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NATURAL PHILOSOPHY, PHYSICS AND
METAPHYSICS IN THE DISCOURSE OF TAN SITONG:
THE CONCEPTS OF *QI* AND *YITAI*

Tan Sitong 譚嗣同 (1864–1898) is well known as one of the six reformers who died after the failure of the ‘Hundred Days Reform’ in 1898 by the sword of the executioner. Furthermore he is known as the author of the politico-philosophical treatise *Renxue* 仁學 (A study on *ren*). Perhaps less known is the fact that he advocated political reform only during the last four years of his life. Tan himself describes this change as a kind of incision that was not restricted to the field of political ideas but was also reflected in his philosophical thought:

After the thirtieth year of my life I began my new studies; this sudden change ripped up the former and the latter as if I were two different persons.¹

I will examine how this incision is reflected in Tan’s explication of the phenomena of nature. The problems will be centered on the relationship between the concept of *qi* 氣 in Tan’s ‘old studies’ and the concept of *yitai* in the *Renxue* and the “Yitai shuo” 以太說 (On *yitai*).

1. *QI*, THE ‘GENERATING FORCES’,
AND A ‘WESTERN DISCUSSION ON *QI*’

I draw the remarks on *qi* from a text classified by Tan as ‘old studies’. The *Shijuying lu bishi* 石菊影廬筆識 (Notes from the Studio of the Chrysanthemum-Ink-slab’s Shadow) was written during the first half of the 1890s; it is a collection of notes standing in the tradition of the *biji* 筆記 genre that was kept alive by many Qing scholars.² The notes are divided into two main parts, the “Xuepian” 學篇 (Studies) and the

¹ Tan Sitong 譚嗣同 . 1981a. “Yu Tang Fucheng shu” 與唐絳丞書 (Letter to Tang Fucheng), in: id. *Tan Sitong quanji* 譚嗣同全集 (Collected works of Tan Sitong [hereafter *TQJ*]). Edited by Cai Shangsi 蔡尚思 and Fang Xing 方行 . 2 vols. Beijing: Zhonghua shuju , pp. 259–61; 259.

² Luke S. K. Kwong. 1996. *T’an Ssu-t’ung, 1865–1898. Life and Thought of a Reformer*. Leiden: Brill, p. 71. On the *genre* see Liu Yeqiu 劉葉秋 . 1980. *Lidai biji gaishu* 歷代筆記概述 (A brief account of historical notebooks). Beijing: Zhonghua shuju.

“Sipian” 思篇 (Thoughts), and contain comments and considerations on Chinese philology, poetry, history, music, military science, etc. Some touch upon problems of ‘Western’ learning (geography, astronomy, calendar science).

The notes of the *Shijuying lu bishi* neither offer a coherent presentation of the *qi* problematic nor do they apply a standardized terminology, but the different terms can be connected by their common references to Chinese natural philosophy.

In “Thoughts”, note no. 8, the term *yuanqi* 元氣 ‘primal pneuma’ belonging to the filiation of Chinese natural philosophy is applied to denote an all-comprehending substance. The substance of ‘primal *qi*’ comprises *yinyun* 網緼, ‘generating forces’, which generate the ‘ten thousand things’ through their ‘motion’ and motivate their changes. The absoluteness of motion is described by a paradigmatic series composed of *yinyun*, primal *qi*, the motion of the globe, the motion within the space of the earth, the motions of man and the motions of the ‘mind-heart’ (*xin* 心, i.e. affection and perception). ‘Motion’ seems to have a second centre in the ‘mind-heart’, the place where the ‘motions’ of the outside world are perceived and interpreted:

The generating forces of the primal *qi* cause changes and the motions [of *qi*] produce [all things]. The globe is also moving within the original *qi*. Ships and vehicles are moving within the space of the earth, man is moving within ships and vehicles. The mind-heart is moving within the human body. The motion of the primal *qi* sets everything in motion. If the mind-heart of man did not move, then he could look but would not see anything, he would listen but could not hear anything. The motion would stop. Therefore I know that heaven, earth and the ten thousand things constitute a unity. If the mind-heart is corrected, everything is correct, if the mind-heart is spoiled, everything goes wrong.³

