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# A THEORETICAL VIGNETTE ON THE POSTULATED EFFECTS OF A SIMPLE DRUG BY CHEN SHIDUO (1627–1707): JAPANESE SWEET FLAG, THE OPENING OF THE HEART ORIFICES, AND FORGETFULNESS

#### Rudolf Pfister, Basel

#### Abstract

Chen Shiduo 陳士鐸 (1627–1707) discussed in his Newly Edited Pharmacopoieia (Bencao xinbian 本草新編, 1692) the effects of shi chāng pú 石菖蒲 (Japanese Sweet Flag, Acorus gramineus Solander ex Aiton), and applies it in his carefully composed recipes (found in his other works) to open the "heart orifices" (xīn qiào 心竅), and against 'forgetfulness' (wàng 忘), where it necessarily has to be accompanied by Ginseng (rén shēn 人參). The opening-closing mechanics of the "heart orifices" echo the activity attributed to Japanese Sweet Flag that is seen as an agent of their "opening", mechanically inducing the improvement of a memory disorder. Chen Shiduo consistently argues for the double interplay of the heart, as the mental and emotional centre in the breast region, and the kidneys, that are related to the sexual functions and the urogenital system. "Forgetfulness", in this view, stems from exhausting the "kidney fluids" (shèn shuǐ 賢水), or from "losses of essence" (yi jīng 遺精) during sexual activity.

# Dipping into Research Questions

In his work *Hidden Record from the Stone Chamber (Shishi milu* 石室秘錄, first printed in 1687 and again in 1689), the physician Chen Shiduo 陳士鐸 (1627–1707) postulated that the intake of simple drugs (*dān yào* 單藥) can lead to circumscribed affective, emotional and cognitive states, which are specified for each case. In his later work *The Newly Edited Pharmacopoieia* (*Bencao xinbian* 

On author and work, see MESSNER forthcoming.

For abbreviations of the cited texts, see *References Cited by Acronym*. Chinese words are given in *pīnyīn* transcription with tone marks; however, Chinese personal and place names as well as book titles are left without tone marks in order to avoid diacritical overload. Plant names are transcribed as found in DRP.

本草新編, 1691 edition) he lists 272 main entries of *materia medica*: these are drugs derived from flora, fauna, minerals and humans (see Table 1).<sup>2</sup> What is mentioned only in passing in the *Hidden Record from the Stone Chamber* is treated much more extensively in this later work, providing us with a technical vignette that contains more details, especially about issues of processing *materia medica* and their application in medical practice.

#### Table 1: Sources and Intertexts

#### Chen Shiduo's works:

Hidden Record from the Stone Chamber (Shishi milu 石室秘錄, SSML),<sup>3</sup> first printed in 1687 and again in 1689

The Newly Edited Pharmacopoeia (Bencao xinbian 本草新編, BCXB),<sup>4</sup> first printed in 1687 and again 1692, comprises 272 main entries of materia medica

His other works

#### Sources to Bencao xinbian:

The Untaught's Knack to the Pharmacopoeia (Bencao mengquan 本草蒙筌, BCMQ),<sup>5</sup> printed in 1565 and again in 1573, by Chen Jiamo 陳嘉謨 (fl. 1565),<sup>6</sup> comprises 448 main entries of materia medica, unillustrated

The Untaught's Knack to the Pharmacopoeia, Recarved, Augmented and Improved by Charts and Illustrations (Chongke zengbu tuxiang bencao mengquan 重刻增補圖像本草蒙筌, BCMQ\*),

illustrated edition of 1628

Other pharmacopoeias

The *Newly Edited Pharmacopoieia* will be used in a larger ongoing project to demonstrate Chen Shiduo's assumptions about the functioning of the body, the emotions and mental states, and about the role of specific *materia medica* there-

- 2 The Newly Edited Pharmacopoeia is also known under the alternative title The Secretly Recorded Pharmacopoeia (Bencao milu 本草秘錄), an abbreviated manuscript version of the Kangxi era, discovered in 1962 (cf. BCML; JIA et al., 2007).
- 3 Cf. ZZGZ: 414–415, no. 05629 (51 editions); 901–902, nos. 13033 and 13034.
- 4 Cf. ZZGZ: 210, no. 02552 (5 editions).
- 5 Cf. ZZGZ: 201, no. 02509 (11 editions).
- 6 Unschuld, 1986a: 241ff., gives the life dates of Chen Jiamo as 1521–1603, whereas we also find mention of uncertain dates, i.e. that he may have been born in 1486 and lived until after 1565 or 1570 (cf. Chen, 1990: 1, and Jia / Zhao / Shen, 2006: 43). The clarification of these discrepancies will have to await further research.

in. It is hoped that, in the course of the comparison, the much shorter comments, as found in the *Hidden Record from the Stone Chamber*, will be elucidated by this intertextual reading. However, the limited space provided here only allows for an exemplary treatment. Japanese Sweet Flag was selected for this paper as a case study, because forgetfulness, or impaired emotional memory, is said to be regulated by this plant.

Běn cǎo 本草, "roots and herbs", or pharmacopoeias, are complex composite texts, which contain vast numbers of units of knowledge that have been accumulated over time. 7 Chen Shiduo, in his Newly Edited Pharmacopoieia, made selective use of The Untaught's Knack to the Pharmacopoeia (Bencao mengquan 本草蒙筌) by Chen Jiamo 陳嘉謨, printed in 1565 and again in 1573. For the present paper, the later, illustrated edition of 1628 has been used (see Table 1 and Figure 1).8 It contains 448 main entries of materia medica, whereas Chen Shiduo's work has only 272 main entries. The decrease in number implies a process of selection.9

A recently published comparison of the two works allows for a rough estimation whether and where Chen Shiduo copied from the *Bencao mengquan* without reference and whether and where he either added, reduced or altered any contents. Besides having fewer main entries, but keeping the sequential order of the source text, the authors of the paper assert that Chen Shiduo at times (a) inserted critical statements (two examples), but in other cases (b) simply repeated a passage of his source text (two examples), whereas for the most part (c) alterations did not significantly change the content of the source.<sup>10</sup>

- 7 On the běncǎo literature, see UNSCHULD, 1986a; NAPPI, 2009.
- 8 It is not known, which of these editions that were printed during his lifetime Chen Shiduo actually saw.
- In both Bencao mengquan and Bencao xinbian entries were numbered by the present author as follows: The first number indicates the roll (juàn 卷), and the second number, after a dot, counts the entries through all rolls; subentries are marked by small letters. Bencao mengquan is starred (\*). (Our plant portrait reads accordingly BCMQ \*1.10 and BCXB 1.11.) The title Bencao mengquan has been variously translated as Elimination of Ignorance in Pharmaceutics (Paul U. Unschuld), Enlightenment of the Materia Medica (Benjamin A. Elman, Elisabeth Hsu), Zur Beseitigung der Unwissenheit in der Drogenkunde (Ute Engelhardt), or Trapping Ignorance in Bencao (Carla Nappi). My baroque attempt considers the "fish-trap" (quán 筌) to be metaphorically used for the "trick" or "knack" by which tool the untaught readers are lured into learning about the specifics of medical drugs.
- 10 Cf. Jia / Zhao / Shen, 2006: 44. On implicit quotation in the *Pharmacopoeia in Monographs* and Topical Arrangement (Bencao gangmu 本草綱目) by Li Shizhen 李時珍 (1518–1593), cf. MÉTAILIÉ, 1995.

