

Traditional Chinese Medicine and its Application for Fashion Design

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Abstract *Therapeutic garments are an undeveloped area and yet they have the potential to generate considerable profit for the fashion industry.*

In traditional Chinese medicine, there are spots and pathways on the body through which energy flows and practitioners consider that disease results when this energy flow is hindered. Clothes which stimulate the spots can therefore potentially help to cure disease. In addition, clothes are worn every day and can therefore offer prolonged treatment certainly in comparison with other treatments.

Obesity is a big problem nowadays and one which is caused by poor energy circulation (according to TCM). A garment which stimulates the spots can assist energy flow and therefore cause the wearer to lose weight. In the process, it can also alleviate side effects of obesity such as diabetes and high blood pressure. The ways to stimulate spots include acupuncture, acupressure, moxibustion etc.

There are lots of products to press spots which improve energy flow both in the Western and Chinese markets. The basic principle of circulation is in fact the same in both Western and Chinese medicine. However, most of these are products are footwear ones because they can easily provide the necessary stimulation to reduce tiredness and improve circulation.

For garments, to press the spots effectively it is best to use tight clothes such as corsets and leggings. The important point is to tighten the body and to make energy flow and yet feel comfortable at the same time. Choice of fabric is therefore an important issue. Although the idea has been introduced, it will be necessary to develop a technique which will allow the necessary amount of pressure to be applied.

It could be concluded that this area has a lot of possibility for the future but further research will need to be done before the idea becomes workable.

Key words *traditional Chinese medicine, therapeutic garments, spots and pathways on the body, circulation, obesity, acupuncture*

Introduction

People in modern society are under pressure of diseases. These diseases can be caused not only by physical problems but also by mental ones through competitive and complex ways

of living. Various sectors of the arts have investigated different ways of alleviating these problems and developed certain therapies such as art, drama and music. However, fashion has not dealt with these topics in depth. There is research about the relationship between fashion and the medical remedy. For example, brightly coloured garments reduce depression and using organic fabrics is beneficial for skin problems. However, there is not any research about functional care using garments themselves for physical therapy. Growing concern about health will no doubt stimulate development in this field in the future.

Moreover, clothes are one of the closest goods for people as they wear them everyday even while they are sleeping. If clothes provided a medical remedy, they would be the most effective of all therapies because they would not be a temporary treatment.

In traditional Chinese medicine (TCM), the human body is regarded as a small universe. Like the universe, it continuously renews itself. All diseases originate in the breaking of the law of nature. Once the balance of the body is destroyed, it is difficult for energy to circulate through the body. Headaches or even obesity can be explained by this theory. The key to solving diseases and their symptoms is to make body energy flow more efficiently. Through its long history from ancient times, doctors have found spots and ways in which energy flows through the body which are different from veins and the nervous system. Chinese acupuncture also deals with these spots on the body.

If clothes stimulated these points and there were ways to run energy fluently through design and pattern cutting, it would help to keep the body healthy both physically and mentally, for example by getting rid of a headache or even losing weight. Therefore I would like to study traditional Chinese medicine and its application for fashion design.

There are hundreds of spots in the body including the head, hands and feet. However, in this study, I only intend to deal with the torso, arms and legs because they are the parts people usually wear garments on. Furthermore, I am going to study the body spot that affects obesity because a lot of people are interested in this issue and it is a modern disease which has implications for nutrition, based on the consumption of 'instant' food and lack of exercise.

The following section will give a general overview of traditional Chinese medicine in order to be able to place the research and theory into a framework.

The theory of Traditional Chinese medicine

Traditional Oriental medicine is based on a simple principle of nature. The Chinese and Korean commonly call this 'the cosmic dual forces and five elements'. The natural world is divided into 'Yin', the negative principle in nature and 'Yang', the positive. These can belong to all phenomena in nature. On the other hand, the five elements theory explains that the realm of nature consists of five elements: wood, fire, earth, metal and water.

Human beings are a part of nature. Just as the natural world has its rainy days and bright days, the human body has healthy days and sick days. Traditional medicine regards this human condition as one phenomenon of the natural world.¹⁾

‘Yin’, the negative principle in nature is passive and silent which represents femininity. On the other hand, ‘Yang’ is active and dynamic which indicates masculinity. In the body, the inside parts such as the palms; the soles of the feet etc are ‘Yin’. The outer parts such as the backs of the hands, the insteps etc are ‘Yang’. The internal organs also conform to this theory.