The terms ‘primal *qi*’ and *yinyun* are not applied in other notes of the *Shijuying lu bishi*, but the theme is continued by using terms like *qi*, *liangyi* 兩儀, *yinyang* 陰陽, which are connected by the discourse of natural philosophy with the terms ‘primal *qi*’ and *yinyun*. These connections can be proved by a commentary to the *Yijing* 易經 written by Kong Yingda 孔穎達 (574–648).⁴ Kong identifies ‘primal *qi*’ with the

³ Tan Sitong 譚嗣同. 1981b. *Shijuying lu bishi* 石菊影廬筆識 (Notes from the Studio of the Chrysanthemum-Ink-slab’s Shadow), in: *TQJ*, pp. 101–52; 127.

⁴ *Zhouyi zhengyi* 周易正義 (The true meaning of the *Book of Changes*). *Sibu beiyao* 四部備要 ed. Shanghai: Shangwu yinshuguan, “Xici shang” 繫辭上 (Appended remarks, part 1), 7.17a.

term *taiji* 太極, i.e. the state of non-differentiation or primal chaos (equated to the notion of ‘unformed *qi*’). *Taiji* produces the *liangyi*, the ‘two [contradicting/complimentary] aspects’. The term *liangyi*, which can be used as an equivalent for *yinyun* in texts of Chinese natural philosophy, connects “Thoughts”, note no. 8, to other notes of the *Shijuying lu bishi*. Note no. 1 states that the change of the ‘ten thousand things’ is determined by the specific relationship of the *liangyi*. A motion once performed is not reversible:

As soon as the *liangyi* are activated all the different things and affairs are predetermined. As soon as they begin to operate [the original state] cannot be restored. Even heaven and earth, the *gui* 鬼 and *shen* 神 ghosts could not change it. The unfolding of regularity is equal to the coordinate motion of the wheels of a machine; it is transmitted from this to that. In the revolving motion, the *liangyi* need each other; one cannot exist without the other.⁵

In the lexicon of Chinese natural philosophy the term *liangyi* is replaceable by the term *yinyang*. In “Thoughts”, note no. 6, the semantic series *yinyun*, *liangyi*, *yinyang* is related to the oppositions heaven/earth, formless/form-owning (*wuxing* 無形 / *youxing* 有形), emptiness/substantiality (*xu* 虛 / *shi* 實):

Earth is within heaven, and heaven is also within the earth. Within *yang* there is *yin*, within *yin* there is *yang*. That which is empty and formless is called heaven. That which is substantial and owns form is called earth. Heaven is *yang* but is never without *yin*, as the earth is *yin* but is never without *yang*; *yin* and *yang* are united in *qi*. How could heaven and earth be separated and constitute [thereby] a duality?⁶

The qualification of heaven as ‘formless’ and earth as ‘form-owning’ refers to “*Qian gua*” 乾卦 (Hexagram *qian*), the first chapter of the *Yijing*, where earth and heaven are described as opposites, and by analogy ‘emptiness’ is opposed to ‘substantiality’. However ‘emptiness’ does not signify the disappearance of *qi*. Note no. 10 describes ‘formless’ and ‘form-owning’ as different conditions of *qi*-condensation. The ‘formless *qi*’ condenses to ‘form’ which shapes the concrete things. Besides ‘motion’ or condensation/dissolution respectively, ‘penetration’ is introduced as another important property of *qi*.

⁵ *Shijuying lu bishi*, TQJ, p. 122

⁶ *Ibid.*, p. 125.

Heaven fills space with undifferentiated, all-pervading *qi*, condenses and becomes stuff (*zhi* 質) that develops into man and things.⁷

Qi is formed by the activity of the contradicting forces into physical objects. Simultaneously *qi* functions as psychic and moral energy by motivating human perception and actions. Tan connects his explanation of the material *qi* with Mengzi's 孟子 concept of *haoran zhi qi* 浩然之氣 'flood-like *qi*' in which *qi* denotes moral virtue.