A more extensive comparison would allow to address diachronic historical questions, such as the following ones: Did Chen Shiduo introduce any new ideas? How did he deal with older units of knowledge? Where and for what motives did he select or discard certain passages? However, any such systematic comparison still awaits to be accomplished. The present paper can only allude to such extensive re-narration of the ancient technical speculations, thereby pointing out the particular value of uncovering details of a single author's elaboration of technical points.

# Plant Portrait: Rhizome of Japanese Sweet Flag in *Bencao xinbian* 1.11

Shi chāng pú 石菖蒲 is identified as Japanese Sweet Flag, or Japanese rush (Acorus gramineus Solander ex Aiton); Chen Shiduo often calls it simply chāng pú 菖蒲.<sup>11</sup> In general, the sun-dried rhizome is used as materia medica; if other parts are employed, this is specified by terms such as huā 花, "flower", or yè 葉, "leaves". <sup>12</sup> (See Figure 1.)

- The currently conventional English names for *Acorus gramineus*, "Japanese Sweet Flag" or "Japanese rush" (DRP: 410), unfortunately contain both the adjective "Japanese", but this convention does not imply its being imported from or growing only in Japan. The naming probably reflects merely the place of first acquaintance of the English-speaking world with the plant, or a similar conjuncture. However, a first scientific description in 1789 gave *Acorus gramineus* the English name "Chinese Sweet-grass" (AITON, 1789: 474), which seems to be rarely used nowadays. The plant is said to grow next to mountain rivers and sources, from Shandong to Guangdong and up to Tibet, as well as from Vietnam to India (DRP: 410). Therefore, "Japanese Sweet Flag" is used here purely as a translation term. It is thereby distinguished from "Sweet Flag", that is *Acorus calamus* L., named *shuǐ chāng pú* 水菖蒲 in Chinese, but often simply called *chāng pú* 菖蒲 as well (cf. DRP: 47, 421). The latter usage makes necessary an interpretative decision as to which kind of plant is implied by a given text (see below).
- 12 ZYD: 95; DRP: 47 (chāng pú), 410 (shi chāng pú); Hou / Jin, 2005: 280-282. Cf. BCGM 19: 921-924. For an exhaustive list of entries for chāng pú in pharmacopoeias, see ZHANG, 2001: chapter 2.1.1. Several ways to prepare the rhizome are mentioned in the ancient composite text Prescriptions and Hagiographies on the Absorption of Nifty Herb Japanese Sweet Flag Pills by Spiritual Transcendents (Shenxian fushi lingcao changpu wan fang zhuan 神仙服食靈草菖蒲丸方傳), which probably dates, at least in part, to the 8th century (Tang), and which was published in the Daoist Canon in 1445 / 1446. Li Shizhen calls its

Figure 1: Japanese sweet flag from Rongzhou

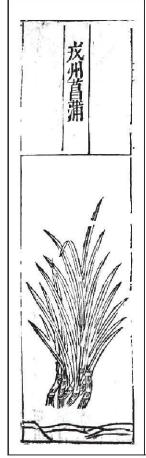


Illustration from The Untaught's Knack to the Pharmacopoeia, Recarved, Augmented and Improved by Charts and Illustrations (Chongke zengbu tuxiang bencao mengquan 重刻增補圖像本草蒙筌)\*1.10: 13a.5-9

Caption: "Rongzhou chāng pú 戎州菖蒲 (Japanese Sweet Flag from Rongzhou)" (Rongzhou 戎州 is now Yibin 宜濱 in Sichuan)

The long green leaves (above ground) are shown together with several segments of the rhizome; but in general, only the rhizome is used as *materia medica*.

Note that the lines below the drawing of the whole plant probably were meant to indicate the appearance of the dried rhizome as sold on the market.

In the *Newly Edited Pharmacopoieia*, the entry on Japanese Sweet Flag falls clearly into four parts: parts (2)–(4) are separated by *huò* 或, "some", followed by a question stating an objection (2)–(3), or a doubted statement (4).<sup>13</sup> Only part (1) repeats some basic information taken from BCMQ \*1.10 (first line, set in frame below), and reformulates a few points.<sup>14</sup> Indeed, this basic information conforms largely to what is found in other pharmacopoeias, but it mentions the

language "coarse", and gives but a very short summary of the text (BCGM 19: 922). Gao Lian 高濂, in 1591, provided a short excerpt on preparation methods (GAO, 1994, *juàn* 13: 488).

<sup>13</sup> The abbreviated version in BCML 49 deletes the three questions, and alters a few words.

As it happens, our exemplary case does not provide us with much implicit citations, and this helps to avoid a text critical digression, which would be a necessity for many other entries in BCXB.

"bitter" taste in addition to their description. 15 Parts (2)—(4) appear to express Chen Shiduo's opinion.

# $1.11(1)^{16}$

石菖蒲, 味辛而苦, 氣溫, 無毒.

Japanese sweet flag (shi chāng pú): taste: pungent and bitter; qì (flow of warmth): tepid; nontoxic.

能開心竅, 善通氣, 止遺尿, Capable of opening the heart orifices; apt to make

pass the qi (inner flows and breath); stops loss of

urine (enuresis);

安胎, 除煩悶, 能治善忘. calms the fetus; dispels vexed and depressed mood

(fán mèn); capable to regulate being prone to

forget.

但必須石上生者良, 否則無功. But it must be the fine one growing on rocks;

otherwise it has no effect.

然止可為佐使, 而不可為君藥. Nevertheless can it solely be the assistant envoy,

and not the ruling drug.

開心竅, To cause the heart orifices to open, 必須君以人參. it must be ruled by Ginseng (rén shēn).

通氣, To make pass the qì,

必須君以芪, 术. it must be ruled by Astralagus spp. (qi, i.e. huáng

qí 黄芪, milkvetch) or [the rhizome of]

Atractylodes macrocephala Koidz. (zhú, i.e. bái

zhú 白朮).

遺尿欲止, If you wish to stop the loss of urine,

非多加參, 芪不能取效. without adding a lot of Ginseng (shēn) or

milkvetch (qi) it is not able to take effect.

胎動欲安, If you wish to calm a moving fetus,

非多加白朮不能成功. without adding a lot of Atractylodes macrocephala

(bái zhú) it is not able to achieve any result.