The five elements represent different parts of the body as follows: the liver is for ‘wood’, the heart for ‘fire’, the spleen for ‘earth’, the lungs for ‘metal’ and the kidneys for ‘water’. These five organs are called the ‘five viscera’. For sustaining life harmoniously, the five viscera must work together. ‘The other internal organs’ have to be partners for the five viscera. The liver is partnered with the gall bladder, the heart with the small intestine, the spleen with the stomach, the lungs with the colon and the kidneys with the bladder.²⁾

Unlike in Western medical science, it is believed the organs do not all exist separately but rather they are aiding each other for continuing life in the natural world. If one of them did not function well, the condition of the body would get worse and cause various problems.

The five viscera and entrails have energy which circulates to allow the body to function. The pathways that energy flows through have spots on the body suitable for acupuncture which have an effect on each organ. For example, spots in the leg part effect symptoms in the stomach and spots in the hand effect headaches. Because energy flows and circulates through each organ, it affects the other parts. Imbalance causes illness and disease.

In traditional Chinese medicine, there are various ways to cure a patient. None of which are direct ways as is the case with Western medicine. Western medicine often regards Chinese medicine as somewhat strange since body energy has not as yet been identified by science. However, since cures have not been found for certain diseases, western doctors are in fact increasingly turning to Chinese medicine as an alternative such as treating postoperative-induced and chemotherapy-induced nausea and vomiting, drug addiction and asthma. For example, western medicine has adopted Chinese medicine practices by developing the ‘ion mobility spectrometer’ (IMS) which uses needles to stimulate the muscles which in turn causes electricity to be transferred into the body.³⁾

Furthermore, the World Health Organisation (WHO) recognised TCM as a method of remedy in 1978. In 2008, it published a book entitled ‘WHO Standard Acupuncture Point Locations’ in which it offered a standardised map showing the spots on the body suitable for acupuncture. Since then, it has been trying to incorporate all the practices emanating from China, Japan and South Korea into one.⁴⁾

For obesity, there are two main causes. The first is a sedentary lifestyle and the chron-

ic ingestion of excess calories. This accounts for the majority of cases and is the reason this study will focus on. The second relates to genetic, metabolic and environmental influences. For example, certain diseases such as Cushing syndrome or hypothyroidism can effect the development of obesity. This reason does not however fall within the ambit of this study. It should also be noted that obesity can result in the development of various other conditions such as diabetes, mellitus, high cholesterol, coronary artery disease, degenerative joint disease and psychosocial disability.

The spots and the ways to stimulate

The spots and pathways of energy on the body, focusing on obesity

<fig. 1> is diagram showing the spots on the body which are connected to obesity and ailments related to it.⁵⁾ In Chinese medicine, obesity is considered the result of poor circulation. Therefore, the spots connected to circulation have also been shown.

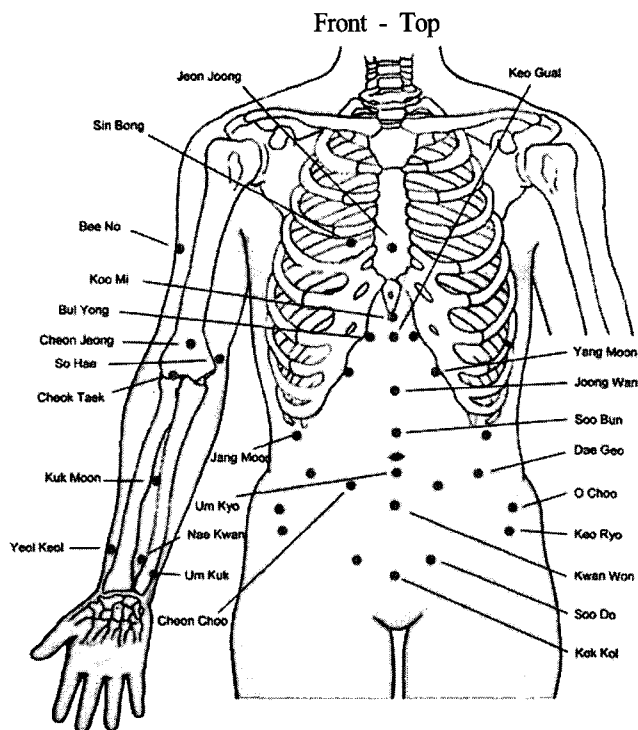


Figure 1.
Body Illustration Foam

The ways to stimulate the spots and pathways of energy on the body

Ways to stimulate the spots and pathways of energy on the body include herbal medicine, acupuncture, moxibustion, aromatherapy and magnetic patches.

