Ayurveda in the Age of Globalization: ‘Traditional’ Medicine, Intellectual Property and the State

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1. Introduction: The significance and perspectives of research on Ayurveda today

This article attempts to describe the contemporary dynamics of transformation of Ayurveda under the conditions of globalization using case studies from Kerala, India. Particular attention will be paid to the cultural politics over the question of to whom Ayurveda belongs as intellectual property. The recent trends show that Ayurveda is in the process of being redefined as national intellectual property. Concomitantly, it is increasingly becoming an object of state control. This paper analyses socio-economic factors underlying such ‘nationalization’ of Ayurveda.

Ayurveda, which was originally confined to the Indian subcontinent and its vicinity,\(^1\) is now becoming a global medical practice, spreading to different areas of the world and acquiring new meanings in theory and practice. The globalization of Ayurveda is also having a great impact in India. Many patients are coming to India from abroad in order to receive treatment. In the state of Kerala, many residential institutions have sprung up

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for such patients and Ayurveda is rapidly growing into a huge industry. It seems that the practice of Ayurveda in India is in the process of reconstruction through contact with the outside world. However, under globalization, there are also increasing anxieties among those involved in Ayurveda that Ayurveda is becoming dominated by foreign countries. Their concerns are that Ayurveda is spreading abroad as quasi-medical 'healing' system and that the patents of Ayurvedic herbal medicines and therapies are taken by companies in the advanced countries. Indian Ayurvedic doctors and pharmaceuticals fear that such trends are transforming Ayurveda in a direction which prevents their involvement in the process of global development of Ayurveda.

Today we can distinguish between two kinds of Ayurvedic practitioners in India, namely those who have learned therapeutic techniques through local apprenticeship and are called 'vaidyas' by the local people and those who have graduated from Ayurvedic courses in colleges. The former will be referred to in this article as 'vaidya' and the latter as 'Ayurvedic doctors' respectively.²

This distinction reflects the modern history of reformation of Ayurveda. From the second half of the nineteenth century, there began attempts to revive Ayurveda after it had been reduced to a status of subsidiary medicine under colonialism. This was a movement to reconstruct Ayurveda as a system of medicine which could rival western medicine [Brass 1972; Leslie 1976; Arnold 2000]. Ayurvedic medicines were tested for efficacy using modern scientific methods and proved to the people as a legitimate and effective treatment and not superstition. Industrialization of the medicines also began by the end of the nineteenth century. Ayurvedic medicines which practitioners had been making individually started to be mass produced in factories and widely marketed. There was also modernization in the teaching of Ayurveda as courses on Ayurveda were established in colleges in the 1910s [Gupta 1976: 375].³ This course was standardized all over India in 1971 leading to the production of college educated Ayurvedic doctors with nationally standardized knowledge.

Previous anthropological researches on Ayurveda can also be divided into two types, one which focuses on the village practitioners (vaidya), and the other on college-educated Ayurvedic doctors. The former type of research places emphasis on understanding the cultural logic of the concepts used in the treatment of diseases and view of the body unique to India in
contrast to western medicine [e.g. Nichter 1981; Kakar 1982; Zimmermann 1987]. According to this approach, Ayurveda is seen as a system of medicine which does not separate the body and the mind, and which also takes into consideration the environment in which illnesses occur. This is seen in contrast to modern western medicine which views the body analytically and cures only individual illnesses. The latter research emphasizes the modernity of practices of Ayurvedic doctors and shows how they were 'transformed' under the process of defining it as a coherent system of knowledge [e.g. Leslie 1976; Trawick 1987; 1995]. However, these studies tend to see the transformations of Ayurveda only in relation to 'colonial' knowledge of Ayurveda and do not sufficiently consider the significance of the present situations under globalization.

In the present day context, it is necessary to take into consideration not only the problem of social changes in terms of modernization but also the rapid globalization and industrialization of Ayurveda. Some recent researches take these changes into consideration and pay attention to the new problems. For example, Banerjee argues that the expansion of Indian Ayurvedic pharmaceutical industry into the world market is introducing a western biased understanding of Ayurveda in India [Banerjee 2000]. Langford illustrates through an anthropological investigation how the ideas and treatment practices of local Indian practitioners are beginning to resemble western ideas and practices of Ayurveda due to increasing contact between them and foreign patients [Langford 2002].

The problem with these previous studies is that they assume in a straightforward manner that the ideas and practices of those involved in Ayurveda in India are becoming westernized due to global influence. Few discussions are found on the complexities involved in the processes of transformation of Ayurveda. Attention should be paid to the creative agency of the people who reflexively transform ideas and practices while confronting the global situation. For example, Indian practitioners attempt to gain more patients from abroad and also seek opportunities to practice outside India. Pharmaceutical companies attempt to participate in larger markets as Ayurveda spreads worldwide. In the process, they try to redefine Ayurveda in order to enhance their opportunities.

Another important point which should be taken into account is the significant increase in the market value of Ayurveda as intellectual property under globalization. As the value of Ayurveda increases in the global mar-
ket, many Ayurvedic practitioners actively try to attract patients from abroad or go abroad themselves to practise. Those in the Indian pharmaceutical industry also actively try to introduce their products into the world market. At the same time, intellectual properties are in danger of being exploited. Practices of Ayurveda abroad are gradually leaving the hands of the Indians and beginning to be taken up independently by the westerners. As I will discuss later, there is no sign of decrease in exploitative acts over herbal medicines and intellectual properties by multinational companies. The increase in market value of Ayurveda has led to the question of how to prevent the outflow of this intellectual wealth and keep it in the hands of Indian people.