除煩悶, 治善忘, To dispel a vexed and depressed mood and to

regulate being prone to forget,

非以人參為君, without making Ginseng the ruler

亦不能兩有奇驗也. it is likewise not able to doubly possess the

miraculous effectiveness.

Part (1), after providing the basic pharmacological information about the plant, mentions its capacities in the treatment of six symptoms, specifies its pro-

- 15 See the respective entries for *chāng pú* in Ma, 1995: 41–43; Tang, 1982: 143–144. BCGM 19: 922 omits the "bitter" taste in the main text, but adds in small print that it is "pungent, bitter, and bland".
- 16 BCXB 1.11: 118, parts (1)–(4); cf. BCMQ \*1.11: 12b–13a.

venance and then quickly adds the author's own opinion on how to combine it with other drugs.<sup>17</sup> The combination is described in hierarchical terms: In none of the mentioned symptoms Japanese Sweet Flag can act as the "ruling drug" (jūn yào 君藥), or "ruler" (jūn 君), it always has to take the role of "assistant envoy" (zuŏ shǐ 佐使), or "envoy" (shǐ 使).<sup>18</sup>

# 1.11(2)

或問石菖蒲必得人參而始效,

是石菖蒲亦可有可無之藥也.

此吾子過輕石菖蒲矣.

石菖蒲實有專功也. 凡心竅之閉,非石菖蒲不能開,

徒用人參, 竟不能取效.

是人參必得菖蒲以成功,

非菖蒲必得人参而奏效.

蓋兩相須而兩相成,

實為藥中不可無之物也.

Some may ask, whether Japanese Sweet Flag must get Ginseng to begin to be effective, and is Japanese Sweet Flag a drug one can have or not?

In this, our master is going over Japanese Sweet Flag too lightly! –

Japanese Sweet Flag really has a special merit. We are unable to open any blockages of the heart orifices without Japanese Sweet Flag. If one merely uses Ginseng, it will in the end be unable to take effect.

be unable to take effect.

It is Ginseng that must get Japanese Sweet

Flag in order to achieve a result,

and not Japanese Sweet Flag that must get

Ginseng to produce an effect.

In fact, the two wait for each other and the two

help each other to achieve it.

It [i.e. Japanese Sweet Flag] is indeed an indispensable material among drugs.

The objection of part (2) directly leads to the expansion on the combination therapy with Japanese Sweet Flag and Ginseng, and to the declaration that the former is indispensable in order to unblock the "heart orifices", a device which will be discussed further below.

# 1.11(3)

或問石菖蒲何故必取九節者良,

Some may ask, what the reason is why one must take the finest Japanese Sweet Flag with

[a rhizome of] nine segments;

since what is traded on the markets does not

市上易者,且不止九節,

- Drug identifications after DRP: 21 (bái zhú), 207 (huáng qí), 373 (rén shēn). Chen Shiduo sometimes uses short forms of drug names for stylistic variation.
- For this kind of drug classification, cf. UNSCHULD, 1986a: 19, 23–25, 33.

而前人取九節者,

節之多寡,可不問乎? cannot the number of segments be questioned?

石上菖蒲, 凡細小者俱可用, Sweet Flag on rocks is usually fine and small,

and all [of the rhizome] can be used; but former people sought to get nine-

segmented ones,

取九竅之俱可通也, in order to draw into the nine openings [of the

human body], which can all be made passable

by it

其實菖蒲俱能通心竅, In fact, when Sweet Flag is capable to

penetrate completely the heart orifices,

心竅通而九竅俱通矣. the heart orifices become passable, and at the

same time all the nine orifices are rendered

passable by it!

The objection discussed in part (3) alludes to the quality assessment found in the pharmacopoeias: "[Specimens] which have nine segments, one inch long each, are excellent; uncovered roots cannot be used." It deals with the doctrine of signatures: a rhizome with nine segments would be more helpful in the treatment of all the "nine orifices" (jiŭ qiào 九竅) of the body — i.e. mouth or tongue, nostrils, eyes, ears, anus and urethral opening — that have to be rendered passable and be unblocked in order to function properly. The upper orifices of the head are considered to be sense organs, whereas the lower ones of the hidden or private parts are necessary to remove excretions. The number nine, both of segments and bodily openings, is taken as a signature, probably based on numerology, marking full development, or fullness.<sup>20</sup>

Chen Shiduo, however, is critical to such a farfetched idea, and instead prefers to use the finer rhizomes that grow between rocks, as he already had stated in part (1). Nevertheless he assures his readers that Japanese Sweet Flag has positive effects on both the heart orifices and the nine bodily orifices, and such a double efficacy is postulated in earlier and Ming pharmacopoeias as well.<sup>21</sup>

- 19 一寸九節者良, 露根不可用. Cf. Ma, 1995: 41; Tang, 1982: 143; and BCGM 19: 921.
- On the doctrine of signatures throughout the world, cf. Bennett, 2007. On signatures in traditional Chinese medicine, cf. KALG, 2011: 11–17.
- MA, 1995: 41, TANG, 1982: 143, and BCGM 19: 922 all speak of "opening the heart hollows (holes)" (kāi xīn kŏng 開心孔), and "making passable the nine [bodily] orifices" (tōng jiǔ qiào 通九竅). BCMQ \*1.10: 12b writes: "(it) opens the heart thoroughly" (kāi xīn dòng dá 開心洞達), and "makes passable the orifices" (tōng qiào 通竅). A creative adaptation of the meaning of "orifice" (qiào 竅) is found in the recent paper LIU / JIANG, 2007, where seven cases are presented in which Japanese Sweet Flag was used to make passable one of the

In part (1), only two symptoms are mentioned, which can be subsumed under the heading of "rendering passable the nine orifices", namely that Japanese Sweet Flag is "apt to make pass the qi" (where qi is referring to upward flows inside the rump and the breath passing through mouth and nostrils), and that it "stops bedwetting" (where urine leaves the body through the urinary meatus). The pharmacological literature refers to the first statement in a general way, and it encompasses further symptoms, which involve one or the other of the nine orifices: the "coughing, counterflowing and rising flow events" (kài nì shàng qì 欬逆上氣) that lead to irregular breathing, belching, coughing, gasping, as well as to feelings of pressure in the breast region, the "clearing of eyes and ears" (míng ěr mù 明耳目), i.e. the improvement of eyesight and hearing, and "producing a sounding voice" (chū yīn shēng 出音聲). Some pharmacopoeias add that the drug "regulates deaf ears, abscesses and sores, and warms up the bowels and the stomach" (zhǔ ěr lóng, yōng chuāng, wēn cháng wèi 主耳聾, 癰 瘡, 溫陽胃).<sup>22</sup>

Chen Shiduo apparently assumed a mechanical passageway that herbal drugs like Japanese Sweet Flag somehow manage to "unblock", a property that seems not to be analysable any further at his time. At least, we found in his reasoning no other ascription of efficacy than to a specific plant part (in our portrait the rhizome of Japanese Sweet Flag). In part (4) he sought a similarly mechanical explanation not only for sensory problems, but also for mental faculties.