Herbal medicine seeks to cure or at least improve health by using plant material such as flowers, plants, shrubs, trees, moss, lichen, fern, algae, seaweed and fungi. Most herbalists consider the patient's intellectual, emotional, physical and spiritual condition in approaching their work. Because nature is not necessarily safe, herbalists should be cautious of quality, dosage and effects.⁶⁾

Acupuncture is the best known and the fastest way to stimulate the spots of energy on the body. The basic theory is to purify toxic energy and blood and enhance them. Small needles stimulate the point as they are inserted and withdrawn. Pressure points can also be stimulated by laser, massage and electrical means.⁷⁾

Moxibustion is heat therapy. Heat is applied to the body spots with a cone of burning mug wart. It helps the circulation of energy and blood.

Hand or foot pressure therapy involves pressing the spot directly by means of the hand or foot. It is used not only for healing but also for relaxing.

Aromatherapy assists the body via essential plant oils. Roots; bark; flowers or leaves may be applied to the body through massage with oil.

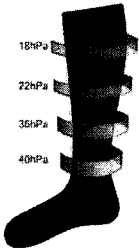
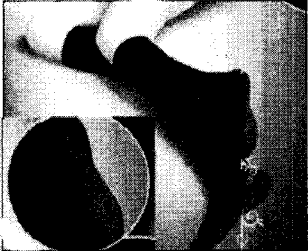
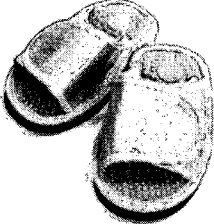
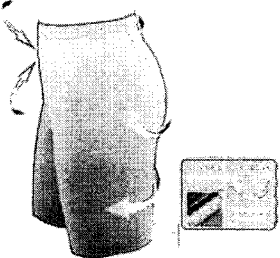
Magnetic patches are attached directly to the spots and stimulate the flow of blood and energy through the body. This practice was actually developed by Western medicine and subsequently adopted into TCM.

The possibility of application for fashion

The products which stimulate the spots and the pathways

There are already a number of products in the market but these focus on function only and are not conscious of design. In particular, there are many socks and sole products, which stimulate body energy since the foot contains spots to every organ. Below are some examples.

Table 1.
Acupressure

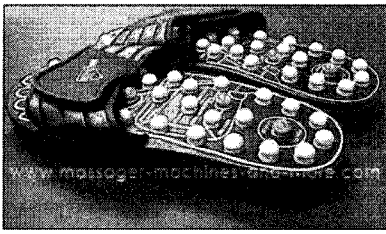
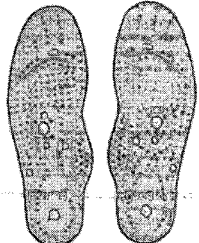
Socks		<p>Japanese Graduated Compression Stocking⁸⁾ Manufacturer: Unmentioned Material: 73% Nylon, 27% Spandex Effect: improve blood circulation and continuously cause the blood to be pumped back into the heart</p>
		<p>Vivian Acupressure Stocking⁹⁾ Manufacturer: Nam Young L & F Material: Polyurethane, Nylon, Mug Wart Effect: reduce tiredness, tighten muscles, odour free due to mug wart</p>
Footwear		<p>AccuStep Sandals¹⁰⁾ Manufacturer: Samson Health Town Materials: Massaging Nodules, Rubber Effect: reduce tiredness, relieve aching feet, improve circulation, inclined design mimics the effect of climbing resulting in increased calorie burning The website says that simply walking with this product makes blood flow more efficiently, increases oxygen, induces relaxation, reenergizes feet and legs and results in weight loss</p>
Under-wear		<p>Hip up Girdle¹¹⁾ Manufacturer: Unmentioned Material: 73% Nylon, 27% Spandex Effect: gives the illusion of a tighter hip area, the weaved design stimulates the body in the same way as acupressure</p>

The above acupressure articles are quite common. A weaved design and small embossments as seen with the underwear exert pressure on the body and stimulate the spots. Many of these articles can be worn every day (for example, the socks and stockings) and many have a slimming effect in addition to the acupressure one. In particular, they sloped

outsole of the sandals.