The flood-like *qi* of Mengzi is no other *qi* than the *qi* that is breathed in and out through the nose. ... *Qi* affects the five senses and the hundred bones. It takes forms and is sight, hearing, speech and action. It manifests itself and is joy and anger, sorrow and gladness.⁸

The ideas on *qi* outlined in the *Shijuying lu bishi* are referring to the traditional discourse of natural philosophy (Tan's reading of the *Yijing*, Zhang Zai 張載 [1020–1077], etc.). They do not show new elements that could be related to modern scientific thought. Only in one note is this nexus drawn. There, Tan refers to what he calls a 'Western discussion on *qi*'. Hypothesis no. 1 of this 'discussion' states that *qi* only extends above the earth to a distance of 200 *li*. This is proven by the fact that there are no living beings on high mountains etc.:

The higher, the thinner the density of *qi*, to the point of non-existence. Thus if you ascend in a balloon you have to store *qi* in tanks so that you can breathe, as there is no *qi* up there.⁹

In this passage *qi* obviously denotes 'air/atmosphere/biosphere' — which, by the way, is close to the etymological sense of the Chinese grapheme.

The 'Western discussion' is indicated by featuring the phenomenon of the motion of an air-balloon, the storing of *qi* in tanks in combination with the specification of numerical data ("distance of 200 *li*").

Hypothesis no. 2 of this 'discussion' supposes that *qi* does not cease at 200 *li* which is proven by the fact that the sun's warmth reaches the earth, which can only be done through *qi*:

The *qi* [which extends up to] 200 *li* is the *qi* of living things, whereas the *qi* in which there is intercourse between heaven and earth certainly has no end. The [light of the] sun is transmitted through this *qi* to the

⁷ *Shijuying lu bishi*, *TQJ*, p. 127.

⁸ David Wright. 1994. "Tan Sitong and the Ether Reconsidered", *Bulletin of the School of Oriental and African Studies* 57.3, pp. 551–575; 569.

⁹ *Shijuying lu bishi*, *TQJ*, p. 123.

earth and the [light of the] moon and the stars is all transmitted through this *qi* to the earth. ... When people raise their eyes to look at the moon and the stars, it is the earthly *qi* which transmits [their gaze] to the moon and stars.¹⁰

In this passage, *qi* is given a new denotation. The description of *qi* as a transmitting medium of light can be read as a reference to the modern scientific idea of ether.¹¹ The same goes for Tan's explication that the sun and the moon attract the seas of the earth through the mediation of *qi*. This is reminiscent of Newton's explanation of gravity. Worthy of a note is that in another passage of the *Shijuying lu bishi* Tan mentions Zhang Zai's explanation of the tides in using the traditional concept of *qi* and puts it on one level with modern scientific findings in the 'West'.¹² Thus Tan equates the discourse of traditional Chinese natural philosophy with ideas derived from the discourse of 'Western' science.

2. *YITAI* AND THE PROCESS OF PRODUCTION/DESTRUCTION

The *qi* discourse and its combination with the 'Western discussion on *qi*' constitutes the background against which the concept of *yitai* is developed in the *Renxue* (written during the second half of the year 1896 and the first half of 1897) and in the short essay "Yitai shuo" (written in May 1898). The term *yitai* does not appear in the *Shijuying lu bishi*. Its application may be motivated by Tan's attentive reading of John Fryer's (Fu Lanya 傅蘭雅, 1839–1928) *Zhixin mianbing fa* 治心免病法 (A method for healing the mind and avoiding sickness), a translation of Henry Wood's *Ideal suggestion through mental photography*, which he acquired in 1896.¹³ Tan did not use competing equivalents for the English term 'ether', such as *chuanguangqi* 傳光氣 used

¹⁰ Tan Sitong 譚嗣同. 1981c. *Renxue* (A study on *ren*), in: *TQJ*, pp. 289–374; 306. Cf. David Douglas Wile. 1972. *T'an Ssu-t'ung: His Life and Major Work, The "Jen Hsueh"*. Ph.D. diss., University of Wisconsin, p. 248.

¹¹ On the concept of ether in modern science, see Wright 1994, pp. 558 ff.; Wile 1972, pp. 234 ff.

¹² *Shijuying lu bishi*, *TQJ*, p. 123–4.