# 1.11(4)

或疑石菖蒲能治健忘,

然善忘之症用之絕少效驗,何耶?

善忘之症,因心竅之閉耳.

心竅之閉者,由於心氣之虚,

補心之虚,舍人參無他藥也.

Some may doubt that Japanese Sweet Flag is capable to regulate reinforced forgetfulness; why is it that there are extremely minor effects when it is used for the symptom of being prone to forget?—

The symptom of being prone to forget is due to the blocking up (bi) of the heart orifices;

the heart orifices are blocked up owing to a vacuity of the heart qi.

To supplement the vacuity of the heart, there is no other drug left than Ginseng.

following seven openings: "heart orifices", "brain orifice" (the patient had blood emerging from the brain for two weeks), "ear orifice", "mouth orifice", "nose orifice", "eye orifice", "lower body orifice" (i.e. the *meatus urethrae*).

<sup>22</sup> MA, 1995: 41; TANG, 1982: 143; and BCGM 19: 922.

不用人參以補虚, If you do not use Ginseng in order to supplement

the vacuity,

惟恃菖蒲以開竅, but depend only on Sweet Flag to open the orifices, 竅開於一時而仍閉,又何益哉. the orifices open a while, yet are still blocked up;

and what benefit has this?

夫開心竅尚君以人參, Now that you cause the heart orifices to open,

treasure the ruler by using Ginseng,

豊治善忘而反遺, how else could proneness to forget be treated, the

losses be countered,

人參能取效乎. and Ginseng be capable to contribute to the effect!

By the question of part (4) Chen Shiduo indirectly admits that according to him the standard entry in other pharmacopoeias, holding that "one does not forget and is not confused" (*bù wàng bù mi huo* 不忘不迷惑),<sup>23</sup> is not quite correct, since Japanese Sweet Flag alone would have only "extremely minor effects" and could not unblock the all-important mechanism of the "heart orifices" permanently.

# "Heart Orifices" and "Heart Hollows"

Li Jiong 李駉 (fl. 1269), in his work *Phrase-by-Phrase Glosses and Assembled Diagrams to the Guide on Eighty-one Difficulties by the Yellow Emperor (Huangdi bashiyi nan jing zuantu jujie* 黃帝八十一難經纂圖句解), comments on the forty-second difficult issue of the ancient *Guide on [Medical] Difficulties (Nan jing* 難經) that briefly describes the "heart" (xīn 心)—its weight, structure, fluid content and function.<sup>24</sup> In the translation below, the main text of the *Guide* is in SMALL CAPITALS, whereas Li's interlinear *Glosses* are indented.

<sup>23</sup> MA, 1995: 41; TANG, 1982: 143; and BCGM 19: 922. BCMQ \*1: 12b: "if one often absorbs [Japanese Sweet Flag], one becomes clever and does not forget anymore" (多服聰明不忘).

<sup>24</sup> Li, 1296, juàn 5: 19a-b; cf. the translation in UNSCHULD, 1986b: 417, 420.

心重十二兩, 心計十二兩重. 中有七孔三毛,

上智人心有七竅,

又言九竅, 三毛. 中智人心有五竅二毛.

下智人心有三竅一毛.

常人心有二竅無毛.

愚人心有一竅. 大愚人心有一竅甚小.

又一生為人癡憨之輩,

其人雖有心而無竅,

故神出入無門,

難成色果. 盛精汁三合, 貯盛精汁三合. 主藏神.

註見三十四難.

THE HEART WEIGHS TWELVE LIĂNG.

The heart amounts to a weight of twelve *liǎng*. Therein are seven hollows and three villi (máo);

The heart of men of superior knowledge has seven orifices,

- some say nine orifices - and three villi.

The heart of men of mediocre knowledge has five orifices and two villi.

The heart of men of inferior knowledge has three orifices and one villus.

The heart of ordinary men has two orifices and no villus.

The heart of foolish men has one orifice.

The heart of greatly foolish men has an extremely small orifice.

Moreover, men who throughout their lifes are in the category of the silly and dumb,

even though such men have a heart, it has no orifice.

and therefore the in-and-out of the spirit(s) has no gate,

and they hardly achieve any kind of outcome.

IT CONTAINS THREE GĚ OF REFINED SAP (jīng zhī),

It holds three gĕ of refined sap.

AND MANAGES THE GARNERING OF THE SPIRIT(S).

See the commentary on the 34<sup>th</sup> difficult issue.

Li Jiong's categorisation of degrees of intelligence revolves around two seemingly tangible entities: (a) the "orifices" or "holes", and (b) the "hairs" or "villi" of the heart.

- (a) The terms "orifices" or "holes" (qiào 竅), or "hollows" or "holes" (kŏng 孔) are used indiscriminately and may point to one or several cavernous structures of the heart that are, however, not described in any further detail. Their number varies according to the degree of a person's knowledge, but it remains unclear whether it is a natural endowment, or whether it can be influenced by learning. Moreover, their maximal number, either seven or nine, was a matter of controversy as becomes evident from the commentators' remark.
- (b) The "hairs" or "villi" ( $m\acute{a}o \equiv$ ) are equally ambiguous: They may denote some visual aspect of the membranes of the pericardium that was

considered similar enough to wisps of hair. 25 The "orifices", if present, serve as a "gate" (mén 門) for the spirit, or spirits, entering and leaving the heart, thus enabling cognitive activity. If one has only a minor number of these mechanic devices, or if they are entirely missing, one cannot achieve "any kind of outcome" (sè guǒ 色果).

# Chen Shiduo's View of the "Heart Orifices"

Although Chen Shiduo adopts in his writings the ancient concept of "heart orifices", he does neither refer to degrees of intelligence nor to villi. Nevertheless, a similarly simple mechanic feature also serves him to explain the effects of Japanese Sweet Flag against forgetfulness, when in the passages cited above he employs the terms "opening (up)" (kāi 開) and "closing (off)" or "blocking" (bì 閉). In fact, "opening the heart orifices" corresponds to the term "opening the heart" (kāi xīn 開心), as found in Sun Simiao's 孫思邈 (581–682) famous recipe for the "Powder to Open the Heart" (Kāi Xīn Sǎn 開心散) that regulates "proneness to forget" (hào wàng 好忘).²6 The explanatory power heavily relies on this postulated mechanic effect, and less on concrete details regarding the culture-