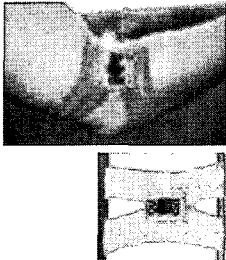
For slipper, besides its function, it is made shorter than the size of feet, it does not need size measurement.

Table 2.
Magnetic patches

Footwear		<p>Acupressure Sandal¹²⁾ Manufacturer: Unmentioned Materials: Nano-silver springs, magnet Effect: The 41 nano-silver springs massage the foot and red nodes contain magnets for extra reflexology and magnetic therapy to specific points. The website states that this effect reaches every vital organ in the body. For best results, a customised sandal is preferable as it will more accurately target points in the specific individual's body.</p>
Insole		<p>Acupressure-Insole¹³⁾ Manufacturer: unmentioned Materials: magnet, rubber Effect: Combination of Acupressure, reflexology and magnet therapy Nodules apply light pressure on vital acupressure points Improving circulation and relaxation</p>

It can be seen how the nodes containing the magnetic patches protrude out of the sandal which might be uncomfortable for a first time wearer. However, it is likely that once the person has become accustomed to the new sensation it will no longer present a problem. Further, magnetic patches have a stronger effect than acupressure ones as not only do they exert pressure on the spots but they actually send magnetoelectricity through the body. Acupressure products are more common as they are easier to make and their properties are more controllable but magnetic patches are perhaps preferable as more energy is directed through the body. However, a sock or stocking would be more effective than a sandal as this could be worn for a longer period of time both in and out of the house.

Table 3.
Others

Socks		<p>Acupressure spot socks Manufacturer: Holland & Barret Material: cotton Effect: a diagram on the sole which direct the wearer to press a part for a determined period of time in order to improve the health of the corresponding organ of the body.</p>
Armband		<p>Qu-Chi Acupuncture Band¹⁴⁾ Manufacturer: Qu-Chi medical. Material: cotton, polyamide, elastane Effect: provides drug free relief from hay fever and allergic rhinitis. It should be placed in right location such as Qu-Chi button is pressing on the outer end of the elbow crease.</p>

The advantage of these socks is that the rest of the sock looks like any other ordinary sock and can therefore be worn in any place and at any time. This product is available in Holland and Barrett. Increasing interest in traditional medicine has led Boots (the Chemist) to develop a similar version.

It is interesting to note that an experiment has been carried out into the efficacy of an acupressure and acustimulation wrist band for the relief of chemotherapy-induced nausea and vomiting. 739 patients were randomly chosen and divided into three groups: the first was given an acupressure band; the second an acustimulation band; and the third was a control group and received no band. [Patients testing the acupressure band on a whole experienced less nausea than those testing the acustimulation band or those who were given no band.]¹⁵⁾

Therefore, there are various products for acupressure in the market. Some of them have been developed through experiments and are evidence-based whereas others are not and should be. Western products get rid of tiredness and improve blood circulation whereas traditional products increase energy flow through the body. The basic principle of stimulation is the same but, because western medicine does not recognise the concept of energy flow, traditional products are in fact advertised and marketed as getting rid of tiredness and

improving blood circulation.

The application for fashion design

It has been shown how for footwear there are two possible ways of stimulating energy flow in the body: <fig. 2>, <fig. 3> are embossed patches and magnetic patches.¹⁶⁾ These products are focused on the harmonious flow of energy to get rid of tiredness. They do not deal with specific symptoms.