In this context, there is an increasing tendency for the Indian central and state governments to strengthen control over Ayurveda as the protective and administrative agent of intellectual property rights of the people [Yamana 2002]. Related subjects are actively discussed from the viewpoint of international sociology and international politics, mainly concerning questions of foreign policy and intellectual property rights. It has been pointed out that as globalization advances, there is a rise in nationalist consciousness as well as the move to re-invent ‘traditional culture’ in the regions of the world [Giddens 1994]. Many works in cultural anthropology discuss the appropriation of local cultural resources by the state [Matsuda 1999; Kagami 2000]. Although these arguments take people’s agency into account, they all assume coerciveness of the state’s power over the people who resist such state domination. In the case of the redefinition of Ayurveda as national cultural resource, however, I would argue that the state intervention is not necessarily a coercive imposition from above. Instead, there is movement on the part of the people from below to invite the state to take control of Ayurveda. Such social movement demands that the state should protect Ayurveda as national intellectual property in order to secure national interests in the global situation. It is necessary to address such positive part played by the people in the process of redefinition of Ayurveda as national resources.

The contents of this article are as follows. First some brief background information is given on the state of Kerala where I conducted the fieldwork. Next, I discuss the medical practices of the college educated Ayurvedic doctors and their position in society. I aim to show how they are forced to turn their eyes outside the local society in order to create a niche
for themselves. In next section, I focus on the wider context in which the current situation of these Ayurvedic doctors should be understood by looking at the globalization of Ayurveda. I will attempt to show how this is leading to changes in the ideas and practices of local Ayurvedic doctors and those involved in the Ayurveda industry. Finally, an analysis will be presented on the process of redefinition and representation of Ayurveda as national intellectual property by paying attention to the ‘World Ayurveda Congress’ which took place in Kerala in 2002.

2. Ayurveda in Kerala

The fieldwork was conducted in the southern coastal area of Trivandrum in Kerala, South India from March 2002 to February 2003 and from November 2003 to February 2004. Kerala has a number of unique characteristics. It is led by the communist government. It has a prominently high level of education, high health index and substantial medical facilities. Literacy rate is 90.9 percent (average in India is 64.8 percent) [Census of India 2001], infant mortality rate is 11 (average in India is 66 per 1000 live births) [Sample Registration System 2001], and there is a health centre for every 1.5 villagers in Kerala, compared with 26.4 average in India [Nair 1994]. On the other hand, it has not had a major industry till now and the lack of employment has been the greatest social problem. For this reason, the state government has been strongly promoting the development of tourism as a new industry in the past ten years or so. As a result, it has become one of the main industries in Kerala today. Ayurveda has become prominent as one of the characteristics of Kerala tourism. As much as 11 percent of all the Ayurvedic pharmaceuticals are concentrated in Kerala, a region which shares less than 4 percent of the total Indian population. There are plenty of plant materials for herbal medicines which provide the basis for the Ayurvedic industry. Ayurvedic therapy centres for tourists were established in several places including existing tourist resorts. Today, 6.29 percent of the GDP in Kerala comes from the tourist industry. The industry has expanded to bring about employment for about 700,000 people [Government of Kerala 2004].

The southern coastal area of Trivandrum where I conducted my research is an area where the Ayurvedic institutions as part of the tourist industry are concentrated. For this reason, there are more people in this
region who are involved in tourism than other areas and they are more strongly related to the Ayurvedic industry.

3. Medical practices of Ayurvedic doctors today

3.1 Ayurvedic doctors' view of medicine

College-educated Ayurvedic doctors understand Ayurveda in the modern scientific way. Courses for training Ayurvedic doctors are based on modern science. Students specialize in Ayurvedic theory of the body and aetiology after mastering modern medical subjects such as anatomy and physiology. Science subjects such as physics, chemistry, and biology are compulsory for candidates seeking to enter colleges to study Ayurveda, just as for those who wish to study western medicine. Such ways in which Ayurveda is taught and learned result in promoting the tendency to reinterpret Ayurveda in the framework of modern science.6

The actual method of consultation by Ayurvedic doctors is similar to that by doctors of modern western medicine. In Ayurveda, generally the patient’s pulse (nāḍī) is taken for diagnosing the symptoms. Pulse diagnosis (nāḍī vijnānam) which examines the condition of the wrist pulse is one of the important basic diagnoses in Ayurveda.7 However, there are few Ayurvedic doctors who use pulse diagnosis today. It is not easy to master in the few years in college the skill which the vaidyas acquire only after some decades of clinical practice. Instead, the Ayurvedic doctors use various methods of medical consultation learnt at college. They employ various instruments of contemporary medicine such as stethoscope and sphygmomanometer instead of applying pulse diagnosis. Sometimes they even depend on precision instruments such as electrocardiogram and CT scan.

College-trained Ayurvedic doctors also tend to reinterpret the Ayurvedic theory of the body according to modern science. For instance, the basic Ayurvedic theory of tri-doṣa (theory of three body fluids or three humours) is often understood in terms of neuro-physiological substances. It is traditionally thought that there are three constitutive elements (body fluids) each with different qualities and that illnesses occur when these three elements are imbalanced. The tri-doṣa theory which is difficult to interpret in physiological terms is often understood among Ayurvedic doctors by interpreting the elements as neuro-transmission substances in biochemical
There is also what is called *marma* (or *varma, marman* in Malayalam) in the Ayurvedic concept of the body. College-trained Ayurvedic doctors tend to understand these *marmas* also in terms of modern medicine. *Marmas* are vital points in the body (similar idea is found in Chinese medicine) and are an important set of points which control life. It is said that illnesses can be treated by pressing or stimulating these points. Many *vaidyas* consider the theory and practice concerning *marma* as the basic principle of treatment and place a great deal of importance on them. A *vaidya* who is greatly honoured among patients in the area where I conducted the fieldwork said as follows regarding *marma*:

'I treat mainly by *marma*. I diagnose the patient's overall condition by *nāḍī* and cure by the technique of *marma*. *Marma* technique can only be mastered through practice of our way of treatment. It is totally different from allopathy. In allopathic treatment, they cannot decide on the exact point for treatment because they have no knowledge about *marma*.'