- UNSCHULD, 1986b: 423, n. 3: "The origin and meaning of this concept of hairs on the heart are unknown." Spodick, 1970, discusses the "hairy hearts of hoary heroes" found in ancient Western literature, starting from Homer's *Iliad*, and signifying heroic courage, these hairs were much later interpreted by anatomists to be pathological signs of *fibrinous pericarditis*, nowadays called *Cor villosum* (in German "Zottenherz"). However, the appearance of a fibrinous network does not quite fit in with the idea as put forward in *Nan jing*, and by Li Jiong, of only a few, countable villi, and it remains unclear what visual aspect they might have referred to, or conceived of.
- Cf. Sun, 1994, juàn 14.7: 265, in the chapter on "Proneness to Forget", one out of 16 recipes: "Prescription for the Powder to Open the Heart and to Regulate Proneness to Forget: [root of] Chinese narrow-leaved polygala (Polygala tenuifolia Willd., yuǎn zhì), Ginseng (Panax Ginseng, rén shēn) (each 4 fēn); dried fungus of Poria cocos (Schw.) Wolf. (fú ling) (2 liǎng); [rhizome of] Japanese Sweet Flag (Acorus gramineus Solander ex Aiton, chāng pú) (1 liǎng). The above four tastes have to be crushed to powder (yě) and sieved (xià shāi). Drink one square-cùn spoonful (fāng cùn bì) for three days." (開心散主好忘方: 遠志, 人参(各四分), 茯苓(二兩), 昌蒲(一兩). 右四味治 [emend to 治] 下篩. 飲服方寸匕, 日三.) Japanese Sweet Flag and Ginseng are likewise Chen Shiduo's two main substances that need to be combined in order to fight forgetfulness.

As recipe titles form an integral part of the internal reference system of the source texts they are set in capital letters both in translation and transcription.

specific concept of the heart as the activator and the commanding centre in the breast.<sup>27</sup> Along a similar line, the term "augmenting [the heart's] sagacity" (yì zhì 益智) can be regarded as a near-equivalent to the expression "opening the heart orifices". It is found in some pharmacopoeias to characterise the effects of Japanese Sweet Flag, and in Sun Simiao's work to describe improved mental faculties, but Chen Shiduo does not use it.<sup>28</sup>

In the *Hidden Record from the Stone Chamber*, the "heart orifices" are considered to be mechanically blocked by "phlegm" (tán 痰),29 which is said to be "going astray" (mí 迷),30 but it can be "lifted up" (qǐ 起) or "made to return" (huán 還) by Japanese Sweet Flag, and consequently it will "dissipate" (sàn 散) by itself.31 The "heart orifices" are thus described as passageways that have to be "opened" (kāi 開, also qǐ 啟),32 or "cleansed" (qīng 清)33 by means of Chinese honey-locust (Gleditsia sinensis Lam., zào jiá 皂莢), Japanese Sweet Flag, or the sclerotium of Poria cocos (Schw.) Wolf. (fú shén 茯神).34 However, Chen Shiduo warns against the danger that Japanese Sweet Flag might be "drawn into the heart orifices, which are thereby led astray and confused" (菖蒲引入心竅,以迷亂之耳), if it is not counterbalanced by Ginseng.35 The more common effect, though, is that it "calms down" (ān 安) the heart, and "makes passable" (tōng 通) the "heart orifices".36

If phlegm is discharged through the "heart orifices" due to the drugs' effect, any confused states of consciousness are removed, and the common waking state is recovered. This is discussed in detail in the following passage in the *Hidden Record from the Stone Chamber*, dealing with a "collapse disease pattern" (tuō

- See Yu, 2009, for a cognitive and linguistic perspective on the Chinese concept of the "heart"; especially chapter 3, on the "heart" in traditional Chinese medicine.
- TANG, 1982: 143, and BCGM 19: 922 write that Japanese Sweet Flag "augments the heart's sagacity" (yì xīn zhì 益心智), and BCMQ \*1: 12b has "it augments sagacity and eleverness (intelligence)" (yì zhì huì 益智慧). SUN, 1994, juàn 14.7: 265f., contains recipes like the "Prescription of the Japanese Sweet Flag Pills to Augment Sagacity" (Chāng Pú Yì Zhì Wán Fāng 昌蒲益智丸方), and the "Prescription to Nourish the Life Mandate, Open the Heart and Augment Sagacity" (Yǎng Mìng Kāi Xīn Yì Zhì Fāng 養命開心益智方).
- 29 SSML 5.3: 381; 6.7: 421; 6.15: 430.
- 30 SSML 1.13: 296; 1.14: 296; 6.7: 421, 422.
- 31 SSML 6.7: 421, 422.
- 32 SSML 1.13: 295; 6.7: 422; 6.15: 430.
- 33 SSML 1.13: 295; 6.7: 421; 6.15: 430.
- 34 SSML 6.15: 430. Drug identifications according to DRP: 138, 570.
- 35 SSML 1.8: 287.
- 36 SSML 6.7: 421.

zhèng 脫症). This pattern is developed by Chen Shiduo in his own way.<sup>37</sup> The word tuō 脫, "to shed, to cast off", allows for a play on words that is difficult to render in English. The disease pattern is called, by its observed aspect, a "falling" or "passing out" of consciousness, here translated as "collapse".<sup>38</sup> According to Chen Shiduo such transient loss of consciousness of male or female patients is characterised by the "shedding" of "essence" (jīng 精) and/or the "dropping" of inner flows, or "qì". In our present case, the syncope of a person who suddenly faints while urinating is contrasted with a collapse due to the loss of "essence" during sexual intercourse.<sup>39</sup>

人有小解之時, 忽然昏眩而倒者,

亦陰陽之氣脫也.

此症多得之入內過於縱欲.

夫縱欲宜即亡於男女之身,

茲何以離男女而暴亡.

蓋亡於男女之身, 乃泄精甚酣, When a person during urination (xiǎo jiě) all of a sudden faints, feels dizzy (hūn xuàn) and falls (dǎo),

it is also a shedding/collapsing of  $y\bar{\imath}n$  and  $y\acute{a}ng$  flow events ( $q\dot{\imath}$ ).

This disease pattern is often acquired by entering the inner quarters [of the women] and unduly following one's [sexual] desires.

Now, following one's desires certainly means a loss [of essence] to the body of men and women:

but here, what does befall a separated man or woman to experience a brusque loss (bào wáng)? –

In fact, the loss in the body of men and women is a consequence of the draining of essence [i.e. male or female ejaculation] being extremely merry,

- On this pattern, cf. SSML 2.28: 324–325; 6.7: 422; 5.6: 384, and BZL 8.5 (Entry on Hidden and Manifest Collapses): 886–888, treating fainting during sexual intercourse, micturition and defecation. On the special conception of the *tuō* 脫 pathology and its treatment by herbal prescriptions developed by Chen Shiduo, cf. QIU, 2006.
- "Collapse" is favoured by World Health Organization Western Pacific Region, 2007: 49, 55, 56, 69; but Wiseman, 1998: 92, translates with "desertion": "The word 脱 tuō, 'desertion', is similar to 滑 huá ['efflux'] in denoting an uncontrollable outward flow, but applies most commonly to yin, yang, qi and blood. The literal meaning of 脫 tuō is to 'shed', as a snake sheds its skin. We chose 'desertion' since 'shed' has positive connotations in English that tuō does not have in the medical context."
- 39 SSML 6.7 (Entry on Inner Damage): 422. Note that the transient "loss" of consciousness, the "shedding" (tuō 脫), loosing and falling are recurrent motives throughout this passage. Drug identifications according to DRP: 21, 24, 47, 373, 473 and 570.