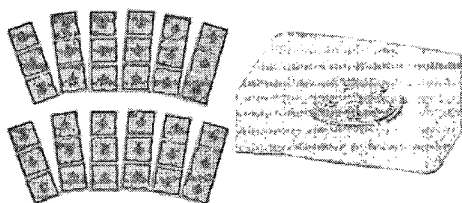


Figure 2.
Embossed Patches

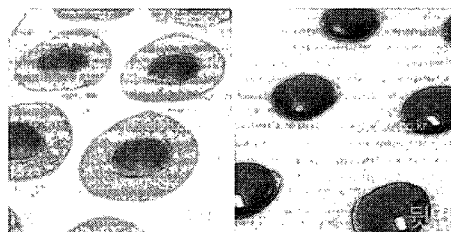


Figure 3.
Magnetic Patches

Whilst function is obviously important, the focus of this study is design. It is vital to pay attention to design as in the absence of this the garment could only be worn as underwear and if that were the case it would not be able to differentiate itself from other products in the market.

On first consideration, a tight body suit such as <fig. 4> would seem a good option as this would allow the majority of spots on the body to be stimulated.¹⁷⁾ However, this could not be worn as outerwear unless the person was particularly confident about their body shape. For obese women, this could potentially be a cruel and humiliating way of losing weight. Therefore, a tight top and leggings ensemble is the preferred choice.

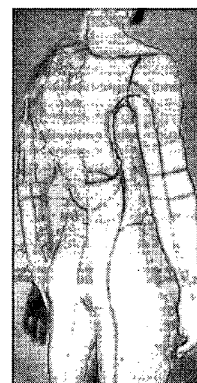


Figure 4.
Body Suit

The characteristics of a figure of an obese woman

It is necessary to understand the characteristics of a figure of an obese woman because the top and bottoms will be highly visible and will therefore need to fit well, hide their bad points and enhance their good points. People of course have different body shapes but in general obese women have a short neck, broad shoulders and thick arms. Their arms

can also appear short not because they actually are but because of their proportions i.e. large breasts, big bum, flabby tummy and wide thighs and calves.

Woodall and Constantine suggest that to hide this kind of figure a top should be tighter around the waist and looser on the breasts so as to make the waist appear smaller and provide comfort for the wearer.¹⁸⁾ Another option is a sleeved corset which would enhance the breasts without making them look too big and generally provide more shape. An unfitted, sleeveless shell top would make an obese woman look even bigger than she is and should therefore be avoided. For the bottoms, colour coordination makes legs look longer and trousers, socks and shoes should therefore all be matching.

The possible garment: corset and leggings

A corset is clothing to mould and shape the torso into a desired shape for aesthetic or medical purposes. Both men and women are known to wear corsets, though they are more commonly found on women.¹⁹⁾ A corset was once regarded as a foundation garment like <fig. 5>.²⁰⁾ However, today fashion does not distinguish so clearly between underwear and outerwear and the corset could therefore easily be made to look like underwear but actually worn as outerwear such as <fig. 6>.²¹⁾ The corset could have the same design, fabric, decoration and image as lingerie such as bras, suspenders and petticoats.

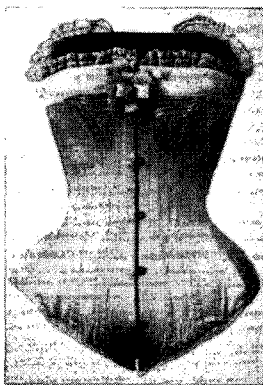


Figure 5.
1880s Corset



Figure 6.
Contemporary Corset

In medieval times when the corset was developed, it was worn as underwear and significantly tightened the body especially the breasts and waist in order to create a shape deemed more attractive at the time. It was very stiff and contained hard boning so as to hold the body firmly in place and the result of this was that it was difficult to breathe and

move naturally whilst wearing the garment. This was of course not good for circulation and carried two further risks: compression of the chest and downward pressure on the abdomen.²²⁾

However, since then the corset has changed considerably. It is now much more comfortable and does not present the problems outlined above. Obese women may be disinclined to wear such a garment due to preconceived ideas about its suitability for their body shape but it is a good option as contrary to what they might think it is in fact very slimming. Obese women sometimes suffer from spinal problems such as scoliosis caused by the excess pressure their weight exerts on their spine and a corset can therefore be particularly beneficial as it stabilizes the torso. Further, a corset might also benefit people suffering from internal injuries (for example, caused by car accidents) for the same reason.