¹³ Cf. Sakamoto Hiroko 阪元弘子. 1985. "Tan Sitong de *Renxue* he Wute Hengli de *Zhixin mianbingfa*" 譚嗣同的《仁學》和烏特享利的《治心免病法》(Tan Sitong's *Study of Benevolence* and Henry Wood's *Ideal Suggestion through Mental Photography*), *Zhongguo zhixue* 13, pp. 264–275; Richard Shek. 1976. "Some Western Influences on T'an Ssu-t'ung's Thought", in: Paul A. Cohen and John Schrecker (eds.). *Reform in Nineteenth-Century China*. Cambridge, Mass.: Harvard University Press, pp. 195–207; 195 ff.

in *Guangxue* 光學 (Optics)¹⁴ (the scope of this term must have been semantically too narrow for Tan's object) or *yituoqi* 以脫氣 used in *Guangxue xuzhi* 光學須知 (Essentials of optics)¹⁵ —the reason for not using this latter term may have been the intention to draw a clear distinction between the new concept and the *qi*-concept (in fact, Tan obviously avoided to use the term *qi* in the just mentioned texts).

This distinction of the traditional *qi*-concept stands in analogous ratio to Tan's political incision, namely his call for 'wholesale Westernization'¹⁶ pronounced in a letter to Ouyang Zhonggu 歐陽中鵠 (written in the middle of the year 1895)— the first text written by Tan expressing reformist ideas. The incision is tempered in so far as Chinese natural philosophy and the 'regulations' of China's ancient society are considered by Tan as precursors of 'Western' science and the political 'norms' of the 'West' (so that the adoption of scientific and political ideas and institutions of the 'West' can be construed in the logic of a negated negation).¹⁷

Yitai is presented as the primal building material of the 'phenomenal world'. It is defined as formless, dimensionless, both "supremely vast and supremely subtle".¹⁸ It is the fundamental 'stuff' (*zhi* 質) of sixty-four different basic (chemical) 'elements' (*zhidian* 質點), which enter into combination with each other.

¹⁴ Cf. Carl T. Kreyer (Jin Kaili 金楷理) and Zhao Yuanyi 趙元益 (trs.). 1876. *Guangxue* 光學 (Optics). Shanghai: Jiangnan zhizaoju.

¹⁵ Cf. John Fryer (Fu Lanya 傅蘭雅) (tr.). 1890. *Guangxue xuzhi* 光學須知 (Essentials of optics). Shanghai: Yizhi shuhui.

¹⁶ Tan Sitong 譚嗣同. 1981d. "Xing suanxue yi" 興算學議 (A proposal to promote the study of mathematics), in: *TQJ*, pp. 153–94; 168.

¹⁷ Cf. Tan Sitong 譚嗣同. 1981e. "Zhi yan" (Views on the management of world affairs), in: *TQJ*, pp. 231–6; 232; id. 1981f. "Siwei yiyun tai duan shu" 思緯壹壹臺短書 (A short discourse from the *Siwei Yiyun*-Studio), in: *TQJ*, pp. 195–236; 201 ff. The idea that 'Western' science could be retraced to Chinese origins, namely Mohist technological interest, was popular among Chinese intellectuals of the late nineteenth century. Cf. Xiao Yishan 蕭一山. 1963. *Qingdai tongshi* 清代通史 (General history of the Qing dynasty). 5 vols. Taipei: Taiwan Shangwu yinshuguan, vol. 4, pp. 2050 ff. Representatives of the early reform generation like Chen Chi 陳熾, Zheng Guanying 鄭觀應 and Tang Zhen 湯震 also cherished the idea that political conceptions and institutions of the 'West' had had predecessors in ancient China. Cf. Min Tu-ki. 1989. *National Polity and Local Power: The Transformation of Late Imperial China*. Cambridge, Mass.: Harvard University Press, p. 84.

¹⁸ *Renxue*, ch. 1, *TQJ*, p. 293; Tan Sitong 譚嗣同. 1981g. "Yitai shuo" (On the ether), in: *TQJ*, pp. 432–4; 434.