樂極情濃使然也. caused by joy at i

離男女而亡者,

乃泄精未暢.

平日腎氣銷亡,

腎火衰弱.

: 既泄其精,

!更加虚極,

▮故氣隨小便而俱絕.40

二症雖異而實同,

救法亦不必大異.

惟死於男女之身,

桂、附可不必重加,

而脫於小便之頃,

桂、附斷須多用.

至人參則二症皆當用至二三兩.

予有一方,

名逢生丹.

人参二兩,

附子二錢,

白术一兩,

菖蒲一錢,

caused by joy at its apex and sensations being

thick (strong).

If a separate man or woman are losing,

the draining of essence has not yet fully spread

[in the body].

If on ordinary days the kidney qi is diminished

and lost,

the kidney fire becomes damaged and weak.

But if one has already drained the essence,

one adds even more to the depleting extreme,

i and because the qi follows the minor relief

(urine), they [i.e. the essences and the qi] are

i cut off altogether [and one faints].

Although the two disease patterns are different,

they are indeed the same,

and the rescue method also does not need to be

greatly different.

Only that for the "died off" [i.e. unconscious]

body of a man or a woman

there is no need to repeatedly add cinnamon

and aconite;

while for a collapse at the moment of minor

relief [during urination]

further use of cinnamon and aconite is

suspended for a while.

As for Ginseng, one then should use as much

as two or three liang for the two disease

patterns.

I have a prescription,

called "Join the Life Elixir" (Féng Shēng Dān):

Ginseng (Panax Ginseng, rén shēn), 2 liǎng;

[processed lateral roots of] aconite (Aconitum

Carmichaelii Debx., fû zǐ), 2 gián;

[rhizome of] large-headed Atractylodes,

(Atractylodes macrocephala (Koidz.) Hand. -

Mazz., bái zhú), 1 liăng;

[rhizome of] Japanese Sweet Flag (Acorus

gramineus Solander ex Aiton, chāng pú), 1

gián;

The block print edition of 1689 includes paratextual marking, indicating emphasis, by dots along the vertical columns; see SSML \*6.7: 191.

半夏一錢,

生棗仁一兩,

水煎服.

此方妙在人参急救其氣,

以生於無何有之鄉.

加附子以追其散亡之氣,

菖蒲啟心竅而還迷,

半夏消痰飲而辟邪,

尤妙用白术

以利腰臍而固腎氣之脫,

用棗仁以安魂魄

而清心君之神,

自然絕處逢生也.

此方陰陽脫, 俱可兼治而收功. [tuber of] crowdipper (*Pinellia ternata* (Thunb.) Makino ex Breit., *bàn xià*), 1 *qián*; fresh jujube (Chinese date) kernels (*Zizyphus jujuba* Mill. var. *inermis* (Bge.) Rehd., *zǎo rén*), 1 *liǎng*;

Take decocted with water.

The wonder of this prescription is that Ginseng quickly rescues a persons's flow events (qi), who thereby revives from the "country where nothing whatsoever exists" (wú hé yǒu zhī xiāng) [i.e. one regains the waking state of consciousness].

Add aconite in order to chase the dissipated and lost *qi*:

Japanese Sweet Flag opens (qi) the heart orifices and leads back the straying [phlegm]; crowdipper disperses phlegm-rheum ( $t\acute{a}n\ y\check{i}n$ ) and repels pathogens;

it is particularly wonderful to use large-headed

Atractylodes

in order to benefit the hips and the navel [i.e. the waist], and to consolidate the shedding of kidney qi;

use jujube kernels to calm  $h\acute{u}n$  and  $p\grave{o}$  [i.e. the ethereal and corporeal soul aspects],

and cleanse the spirit(s) of the Heart

Sovereign;41

all by themselves the [formerly] cut off places

[in the body] join life again.

By this prescription  $y\bar{i}n$  and  $y\dot{a}ng$  collapses can completely be cured concurrently, and it even does harvesting work [i.e. collects the  $q\dot{i}$  and prevents their renewed dispersal].

The expression "spirit(s) of the Heart Sovereign" (xīn jūn zhī shén 心君之神) is only used in SSML 6.7: 422, and is not found in BZL. The "Heart Sovereign" has its "seat" in the heart region (6.4: 415); he can be "calm and quiet" (3.26: 344), "quiet and tranquil" (3.20: 338), or "disquieted" (3.2: 328), or have a "vacuity" (2.8: 307), and has a special "fire" of its own as well (1.11: 292). The idea of central control over body functions is localised in the heart region, and visualised dynamically as "fire" or "spirit(s)". "Cleaning" or "calming" of this centre are positive adjustments, whereas "disquiet" and "vacuous" states are negative disturbances that affect the overall sensitivity of a person.

Chen Shiduo's rationales for drug application are clearly spelled out here. Each drug component of the "Join the Life Elixir" (Féng Shēng Dān 逢生丹) has its defined role in a complexly structured interactive play. By attributing in a modular way specific ranges of efficacy to each drug, he conjectures at once the path the drug takes in the body, and what structure is influenced by it in which way. Japanese Sweet Flag does the job by guiding phlegm away from the newly opened "heart orifices", where it had caused confusion; the drug is assisted by crowdipper in this task. The prescription is viewed as simultaneously restoring normal functioning in the abdomen and in the heart region, in both the kidney and heart functional systems, that is in yīn and yáng organs of the human body.

# Treatment of Forgetfulness

The Hidden Record from the Stone Chamber contains a passage and the Record on Discerning Disease Patterns (Bian zheng lu 辨證錄) a full chapter on the treatment of "reinforced forgetfulness" (jiàn wàng 健忘). The latter describes the differing conditions of forgetfulness of both old and middle-aged persons, when feeling depressed and tensed, and when having hardly no short-time memory, and provides one or several prescriptions against each of these conditions.

