with yogic practices, aimed at the stabilisation of mind, breath and semen. Yet another mentioned instance refers to the binding of the salt into *kattuppu*, which is stated to have the power to stabilize the body, so that it resembles an iron pillar. The stabilization and retention of the movement and changeability is associated with resistance to the passing of time and ageing. Karpam substances, such as herbs and triple salt are also believed to effect the operation of "binding" (kattu) on the physical substances manipulated by the Siddha doctor-alchemist, which justifies their use in the stabilisation and preservation of the body. Moreover, the special status of triple salt among the substances may be also connected with the symbology of the number three. In the Siddha tradition, various triplets of concepts are recognized, among which the three phonemes of the syllable *aum* are especially important. The triadic character of the salt may suggest correspondences between the mantra seen as the transformative agent during spiritual practices and the salt used to transform physical substances and the human body.⁷⁹ Drinking urine is also stated to stabilise the body and it may be further related to yogic practices in which the bodily secretions are applied on the body of the practitioner. As pointed out by Mallinson, numerous hathayogic texts contain references to practices

 77 ÑK: 73:
 iniyapattiyamān

 cirivarkal/muriyīreţţu
 paţiyatukaņakkāy

 icaivatāy
 pānţaminnīrviţţatani/
 liņaiy

 ilāk
 kalcunnanīru
 paniyeţtuppaţikonta

 muriyiltākkic/cankaiyillāmalum
 karaittu

 taniyavaittatanai
 mūnrunālraviyil/

 taraņimāniţarkaļu
 mariyā
 paniravikārrum

vanitaiyarnilalum/paṭāmalum rakaciyamākap pākamāycaturnāl pānṭamāncillu/pativatāy telintanīrvāṅki iniyorupānṭamē taninirrelivai/viparamāy viṭtuṭanaṭuppil [...] /mitamatāyt tīyerintiṭumē.

78 See Venkatraman 1990: 110.

79 See Zvelebil 2003: 27-31; 98-99.

associated with massaging the body with various bodily secretions, including urine. In certain passages, human urine is also credited with the power of transmutation of copper into gold as well.⁸⁰ Drinking urine is also part of the yogic technique called *amarolī*.⁸¹ In addition, the ambiguous Tamil term *amuri* suggests connotations between urine and the concept of immortalizing nectar believed to be the effect of yogic practices.

Passages on *karpam* drugs repeatedly advise to practice yoga during therapy with karpam.⁸² The text *Pokar Karpaviti* also states that during karpam therapy, some side effects may occur, such as a burning sensation in the body. The experience of excessive heat in the body is often regarded as a characteristic symptom of the awakening of the *kundalinī* energy during practices of yoga, which also may suggest a further connection between yoga and karpam therapy. Pokar's text prescribes herbal karpam to fight such heat.⁸³ Connections between medicine, alchemy and yoga are apparent in regard to the effects ascribed to the *karpam* preparations contained in medico-alchemical literature. The most often mentioned effects of karpam therapy in Siddha texts are rejuvenation and strengthening of the body. The purifying properties of the preparations are also frequently mentioned, especially with regard to phlegm,⁸⁴ which is considered to be a serious obstacle in yogic practices, as it is believed to obstruct the oozing of the yogic nectar to the throat of the practitioner.⁸⁵ In Siddha literature, it is repeatedly stated that karpam preparations support yogic practices, for example by facilitating control of the breath, and by supporting and opening the central channel (culumunai).⁸⁶ Yet another frequently mentioned effect of eating karpam is the visible transformation of the body, which becomes healthy, beautiful and youthful.⁸⁷ It is claimed that due to *karpam* therapy the body becomes as beautiful as the one of the love-god,⁸⁸ or like gold,⁸⁹ and that it is consolidated like a diamond.⁹⁰ As already mentioned, the consolidation of the body is associated also with yogic practices connected with the stabilisation of breath, mind and semen. Finally, it is claimed that *karpam* substances provide immortality.⁹¹

- 80 See Mallinson 2007: 220, n. 328.
- 81 Mallinson 2007: 221, n. 333.
- 82 See, e.g., PKV: 68, PKV: 97, PKV: 166.
- 83 PKV: 111–112.
- 84 See, e.g., PKV: 7.
- 85 See Velan 1992: 82.
- 86 See, e.g., ÑK:11–76; PKV:12; PKV:73. See Venkatraman 1990:109–110.