*Marma* is also a part of the everyday idea of the body familiar to the village people. Many village people believe that a *marma* specialist can cause or cure illnesses by pushing (or attacking) the important *marma*. One hears various episodes in people's everyday conversation, for example 'A became ill because A's neighbour B got a *marma* specialist to attack A's *marma* point.' Village people share the idea of *marma* with the *vaidya* and for this reason *vaidya*’s treatment is trusted by the villagers.

In contrast, many Ayurvedic doctors do not use *marma* technique in their treatment as the *vaidyas* do. This is because although *marma* is taught in Ayurveda colleges, the college graduates do not have the practical experience of applying the *marma* theory. It is also because they have a different view of *marma*. Many Ayurvedic doctors understand *marma* in the following way, as one doctor commented:

'Local *vaidyas* specialize in *marma* treatment. But is it necessary to concentrate on *marma*? Ayurveda has many kinds of treatment and medicine. *Marma* is the vital point. Vital point can be understood not only by Ayurvedic anatomy but also by western anatomy.... Of course, allopathic doctors also know *marma* points. Allopathic doctors can
perform operations while avoiding the vital points. This shows that they also know about marmas, I think.\(^{(10)}\)

For Ayurvedic doctors, marmas are ‘vital points’ which can be understood anatomically in the same way as blood vessels, nerves and important organs and nothing more. They do not use the marma theory itself as a method of treatment.

### 3.2 Disassociation of Ayurvedic doctors from local society

As mentioned above, Ayurvedic doctors do not always share the concept of the body with the village people. They also tend to practise keeping a little distance from village society. This kind of social position of Ayurvedic doctors can be seen in the case of Dr. Krishnakutty (pseudonym).

Dr. Krishnakutty is an Ayurvedic doctor who completed a course on Ayurveda in a college. Since he is not from a lineage of practitioners, he did not go back to his village to open a clinic, but established a small clinic of his own on the outskirts of a tourist spot in the suburbs. Many of the patients who visit his clinic in the tourist site are westerners who want to stay for some time and receive treatment. They come to Kerala for this purpose and highly evaluate Ayurveda and respect Ayurvedic doctors. This greatly enhances Dr. Krishnakutty’s pride.

On the other hand, Dr. Krishnakutty also works as a part-time doctor in a private clinic in a nearby village and practise basic treatments.\(^{(11)}\) There he does not tell the patients that he is an Ayurvedic doctor and pretends to be a doctor of western medicine. He explains, ‘I say I am a "doctor", not mentioning that I am an “Ayurvedic” doctor, because a village person trusts and likes to take treatment from an allopathic doctor.’

He knows from his own experience that Ayurvedic treatment is effective for many illnesses which cannot be treated by western medicine. He believes in the great potential of Ayurvedic treatment. However, he also knows that Ayurvedic doctors like himself are not so much in demand by the local people in India especially in Kerala society. In fact, their therapeutic practices which use equipment like those used by doctors of western medicine and which provide prescription of medicines on the market are often considered by the village people to be not very different from those of western medicine. Even if an Ayurvedic doctor starts a new practice in the village locality, the villagers will not visit him very often because the
vaidyās are already well established in the local society.

As a result, Ayurvedic doctors often get patients from urban intellectuals, the middle classes and people from abroad. However, it is not easy for Ayurvedic doctors to practise even in the cities. In the cities there are large hospitals with the latest equipment and technology. In many cases people want to have the most advanced medical treatment and do not wish to go to small clinics. In the end, many of the Ayurvedic doctors tend to rely on patients who come from abroad. This is especially the case in recent years when Ayurveda is promoted by the central and state governments as an attraction in the tourist industry. It has a great economic advantage to treat patients from abroad. It can also increase the sense of pride in Ayurveda as well as that of satisfaction as a doctor. Hence many Ayurvedic doctors turn their eyes to the trends in Ayurveda abroad.

4. Ayurveda in a global context

4.1 Medical practices expanding overseas

Ayurveda has been introduced in the advanced countries in the last few decades. In recent years it has begun to be practised in many places. Mutual interaction began in the 1970s. Indian doctors were invited to the advanced countries and doctors from the advanced countries went for training of Ayurveda in India. In 1978 there was the 'Alma-Ata Declaration' in which the World Health Organization (WHO) stated their evaluation and promotion of traditional medicine. This led to the establishment of activities and institutes of research and education in Ayurveda in various advanced countries in the 1980s. In 1984, 'The Ayurvedic Institute', one of the most important centres of Ayurveda in the world today, was established in America. Since 1985, the 'Maharishi Ayurveda Prevention Centers' were established in many places in Europe [Transcendental Meditation Ex-members Support Group 1991]. In these institutes, research and promotion activities are carried out with western funding. Works written by Ayurvedic intellectuals in these institutes are published in the advanced countries and later republished in India. As a result of these activities, the institutes have become well known and take worldwide leadership regarding Ayurveda.