I say that, when I speak of the origin of things, they really do lack an [innate] nature; this is obvious. For if one considers the differences between animals and plants, is it really true that they have their own natures? Or is it just that their constituent atoms differ in their spatial arrangements and relative proportions? For all the atoms derive from sixty-four elements, and the nature of the substance arises from the combination of one element with another. When a compound is analyzed and one element is combined with another one, or when the [proportion] of one atom is increased or decreased, then a substance with a new nature is produced. Even if equal numbers of two elements are combined, depending on the extent to which one element dominates the other, substances of different natures are generated.¹⁹

Although this passage explicitly speaks of sixty-four different elements, the *Renxue* denies that things produced by the special combination of elements are qualitatively defined and thus possess a specific 'nature'. 'Difference' has to be read as quantitative difference within the identity represented by the term *yitai*:

There still is a difference between the sixty-four elements but the primal source of the elements is the one *yitai*. [It is] one, therefore it is not produced and [can] not be destructed. Since it is not produced, it cannot be said to be existent. Since it is indestructible, it cannot be said to be non-existent. *Yitai* may be called 'nature', [but] there is no nature that can be spoken of.²⁰

The infinite combinations of elements produce the physical objects that constitute the universe. The consistency of a definite agglomeration of elements is relative, i.e. any physical object is subjected to a constant process of production and decomposition, while *yitai* as stuff is not augmented or diminished.²¹

In explaining the nexus between *yitai* as a kind of indestructible building 'stuff' and the relative identity of physical objects combined by elements based on *yitai*, Tan does not refer to the scientific discourse but to the Buddhist concepts of 'production/destruction' (*sheng* 生 / *mie* 滅) and 'non-production/non-destruction' (*bu sheng* 不生 / *bu mie* 不滅). These concepts are structurally analogous with the concepts of 'motion', 'condensation/dissolution' of *qi* as described in the *Shijuying lu bishi*.²²

¹⁹ *Renxue*, ch. 11, *TQJ*, p. 306, cited in: Wright 1994, p. 555.

²⁰ *Renxue*, ch. 11, *TQJ*, p. 306.

²¹ *Ibid.*, ch. 12, *TQJ*, pp. 306–7.

The process of *sheng/mie* takes place within the physical object, i.e. the product of *yitai*. Its changes are explained as effects of chemical processes and do not signify an increase or decrease of the *yitai*-substance.

The continuous process of ‘production/destruction’ in the infinite series of physical objects is considered as proof of the ‘indestructibility’ of the *yitai* substance. The ‘decomposition’ and the ‘manifestation’ of ‘things’ are explained by the dialectic interrelation between the ‘hidden’ and the ‘visible’ as cited in Wang Fuzhi’s 王夫之 (1619–1692) commentary to the *Yijing*:

Being and non-being signify condensation and dispersion, but not production and destruction. ... In explaining the *Yijing*, Wang Fuzhi said: ‘Each hexagram has twelve lines, one half is hidden, the other is visible.’ Correspondingly, the *Yijing* does not speak of being and non-being, but only of concealment and visibility.²³

This explication can be linked up with the concept of ‘formless/form-owning’ (being isotopic to ‘hidden/destroyed/non-being’ or ‘visible/produced/being’) described in the *Shijuying lu bishi* as different conditions of *qi*-condensation.

The ensuing passage in the *Renxue* describes its main relations: the discernable ‘production/destruction’ of physical objects corresponds to the ‘great transmigration’ (*da lunhui* 大輪迴). ‘Production/destruction’ or, respectively, the ‘great transmigration’ are based upon operations proceeding under the surface of the perceptible in the form of ‘sublime production and destruction’ (*wei shengmie* 微生滅) or ‘sublime transmigration’ (*wei lunhui* 微輪迴).

The delineation of the relations in question is combined with the central epistemological conception of the *Renxue* which says that the apparently objective operations are traced back to the imaginary projections of ‘thought’ (I will revert to this subjective idealist perspective later):

²² In Buddhist discourse the term *busheng bumie* (Sanskrit: *an-utpanna an-utpada*) describes the level of nirvāna (in the explication of Mahayanism: the experience of the ‘inner Buddha nature’). *Shengmie* (Sanskrit: *utpanna utpada*) describes the level of samsāra, the sphere of flux, transmigration (*lunhui* 輪迴), the cycle of rebirth. The identity of *busheng bumie* and *shengmie* as stated in the *Renxue* points to the Mahayanistic explication that nirvāna and samsāra constitute two complementary sides of one reality.

²³ *Renxue*, ch. 12, *TQJ*, pp. 307–8.