The corset should not be too tight as comfort is a significant consideration for the wearer. This is not a particularly difficult problem as there are currently many hi-tech fabrics available in the market. In particular, spandex, Lycra, nylon (nylon tricot) and polyester are to be recommended. These can all tighten the body due to their elastic properties but they do not hinder blood circulation and it is still possible to breathe and move easily whilst wearing them. Flexible boning can be put in place and magnetic or embossed patches inserted behind it to stimulate the torso in the appropriate way. Other details that could be used to disguise the presence of these patches include corsages and buttons.²³⁾

Jean Paul Gaultier is one designer who particularly favours the corset (as outerwear). In the 1980s, a sexy look was very fashionable and he made many corsets for Madonna such as <fig. 7>.²⁴⁾ Since then, both he and other designers have continued to use this garment but have developed it to be more decorative, complex in shape, luxurious in material and erotic in look.

There are of course problems associated with the corset, for example it can not hide thick arms and broad shoulders. For this reason, it would be better to wear the corset with a jacket or other item on top. This could also make it more fashionable as it would provide more colour and detail. Further, it should be noted that a corset can not stimulate all the spots in the body. This can only be achieved by wearing a full body suit although even then this would not reach the head, hands and feet.

Leggings are designed to cover the legs. Originally, they were two separate items (one for each leg). Nowadays, leggings are tight, fitted trousers. In the United States, they are



Figure 7.
Jean Paul Gaultier Corset
Design for Madonna

sometimes referred to as tights. Modern leggings are typically made from a blend of Lycra and either nylon, cotton or a cotton-polyester blend.

Leggings went through quite a long period of being unpopular but became fashionable again in 2005 (along with skinny jeans) and were worn with mini skirts and dresses. This resurgence is related to the popularity of the boho-chic style of fashion. It is now common for see through material such as chiffon or lace to be worn over leggings as seen by Prada. Such a material could be used to conceal the magnetic and embossed patches.

Regardless, the acupressure and magnetic patches must not be too obvious as they could cause the wearer considerable embarrassment. Therefore, indirect ways of stimulating body spots such as putting patches behind the boning is possible. In addition, buttons or spangles might be a good option to hide patches. In addition to stimulating body spots, the garment could also be designed to slim the wearer for example by including vertical rather than horizontal stripes.

Magnetic patches are more powerful than acupressure patches. It is therefore vital that they are attached in the right way to the correct spots as if they are not they could potentially affect the body and health in a detrimental way. There is a difficulty in achieving this as body shapes of course vary widely. If the garment were not customised it would be impossible for the appropriate spots to be pressed correctly and the article of clothing must therefore be made to measure. Further, how to minimise stiffness in the garment and the appropriate size of the magnets should be researched.

The consideration of another possibility

It might be possible to put a jacket with embossed buttons or studs over the corset such as KTZ 2009 A/W Collection <fig. 8>. This could further stimulate the spots on the body. However, jackets are not usually that tight and may therefore not succeed in applying the necessary level of pressure unless perhaps the wearer is in a sitting position. This requirement would of course negate the fact that obese people are recommended to be as active as possible and not to spend a great deal of time sitting down. It has also been stated that the wearer should be able to wear the garment at any time and to benefit from its properties continuously throughout the day. The jacket idea does not therefore work at present and needs to be developed further.

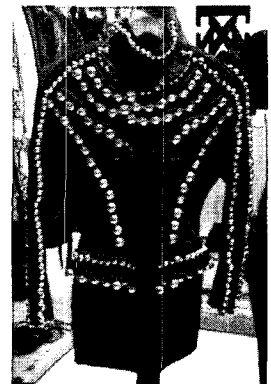


Figure 8.
Possible detail for stimulating

Conclusion

The fashion industry has developed some hi-tech fabrics and techniques. However, therapeutic garments are an undeveloped area and yet they have the potential to generate considerable profit for the fashion industry. This gap in the market should therefore be explored as soon as possible.

In traditional Chinese medicine, there are spots and pathways on the body through which energy flows and practitioners consider that disease results when this energy flow is hindered. Clothes which stimulate the spots can therefore potentially help to cure disease. In addition, clothes are worn every day and can therefore offer prolonged treatment certainly in comparison with other treatments.

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For garments, to press the spots effectively it is best to use tight clothes such as corsets and leggings. The important point is to tighten the body and to make energy flow and yet feel comfortable at the same time. Choice of fabric is therefore an important issue. Although the idea has been introduced, it will be necessary to develop a technique which will allow the necessary amount of pressure to be applied.

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