However, it is not that Indian Ayurveda was introduced and practised in the advanced countries without any alterations. Ayurveda was accepted
after changing itself according to the situation and purpose of each country. Many people in the west expect something 'Indian' in Ayurveda that cannot be found in western society. They seek a system of medicine which is based on an 'oriental' concept of the body. They also look for a religious perspective and an eco-friendly stance. Very often, their image of Ayurveda is a non-western 'healing' technique that is related to yoga and meditation. Western doctors consider Ayurveda as 'complementary/alternative medicine'. They include its therapies and medicines for treating chronic and psychological disorders which are difficult to cure with the conventional medicine. People who doubt the materialistic world view and ways of the conventional medicine/science emphasize the spirituality and holistic nature of Ayurveda and claim its effectiveness. For instance, 'Maharishi Ayurveda' proposed by Maharishi Mahesh Yogi is closely related to his particular yoga and meditation techniques known as 'Transcendental Meditation (TM)'.

The fact that Ayurveda is not officially recognized as medicine\(^{(a)}\) in the advanced countries is also related to the spread of discourse and practice of Ayurveda as a kind of spiritual healing. Ayurveda was spread by travellers returning from India who established their own 'Ayurveda massage' facilities based on massage techniques learned personally from Ayurvedic doctors. These techniques were often learned over a short period of time during the travellers' stay in India. As a result, their knowledge is often insufficient and biased. Moreover, the treatment programmes these extravellers offer are often transformed according to their tastes into methods of practice emphasizing spiritual elements such as yoga and meditation techniques. These also cater to the needs of those who are looking for 'holistic healing'.

The Indian Ayurvedic doctors are by no means satisfied with the fact that such techniques are practised in the advanced countries in the name of 'Ayurveda'. The situation in which Ayurveda is understood as quasi-medical practice or healing is difficult to accept for Ayurvedic doctors who take pride in being medical doctors of the same standard as those of western medicine. However, in many advanced countries where Ayurveda is not established as official medical practice, there is not much they can do even if the therapeutic practices are changed or distorted in ways that are difficult for them to accept. In this situation, Indian doctors have begun to stress the necessity of establishing international standards for Ayurvedic
medical practice. For this purpose they call for setting up organizations with international authority. As I will discuss later, it is demanded by Ayurvedic doctors that the Indian government will play the leading role in the establishment of international standards and setting up organizations.

4.2 Problems involving herbal medicines

The large scale expansion of Ayurveda abroad is also greatly transforming the local pharmaceutical companies.

Today, the world trend in the development of new medicines is as follows. Researchers from pharmaceutical companies of the advanced countries go into societies of underdeveloped regions. They collect knowledge and technique regarding natural medicines from the medical practices of the local people. Then the researchers scientifically examine the herbal medicines by distilling the effective elements and verifying their effectiveness. In many underdeveloped regions of the world, there are many pharmaceutical resources and medical practices which are still not very well known. The pharmaceutical companies of the advanced countries develop new medicines from such indigenous knowledge. Then they get the patent and commercialize them. In this way, they can save the cost of developing new medicines [Sahai 2002]. Today's tendency for preference in natural medicines also encourages this trend.

Thus, pharmaceutical companies in the advanced countries have become interested in traditional medicines in many parts of the world. In India, too, many investigations have been conducted on herbal medicine resources by multinational pharmaceutical companies. Some have been patented and commercialized in the advanced countries.\(^{15}\) This 'biopiracy' has changed local societies in many significant ways. It is not just the moral problem of exploiting people's common intellectual property without permission.\(^{16}\) Indiscriminate collection of herbal plants and rise of market prices of herbal medicines have resulted in difficulties in using the herbals for the everyday lives of local people. State action thus came to be demanded to prevent biopiracy.

The Indian government and the Council of Scientific and Industrial Research have put forward new policies in order to prevent exploitation of herbal medicines by pharmaceutical companies of the advanced countries. They have suggested the followings: 1) exhaustive investigation of the local herbal medicine resources, 2) creation of a data-base of the herbal
medicines, their uses and effects, and 3) international publication of this data. In accordance with this suggestion, in 2000, the flora of 93 regions in India was investigated. The prescriptions written in various literatures were edited and the results were published in the ‘Traditional Knowledge Digital Library’. Further, legal preparations were made to prevent biopiracy of herbal medicine resources. In 2002, the ‘Biological Diversity Act 2002’ was legislated. According to this law, government permission is required when a foreign researcher wants to access biological resource or traditional knowledge in India. Large-scale measures for preventing biopiracy have begun with the state initiative.

The increase in worldwide interest in Indian herbal medicines has also led to expectation for new market expansion by Indian Ayurvedic pharmaceutical companies. In recent years, the herbal and natural medicines constitute a developing industry. Their consumption in the advanced countries is increasing day by day. However, the share of herbal medicines and chemicals made in India is less than 1 percent in the world herbal medicine and natural chemical market today [Nair 1998].

There are also difficulties in expanding the market in the advanced countries. Since many Indian Ayurvedic pharmaceuticals have been producing on a small scale restricting the market to the locality, they do not have sufficient measures to cater to the wider market. There are also many problems particular to the market in the advanced countries — the problem of quality standards, the pharmaceuticals affairs law, and methods of finding sales networks. These problems stand as serious obstacles for Indian pharmaceuticals to expand their market abroad.

For example, when exporting an Ayurvedic medicine to Europe, the ‘Pharmaceutical Affairs Law’ based on western medicine is enforced in many European countries. According to this law, it is necessary to specify the medicinal ingredients contained in the medicine when importing and selling. However, since many Ayurvedic medicines are made by blending several herbal medicines, it is difficult to analyze and specify medical ingredients. A research institute equipped with modern facilities is required for such analysis.