Within one moment of time infinite Buddhas are produced and destructed, infinite living beings are produced and destructed, infinite worlds and worlds of phenomena are produced and destructed. In the past, production and destruction had no beginning; in the future, production and destruction will have no end. At the present time, production and destruction succeed each other, pass by, never stop. Therefore transmigration does not begin with the [evident cycle of] production and destruction, for this is the great transmigration only. Production and destruction are performed at the same moment, thus there is no moment without transformation. Naturally there is *stepping forward* and *withdrawing*, motion and rest, utterance and silence, thinking and loafing, hearing and seeing, drinking and eating, dreaming and waking, breathing and the circulation of blood. That goes and this comes, that is connected and this broken off. That which goes, vanishes, this which comes, is produced again. That which is connected, is produced, this which is broken, dies. Is it not sad that all things produced and destructed cannot transcend the cycle of transmigration? [Things] are produced and formed through the continuity of thoughts. Correspondingly the great transformation is also created through thought. That is why the Buddha said: 'The three worlds [of phenomena, of the void and of living beings] are all mind-heart.' And again: 'All is produced by the mind-heart.' Whether man is able to transcend the great transmigration can be known [by analyzing] the sublime transmigration. If sublime transmigration never stops, the [sublime] production and destruction will not stand still. Not to speak of [the evident cycle of] production and destruction of *yitai*.²⁴

'Sublime production and destruction' is performed on a level of physical change that is not accessible to sense perception. On this micro-level the processes of 'production/destruction' are performed in such a 'dense' succession that the two opposites constantly shift into each other, until the point is reached when the difference is no longer measurable and 'sublime production and destruction' dissolves into 'non-production and non-destruction', signifying the sphere of the primal substance *yitai* which is not defined by space and time (that which is not created cannot pass away and occupies no place):

The time and space of transition from production to destruction is so short that it can be shortened no more, it is so close that it cannot come any closer. Thus production and destruction merge into one another and become non-production and non-destruction. In this way sublime production and destruction is shaped.²⁵

²⁴ *Renxue*, ch. 15, *TQJ*, p. 313.

²⁵ *Ibid.*, *TQJ*, p. 314.

Apart from its indestructibility and its capacity to mould concrete things and develop sensitive beings, *yitai* possesses a variety of properties such as ‘interconnection’ or ‘communication’ (*tong* 通), ‘penetration’ (*guanqia* 貫洽) and ‘cohesion’ (*jiaonian* 膠拈).²⁶ *Yitai* is connected with the force of gravity and thus conceived of as a power that holds together the solar systems and the entire universe. By homology it functions as an adhesive force for the ‘regions’ of the human body.

The world of phenomena is produced by *yitai*, the void is established upon it, and the living beings issue from it. Nothing is closer to man than his body. The bones of the body number over two hundred, it consists of a certain quantity of muscles, blood vessels, and internal organs. [The medium] that forms the body and holds it together, so that it does not disperse, is only *yitai*. ... What enables the eye to see, the ear to hear, the nose to smell, the tongue to taste, the body to feel? It is only *yitai*. Nothing is closer to the body than the earth. The earth is composed of many atoms. What holds them together? It is only *yitai*. If we divide an atom until the point of nothingness is reached and examine that which holds [the particles] together, [we find that] it is only *yitai*.²⁷

Yitai is not only understood as a passive medium but it is “manifested in function”²⁸, namely as energetic force. A central ‘function’ of *yitai* is ‘electricity’. While the brain and the nervous system are considered as the ‘most intelligent’ products of *yitai*, ‘electricity’ transfers sensuous impressions via the nerves to the brain and integrates the human body as an organic system.²⁹ Another function of ‘electricity’ is ‘psychic energy’ (*xinli* 心力) that enables the self to be connected with the other selves:

My psychic energy can affect others to share my thoughts. ... The student of *ren* must realize that electricity is the brain; there is no place without electricity, i.e. there is no place without the self; a wrong distinction between the self and others will lead to non-*ren*.³⁰

²⁶ *Renxue*, ch. 1, *TQJ*, pp. 293–4; cf. “*Yitai shuo*”, *TQJ*, p. 434.

²⁷ *Renxue*, ch. 1, *TQJ*, p. 294.

²⁸ *Ibid.*, *TQJ*, p. 293; “*Yitai shuo*”, *TQJ*, p. 434.