87 In *Karpaviti*, it is even claimed that certain preparations may rejuvenate a ripened banana, which after administering the drug through the cut in the skin would become green within a few hours. See PKV: 158. 88 See, e.g., PKV: 78: 4: [...] matanpō lākum. 89 PKV: 128: 3: [...] taṅkampōl mēniyellān talukkuk kānum.

90 PKV: 90: 1: [...] vayiram põlirukum tēkam.
91 PKV: 90: 4: [...] orukālum cāvillai uņmai tānē.

4. CONCLUSION

T^O CONCLUDE, the application of *karpam* drugs seems to be closely associated with yogic practices in Tamil Siddha medico-alchemical literature. On the one hand, it is repeatedly stated that *karpam* preparations support yogic practices, such as meditation and breath control, they remove phlegm seen as an obstacle in the process of yogic perfection, open internal channels and so on. On the other hand, it is also claimed that yoga supports the efficacy of the *karpam* therapy. Additionally, the two disciplines are also related with alchemy, references to which are widely present in the consulted texts. Looking from the broader perspective, some parallels with *karpam* therapy can also be found within alchemical and medical Sanskrit texts, which refer to certain preparations (*rasāyana*) connected with attaining the special powers, such as extending life span far beyond the ordinary length or rendering the body imperishable.⁹²

The conviction that the body and soul are equivalent and interdependent and that the body is necessary to achieve the final aim of liberation, directly expressed in the *Tirumantiram*, legitimizes *karpam* practices aiming at the preservation of the physical body, which are described in the later texts. This conviction, which underlies the practices described by Tirumūlar, although not explicitly stated, resonates strongly in Tamil Siddha medico-alchemical literature. The conception that the human being is an inseparable connection of the material body and soul, authorizes the synthesis of the disciplines of medicine, yoga and alchemy which refer to both material and spiritual domains. The three disciplines might be regarded as the three integral parts of a wider Siddha system of knowledge, oriented towards achieving immortality and liberation.

TEXT EDITIONS

Cuņ	Ta. Kuppucāmi Nāyutu, ed. (1952). Yākōpu Tiruvāymalarntaruļiya
	Cuṇṇam 300. Maturai: Śri Rāmaccantira Vilācam Piras.
CuņKaņ	Ār. Ci. Mōkan, ed. (2014a). Yākōpu Cuņņak Kāņṭam 600. Cennai: Tā-
	marai Nūlakam. First published 2002.
KMKN	"Karpa Muppu Kuru Nūl 100" (2014b). In: Akastiya Munivar Aruļiya
	Muppu Cūttirankal. Ed. by Ār. Ci. Mōkan. Cennai: Tāmarai Nūlakam.
KNM	"Kuru Nūl Muppu 50" (2014c). In: Akastiya Munivar Aruliya Muppu
	<i>Cūttiraṅka</i> ļ. Ed. by Ār. Ci. Mōkan॒. Cennai: Tāmarai Nūlakam.
ÑK	Pulastiyar Viļakkiya Ñānakarpam-222 (1936). Cennai: Cakkaravartti
	piras.

92 On the special powers associated with *rasāyana* preparations in medical and al-

chemical Sanskrit texts see Wujastyk forthcoming.