The quality control of the medicines is also very strict when they are exported to the advanced countries. The exported medicine must conform to the quality standards of the advanced country. Some years ago, the Indian government was requested by the British government to improve
the quality of the Ayurvedic medicines. In response to this request, the Indian government enforced the ‘Good Manufacturing Rule’ on the pharmaceutical companies in 2000. With this the government has started to regulate companies to maintain a certain quality standard for export. In this way, the government has started to take strong initiatives in creating new standards and regulations to promote export of Ayurvedic medicines. The pharmaceutical companies are also actively adapting to these in order to expand their market abroad.

5. Rise of national consciousness

5.1 Significance of World Ayurveda Congress

So far I have discussed the general context in which Ayurvedic doctors and the pharmaceutical industries are seeking new policies and protection from the state. In this section, I take up the World Ayurveda Congress which provided an opportunity for individual practitioners and pharmaceutical people to gather and discuss their views on the current situation. I also look at the ideology and activities of the Swadeshi Science Movement which organized this congress.

The World Ayurveda Congress 2002 (WAC) was held in November 2002 in Kochi (previously called Cochin) in Kerala for 4 days. It was organized by the Swadeshi Science Movement (SSM) and the Ministry of Health and Family Welfare, Government of India. The topic of the congress was ‘World health and Ayurveda’ [World Ayurveda Congress 2002].

There were 2000 participants, many of whom were Ayurvedic doctors practising Ayurveda in Kerala and the people involved in pharmaceutical companies. There were also many participants from abroad. Alongside the conference, large-scale exhibitions were also held. Approximately 300 booths for exhibition and sales were set up by related research institutes, colleges, Indian Ayurvedic pharmaceuticals, treatment centres and medical instrument manufacturers. Since the general public were admitted in these exhibitions, the booths were filled with people every day.

The congress was strongly related to the promotion of Ayurvedic industries. The state government of Kerala, Department of Indian System of Medicine and Homeopathy of the Government of India, Kerala Tourism Board, non-government Ayurveda groups and local pharmaceutical companies supported this international congress.
People of Kerala were also very much interested in this congress. During the period of the congress, almost all the local newspapers dealt with the events in the congress in the front page. The details of the day's conference were reported all over Kerala through the mass media. Vaidyas who did not participate in the congress were also interested in and paid attention to the progress of the congress through the media.21)

5.2 Outline of Swadeshi Science Movement

Let us have a look at an outline of the activities and ideals of the Swadeshi Science Movement (SSM) which organized this congress. SSM is an activist group based in Kochi. It is a group of intellectuals, mainly scientists and administrators,22) with membership of over 2000 people [Swadeshi Science Movement 2002]. Their aim is stated as follows: 'fostering multi disciplinary approach to local problems and promotion of India's Scientific Heritage' [Swadeshi Science Movement n.d.(a)], to 'provide the contestant an opportunity to know about the past and present contributions of Indians, Indian Scientific Institutions and Organisations' and 'to instill confidence and national pride' [Swadeshi Science Movement n.d.(b): 3]. Since 1991, they have been organizing regular workshops by specialists suggesting that problems in contemporary society including farming and environmental pollution can be solved by introducing traditional Indian scientific methods.

SSM is a sub-organization of Vijnana Bharati (Vigyan Bharati),23) one of the organizations (Sangh Parivar) related to the Hindu nationalist Rashtriya Swayamsevak Sangh (RSS).24) Vijnana Bharati is a group with highly nationalistic political overtones which calls for the revival of Indian traditional science. SSM restricts itself to problems concerning traditional knowledge and technology. It is active all over Kerala without overtly displaying any kind of political orientation.25) Their activities have been limited to intellectual ones and have hardly attracted the attention of the general public. However, recently SSM started placing Ayurveda as their central activity. They began organizing large-scale workshops sponsored by major pharmaceutical companies under the joint auspices of the government. These workshops have great influence on the trends of Ayurveda in India.

The feature of 'Indian science and technology' which SSM promotes is revealed in their publications and presentations at workshops and the congress. For example, SSM gives the following remarks concerning 'Indian

science and technology:

‘In Indian perspective philosophy and science are complementary. In the west science developed against philosophy of that time. By following this concept we jeopardize the growth of science.’ [from an exhibition display at WAC].

‘Indian Science: Holistic Model, Western Science: Un-holistic Model. Indian Science: Accepting Physical, Mental and Spiritual Planes without Contradiction. Western Science: Accepting Physical and Mental Plane [sic] Only’ [from an exhibition display at WAC].

In order to explain ‘Indian science and technology’, SSM place it in contrast with modern (western) science. The limitations of modern (western) science on the one hand and the potentiality of Indian science and technology on the other hand are clearly depicted in black and white terms. What they see as Indian science is ‘holistic’ and includes spirituality. Their argument directly indicates superiority of tradition and history of Indian science and technology. Their idea of history of Ayurveda is as follows:

‘Ayurveda is the first health management system on earth, healing wisdom given to us from the ancient enlightened Vedic culture. The Vedas are the oldest literature on earth. They are divided into four sections and Ayurveda is a sub-unit of Atharvaveda — the last of the four sections…. According to various historians, the first record of Ayurvedic literature was more than 4000 years ago. It is considered the mother of all health systems which gave birth to many medical systems’ [from an exhibition display at WAC].

‘With the advent of foreign rule the decline of Ayurveda started…. The Muslim rulers patronized Unani system of medicine and the British, the Allopathy systems. Both the rulers ignored Ayurveda. For centuries there was no progress in Ayurvedic medicine’ [Swadeshi Science Movement n.d.(b): 14–15].

