MASS AND COUNT NOUNS IN CHINESE AND ENGLISH:
A FEW FURTHER WHORFIAN CONSIDERATIONS

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1. INTRODUCTION

Arguments, Whorfian or otherwise, if one plays by the rules, are most often developed either deductively from thesis to supporting evidence or inductively from marshalled evidence to the final all but inevitable conclusion. There is a third logic of development, however, which we intend to use in this case. We plan to state our case and then run for cover, leaving as much confusing evidence lying around as necessary to conceal our retreat. It is a hit-and-run logic, a kind of rhetorical commando raid on an all but impregnable but strategically central question: can we learn anything about how people think by studying the characteristics of the language they habitually use? In this case the specific form is this: can we learn anything about the differences between Western ways of thinking and Chinese thought by studying differences between English and Chinese?

We begin with the thesis: nouns in Chinese are mass nouns, in Indo-European nouns are (predominantly) count nouns; this distinction has given rise to Platonism in Western philosophy and to the philosophies of Confucianism and Taoism in China. This idea is not ours but that of Chad Hansen (1983). He advances this idea as a way of accounting for the widely acknowledged but never satisfactorily depicted difference between Chinese and Western thought. We think Hansen is right and that we have good ethnographic evidence to support his position but...

First of all, we should try to clarify what Hansen is saying. Hansen argues that Platonism arose in Greek thought, and continues as the philosophical core of Western thought to this day, because of the problem of set and member grounded in the count nouns of Indo-European languages. The two crucial aspects of count nouns are that they take pluralisation ('a horse', 'some horses'), and that they take some form of article ('a horse', 'the horse'). Given the philosophical problem of determining what is a horse, to take an example not at all at random, to the Platonic mind no particular horse can suitably be the definition of the idea of horse, because no one horse has all and only the characteristics of 'horseness'. Given a set of many members, one only arrives at 'horseness' through abstraction of those qualities that form the defining characteristics, four legs (except in pathological cases) and the rest. Hansen's argument, much fuller and more credible than we are able to demonstrate here, is that because we are constantly troubled to determine whether we are talking about one particular horse or several, we are also, perhaps unconsciously, troubled to know whether we are talking about particular horses or 'horse' in general. This constant push towards making a

distinction between one and many, and then also between particular and general, gave rise in Western thought, with Platonism as the paradigmatic case, to a general concern for distinctions of set and member.

In Hansen's thinking, the concept of set and member is the paradigmatic case in Western thought for linguistic meaning. Certainly the philosophical literature attests to a longstanding precedent of using count nouns as examples in arguments about reference. Platonic idealism is, for Hansen, a response to the intuition that there is something held in common by all members of a set which determines a prototypical or ideal member.

Hansen then contrasts Chinese nouns, which he feels can be best understood by Westerners as being like the mass nouns in Indo-European languages (such as Classical Greek and Modern English), with count nouns. In an extended argument, drawing principally on classical philosophical texts, but not ignoring questions which arise in Modern Chinese,[1] Hansen then argues that nouns in Chinese are mass nouns, not unlike English 'water', 'mud' or 'sugar'. What is significant about a mass noun is that matter is conceived of as an extended 'stuff' (Hansen's wording). The crucial questions which arise, then, are not regarding the ideal characteristics which define the stuff, but the boundaries between one kind of stuff and another kind of stuff. In other words, Hansen believes that Chinese mass nouns have given rise to an ontology of form and substance rather than an ontology of idea or prototype.

Where the noun 'water' is in question, we Westerners have no problem. East or West, water is a mass noun, and we have no trouble with thinking of it as taking the shape of its container, being spoken of in container-sized bits, and as being essentially the same stuff in all its instantiations. A horse or a man is another matter. In English, if we contrast 'a horse' and 'horse', most likely we'd think of the latter as meat. Fish, perhaps, is a better example, where 'a fish' means one animal but 'fish' means the flesh we eat for dinner. In Hansen's view, in Chinese 'horse' and 'man' are like 'water'; they are extended 'stuffs' or substances which take the shape of particular containers. This is an intriguing view, and once one gets around to trying to think that way, it seems to make a different kind of sense of much of Chinese philosophical thought and life. That is what attracts us to this idea.