²⁹ *Renxue*, ch. 3, *TQJ*, p. 295.

³⁰ *Ibid.*, ch. 2, *TQJ*, p. 295.

In the cosmos of the outside world ‘electricity’ functions as “brain without form and stuff”.³¹

In a broad sense the *yitai*-concept constitutes the core of an atomistic theory. As to the properties of *yitai* there are correspondences with the *qi*-concept. Both concepts are based on a monistic view; *qi* and *yitai* are defined as indestructible substances with certain attributes such as motion, penetration, unobstructed interchange, etc. Herein both function as energetic force. *Qi* and *yitai* manifest themselves in different forms conceived of as ‘agglomeration’ or ‘condensation’ of *yitai* or *qi*. These forms are defined as limited objects subdued to constant change, which in their infinite totality constitute the universe. On the other hand, there are distinctions between the two concepts. The *qi*-concept of the *Shijuying lu bishi* belongs to the filiation of Chinese natural philosophy (even though it includes elements of a ‘Western discussion’ in one note). The *yitai*-concept as applied in the *Renxue* explicitly refers to the discourse of modern ‘Western’ science. It does not hint at the *qi*-concept—at least not on the discursive surface. I have considered this under the aspect of ‘incision’.

Apart from the references to the discourses of physics and chemistry (atom, gravitational force, centripetal force, electricity, wave nature of light, chemical elements)³², the *Renxue* bears upon the discourse of anatomy (nerve, brain)³³, and even upon the discourse of astronomy (the orbits of planets, the structure of the cosmos).³⁴ The latter is partly connected to the discourses of Chinese astronomy and Buddhist cosmology. The term ‘psychic energy’ is taken from the discourse of psychology but is basically used in a religious-metaphysical sense.

³¹ Ibid. The relationship between *ren*, *yitai*, and ‘electricity’ is also described in Kang Youwei’s 康有為 (1858–1927) *Datong shu* 大同書 (Book of Great Unity), obviously under influence of Tan’s concept. See Wing-Tsit Chan. 1967. “K’ang Yu-wei and the Confucian Doctrine of Humanity”, in: Jung-pang Lo (ed.). *K’ang Yu-wei: A Biography and a Symposium*. Tucson: The University of Arizona Press, pp. 355–74; 358; cf. also Kuang Bolin 鄺柏林. 1980. *Kang Youwei de zhexue sixiang* 康有為的哲學思想 (The philosophical thought of Kang Youwei). Beijing: Zhongguo shehui kexue chubanshe, p. 60 and *passim*.

³² “Yitai shuo”, *TQJ*, p. 432; *Renxue*, ch. 11, *TQJ*, p. 306 and ch. 17, *TQJ*, p. 317.

³³ *Renxue*, ch. 2, *TQJ*, p. 295.

³⁴ Ibid., ch. 1, *TQJ*, p. 294.

3. THE RELIGIOUS-METAPHYSICAL EXPLICATION OF *YITAI*

By means of its properties, *yitai* is identified with certain ethico-religious ideas, such as the Buddhist *cibei* 慈悲 ‘compassion’, the Mohist *jian’ai* 兼愛 ‘all-embracing love’ and Christian ‘charity’.³⁵ The main nexus in this sphere of the religious-metaphysical is the linking of *yitai* with *ren*, a central Confucian term (usually translated as ‘benevolence’, ‘goodness’, ‘altruism’, ‘humanity’, etc.). Deconstructed as an integral part of the hegemonial ideology, it is assembled anew in the *Renxue* as representative of ‘equality’ (*pingdeng* 平等): it becomes the agent of ‘people’s power’, ‘people’s rule’ and ‘autonomy’³⁶. Moreover, it is understood as the universal law of mutual responsiveness which governs the physical and the non-physical world. Defined as a ‘function of *yitai*’, *ren* is equipped with the properties attributed to *yitai* and is treated as a principle parallel to it. Thus, the distinction between *yitai* and *ren*, drawn on certain carefully defined levels (*ren* is in general not applied in the explication of material phenomena thought to be the object of natural science while *yitai* is not used to explicate phenomena belonging to the social realm), is eliminated in the last instance by a semantic overloading of the central terms *yitai* and *ren*.