Their idea of history of medicine is that Ayurveda was an excellent system of medicine in ancient India and that it was the origin of all medical systems. However, Indian science declined due to the conquest of India by outside forces. As a result, Ayurveda is no longer used very much in India. This kind of understanding is the same as the idea of history put forward by Hindu nationalists. They do not mention that Indian people
actively adopted western medicine during the colonial period and that Muslim rulers had in fact protected Ayurveda in the course of history.

As SSM argues for the historical superiority of Ayurveda, it is critical of the fact that Ayurveda today is reinterpreted in the framework of material science and practised relying on the concepts and practices of modern medical science. Hence there has been little interaction and cooperation between SSM and Ayurvedic doctors until now as the latter depends heavily on modern medical practices and equipments. SSM's claims are not widely accepted by the general public either. Kerala is a communist led state. The percentage of Hindus (56.2 percent) is low compared with that in other states. There are 24.7 percent Muslims and 19.0 percent Christians [Census of India 2001]. Because of these political and demographic factors, the opposition to Hindu nationalism is particularly strong in Kerala. In the village where I conducted the fieldwork, people voiced their anxiety against holding a large state level congress with the leadership of SSM.

In spite of this, the World Ayurveda Congress led by SSM resulted in strengthening ties among people involved in Ayurveda and people of Kerala. It was successfully closed with the approval of its decisions by the participants. Why did SSM's activities related to Ayurveda attract people in spite of differences in ideas? In order to answer this question, the next section looks at the actual discussions held at this congress.

5.3 Discussion in the congress

Many topics were discussed in this congress. Amongst the sessions which attracted most attention of the participants were those concerning relationships with overseas. The researchers from both inside and outside India, medical practitioners and government officials debated ardently on how to confront the exploitation of herbal medicines and intellectual properties, how to formulate the standards for Ayurvedic practice abroad and possibilities for Indian herbal and natural medicines in the world market.

In one of the sessions, discussions were held concerning Ayurvedic treatment practices abroad. Indian Ayurvedic doctors who practise in the west explained the situation in the countries they live. In many western countries, Ayurveda can be practised only under the supervision of doctors of western medicine according to the law. The participants showed great interest in this situation and asked questions regarding to what ex-
tent the Indian doctors could practise treatment by their own initiative. One Indian researcher criticized the fact that Ayurveda abroad is biased towards religion and philosophy. He stated as follows:

"Now even in foreign countries many students have begun to study Ayurveda. The teaching of Ayurveda in western countries is mostly biased and tends to be superstitious, anti-allopathy, and linked to spiritual healing. In one institution in the United States, they understand and teach Ayurveda as mental and spiritual healing." 27)

When the speaker mentioned the teaching of Ayurveda in America as spiritual healing, there was laughter from the audience. This reaction should be understood in the context of frustration over the fact that although Ayurvedic practice in the advanced countries deviates from orthodox Ayurveda in the eyes of Indian Ayurvedic doctors, they can do nothing to this situation due to legal and practical constraints. Discussion led to an agreement that in order to correct such biased Ayurveda, it is necessary to have an authority who can take action against practices abroad and that for this purpose the Indian government should take leadership and control Ayurvedic practices in the world. 28)

There was a similar kind of discussion amongst the pharmaceutical companies. Many people in the pharmaceutical industry participated in this congress from all over India. In the session on the production of Ayurvedic medicines, most of the presenters referred to the scale and potentiality of the world herbal medicine market. They explained the current dismal situation where Indian pharmaceutical companies have hardly succeeded in entering overseas market, and emphasized that government intervention and support were necessary. On the second day of the congress, apart from the sessions set up by the congress, pharmaceutical companies took the initiative to get together in groups to exchange information. Thus impromptu sessions were held. There the persons in companies which tried sales in the advanced countries discussed details of their experience. They suggested concrete measures on how to make sales possible and overcome legal problems in the advanced countries. They agreed on the necessity of government support and cooperation amongst pharmaceutical companies for smoother participation in overseas market. It was commonly agreed that for this purpose the government's role was important in showing clearly both domestically and internationally that Ayurveda as intellec-
tual property belonged to India.

Many government officials also made statements. P. Sankaran, the Minister of Health and Family Welfare in the state government of Kerala, argued at the congress that by considering Ayurveda as 'national treatment system' the government's development policy could be promoted and the related employment opportunities would increase [Jacob 2002]. In other speeches, it was also argued that it was important to understand and promote Ayurveda not just as a local medical culture but as a part of Indian national culture both domestically and internationally. The possibility of overseas expansion of Ayurveda and related herbal medicines was repeatedly stated and the necessity for cooperation among Indians was stressed. Most of this was reported sympathetically by local medias to the general public.

It should be noted that SSM did not reveal its Hindu nationalist stance openly in the congress. It strongly emphasized from the beginning to the end the possibility and necessity of expanding Ayurveda as medical system acceptable in the world. It was reported in The Hindu, a national newspaper, that K. I. Vasu, the working chairman of the congress and national president of Vijnana Bharati introduced the activities of SSM by emphasizing the following points:

'The Swadeshi Science Movement of the organization aimed at promoting Ayurveda as a universal medicine. Ayurveda can give a healing touch to the whole world. Though it is an intellectual science, which needs popularity, the economic aspects should be taken into consideration' [The Hindu 2002].

SSM stated that the spread of Ayurveda worldwide and its wide usage by people were the primary aim of the congress. It also hinted that economic profit can be expected from this. With this message, SSM succeeded in attracting many people to the congress. The worldwide spread of Ayurveda would create new sphere of activities for Ayurvedic doctors and pharmaceutical manufacturers and lead to their economic profit. The reason why SSM put the overseas promotion of Ayurveda as the primary aim was that if Ayurveda successfully spreads worldwide, it would be possible to prove the superiority of Indian science and technology' in solid terms. As a result they could establish the legitimacy of their promoting activities of traditional Indian science and Indian civilization.
As discussed above, according to the original claims of SSM, Ayurveda was an antithesis of western medicine and science. They were critical of interpreting Ayurveda in the framework of modern medicine and science. However, in this congress, they did not even mention, let alone criticize, the fact that Ayurvedic doctors relied on modern western ideas and that the methods of practising Ayurveda based on modern science were common.