Not least among Hansen's arguments is that this conception puts Chinese philosophers and the Chinese language on a somewhat better footing than they have sometimes been allowed by Western thinkers in the past. In Hansen's view it is not fair to say that Chinese philosophers were not able to conceive of the set-member distinction nor ideal types, but just that they had little interest in doing so. On the other hand, Platonic thinkers had little interest in typical Chinese philosophical issues and concentrated on questions of definition, reference and truth. In the past many Westerners have troubled over the absence in Chinese of both a distinction between concrete and abstract and the distinction between singular and plural, two distinctions which do not seem to bother us in reference to Indo-European mass nouns – it apparently only bothers us where Chinese have a mass noun in places where we have a count noun. Looked at from this perspective, if we genuinely accepted the world view implied by a total mass-noun inventory, it might ultimately be more difficult to

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[1] As an example of what sort of problem we mean, in contemporary Mandarin some nouns which are mass nouns in English such as 'water' may be used without the individuator or measure word. On the surface of it this may indicate a distinction between mass and count categories not unlike that found in Indo-European. We take up this question in more detail below.

understand how we can consider two horses to be different things since they are both, like two cups of water, just two skins full of horse.

Hansen's notion is that not only are all Chinese nouns mass nouns, but that Chinese philosophy is fundamentally nominal; "behavioral nominalism" is what he calls it. One can use the characteristics of mass nouns as a kind of philosophical template by which to understand Chinese thinking, and ultimately, we presume, the sort of ethnographic matter of which we have been trying to make sense. If this were an argument, rather than a sketch of one, a considerable amount of detailed evidence would be necessary at this point to draw a clear picture of that philosophical template. In place of that evidence, the following table of contrasting points can suggest the outline:

Mass Nouns	Count Nouns
Definition by example	Definition by analysis
Discrimination	Description
Boundary marking	Prototype
Interpretation	Observation
Taoism	Nihilism

2. DEFINITION BY EXAMPLE, DEFINITION BY ANALYSIS

The count-noun ontology gives rise to a semantics in which knowing a word seems to centre on definition by analysis. Socrates, for example, dismisses his opponents whom he says do not know what a word means since they are unable to give an unequivocal analysis of its meaning.[2] Language is thought of as describing a world independent of language; meanings of words seem to cluster about a prototypical example, or in the extreme Platonic form, an ideal type. This leads to a general sense that reality is an idea or a prototype from which instantiations depart. Along with this is a general thrust towards the making of statements, or descriptions of the world, which are judged for truth. Truth itself tends to be established by analytical rules, and forms the goal of philosophical activity.

The semantics of mass nouns centres on discrimination and prefers definition by example. As a result, the crucial questions depend on boundary marking. In that sense, the ontology of count nouns seems to focus towards the centre, the prototype, while the ontology of mass nouns seems to focus towards the boundaries, the forms, within which the substance of reality is contained. Since an undifferentiated substance might be found to be held within an abundance of containers, reality comes to be seen as conventional. What is held in one container might as well be held in another; what is called by one name might in other circumstances be called by another; the substance itself is thought of as unchanged in this process of renaming.

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[2]One wonders in this sort of argument where those opponents of Socrates came from. By Hansen's argument they are behaving in a very Chinese way for Greeks. Perhaps it is because Socrates has won these arguments that we take his view of language as the prototype, not that of his equally Greek-speaking opponents.

3. DISCRIMINATION, DESCRIPTION: THE RECTIFICATION OF NAMES

Since in the logic of mass nouns the discrimination of the names of things is seen as conventional, the choice of which name one uses comes to be tested against the pragmatic consequences of choosing that name. This pragmatic emphasis in Confucian writings on semantic discrimination is most often translated into English as 'the rectification of names'. It is thought by some to form the essential core of the Confucian philosophy of language (Hall and Ames 1987). The most well-known example occurs in the *Mencius*. The word in question is 'king'. In Confucian thought, one is called the king only when one behaves as a king within the canons of the Confucian code. The killing of a king is prohibited within the Confucian code, and yet the last king in a dynasty is sometimes allowed to be killed. Mencius was questioned about this inconsistency and answered as follows:

> King Hsuan of Ch'i asked, "Is it true that T'ang banished Chieh and King Wu marched against Tchou?"
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> "It is so recorded", answered Mencius.
>
> "Is regicide permissible?"
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> "A man who mutilates benevolence is a mutilator, while one who cripples rightness is a crippler. He who is both a mutilator and a crippler is an 'outcast'. I have indeed heard of the punishment of the 'outcast Tchou', but I have not heard of any regicide".
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> (Lau 1970:68)

If a man is called 'king,' he cannot be killed. If a man is called 'outcast,' it is not a king one is killing. The moral consequences follow from the name given. If language can be divided into two very broad functions, the descriptive and the regulative, the semantics of the count noun comes down on the descriptive side and the semantics of the mass noun comes down on the regulative. If the count-noun logic drives in the direction of the establishment of true statements, the mass-noun logic drives in the direction of examining the social and moral consequences of one's statements.[3]

4. BOUNDARY MARKING, PROTOTYPE: LOCAL PATTERNING

The rectification of names is the pragmatic outcome of the Chinese mass-noun philosophy. For our purposes, however, the most interesting aspect of these contrastive mass-noun and count-noun philosophical templates is the absence in the mass-noun logic of any interest in definition by logical attributes or prototype and the contrasting great concern with discriminations and boundary marking. Hansen notes that:

> nowhere in any of the traditional accounts of the rectification of names was there any mention of definitions, ideals, ideas, ideal types, concepts, essences, or even of meanings. (1983:82)

What is crucial in this mass-noun logic is the discrimination of boundaries. In nouns, as in geopolitics, the Great Wall is the symbol of China.

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[3]This aspect of the rectification of names is all too familiar in the modern context. We find that no students were shot, only ruffians and radicals, or even vermin. Unfortunately, this practice of semantic readjustment is not the exclusive property of speakers of mass-noun-only languages. Our point, and Hansen's, is only that English (or Greek) and Chinese differ in their relative emphasis on the descriptive and regulative functions of language. A mono-functional utterance in any language would be a difficult thing to establish indeed.

Western images of China abound. Two which come to mind immediately seem at first to form an irreconcilable contrast. A Tang Dynasty landscape painting in which clouds hide all but glimpses of mountains is one image held in Western imaginations, while another is that of a highly ornate brocade, or perhaps a temple. The contrast is between an aesthetics of the barest suggestion and one of an extremely dense symbolic complexity. On the more mundane level one sees in the streets of Taipei, Hong Kong, or even Zhongshan a person dressed in slacks or a skirt of one striking and complex pattern and a shirt or blouse of a different (and, to Western eyes, glaringly clashing) complex pattern. In contrast to a Western, or even Japanese, aesthetics of sparsity of composition and form, one sees in China patterns of juxtaposed intricacy which strike a Western observer as lacking in all sense of balance and perspective.

And perspective may be, indeed, the point. Clothing patterns, temple designs, the furnishing of modern houses, Tang Dynasty landscape paintings, and a nine-course Chinese dinner all reflect what we think of as local patterning. The aesthetic organisation which applies within a boundary is not carried over to apply across the boundary. In a Western analysis this might be called an absence of perspective. The landscape painting does not resolve into one, organising perspective. There are local areas of patterning and perspective which carry no implications for patterns in other areas. The size of the pavilion perched high on a ledge bears no particular relationship to the size of the boat tied up to a bank in the lower corner of the same painting. The design and colour relationships of the material from which the pants are made bears no relationship to those of the shirt. Each answers to the logic of a local aesthetic pattern.

In this, as in so many other things Chinese, the written character seems to form a paradigmatic example. With extremely rare exceptions,[4] the Chinese character is calligraphed within an imaginary square boundary. Within that boundary there is a time-honoured and rather complex aesthetic of strokes, both position and order, which applies to all characters whether they are written with one stroke or with sixty-four. There is no Chinese equivalent to the Western alphabetic practice of proportional spacing, or kerning, of letters such that an 'i' is given less space than an 'm', or a 'w' is given more than other letters.