Chen Shiduo argues consistently for the double interplay of the heart as the mental and emotional centre in the breast region, correlated to yáng, and the kidneys, which are yīn and related to the sexual functions and the urogenital system. 42 Forgetfulness, in this view, stems from exhausting the "kidney fluids" (shèn shuǐ 腎水), or from "losses of essence" (yí jīng 遺精) during sexual activity. 43 In the recipe of the "Pills to Support the Elderly" (Fú Lǎo Wán 扶老丸) it is stated, that the pills can be taken by persons of all ages but that they are especially suited for old people,

because there are more tastes [i.e. ingredients] to supplement the kidneys [included in it] than to supplement the heart, for if there is enough essence, the juices of the heart  $(x\bar{\imath}n\ zh\bar{\imath})$   $y\dot{e}$ ) are produced; if the juices are produced, the orifices of the heart are opened; if the

Further study is needed to clarify the special role of the heart-kidney dyad, and possibly to find the sources of Chen Shiduo's doctrines.

<sup>43</sup> See BZL 4.8: 783–785.

orifices are open, the spirits of the heart are cleansed; how then could dark and dim states [of the heart (mind)] occur and proneness to forget?<sup>44</sup>

Let us take a closer look at the treatment as proposed in the *Hidden Record from* the *Stone Chamber*, where Chen Shiduo elaborates on the heart-kidney connection:<sup>45</sup>

遺精,下病也;	Loss of essence is a disorder of the lower parts;		
健忘,上病也.	reinforced forgetfulness is a disorder of the		
	upper parts.		

	entirely appropriate?
方用人参三兩,	The recipe uses:

	Ginseng (Panax Ginseng, rén shēn), 3 liǎng;
蓮須二兩,	stamens of sacred lotus (Nelumbo nucifera

Gaertn., lián xū), 2 liǎng;

芡實二兩, Gorgon fruit (Euryale ferox Salisbury, qiàn

shi), 2 liăng;

山藥四兩, Chinese yam (Dioscorea opposita, shān yào), 4

liăng;

麥冬三兩, [tuber of] dwarf lilyturf (Ophiopogon

japonicum, mài dōng), 3 liăng;

五味子一兩, Schisandra chinensis berries (wǔ wèi zǐ), 1

liăng:

生棗仁三兩, fresh jujube (Chinese date) kernels (Zizyphus

jujuba Mill. var. inermis (Bge.) Rehd., zǎo

rén), 3 liăng;

遠志一兩, [root of] Chinese narrow-leaved polygala

(Polygala tenuifolia Willd., yuán zhì), 1 liăng;

菖蒲一兩, [rhizome of] Japanese Sweet Flag (Acorus

gramineus Solander ex Aiton, chāng pú), 1

liăng,

當歸三兩, [root of] Chinese angelica (Angelica sinensis

(Oliv.) Diels., dāng guī), 3 liǎng,

柏子仁去油一兩, kernels of Chinese arborvitae (Biota orientalis

(L.) Endl. băi zi rén), deoiled, 1 liăng,

熟地五兩, [rhizome of] Rehmannia glutinosa (shú dì), 5

liăng;

44 BZL 4.8: 784: 此方老少人俱可服, 而老年人尤宜, 蓋補腎之味多於補心, 精足而心之液生, 液生而心之竅啟, 竅啟而心之神清, 何至昏昧而善忘哉.

45 SSML 3.27: 344–345. Drug identifications, according to DRP: 43, 47, 95f., 272f., 302, 360, 373, 400, 401, 417, 469, 563, 570.

山茱萸三兩, [fruit of] medicinal cornel (Cornis officinalis

Sieb. et Zucc., shān zhū yú), 3 liǎng;

各為末,蜜為丸, Make a powder of all these, and form pills with

honey.

每日早晚各用白滾水送下五錢. Every day, both in the morning and evening,

use clear, boiled water to swallow down five

gián of it.

〔批: 遺忘雙治丹.〕 (Note: "Double Treatment Elixir for [Semen]

Loss and Forgetting".)

半料兩症俱全. With half of the material all is on hand for two

disease patterns.

此方乃治健忘之方也, Since this recipe is a prescription to cure

reinforced forgetfulness,

何以遺精而亦效? how does it take effect for losses of essence as

well?

蓋遺精雖是腎水之虚, In fact, although loss of essence is an emptying

of kidney fluids,

而實本於君火之弱, its real cause lies in a weakness of the

Sovereign Fire; 46

今補其心君, as we now supplement the Heart Sovereign, 則玉關不必閉而自閉矣.

the jade bar does not need to be blocked and is

yet blocked by itself [so that semen loss is

impossible].

此合中之分, In the components of this combination 實有殊功也. one does indeed possess outstanding

achievements.

The right combination of drugs allows to positively influence the "jade bar" (yù guān 玉關). This is a structure located in the abdomen that is imagined as something like the locking bar of a door lock. The male sphincter function is represented by the simple closing mechanism of "blocking with a bar". If it remains open, nightly pollutions occur.<sup>47</sup> Chen Shiduo envisages this structure for both sexes, when he calls it "jade gate" (yù mén 玉門), a term that usually refers to the vagina. But from the context it becomes clear that it must lie in the abdomen of men and women, and that it can be "barred" (guān 關) or "blocked

<sup>46</sup> In SSML 5.14 (1): 389 Chen Shiduo explains that the "Sovereign Fire" (jūn huǒ 君火) is the fire of the heart, and the "Ministerial Fire" (xiàng huǒ 相火) the fire of the "heart sac", or pericardium. In both of these fires, there is also water. But if they are without water, the heart will be scorched, and the heart sac's network be burnt up by itself. BZL 4.1: 773 names five different fires, one for each of the "five storehouses" of the body.

<sup>47</sup> Cf. SSML 6.7: 425-426; 1.11: 293. Cf. BZL 8.4: 885.

(with a bar)" (bì 閉) in order to close off the male or female "essence" (jīng 精).<sup>48</sup> The double treatment is necessary, because the root cause is that

the kidney fluids are exhausted; above they cannot connect with the heart anymore, in between they cannot moisten the liver anymore, and below they cannot be engendered in the spleen-Earth anymore, so that the jade bar does no barring anymore; and even without dreaming, one has [semen] losses. 49

If the connection with the heart is affected, all kinds of mental problems might arise, and therefore, the double treatment must be put to use.

