# **Chinese Medicine and Systems Theory**

#### Synopsis

A discussion of the concept of systems theory, cybernetics and how traditional Chinese medicine expresses this concept in placing greater emphasis on inter-relations within the bodymind processes.

#### Foreword

Chinese medicine and its understanding of the body-mind is based upon a concept of inter-dependency. The relation between parts is more important than what the parts do. In many cases the Chinese medical concepts seem strange and even simplistic, (as for example with the Five Phase theory), and where the Chinese concepts do have the same names as Western entities, such as the organs of the body they do not appear to match the modern scientific understanding. This discussion will focus on the question: is Chinese medicine based upon primitive understanding and concepts that need serious revision in light of modern research, or are they actually based upon an understanding that the West is only just catching up with?

#### Introduction

Western science and thus Western anatomy and physiology is generally understood to be reductionist in approach; in other words the human body (for example) can be understood by reducing it to its constituent parts. The parts of the organism are secondarily understood to be combined into systems. In the latter part of the 20<sup>th</sup> century and partly as a reaction to this mode of thinking, and a gradual shift in to a holistic paradigm a different way of understanding has become *en vogue* a concept known as systems theory.

Systems theory



This graphic may be seen as a whole or as a group of parts, representing a central aspect of systems theory.

Systems theory was the nomenclature early investigators used to describe organization and interdependence of relationships. The system concept contrasts with the Classical perspective of reductionism which has as its subject a single part. A system is composed of regularly interacting or interrelating groups of activities/parts which, when taken together, form a new whole. In most cases this whole has properties which cannot be found in the constituent elements.

http://en.wikipedia.org/wiki/Systems\_theory

Anyone familiar with systems theory and Chinese medicine will recognize that Chinese medicine is based upon a systems theory approach; although, it is not necessarily understood or practiced by everyone in this way<sup>1</sup>.

Chinese medicine is first and foremost about relationships. It is customary to consider the various parts of the system as individual 'Elements', Channels or Organ/functions, but these are primarily part of a unitary system. It is easy to forget about this interconnectivity, or at least consider it as a secondary phenomenon, as is done in the Western anatomy and physiology, but within Chinese medicine it is arguably the primary thing.

All body-mind functions are grouped into mutually dependent yin-yang pairs. They are further grouped into Channels with two main relations, one of likes and one of opposites. Similarly they are grouped into organ/functions with matching relationships. They are also understood as part of a general system called the San Jiao. And they are arranged in series of relations called the Five Elemental Phases (Five Elements or Five Phases for short). It should also be noted that many of these models are overlapping; whereas systems in Western physiology are more clearly distinct. This overlap emphasizes the functional over the anatomic and the priority of inter-dependency over individual functions.

It has been pointed (Porkert 107) that the Chinese concept of 'organs' bears little relation to the anatomical structures by these names as understood in Western anatomy and physiology. We could just dismiss the Chinese concepts as the product of an earlier age without the scientific tools, but it is important to bear in mind that in comparing the Chinese functional unit with the Western anatomy we are not comparing like things. The whole 'has properties that cannot be found in the constituent parts' and we can really consider the so called 'organs' to be sub-systems within the greater system that will also have properties not found in their constituent parts.

## Five Elements as a Cybernetic System

In Five Element theory there are the connections and the attributes or correspondences. The Five Elements is first and foremost about relationships or inter-dependency. Secondly it is about the attributes. The Five Elements are connected in two main relations. One is referred to as the Sheng cycle and the other as the Ke cycle.

Sheng and Ke

生	shēng	to live / life / living / livelihood / alive / to be born / to come into being /
		to come into existence / to breed / to bear / to beget / to produce / to
		create / to give rise to / to give birth to / to cause / uncooked / raw /
		unripe / crude / unfamiliar / strange / unknown / savage / untamed /

<sup>&</sup>lt;sup>1</sup> Many practitioners of Chinese medicine focus on the attributes of the individual phases rather than their relationships, and many are not fully aware of the discrepancies that exist between the Chinese functions and the organs with the same name in Western medicine.

		barbarian / uncultured / a pupil / a student / the male character type in Chinese opera / creatures
克	kè	to be able to / to win / restrain / to overcome / to conquer / subdue / love of superiority / a gram / to limit

The working of these two relations produces a system of checks and balances that is referred to in modern terms as cybernetic. These relations are the normal everyday checks and balances but are subject to going too far, in over-promotion, over-control and their reverse actions.

### Cybernetics



Cybernetics is the study of communication and control, typically involving regulatory feedback in living organisms, machines and organisations, as well as their combinations. For example, in sociotechnical systems, it includes the study of computer controlled machines such as automata and robots. The term cybernetics stems from the Greek Kuβερνήτης (kybernetes, steersman, governor, pilot, or rudder — the same root as government).

http://en.wikipedia.org/wiki/Cybernetics

#### Conclusion

In Chinese medicine one should always remember that the relations between things are more important than what the individual parts do. In terms of the Five Phases the relations are most important and the attributes secondary. In relation to the 'organ/functions' the relations between them are more important than what each individual entity does. An understanding of Chinese medicine as based upon systems theory and cybernetics also suggests that Chinese medicine is intrinsically more naturopathic in philosophy, emphasizing the body-mind as a self-healing organism, rather than a mechanism requiring outside intervention when it goes wrong.