The gist of the idea of local patterning, or internal patterning, is that the boundary forms an aesthetic or conceptual limit to the concern for order or harmony. A row of characters has no flow from one to the next;[5] in a painting there is no single perspective; food is prepared and served in small morsels; if a string of elements is connected one to one to one, there is no implication that the first and the last must also relate to each other. In a negative (Western) assessment there is no sense of perspective nor any dominating point of view. A linked chain is the dominating metaphor. The cultivated practice of linking couplets of poetry in a gathering of poets is a further instance, we think, of local patterning. The point in these poems is not to create a grand work of art, with economy of expression and a central theme, but more on the model of ping-pong, to catch the other poet's phrase, match it in mood, imagery and rhyme, and then to pass it on to the next poet in line. The aesthetic pleasure derives from a skilled control of the line or the couplet, not from the creation of a unified

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[4] In the National Palace Museum in Taipei we were able to locate only one example of calligraphy in which characters were arranged with an overflow of one character into those both above and below it and those on either side.

[5] We are aware of 'grass' writing, of course, in which characters are written in a highly flowing style. Nevertheless, the examples in which any one grass character flows over into another are still quite rare. This is not the case so far as we know in grass style as practiced in Japanese calligraphy.

A style of calligraphy developed in the 20th century in which calligraphed words appear superimposed upon wallpaper-like floral patterns corresponds quite closely with the use of patterns in Chinese styles of Western clothing.

perspective. The Western film technique in which a montage of unrelated elements is juxtaposed was introduced by Eisenstein on the inspiration of juxtaposed images in Chinese poetry (Yip 1976).

In designing a new campus for Providence University in Shalu, Taiwan, each department was given a separate building with markedly differing architectures. Although a single architect was employed to create these pockets of local patterns, he was instructed to follow the tastes and inclinations of the deans and department heads in creating this aggregate of designs. This juxtapositioning of unrelated architectural elements contrasts strongly with Tunghai University just a short distance away which, being designed on a Japanese model, follows continuous motifs throughout the campus.

Local patterning and the linked chain of patterns also shows up in the Chinese essay. Moving from one topic to another topic means showing the boundary between topics. In contrast to this, in Western essayist discourse moving from topic to topic requires the re-establishment of the central or dominating perspective. We expect an essay or an argument to centre on a theme: 'Thesis X, Y, Z has three main elements, X, Y and Z'. Then as we begin our development we want to say, 'The first point in support of XYZ is X'. As we make our first transition we would like to see, 'Not only does X support XYZ but Y does as well'. Then in conclusion we want, 'Moreover Z provides the most decisive support to XYZ'. Each shift from X to Y to Z re-establishes the centrality of XYZ and shows where each element fits, much as in a Western painting we expect each element of the painting to point to the vanishing point.[6]

A Chinese essay proceeds from point to point, beginning, of course, with established precedent and ending with a suggestion of the author's point. 'X has said Y. This is interesting and worthy of our attention. Which leads me to think of P. P, of course, makes one think of A. One can never bring up the topic of A without being led immediately to think of M. However, the author believes that M might be modified to say Y+Z'. Each element in the argument, X, Y, P, A and M is treated independently with appropriate quotations from the classics and even personal anecdotes. What one does not do is cast a unifying perspective over the whole and demean the reader by showing the connections among the elements mentioned.

A consequence of local patterning in Chinese discourse is the topic umbrella. Once a topic is mentioned, it is no longer given explicit statement within that unit of discourse. The boundary is made and then discourse continues within the boundary until further notice. As a result, Chinese discourse tends to consist of a series of chain-linked predicates.

5. INTERPRETATION, OBSERVATION: INSIDE/OUTSIDE

A major consequence of boundary marking and local patterning in Chinese thought is that there is a relatively higher emphasis on interpretation than on observation. This can also be phrased as a relative lack of response to context in Chinese thought. By way of contrast one thinks of examples beginning with the Parthenon and the Socratic dialogues and coming down to the present laboratory studies in science as an attempt to organise reality from the point of view of a clear, unobstructed perspective. One clears the ground from around a work of architecture so that the eye is not cluttered

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[6]Of course, vanishing point perspective in Western painting was not used until the Renaissance and has all but disappeared, except perhaps in greeting cards, in the modern period. But to use the painting of the period from the Renaissance to the modern as a prototype is an example of how count-noun thinkers work, so we have decided to let this stand as an example if not as an argument.

up by competing forms; one isolates a phenomenon in the laboratory so that only those aspects one wishes to study come into the picture.