Through this world congress, people involved in Ayurveda in India recognized the various problems that arise due to globalization of Ayurveda and they thought and discussed about the solutions. In this process, central arguments came to be that it is necessary to define Ayurveda as national resource and that the national government should take initiatives in protecting and promoting economic interests related to Ayurveda.

5.4 Ayurveda as national resource

Let us consider intentions and interests of different sectors of people who came to agree on defining Ayurveda as national resource and demanded state control over it.

Ayurvedic doctors would be able to expand the opportunity of spreading their practices abroad by the state intervention. They can claim to be the legitimate practitioners of Ayurveda with its authentic knowledge recognized by the state authority. The fact that their practices are not deeply rooted in local society in India make them look towards the market abroad. Such interests and social position of the Ayurvedic doctors encourage them to promote the idea of Ayurveda as a ‘national resource’ and invite state intervention.

Similarly for pharmaceutical companies which seek to sell their products widely in both domestic and international markets, government initiatives in taking legal and institutional measures are becoming important. State control is sought after to create more favourable legal conditions and to regulate quality of the products for expanding export. The pharmaceutical companies demand that Ayurvedic medicine should be promoted as a national resource under the protection of the government. In this way, they attempt to gain the governmental support in preventing ‘exploitation’ by companies from the advanced countries and in expanding their business in the overseas market.

It should also be noted that the World Congress was held in Kerala and
attracted the attention of many people besides those in the Ayurvedic industry. As mentioned above, the communist party is the ruling party in Kerala. Since there are many Christians and Muslims there is strong opposition against Hindu nationalism. People are anxious that Hindu philosophy underlying Ayurveda may be connected to nationalism. They fear that Hindu nationalism might expand synergistically as Ayurveda develops as an industry. This was what many people were concerned about when this congress was organized. On the other hand, people of the region strongly hope that Ayurveda will develop as a local industry in Kerala. In this context, SSM, instead of openly displaying its philosophy of Hindu nationalism, focused on the economic prospect of Ayurveda as intellectual property and stressed the necessity of legal and institutional support by the state. Their strategy was to redefine Ayurveda as an Indian national medical system unrelated to specific religion and to promote its economic potential as intellectual property under state management. This strategy succeeded. For the people of Kerala, redefinition of Ayurveda as Indian 'national resource' was acceptable as a way to expand the economic potential of Ayurveda while excluding religious and political connections.

It is important to point out here that, although the Indian government participated in this congress as a joint organiser and called for the necessity of laws and regulations to protect the intellectual property of Ayurveda, this was by no means coercion from above. Rather the people called for the government to take necessary measures concerning foreign policies and regulations to protect Ayurveda as intellectual property. At the congress, it was commonly agreed that the state should have a stronger control of the Ayurvedic resources. By defining Ayurveda as an Indian 'national resource', the government as representative of the people could legitimately intervene in the field of traditional medicine and enforce policies smoothly.

In this way, defining Ayurveda as national intellectual property of India and protecting it through the state came to be in the common interest of Ayurvedic doctors, pharmaceutical companies, regional people expecting economic development through Ayurveda, and the government. Thus today Ayurveda is being redefined as 'national resource' of India as the highest common factor for uniting the interests of people in various positions with different ideas.
6. Conclusion

In this article, I have described the process by which Ayurveda is being redefined as a national resource in today’s global situation.

Today Ayurveda is not a medical practice restricted to local society. In the context of globalization, people involved in Ayurveda see new opportunities to enhance their interests and attempt to reconstruct their practices and ideas reflexively to suit the situation. As I have tried to show in this article, practitioners expand their sphere of practice and pharmaceutical companies try to increase profit by participating in the overseas market. There is creative agency of the people who construct their practice and ideas anew by considering the situation of Ayurveda in the world.

Also as it is clear from the examples given in this article, the state’s control of Ayurveda did not come about by the coercive and unilateral state intervention from above. Rather, amidst the interaction of ideas and interests of different groups, people in society belonging to various sectors also urged the government to play a part in protecting and promoting the intellectual property rights of Ayurveda in the context of globalization. This shows that what is explained by previous theories of nationalism as the appropriation and representation of traditional culture and knowledge by the nation state as national culture [Anderson 1991] can in fact involve a drive towards that direction by the people themselves. It was also from the people’s side that there came demands to redefine their cultural resources as national intellectual property and to seek state control in order to protect their own interests. This aspect presents a new viewpoint on cultural nationalism ‘from below’ regarding protection and possession of intellectual property as national resource under globalization.

Notes

1) The theories of Ayurveda were outlined in classical texts called Caraka-saṃhitā (compiled around the second to third century) and Suśruta-saṃhitā (compiled around the third to fourth century) [Wujastyk 1998]. These theories were later passed down including a variety of techniques as the particular flora and social environment of various regions in India were taken into account by the local medical practitioners through experience.

2) Vaidya originally means a holder of knowledge of veda. In the field of medicine, this term is used both for college-educated Ayurvedic doctors and hereditary-
trained practitioners. In this article, I use the term *vaidya* only to refer to the latter, since most of the local people call the former 'doctors' and the college-educated Ayurvedic doctors also prefer to refer to themselves as 'doctors' rather than 'vaidyas'. According to research in 1980, among the total number of 223,000 Ayurvedic practitioners, 117,744 have been educated in institutes or colleges [Gunarante 1980]. However, it is estimated that there are many *vaidyas* in villages who are not included in the statistics.