140	MASTERING DEATHLESSNESS
PKV	"Pōkar Karpaviti" (2004). In: <i>Cittar Kāyakarpam</i> . Ed. by citta maruttuva maiya āraycci nilaiyam Citta maruttuva ilakkiya ārāycci āvaņatturai and citta maruttuva maiya ārāycci nilaiyam Citta maruttuva ilakkiya ārāycci āvaņatturai. Cennai: Citta maruttuva ilakkiya ārāycci āvaņat- turai, citta maruttuva maiya āraycci nilaiyam.
TM	P. Irāmanāta Pilļai, ed. (2007). <i>Tirumantiram Mūvāyiram</i> . 2 vols. Tirunelvēli: Tennintiya caiva cittānta nūrpatippuk kalakam. First published 1942, 1957.
VaiCin	Ta. Kuppucāmi Nāyuṭu, ed. (1960). <i>Yākōpu Aruļic Ceyta Vaittiya Cintāmaņi 700, Kurulūl 55 Cērttatu</i> . Maturai: Śri Rāmaccantira Vilācam Piras.
VāVai	Ta. Kuppucāmi Nāyuṭu, ed. (1955). Yākōpu Vakārak Kaļaṅku Ennum Vātavaittiyam 300. Maturai: Śri Rāmaccantira Vilācam Piras.
VK	Ji. Irāmacāmikkōn, ed. (1963). <i>Vaittiya Kallāṭam</i> . Maturai: Śri Rāmac- cantira Vilācam Piras.
	SECONDARY LITERATURE

- Anandan, Anaivaari R., ed. (2008). *Siddha Materia Medica*. Chennai: Department of Indian Medicine and Homeopathy.
- Buck, David C. (1976). *Dance, Snake! Dance! A Translation with Comments of the Song of Pāmpāţţi-Cittar*. Calcutta: A Writers Workshop Publication.
- Charles University (1998–2009). *Pandanus Database of Indian Plants*. Seminar of Indian Studies, Faculty of Arts, Charles University, Prague, Czech Republic. URL: http://iu.ff.cuni.cz/pandanus/ (on 8 Jan. 2018).
- Ganapathy, T.N. (1993). *The Philosophy of the Tamil Siddhas*. New Delhi: Indian Council of Philosophical Research. ISBN: 9788185636030.
- (2003). *The Yoga of Siddha Bhōganāthar*. Vol. 1. Quebec: Babaji's Kriya Yoga and Publications, Inc. ISBN: 9781895383195.
- (2004). *The Yoga of the Eighteen Siddhars: An Anthology*. Quebec: Babaji's Kriya Yoga and Publications, Inc. ISBN: 9781895383249.
- Goodall, Dominic (1998). *Bhaṭṭa Rāmakaṇṭṭha's Commentary on the Kiraṇatantra*. Vol. 1. Pondicherry: Institut Français de Pondichéry, École française d'Extrême-Orient. ISBN: 9788184700862.
- (July 2000). "Problems of Name and Lineage: Relationships between South Indian Authors of the Saiva Siddhānta". In: *Journal of the Royal Asiatic Society* 10.2, pp. 205–16.

Jappār, A. Aptul (2014). *Muppu Enum Karpa Maruntu*. Cennai: Tāmarai Nūlakam.

Kędzia, Ilona (2016). Video Recording of "mastering Deathlessness - Some Remarks about Immortality Teachings from Selected Tamil Siddha Texts". Ayuryog Project Workshop, University of Vienna. URL: https://youtu.be/ALqn5y0JqxM?t= 14m47s (on 8 Jan. 2018). Video recording of lecture. Conference URL: https://goo.gl/mgxycr.