This Western clearing of the ground could be seen as an attempt to control the embeddedness or context of things and events, and so might appear to be not unlike Chinese boundary marking, which attempts to make a clear distinction between what is inside (and therefore subject to local patterning) and what is outside (and therefore ignored). The difference lies, we think, in that in the West, the focus is on the central phenomenon, as a sort of logical vanishing point, and the context is pushed out of the way as much as possible, or until no longer convenient. It is not the boundary which really matters, so much as just getting the peripheral vision cleared of competing perspectives. In the Chinese view the focus is on the boundary. Discriminating a boundary is not only a logical or a descriptive activity, it is a regulative and moral activity. What is outside a boundary is not relevant in any way to what is inside. It is safely (even compulsorily) ignored.

One finds in colleges in Taiwan, for example, a sense of unreality as if the world outside the walls were of no relevance to the activities being pursued within the walls. The entrance exam, of course, sets the entry boundary for Chinese students. American teachers in Taiwan are struck by the extreme emphasis placed on these exams for college entrance as well as for successful graduation. If it were just the exams, however, one might think of parallels with the British academic model rather than with American colleges. Many other activities, however, cluster around these crucial boundaries. The senior year seems more taken with photographs, preparation of memorial writings, and graduation preparations than with the studies that one would think were the prerequisite for graduation. At the same time, and in contrast to American college students at least, it seems little interest is paid to the intellectual aspects of being a student. There is a perfunctoriness in studying that gives the appearance more of role-playing than of intellectual inquiry. It is widely advertised in Taiwan, for instance, that once one is accepted by a major university everything is easy. No study is required to graduate and, because one has graduated from a major university, one is virtually guaranteed a successful life. That one's activities in college should bear any connection to one's work later outside college seems to rarely be considered.

Ignoring context is, of course, an act of interpretation. That might help to explain the Chinese capacity to simply not see what is not interpretable or not relevant to the current local pattern. A man scrupulously goes down the boundary of his tiny yard and the outside of his house. He picks up trash as he goes and tosses it a few feet away onto the property of another person. It is no longer trash cluttering up his space, and so it is no longer a problem. A temple is built so as to open out onto the vista of a stream. The stream becomes filled with the flotsam and jetsam of a rapidly developing country specialising in plastics. A temple looking out onto a stream is an ancient image of tranquillity and beauty. Does a Chinese who has accepted that symbolism actually see the trash? We would say that in a Western observational sense he or she must be able to see it. But the tranquil temple image does not allow the interpretation of ugliness. So a photograph of the garbage-glutted stream and temple taken by a foreigner only elicits the response, "What is that?" The question is not a literal, observational question. The meaning is, "What motives do you have in taking such a picture?" In other words, the questioner wants to know what interpretation one is driving at. The drive to interpretation and its consequences either undermines or motivates all observation. It appears that once the interpretation is made, what falls outside the boundaries is simply not seen. The Chinese emperor who, upon seeing such non-Chinese animals as giraffes and who ordered that the boats of exploration which had gone out to Africa be burned, is an example of this Chinese disinterest in what lies outside one's boundaries.

6. INSIDE/OUTSIDE

This distinction between inside and outside governs interpretations in virtually every domain, from calligraphy and clothing styles through kinship relations and the building of houses, to the building of the Great Wall. The inside relations, for instance, are those established when one is born, such as the relations with other members of one's family; they also include those established by being members of the same class in school, entering a company as part of the same groups of recruits, or perhaps serving in the military together.[7] Outside relationships are those strictly utilitarian relationships one has with taxi drivers, ticket collectors, bank tellers, or business clerks. In discourse this distinction governs such matters as who speaks first and who introduces the topics of a conversation.[8] This is not to say that the distinctions between inside and outside are all that obvious to one who does not know the system. The wife in the Confucian system is inside (literally 'inside person') but the wife's relatives are the outside relatives. As in most cultural matters the distinction between inside and outside is what is patterned throughout the culture, not the particular contents of the pattern.