3) College courses on Ayurveda had been established by the colonial government in the 1830s. The intention of the colonial government, however, was to make Indian people understand the superiority of western science and not to propagate Ayurveda [Arnold 1993: 55].

4) Research work was conducted mainly in the area between Vizhinjam village and Ballalamapuram city, south of Trivandrum district. Informants of this research were as follows: 4 Ayurvedic doctors graduated from Ayurveda College in Trivandrum, 2 doctors who work in private dispensary and hospital in the field, one doctor who teach in the Ayurveda college, one doctor who work and research in the Ayurveda college, 4 *vaidyas* who work in the village.

5) Calculated by Kasezawa based on statistics in 1999 indicated by the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy. [Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy 2004].

6) In the present entrance examination system, courses in western medicine and Ayurveda belong to the same section and those with higher marks go to western medicine. Thus many people in the Ayurveda courses actually applied for western medicine.

7) It is said that pulse examination is not described in the classical texts and it was introduced from outside [Kutumbiah 1969]. However, pulse examination is included in modern Ayurveda today and is a major examination for diagnosing patients.

8) The theory that the *trī-doṣa*, namely, *vāta* (or *vāyu*: wind), *pitta* (bile) and *kapha* (or *śleṣman*: phlegm, water) correspond to acetylcholine, histamine and catecholamine respectively was proposed by Dr. Udupa who was a central figure in modern and contemporary Ayurveda [Udupa 1985].

9) From the interview conducted by Kasezawa near Vijhijam on 8 November 2002. Since the place of the fieldwork is in an area adjacent to Tamil Nadu, there are many *siddha* practitioners who put importance on *marmas* as well as *vaidyas* who are influenced by *siddhas*.

10) From the interview conducted by Kasezawa near Vijhijam on 30 December 2003.

11) Ayurvedic doctors who have had training experience for a certain period in a western medical hospital are legally permitted to perform basic diagnosis and treatment in a western medical facilities.

12) However, the promotion of traditional medicine as practical medicine in ‘Alma-Ata Declaration’ is on the condition that it is a method and technique which is scientific and acceptable by society.
13) For instance, Vasant Lad of The Ayurvedic Institute is the most famous Indian Ayurvedic physician working abroad. Deepak Chopra, Robert Svoboda and David Frawley are also eager to enlighten western countries with Ayurvedic "wisdom". Their representative literatures are as follows: Lad [1984], Chopra [1989], Svoboda [1989] and Lad & Frawley [1993].

14) For example, France, Australia and Japan do not recognize Ayurvedic treatment as medical practice, while Britain and Germany accept it to a certain extent but do not allow it to be covered by medical insurance [Watanabe and Shinohara 1997].

15) It is a well known fact that in the case of turmeric which is commonly used in India, the Indian government protested against the patent being taken by the advanced country. As a result of an international lawsuit the patent became invalid. However, the acts of biopiracy have not stopped. There is still increasing apprehension in India over the lack of legal provisions to prevent more thorough 'excavation' of resources by the advanced countries. Activists such as Vandana Shiva [Shiva 1997] continue to criticize biopiracy.

16) In India there was no clear idea of ownership of intellectual property regarding medicines, and getting patents for herbal medicines and their medicinal components were not allowed by the patent law. However, in 2004, the patent law was amended based on western style intellectual property rights and the patent for medicinal substances came to be recognized.

17) SSM was the actual organizing body with the full support of the Ministry of Health and Family Welfare.

18) Since the participation fee for Indians was expensive (1500 Indian rupees = approximately 30 U. S. Dollar), participation by local people was limited to those who were most interested in overseas matters.

19) Twenty-eight countries from abroad participated not only from nearby countries such as Sri Lanka but mainly from Europe and America. The organizers requested participation from Pakistan but there were no participants. This may have been due to the political orientation of the organizers.

20) The department of Indian System of Medicine and Homeopathy was renamed as Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy in 2003.

21) One vaidya said, 'This congress is aimed just for business development and I have no interest in it.' But the vaidyas did in fact show great interest in the congress. This is probably because they were looking for new ideas in this congress which would lead to future possibilities for their own practices.

22) This organization is led by researchers currently holding college/university posts and retired researchers and it is interesting that there are many people who have been involved in research in modern science.

23) This means the 'science of Bharat'. Bharat refers to India and Hindu nationalists often use this term instead of India.

24) A Hindu nationalist group established in 1925. It has been rapidly expanding its organization since 1980s [Nakajima 2002].

25) The reason why Vijnana Bharati operates a separate group called SSM in
Kerala is not clear, but it seems that they take care not to show their political orientation in view of the political situation of Kerala. In fact, in the interviews they argued that they have no connections whatsoever with political organizations.

26) According to the 2001 census, the ratio of religious groups in India as a whole is 80.5 percent Hindu, 13.4 percent Muslim, and 1.9 percent Christian.

27) In the speech of Dr. C. K. Krishnan Nair at WAC on 3 November 2002, recorded by Kasezawa.

28) In contrast to the Indians, most of the participants from western countries tended to view Ayurveda in more than just scientific terms and included spiritual aspects. For example, one participant from the Netherlands looked for mental and spiritual wisdom in Ayurveda beyond science. One western researcher who was invited as a speaker also criticized recent tendency of Indians to attach too much importance to modern science. This tendency was also expressed in their appearances. Most Indian participants wore western style shirt and trousers, while most western participants wore Indian style dress.

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