- (2017). "Global Trajectories of a Local Lore: Some Remarks about Medico-Alchemical Literature of the Two Tamil Siddha Cosmopolites". In: *Cracow Indological Studies* XVIII, pp. 93–118.
- Little, Layne Ross (2006). "Bowl Full of Sky: Story-making and the Many Lives of the Siddha Bhogar". PhD. Berkeley: University of California.
- Macdonell, Arthur Anthony and Arthur Berriedale Keith (1912). *Vedic Index of Names and Subjects*. Vol. 1. London: John Murray.
- Mallinson, James (2007). *The Khecarīvidyā of Ādinathā*. London: Routledge. ISBN: 9780415586139.
- Meenakshi, K. (1996). "The Siddhas of Tamil Nadu: A Voice of Dissent". In: *Tradition, Dissent and Ideology*. Ed. by R. Champakalakshmi and S. Gopal. Delhi: Oxford University Press.
- Natarajan, Kanchana (2004). "'Divine Semen' and the Alchemical Conversion of Iramatevar". In: *The Medieval History Journal* 7.2, pp. 255–278.
- (2009). "'Entering the Universe of Fire and Light' The Life and Philosophy of Pokar from Pokar Elayiram". In: *Studies in Humanities and Social Sciences* 12.1-2, pp. 147–164.
- Sambasivam Pillai, T. V. (1931–1994). *Tamil-English Dictionary of Medicine, Chemistry, Botany and Allied Sciences.* 5 vols. Madras: Government Central Press.
- Scharfe, Hartmut (1999). "The Doctrine of the Three Humors in the Traditional Indian Medicine and the Alleged Antiquity of Tamil Siddha Medicine". In: *Journal of the American Oriental Society* 119.4, pp. 609–629. DOI: 10.2307 / 604837.
- Sébastia, Brigitte (2015-2017). Conservation, Documentation and Preservation of the Knowledge of Siddha Medicine. Header text Institut Français de Pondichéry. URL: http://www.ifpindia.org/content/conservation-documentation-andpreservation-knowledge-siddha-medicine (on 9 Jan. 2018).
- Sivaraja Pillai, K. N. (1930). *Agastya in the Tamil Land*. Madras: University of Madras.
- Tamil Lexicon (1924–1936). University of Madras. URL: http://dsal.uchicago. edu/dictionaries/tamil-lex/ (on 9 Jan. 2018).
- Velan, A. Shanmuga (1992). *Longevity and Kalpa Medicine of India*. Madras: Directorate of Indian Medicine and Homeopathy.
- Venkatraman, R. (1990). *A History of the Tamil Siddha Cult*. Madurai: Ennes Publications.
- Weiss, Richard S. (2009). *Recipes for Immortality: Medicine, Religion and Community in South India*. New York: Oxford University Press. ISBN: 9780195335231.

- White, David Gordon (1996). *The Alchemical Body: Siddha Traditions in Medieval India*. Chicago and London: The University of Chicago Press. ISBN: 9780226894997.
- Wujastyk, Dagmar (forthcoming). "On Attaining Special Powers through Rasāyana Therapies in Sanskrit Medical and Alchemical Literature". In: *Religious Medicine*. Ed. by Michael Stanley–Baker and Pierce Salguero. Manchester: Manchester University Press. Forthcoming.
- (Sept. 2013). "Perfect Medicine. Mercury in Sanskrit Medical Literature". In: *Asian Medicine: Tradition & Modernity* 8.1, pp. 15–40. DOI: 10.1163/15734218– 12341278.
- Zvelebil, Kamil V. (1992). *Companion Studies to the History of Tamil Literature*. Leiden: Brill.
- (1993). *The Poets of the Powers: Magic, Freedom, and Renewal.* 2nd ed. Lower Lake: Integral Publishing. ISBN: 9780941255325. First published in 1973.
- (2003). *The Siddha Quest for Immortality*. Oxford: Mandrake of Oxford. ISBN: 9781869928438.
- Zysk, Kenneth G. (2013). "An Indologist Looks at Siddha Medicine in Tamilnadu". In: *Medical Texts and Manuscripts in Indian Cultural History*. Ed. by Dominik Wujastyk, Anthony Cerulli, and Karin Preisendanz. New Delhi: Manohar, pp. 181–194.

Please write to (wujastyk@ualberta.ca) to file bugs/problem reports, feature requests and to get involved. The History of Science in South Asia • Department of History and Classics, 2–81 HM Tory Building, University of Alberta, Edmonton, AB, T6G 2H4, Canada.