7. TAOISM, NIHILISM: SEMANTIC BREAKDOWN

Finally, one way to look at a cultural pattern is to see how it breaks down. As a kind of perceptual archaeology, sometimes in dissolution one sees the former pattern more clearly. When we compare the mass-noun philosophical template with the count-noun philosophical template the question we want to ask is: What happens when the ability (or the desire) to discriminate is lost (or abandoned)? Also, what happens when the ability (or the desire) to achieve clear, definitive prototypical sets breaks down? In other words, what is the shape of mass-noun scepticism as compared with count-noun scepticism? As a quick answer, we suggest that when one loses the discrimination of forms, one is left with the substance; when one loses the definition of the ideal characteristics required for set membership, one gets an undifferentiated world of individuals without any principled groupings. The first case, the mass-noun case, leads to something like Taoism; the second case, the count-noun case, leads to something like nihilism.[9] In other words, we think if someone were to take the time to work it out, it would be possible to show that even though Taoism and nihilism appear to share a great deal in their generalised relativism, Taoism and nihilism differ radically in their psychological valency. A substance without form is still, after all, something, a positive. An individual item in the universe without set membership is, in fact, nothing.

Whorfian arguments are dicey no matter how nicely ethnographic and philosophical speculations line up behind them in support. In the case of Hansen's very Whorfian notion that so much of the Chinese philosophical template has derived from the mass-noun character of the Chinese language, one is reminded immediately of Whorf himself. In drawing a comparison between Hopi and English, Whorf had occasion to use mass nouns in English to draw what, on the surface of it, appears to be quite a contrasting conclusion.

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[7]These relationships established in schools, work and the military are sometimes talked about as *tong* relationships.

[8]Two systems of conversational initiations and topic control operate in which outside relationships are strictly utilitarian but inside relationships are dominated by the Confucian benevolence-respect pattern. In such cases as between teacher and student, parent and child, or employer and employee the right to initiate conversations and to introduce the topics is reserved for the person in the upper or benevolent position. For a further analysis of this discourse implication of the inside-outside distinction in Chinese thought see Scollon and Wong-Scollon (1990).

[9]One wonders whether it is a reflection of this distinction between Taoist nothing and nihilist nothing that we conventionally capitalise Taoism but not nihilism.

In 'The relation of habitual thought and behavior to language' Whorf's argument (1956:134, but written in 1939) is that mass nouns in English give evidence of an underlying (Whorf calls it 'covert') analysis of all matter into its substance and its form, ultimately giving rise to the transcendental characteristics of Western thought. Hansen, of course, has derived that same Platonic transcendental analysis from English count nouns. Whorf argues that the English use of individuators (such as 'cup' in 'cup of water') indicates the fundamental concern in the habitual thought of speakers of SAE (Standard Average European) languages to objectify abstract substance with a form.

Certainly one cannot have it both ways: if there is such a thing as a logic of mass nouns, that logic ought to apply in about the same way whenever mass nouns are used, whether it is in SAE or in Chinese. Surely mass nouns are not likely to be the clearest indicator of Platonic idealism in SAE while at the same time giving rise to a radically non-transcendental philosophy in China. More directly to the point, perhaps, is that when I stir my tea with a spoon it seems far fetched to think that the spoon, as a count noun, is stirring up philosophical Platonism in my mind at the very moment the tea, as a mass noun, is brewing Taoist contemplations.

One can imagine trying to save the story by arguing that it is, in fact, the count nouns which give rise to Platonism in SAE and that the Platonism carries over into our analysis of mass nouns as well. In any event, it is the individuator that forms the crucial evidence for Whorf, and it is just there that one has problems in the Chinese analysis.

The language of Confucius, unlike modern Chinese, is a language of mass nouns without individuators (or measure words--also called classifiers by some scholars). At that time, according to Norman (1988), individuators were markedly rare.[10] If that were all there were to it, we could say that the presence of individuators in English and their rarity in Confucian Chinese shows the pressure of the count-noun template on English (and SAE) mass nouns. Unfortunately, Modern Chinese has all-too-abundant individuators, more by a large amount than English. Norman argues that they had gone from being rare at the time of Confucius to becoming commonplace by the Nanbeichao Period (AD 420-589). This gives rise to the question of whether or not this establishment of measures in Chinese indicates a rise of the count noun as a covert category in the millenium between Confucius and the Nanbeichao Period. While it might somehow be argued that there was an influence from Indo-European by way of Sanskrit Buddhist texts, this influence beginning in China around AD 480,[11] the sociolinguistic circumstances required for Sanskrit to exert such an influence seem improbable enough to make this explanation rather far fetched.