# Modern Usage

The "heart orifices" came a long way, but have remained in current Chinese language usage merely as a cognitive metaphor, meaning the "capacity for clear thinking". <sup>50</sup> Translators seeking to standardize the modernized Traditional Chinese Medicine (TCM) are struggling, vacillating between literalness and current meaning, but do not seem to give up any obsolete anatomical notions. The symptom "phlegm clouding the pericardium" (tán méng xīn bāo 疾蒙心包) is identified to be the same as "phlegm confounding the orifices of the heart" (tán mí xīn qiào 痰迷心竅) and defined as "a pathological change in which phlegm causes mental confusion". <sup>51</sup>

- 48 Cf. SSML 2.28: 325; 5.15: 391.
- 49 SSML 1.11: 293: 蓋腎水耗竭, 上不能通於心, 中不能潤於肝, 下不能生於脾土, 以致玉關不關, 無夢且遺.
  - Quite unexpectedly, the text notes the phase "Earth" that is correlated to the "spleen", but omits three other correlations, which could be mentioned here: "kidney-Water", "heart-Fire", "liver-Wood". The names of the phases are capitalised in order to mark their belonging to the "Five Phases" set. The notation "spleen-Earth" is common in SSML.
- Mentioned in Yu, 2009: 55 n. 36. This is reflected already in MATHEWS, 1975: 405, item 2735-132: "心竅 the intellect; powers of understanding; comprehension said to be holes in the heart which give intelligence." Wu / Cheng, 2004: 1718, define it as "aperture of the heart as a thinking organ; capacity for clear thinking."
- 51 WORLD HEALTH ORGANIZATION WESTERN PACIFIC REGION, 2007: 58, item 1.7.155. This is commented on by Li, 2009: 86: "The Chinese terms [tán méng xīn bāo] 痰蒙心包 and [tán mí xīn qiào] 痰迷心窍 are similar to each other in structure and meaning, usually referring to the syndrome of mental disorder due to obstruction of the heart spirit by phlegm, often translated as 'mental confusion due to phlegm', 'heart confused by phlegm' or 'phlegm

Chen Shiduo wrote at a time and in a culture before chemistry and neural sciences. Therefore, it is of interest to briefly survey what contemporary herbalists and natural scientists are making of Japanese Sweet Flag, and its postulated effect in curing forgetfulness. Two experts in Chinese-style pharmacology assert, apparently following tradition:

Today, the herb is used to treat loss of consciousness and confusion of the mind, forget-fulness, anorexia, a stuffed sensation in the epigastrium, and epilepsy.<sup>52</sup>

Among the four ingredients of the "Powder to Open the Heart" (Kāi Xīn Săn), Ginseng is used together with Japanese Sweet Flag. The latter is

the most frequently used adjuvant component in TCM formulas intended for the treatment of central nervous system complaints and it is assumed to act as a 'delivering servant', capable of increasing the uptake of active ingredients to the brain [...]. However, scientific evidence to support such an assumption is yet lacking. [... The rat study's] results suggested that the presence of AG [Acorus gramineus] in the KXS [Kāi Xīn Sǎn] formula promoted the initial absorption of ginsenosides Rg1 and Re in the gastrointestinal tract, but unlikely affected the brain-to-plasma AUC [area under the concentration] ratios.<sup>53</sup>

A recent review summarises findings on Japanese Sweet Flag as follows:

This herbal plant has long been prescribed in TCM formulas for improving memory and treating forgetfulness. A. gramineus' active compounds of  $\alpha$ -asarone and  $\beta$ -asarone are the most probable candidates for eliciting cognitive improvements. Recent studies have brought forth convincing results supporting the use of  $\alpha$ -asarone and  $\beta$ -asarone as neuroprotective agents. S4

confusing the mind'. Some translators also use the English word attack to translate [mi] 迷 or [méng] 蒙. In WPRO [WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region] Standard and WFCMS [World Federation of Chinese Medicine Societies] Standard, the English word 'cloud' is used to translate [mi] 迷 and [méng] 蒙, appearing quite vivid." Now, whether clouded or not, to my Western-Eurasian mind, "obstruction of the heart spirit" would have required further clarification, which was, however, not available in these two works. (Insertions in square brackets by present author.)

<sup>52</sup> Hou / Jin, 2005: 280.

<sup>53</sup> WANG et al., 2010: 313, 314.

<sup>54</sup> Jesky / Chen, 2011: 1112.

Apparently, current knowledge about the effects of Japanese Sweet Flag is increasing, but not yet sufficient, and more research into the complex interaction of drugs and their active compounds is needed.

# Summary of Chen Shiduo's Theoretical Position

The closing-opening mechanics implied in the concept of the "heart orifices" echo the activity ascribed to Japanese Sweet Flag, which is considered an opening agent, if properly ruled by Ginseng. In the double system of the heart and the kidneys, Japanese Sweet Flag influences the heart system, but in Chen Shiduo's view, it often serves better to supplement the kidney system, and consequently he adds to his recipes for the treatment of "reinforced forgetfulness" a few specific ingredients, which just achieve that effect. The modular conception of simple drug effects on the mutually interacting systems of the kidney and heart in the human rump allows for a flexible composition of prescriptions that are believed to treat various symptoms. Working with such epistemological tools, Chen Shiduo develops his speculative explanatory model into ever finer detail, always cautioning against possible undesired results of an intervention, pointing to useful interactions between different drugs, and modulating his tools tirelessly, even in repetitious consistency. This has resulted in a large number of texts that contain plenty of prescriptions and for all kinds of diseases. Apparently, Chen was convinced that his recipes would work.

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- BCMQ CHEN Jiamo 陳嘉謨: Bencao mengquan [The Untaught's Knack to the Pharmacopoeia]. In: XUXIU SIKU QUANSHU BIANZUAN WEIYUANHUI 《續修四庫全書》編纂委員會 (ed.): Xuxiu siku quanshu 續修四庫全書. Shanghai: Shanghai guji chubanshe, 1995: vol. 991, pp. 545—693. [Reprint of orig. publ. 1573.]
- BCMQ\* CHEN Jiamo 陳嘉謨 / YE Fei 葉棐 / HU Yiguan 胡一貫 / LIU Kongdun 劉孔敦 (eds.): Chongke zengbu tuxiang bencao mengquan 重刻 增補圖像本草蒙筌 [The Untaught's Knack to the Pharmacopoeia, Recarved, Augmented and Improved by Charts and Illustrations]. 12 juan. [Nanjing]: Wanjuanlou 萬卷樓, 1628. Waseda University Collection 早稻田藏; last visited January 14 2013: <a href="http://archive.wul.waseda.ac.jp/kosho/ni01/ni01\_00815/">http://archive.wul.waseda.ac.jp/kosho/ni01/ni01\_00815/</a>.
- BCXB Bencao xinbian 本草新編 [The Newly Edited Pharmacopoeia]. In: CQS: 75–264. [Orig. publ. 1691.]
- BZL CHEN Shiduo 陳士鐸: *Bian zheng lu* 辨證錄 [Record on Discerning Disease Patterns]. 14 *juan*. In: CQS: 691–1010. [Orig. publ. 1687.]
- CQS LIU Changhua 柳長華 (main ed.): *Chen Shiduo yixue quanshu* 陳士鐸醫學全書. Ming Qing mingyi quanshu dacheng 明清名醫全書大成. Beijing: Zhongguo zhongyiyao chubanshe, 1999, 2010<sup>5</sup>.
- DRP Francine Fèvre / Georges Métallié. Dictionnaire Ricci des plantes de Chine chinois-français, latin, anglais. Paris: Association Ricci Cerf, 2005.
- SSML Shi shi mi lu 石室秘錄 [Secret Notes from the Stone Chamber]. In: CQS: 265-433. [Orig. publ. 1687, 1689.]
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