The realm of phenomena, the realm of the void, and the realm of sentient beings are permeated by a thing which is supremely vast and supremely subtle, which adheres, penetrates, connects and fills all things. The eye cannot see its colour, the ear cannot hear its sound, the mouth and nose cannot realize its smell or taste. There is no [adequate] name for it, but we may call it *yitai*. Its manifestations in function are waves, energy, [chemical] elements, and nerves. The realm of phenomena is produced from it, the realm of the void is established by it and the realm of sentient beings issues from it. It has no form, but all forms depend upon it; it has no mind-heart, but it is felt by all mind-hearts. Strictly speaking, we can simply call it *ren*.³⁷

The strategy of linking elements of different discursive fields by means of the central concept *yitai* (or *ren*) is aimed at a presentation of an internal connection between scientific reasoning and the axioms

³⁵ *Renxue*, ch. 1, *TQJ*, p. 293.

³⁶ Cf. my essay ‘The People, People’s Rights, and Rebellion. The Development of Tan Sitong’s Political Thought’, in: Joshua A. Fogel and Peter G. Zarrow (eds). 1997. *Imagining the People: Chinese Intellectuals and the Concept of Citizenship, 1890–1920*. Armonk, New York: M. E. Sharpe, pp. 82–112; 88 ff.

³⁷ ‘Yitai shuo’, *TQJ*, p. 434.

underlying the religious-metaphysical doctrines of the new ‘three teachings’ (*san jiao* 三教), i.e. Confucian, Christian and Buddhist doctrines deconstructed and newly construed in the *Renxue*. This fusion of scientific and religious-metaphysical thought functions as the basic structure of the ideological setting of the *Renxue* discourse. Scientific reasoning is regarded as an instrument capable of proving the mutual dependence of the ‘ten thousand things’.³⁸ This approach is a prerequisite to overcome thinking in ‘relative terms’³⁹ and to recognize the differences between things as a game of imagination. In referring to the Mahayanistic epistemology of the *Weishi* 唯識 (‘mere ideation’) School, the external world and its transformations are now unveiled as a projection of the mind or, more accurately, the ‘storehouse of consciousness’ (*cangshi* 藏識).⁴⁰ In this context, determined by the Mahayanistic discourse, the *Renxue* redefines *yitai* as *xiangfen* 相分, a ‘form’ of imagination. *Yitai* is an “object projected by mere ideation”, which “can be considered as non-existing”.⁴¹ The significant (‘name’) *yitai* does not possess a referent.

In this perspective, the concept of *yitai* reflects a fundamental contradiction that pervades the base construction of the *Renxue* discourse: A science-oriented approach (a materialistic view, as it were) is opposed to the idea that the differences received by the perceptive apparatus are nothing but the imaginations of this apparatus itself. The desire for scientific knowledge and for social cognition (politically aiming to overthrow autocratic power—a main topic of the *Renxue*) are opposed to the attempt of dissolving the referent into the emptiness of an all-encompassing unity. The *Renxue* does not intend to offer a solution to this aporia.⁴²

³⁸ *Renxue*, ch. 17, *TQJ*, p. 317.

³⁹ *Renxue*, “Jieshuo” 界說 (Definitions), *TQJ*, p. 291; and ch. 17, *TQJ*, p. 317.

⁴⁰ *Renxue*, ch. 25 and 26, *TQJ*, p. 331. Cf. Chan Sin-wai (tr.). 1984. *An Exposition of Benevolence. The Jen-hsueh of T’an Ssu-t’ung*. Hong Kong: The Chinese University Press, pp. 135 ff.

⁴¹ *Renxue*, ch. 26, *TQJ*, p. 331. Cf. Chan Sin-wai 1984, p. 136.

⁴² When Nagarjuna was asked how to handle the somewhat puzzling contradiction that the projections of the mind pose problems to the projecting subject (the so-called problems of real life, which—seen from the standpoint of the ‘Middle Path’—in the last instance are illusive problems in an imaginary world of an imaginary subject), he answered that in practical life one can deal with illusion by letting them pass for real just as one has to take for granted the effects of a chronic eye-disease. Cf. Klaus Mylius. 1983. *Geschichte der Literatur im alten Indien*. Leipzig: Reclam, p. 425.