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[10]There remains the problem of knowing whether or not the written language of Confucius represents the spoken language of 'the Chinese' in the 5th century BC. These are actually two problems: we do not really know the relationship between written and spoken Chinese for this period, and the texts referred to as the writings of Confucius were written not by Confucius, but by others at some later date. We hesitate to bring up the fact that China at that time, as now, was sociolinguistically rather complex, so much so that generalisations from those few texts to the thoughts of a culture seem almost hopeless. Some measure of rescue from this position seems to be had in the fact that if we can gain any ground in our understanding of the Confucian language it can be asserted that over the centuries this language has exerted a conceptual pressure on Chinese culture that is, perhaps, unmatched elsewhere in human culture.

[11]This influence comes a little late in the millenium to have done much in any event. Bodhidharma, who is said to have brought Buddhism to China, was thought to have been a Persian monk (Wu 1975). His arrival began a period of extensive study of Sanskrit texts and the translation of these texts into Chinese. There are, of course, many legends indicating a much earlier introduction of Buddhism to China. In one case it is said that Confucius himself knew of the teachings of Buddha (Ch'en 1964).

The evidence from language learning seems to argue against any covert category, or psychological reality, for count nouns in Chinese in contemporary times. It is a truism among language teachers that speakers of Chinese are bedevilled in their learning of Indo-European languages by a pervasive inability to get grammatical number straight. One would expect number to be somewhat more learnable in a new language if one had number in one's own language (either overtly or covertly). A second somewhat reciprocal sort of evidence that individuators seem to have nothing to do with a count-noun analysis is that speakers of English (and other SAE languages) appear to have an equivalent difficulty in learning individuators in Chinese.

We can only conclude that Whorf's introduction of mass nouns in his comparison of English and Hopi is convincing only if we ignore the evidence Hansen calls up from Chinese. Unfortunately, Hansen is also more convincing if we do not look too closely at a comparison with Whorf's examples. That the two arguments are incompatible seems to us strong enough evidence that neither is on the right track.

In a recent reanalysis of the thought and language of Confucius, David Hall and Roger Ames find much to admire in Hansen's general statements about Ancient Chinese language and logic (Hall and Ames 1987). They take exception, however, to Hansen's assertion that the mass-noun character of Chinese lies at the foundation of Chinese thought. While they draw a parallel set of conclusions about that thought, they attribute these characteristics to the Chinese emphasis on the pragmatic role of language in communication over the referential role. Above we argued, following Hansen, that the emphasis on discriminating boundaries in the Chinese mass-noun ontology leads to an emphasis on the regulative functioning of language. Hall and Ames stand this argument on its head, arguing that it is because, from earliest times, Chinese have regarded the pragmatic role of language to be fundamental that they have developed a philosophy of language concerned with discrimination, setting boundaries, and the rectification of names. The fault Hall and Ames find with Hansen's argument is that contrasting the mass-noun philosophical template of Chinese with the count-noun philosophical template of English still implies for both a referential theory of language.

Without citing Hymes (1966), Hall and Ames have introduced a second type of linguistic relativity to the Whorfian argument. In their view the relationship between Chinese thought and language derives functionally rather than referentially. The crucial difference between Chinese and SAE languages, in their view, lies not in the nature of nouns in these languages but in the relative emphasis given to the pragmatic and referential functions of language. It is this difference which has given rise to the philosophical differences Hansen notes, and it is this difference which underlies the ethnographic distinctions we have sought to understand.

The question with which we began was: can we learn anything about the differences between Western ways of thinking and Chinese thought by studying differences between English and Chinese? Now we are in the position to say that while such a contrast has many attractive elements, we believe the attractions of Whorfian thinking lie closer to art than to science. If science and art can be distinguished not so much by their subject matter as by their methods, perhaps we can say that science is driven by its questions towards some resolution in proof, but art is driven by its observations of the world towards the posing of attractive questions. Like in much art, the proof of a Whorfian argument lies in the attractiveness of its questions.

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